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FIELD MEASUREMENT OF
GREENHOUSE GAS EMISSION
RATES AND DEVELOPMENT OF
EMISSION FACTORS FOR
WASTEWATER TREATMENT

Prepared for

Office of Policy, Planning, and Evaluation

Prepared by

National Risk Management
Research Laboratory
Research Triangle Park, NC 27711

FOREWORD

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E. Timothy Oppelt, Director
National Risk Management Research Laboratory

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FIELD MEASUREMENT OF GREENHOUSE GAS EMISSION RATES AND DEVELOPMENT OF EMISSION FACTORS FOR WASTEWATER TREATMENT

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ABSTRACT

Greenhouse gases (GHG) are produced from the anaerobic decomposition of waste in landfills, septic sewage systems, and wastewater treatment (WWT) facilities. Reasonably accurate global balances are needed for methane (CH_4) and other greenhouse gases for use with climatic models to estimate long-term global temperature changes. The development of a global balance for any compound requires identification of all major emission sources and estimation of their source strength (i.e., emission rate).

Estimates are available for the amount of methane emitted from certain types of waste facilities, but there is not adequate field measurement data to validate these estimates. Under the Base Statement of Work Area for this contract, field testing was performed to develop more reliable GHG emission estimates for WWT lagoons. Field tests of emissions were conducted for wastewater treatment lagoons that use anaerobic processes to treat large volumes of wastewater with large BOD loadings. Air emission and wastewater measurements were made for anaerobic lagoons at three meat processing plants and at two publicly-owned treatment works (POTWs). The overall emission rates of methane, carbon dioxide, carbon monoxide, nitrous oxide, ammonia, volatile organic compounds (VOC) and chlorofluorocarbons (CFCs) were measured from each source using an open path monitoring approach. The emitted compounds were identified and quantified by Fourier-Transform Infrared (FTIR) spectroscopy. Emission factors were developed for methane and ammonia as a function of the plant production rate, wastewater parameters (e.g., influent BOD and COD loadings), and WWT system performance (e.g., BOD and COD removal rates).

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ACRONYMS AND ABBREVIATIONS

AAM	Ambient Air Monitoring
ASTM	American Society for Testing and Materials
BOD	Biological oxygen demand
CFCs	Chlorofluorocarbons
CH_4	Methane
CLS	Classical least squares
CO_2	Carbon dioxide
CO	Carbon monoxide
COC	Chain of custody
COD	Chemical oxygen demand
Conc	Concentration
CV	Coefficient of variability
DAF	Dissolved air flotation
deg	Degree
DO	Dissolved oxygen
ECD	Electron capture detector
EPA	Environmental Protection Agency
FID	Flame ionization detector
FTIR	Fourier-transform infrared
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectroscopy
GHG	Greenhouse gas
H_2O	Water vapor
H_2S	Hydrogen sulfide
IC	Ion chromatography
Met	Meteorological
MGD	Million gallons per day
mph	Miles per hour
MS	Mass spectrometer
N_2O	Nitrous oxide
Obs	Observations
OPM	Open path monitor
OPM-TM	Open path monitor - transect monitoring
POTWs	Publicly-owned treatment works
ppm	Parts-per-million
ppm-v	Parts-per-million on a volume basis
QA	Quality assurance

ACRONYMS AND ABBREVIATIONS
(Continued)

QC	Quality control
RPD	Relative percent difference
RR	Retroreflector
SE	Southeast
SF_6	Sulfur hexafluoride
SM	Standard method
SW	Southwest
TCD	Thermal conductivity detector
TKN	Total Kjeldahl nitrogen
TNMHC	Total non-methane hydrocarbons
TOC	Total organic carbon
TSS	Total suspended solids
VOCs	Volatile organic compounds
WD	Wind direction
WWT	Wastewater treatment

METRIC CONVERSIONS

Non-Metric Unit	Multiplied by	Yields Metric Unit
°F	0.555556 (°F-32)	°C
in.	2.54	cm
ft.	0.3048	m
mile	1609.344	m
lb.	0.453592	kg
gal.	3.78541	L
mph	0.44704	m/sec

SECTION 1
INTRODUCTION

This section contains the rationale for performing this study, a listing of the project objectives, a description of the site selection process, and an overview of the technical approach employed in the test program.

1.1 Background

A greenhouse gas (GHG) generally can be defined as any molecule which absorbs infrared light in the spectral region of 5 to 20 micrometers (μm). These molecules include, but are not limited to, water vapor (H_2O), carbon dioxide (CO_2), carbon monoxide (CO), methane (CH_4), certain volatile organic compounds (VOCs), and nitrous oxide (N_2O).

Reasonably accurate global balances of GHGs are needed as input to climatic models for estimating long-term global temperature changes. The development of a global balance for any compound requires identification of all major emission sources, estimation of their source strength (i.e., emission rate), identification of major reaction mechanisms and sinks, and calculation of the total mass of a given compound in the atmosphere and its average atmospheric residence time.

A large number of natural and anthropic activities produce or release GHGs. The emphasis of this program is on emissions from waste management facilities. Greenhouse gases are produced from the decomposition of waste in landfills, septic sewage systems, and wastewater treatment (WWT) facilities; and from the open burning of waste. The decomposition of organic waste may occur aerobically (i.e., with oxygen) or anaerobically (i.e., without oxygen). Aerobic decomposition of organic carbon results in the production of CO_2, while anaerobic decomposition results in the production of CH_4. Given a sufficient amount of time, essentially every atom of carbon in waste streams is converted to either CO_2 or CH_4. In terms of their ability to retain heat in the atmosphere, however, CO_2 and CH_4 are not equivalent. A given mass of CH_4 is 58 times stronger a GHG than the same mass of CO_2 (it is 21 times stronger on a molecular basis).[1] Therefore, the relative amount of anaerobic versus aerobic decomposition is of interest.

Another issue is the relative contribution of emissions from waste management facilities as compared with all other emission sources. The emissions of CH_4 from waste management facilities are considered to be much more significant than the emissions of CO_2 from these same facilities because the CO_2 emissions are thought to be quite small compared with emissions of CO_2 from the combustion of fossil fuels and other sources.

National and global emission inventories of CH_4 emissions from waste management facilities (e.g., landfills, WWT lagoons, and livestock waste lagoons) have been published.[1-3] These estimates, however, are based on mass balance calculations and various assumptions. Therefore, field measurement data are needed to validate these estimates.

This report contains the results of a project for measuring emissions of GHGs from WWT and disposal facilities. The work was sponsored by the Air Pollution Prevention and Control Division (APPCD), National Risk Management Research Laboratory, Office of Research and Development (ORD) of the U.S. Environmental Protection Agency (EPA).

1.2 Objectives

The overall objective of the research under the base statement of work area for this contract is to develop more reliable estimates of GHG emissions from industrial and domestic WWT systems. Most previous research for these sources has used a mass balance approach to estimate potential CH_4 emissions, but in this study emissions of CH_4 and other GHGs were measured under field conditions, which should improve the reliability of the emission estimates.

The specific objectives of this study were to:

- Identify those industries and WWT processes that have the greatest potential for measurable emissions of CH_4;
- Develop selection criteria for identifying suitable field sites;
- Select the five most promising sites for testing;
- Perform ambient air measurements using an open path monitoring (OPM) approach with a Fourier Transform Infrared (FTIR) spectroscopy instrument;
- Collect process data and characterize the influent and effluent wastewater quality at the five field sites; and
- Use the field data to develop emission factors for each GHG of interest.

1.3 Site Selection

Industrial and domestic WWT systems include both anaerobic and aerobic processes, and a great variety of WWT methods are used among industries and among different countries. Because of the relative importance of GHG emissions from anaerobic decomposition (as discussed above), the subset of WWT systems that employ anaerobic treatment processes was selected for testing. Within this subset, anaerobic lagoons were given priority over anaerobic digesters, tanks, and sludge disposal units because lagoons offered the fewest logistical constraints to testing.

Although anaerobic lagoons are not extensively used to treat industrial and domestic waste in the United States, other countries use anaerobic lagoons to treat wastewater. Because of difficulties associated with identifying sites and the expense of conducting field measurements in foreign countries, sites in the United States that are representative of treatment conditions in developing countries were selected for testing.

Site selection focused on U.S. WWT systems that employ open, anaerobic processes to achieve high levels of biological oxygen demand (BOD)

removal. First, industries that treat large volumes of wastewater and remove large amounts of BOD (or chemical oxygen demand [COD]) were identified using published information sources. Then, additional information was collected from EPA regulatory personnel, project files, and reports and researches in the WWT field to identify which industries were most likely to treat wastewater to remove high levels of BOD/COD in open, anaerobic lagoons, and to identify the most promising sites for sampling. The most promising candidates were beef and poultry processing plants and pulp and paper mills. Publicly owned treatment works (POTWs) also were of interest because they are used to treat a significant fraction of wastewater both nationally and globally and, also, they were thought to be a potentially significant source of N_2O emissions.[4]

Information was collected from published sources; EPA regulatory personnel, project files, and reports; and researchers in the WWT area to identify potential sites for field testing. Beef and poultry processing plants and POTWs were identified as good candidates for field testing. Pulp and paper mills proved to be less suitable, because the amount of BOD removal by anaerobic processes in that industry in the U.S. appears to be small.

Five sites were selected for testing. Pre-sampling surveys were conducted at these sites to confirm that they met the site-selection criteria for sampling. The sites selected included two beef processing plants, one chicken processing plant, and two POTWs. Two beef processing plants and two POTW sites were selected to help determine the variability in emissions within a given industry.

1.4 Approach

The field work involved being on site for about five days at each facility. Ambient air measurements were made immediately downwind of the lagoons using an open-path monitoring (OPM) approach with detection by Fourier Transform Infrared (FTIR) spectroscopy. The FTIR light beam was directed along a path of several hundred feet and the absorbance of gases was measured. The target compounds of interest included CH_4, CO_2, N_2O, as well as CO, ammonia (NH_3), and certain VOCs. Emission rates were determined from measurements of the downwind ambient concentration and the atmospheric dispersion characteristics at the time of sampling.

The sampling equipment consisted of a van containing the FTIR equipment and a 3m (10 ft) tower for measuring meteorological parameters. In addition, a limited number of influent and effluent wastewater and sludge samples were collected.

Where available, historical facility records were used as the most robust estimators of BOD and COD loadings in the system influent and effluent for correlation to GHG emission rates. Wastewater samples also were collected during the periods of FTIR sampling to confirm the historical data or to provide estimates of current conditions if historical data were unavailable or current conditions differed from historical conditions.

Emission factors were developed in terms of grams of GHG species emitted per gram of precursor in the influent wastewater (e.g., g CH_4/g BOD). The emission factors

will be combined with activity factor data to develop national and global emission estimates.

Measurements of emissions from anaerobic lagoons used in the meat processing industry are expected to provide upper bound estimates of CH_4 emissions for the entire WWT source category because this industry has among the highest influent BOD concentrations of any industry.[4] The use of emission factors developed for these sources to estimate emissions for WWT lagoons with lower BOD and COD removal rates potentially could result in overestimating emissions. To the extent that CH_4 emissions are directly proportional to BOD and/or COD removal rate, the emission factors for CH_4 (expressed as kg CH_4/kg BOD and/or COD removed) should be fairly constant regardless of BOD and/or COD loading. This may not be true, however, for N_2O or other GHGs where the emission factors for these pollutants are based on a parameter(s) other than BOD or COD. Given the current state of knowledge, however, it was decided that measuring emissions from sources with high BOD and COD removal rates was the best starting point for developing more reliable emission estimates for anaerobic WWT systems.

SECTION 2

CONCLUSIONS AND RECOMMENDATIONS

This report contains the results of a project for measuring emissions of GHGs from WWT lagoons. Five sites were selected for testing. The selection intentionally included sites from several different industries: two beef processing plants, one chicken processing plant, and two POTWs. Open path monitoring using the FTIR/transect method was used to determine emission rates. A very large data set was generated, and up to 300 separate valid, 5-minute average emission rate determinations were made at a given site.

The air measurement data were reviewed to identify those compounds found in significantly greater concentrations in the downwind air versus the upwind air at each site. Any such compounds were likely to have been emitted from the lagoons being tested. Many of the target analytes were found at the same concentration levels upwind and downwind of the lagoons; i.e., they had no quantifiable emission rate. Only CH_4, NH_3, and the SF_6 tracer gas generally were present in greater amounts in the downwind air.

The minimum quantifiable emission rate varied from site to site and from one 5-minute period to another. The detection limit for a given compound, in terms of g/sec, is dependent on the smallest difference between downwind and upwind concentrations that could be identified apart from the measurement variability within each of the upwind and downwind data sets. Typical detection limits were about 0.1 g/sec for most compounds, except for CO_2, which had a minimum detection limit of about 150 g/sec. The high detection limit for CO_2 was due to the high background concentrations (e.g., 500 ppmv) and the measurement variability (e.g., %CV = 7.5%, or 37.5 ppmv).

For each increment of 0.5 ppmv (500 ppbv) that a given compound was present in greater concentrations downwind than upwind, its emission rate was about 1 g/sec (depending on the molecular weight of the compound).

The upwind data at the five sites showed average CH_4 concentrations ranging from 1.92 to 2.83 ppmv and average CO_2 concentrations ranging from 351 to 668 ppmv. The upper end of the range for both compounds is higher than typical background levels, indicating that other emission sources were present in the general area.

At all three meat processing plants, large amounts of CH_4 were detected downwind of the WWT system. For the two beef processing plants, the concentration of CH_4 (and NH_3) exhibited an exponential-type relationship with wind speed. The downwind CH_4 concentration at the chicken processing plant did not show a clear relationship between concentration and wind speed. At the chicken processing plant, however, the range of wind speeds was much smaller than for the meat processing plants and the number of valid measurement periods also was much smaller, making it more difficult to identify trends and relationships.

Some total non-methane hydrocarbons (TNMHC) were detected at certain sites, but the FTIR method is not particularly well-suited for measuring this analyte. Only an approximate value can be determined based on the stretch of the total number of C-H bonds present. Hydrogen sulfide was not conclusively detected at any of the sites. However, the detection limit for H_2S by FTIR is about 1 ppm, so the method is not well-suited for measuring this analyte.

Very low levels of chlorinated solvents were detected in some of the upwind and downwind air samples (e.g., 1-10 ppbv). The reported values, while low, are substantially higher than typical data reported from canister/GC studies (e.g. <1 ppbv).

The emission rates measured at each site for CH_4, NH_3, and other selected compounds are given in Table 2-1. Surprisingly, no quantifiable emissions from the POTWs were found. It was expected that either CH_4 or CO_2 would be emitted from the POTWs. The DO level in the lagoons exceeds 2 mg/L, indicating that BOD removal is taking place under aerobic conditions. So it is highly probable, that CO_2 is being generated, but the levels were too small to detect given the very high minimum emission rate of CO_2 that could be quantified.

In general, anaerobic degradation can be expected to produce a mixture of CH_4 and CO_2 (in somewhere between a 50:50 and a 70:30 ratio). Therefore, emissions of CO_2 would be expected wherever quanitifiable emission rates of CH_4 were found. The lack of quantifiable CO_2 emission rates may be due to the high detection limit for CO_2 emission rates, as previously discussed. The absence of CO_2 emissions also could be due to the presence of cyanobacteria (blue-green algae) in the anaerobic lagoons. The wastewater data for all three meat processing plants are very similar, with the two beef processing plants showing very good agreement. All three WWT systems had high BOD removal rates (88-95%), as well as high removal rates for COD, TOC, and nitrates. All three WWT systems at meat processing plants generated large amounts of ammonia as a by-product of the biodegradation of the wastewater. The only parameter that showed variable behavior from system to system was TKN.

The two POTWs had similar influent wastewater and exhibited similar performance in terms of removal of BOD, COD, TOC, TKN, and ammonia. Both systems generated nitrates as a by-product of biodegradation.

Activity factors were developed for each site based on information provided by the plant operators and from the wastewater data. Emission factors were developed for each site by dividing the average emission rates by the activity factors for each site. The resulting emission factors are given in Table 2-2. For CH_4, the emission factor based on COD should be the best predictor of emissions from other facilities. COD data, however, are not always available and estimates based on other activity factors may be necessary. Therefore, a variety of emission factors are included in Table 2-2.

An estimate of the uncertainty was developed through standard error propagation methods. The derived emission factors all appear to be reliable to within a factor of two, based on random error in the measurements, and assuming

Table 2-1
Measured Emission Rates of Selected Compounds for Each Field Site

Site	Compound	Average Downwind Conc. (ppm)	Average Upwind Conc. (ppm)	Maximum Downwind Conc. (ppm)	Average Emission Rate (g/sec)
Beef Processing Plant in SW U.S.	CH_4	61.9	2.3	142	280
	NH_3	355 ppb	0	609 ppb	2.2
Beef Processing Plant in Midwest U.S.	CH_4	58.1	2.83	200	230
	NH_3	1.04	0.277	2.06	3.5
Chicken Processing Plant in SE U.S.	CH_4	9.80	1.92	29.9	180
	NH_3	2.6 ppb	2.8 ppb	44.1 ppb	0.066
	N_2O	563 ppb	542 ppb	586 ppb	2.6
POTW for Small Town in Southwest U.S.[a]	CH_4	2.20	2.14	2.46	<0.15
	NH_3	0.2 ppb	0	15.4 ppb	<0.05
	CO_2	342	351	384	<150
POTW for Very Small Town in Southwest U.S.[a]	CH_4	2.11	2.16	2.81	<0.15
	NH_3	93.3 ppb	25.5 ppb	214 ppb	<0.05
	CO_2	528	668	691	<150

[a] Methane, carbon dioxide, and ammonia values are shown for the POTWs for comparison purposes. No quantifiable emissions of these compounds were detected at either POTW.

Table 2-2
Average Emission Factors

Compound	Emission Factor	Average	Range
Methane	g CH_4/head of cattle	4,200	3,500 - 4,800
	g CH_4/chicken	120	n/a
	g CH_4/kg meat	37	15 - 74
	g CH_4/L of wastewater	2.7	1.6 - 4.6
	g CH_4/g influent BOD	1.5	0.40 - 3.2
	g CH_4/g BOD removed	1.6	0.43 - 3.4
	g CH_4/g COD removed	0.96	0.26 - 2.0
Ammonia	g NH_3/head of cattle	46	37 - 54
	g NH_3/chicken	0.046	n/a
	g NH_3/kg meat	0.14	0.027 - 0.24
	g NH_3/L of wastewater	0.014	0.0017 - 0.028
	g NH_3/g influent BOD	0.40	0.0031 - 1.2
	g NH_3/g NH_3 in effluent	0.072	0.020 - 0.13
Nitrous Oxide	g N_2O/chicken	1.8	N/A
	g N_2O/kg meat	1.1	N/A
	g N_2O/L of wastewater	0.067	N/A
	g N_2O/g BOD removed	0.051	N/A
	g TKN removed	1.7	N/A

N/A = Not applicable

that the sites and samples accurately represent the population of interest.

The COD content of the influent wastewater should be a better indicator of its CH_4 emission potential than the BOD content. The 5-day BOD test will not fully degrade all of the biological material in wastewaters containing proteins and fatty acids. The suspended solids associated with the wastewaters also are biodegradable and their ultimate BOD would not be exerted in the 5 days it takes to run a standard BOD test.

It is possible that the lagoons are a sink for suspended and colloidal material (i.e., insoluble BOD) and this material builds up over time in the lagoon sediments. If so, the degradation of the sediments may occur during summer months or whenever the sediment is resuspended, thereby increasing the CH_4 (and CO_2) emissions. However, no seasonal trend is evident in the BOD effluent levels in the long-term wastewater data provided by the plants and shown in Appendix G.

A number of previously published studies contain estimated or measured values for the emission fluxes of CH_4 from liquid surfaces or slurries. The key comparison is the emission flux (i.e., emission rate per area). The average CH_4 emission flux for the three meat processing plants ranged from 6,100 to 23,000 $\mu g/sec\text{-}m^2$. Results for livestock lagoons in previous studies were similar (1,400 to 9,400), as were measurements at a manure tank (1,300 to 3,800). The emission flux from municipal WWT systems, industrial WWT systems, and rice paddies were substantially lower, as expected given the much lower BOD and COD levels in such waters.

There are very few published emission factors which can be compared with the emission factors developed in this study. The most widely reported emission factor for CH_4 is 0.22 g CH_4/g BOD. The reference for this factor does not provide information about how it was developed. It is very close to the theoretical value for the anaerobic degradation of glucose. The emission factors determined in this study are substantially higher than those based on glucose degradation. Glucose is a simple sugar and its biodegradation over short periods of time cannot be directly compared with the microbial degradation of complex mixtures of amino and fatty acids, such as are present in the wastewaters at the meat processing plants.

2.1 Conclusions

Several conclusions can be drawn from these data and the data presented elsewhere in this document:

- The FTIR measurement approach used in this study was successful for the simultaneous collection of large amounts of ambient concentration data for CH_4 and NH_3;

- The use of the OPM-TM approach using FTIR for estimating emission rates has insufficient sensitivity for certain compounds, such as H_2S and TNMHC, due to limitations in the FTIR analysis. The sensitivity for CO_2 is limited by the variability in background concentrations and the OPM approach;

- Anaerobic WWT lagoons are a significant source of CH_4 and NH_3 emissions; and

- Lagoons at POTWs are not a significant source of any GHG, with the possible exception of CO_2.

2.2 Recommendations

Several recommendations merit consideration for any similar studies performed in the future. First, emission rate measurements should be performed using a flux chamber placed directly on the source to provide greater sensitivity for CO_2, TNMHC, and other compounds which potentially are being emitted at low rates. It also will serve as a independent check of the OPM-TM results. A minimum of six measurements per source is recommended in the EPA reference method to obtain a representative average emission rate and information about the spatial variability in emissions.

Second, samples should be collected of the sediments present in the lagoons and analyses performed to determine the contribution of the sediments to the overall gas generation. This is primarily of importance for sites where long-term data are not available on the performance of the WWT system.

Other topics of potential interest include evaluation of the effect of seasonal temperature fluctuations on biodegradation and emission rates and measurement of N_2O emissions from identification basins at POTWs.

SECTION 3

SITE DESCRIPTIONS

This section contains an overview of the site selection process and a description of each site selected for field testing.

3.1 Site Selection

As stated in Section 1, the site selection focused on U.S. WWT systems that employ open, anaerobic processes to achieve high levels of BOD removal. Approximately one dozen industries that treat large volumes of wastewater and remove large amounts of BOD/COD were identified using published information sources. Researchers active in the WWT area and regulatory personnel were contacted to identify the industries most likely to treat wastewater with high levels of BOD/COD in open, anaerobic lagoons. Initially, the most promising candidates were beef and poultry processing plants and pulp and paper mills, but pulp and paper mills ultimately were removed from consideration because of the small amount of BOD removal by anaerobic processes in that industry. Publicly owned treatment works also were of interest because they are used to treat a significant fraction of wastewater both nationally and globally and because they were thought to be a potentially significant source of N_2O emissions.[4]

Information was collected from published information sources; EPA regulatory personnel, project files, and reports; and researchers in the WWT area to identify potential sites for field testing. The following criteria were developed to evaluate sites for sampling:

- WWT system is likely to emit CH_4 or other GHGs;
- Facility type is among those treating the largest annual mass of BOD/COD in wastewater;
- WWT source is representative of practices within the industry or is representative of WWT practices in developing countries;
- Influent BOD/COD loadings are relatively high;
- BOD/COD removal primarily occurs in anaerobic lagoons;
- Site terrain is conducive to Gaussian plume dispersion (i.e., reasonably level terrain, few wind flow obstructions such as buildings and trees, low berms around the lagoons);
- Site has no or few other significant emission sources in the area;
- Access around the lagoon is adequate for the set-up of the sampling equipment;
- Site has access for collecting influent and effluent wastewater samples; and
- On-site WWT operators offer a high degree of cooperation.

Five sites were selected for testing. Pre-sampling surveys were conducted at these sites to confirm that they met the site-selection criteria for sampling. The sites are as follows:

- Beef processing plant in the southwestern (SW) U.S.;
- Beef processing plant in the midwestern U.S.;
- Chicken processing plant in the southeastern (SE) U.S.;
- POTW for a small town in the SW U.S.; and
- POTW for a very small town in the SW U.S.

Each of the three industrial plants is considered to be a representative plant within its industry, and the WWT units at these plants are modern facilities. All three WWT units are considered to be large-capacity systems. Both of the POTWs are relatively small systems.

Table 3-1 summarizes the wastewater characteristics of each plant. Additional information about each plant is given below, along with a schematic diagram of each plant.

3.2 Beef Processing Plant - SW U.S.

The plant processes 5,000 head per day of cattle and produces both beef and partially tanned hides. The production rate is 1,140,000 kg beef (2.5 million lb beef) per day. There are two WWT influents: 11 million liters per day (3 million gallons per day [MGD]) from the slaughter of cattle and 4 million liters per day (1 MGD) from tanning operations. The WWT system for this plant is depicted in Figure 3-1.

The tannery water first is treated in a series of tanks to remove solids, which are applied at agronomic rates on land used for agricultural purposes. Following removal of solids, the tannery water is combined with water from the meat processing and split evenly among four anaerobic lagoons that are each 91m by 69m and 4.9-5.2m deep (300 ft by 225 ft and 16-17 ft deep). The lagoons are cleaned out about every five years, and the last time they were cleaned was about five years ago. Since the last cleaning, the treatment system has been modified to add pretreatment of the tannery wastewater to remove solids. This pretreatment may allow the lagoons to go longer between cleanings. The outflow from the four basins goes to a small aeration basin with four large surface aerators. The water is discharged to playas (shallow, undrained basins) and ultimately is used for irrigation of the land surrounding the plant. The anaerobic lagoons reduce the BOD concentration of the wastewater from about 2,800 to 200-300 mg/L.

The anaerobic lagoons had little or no grease cover at the time of the sampling, (August, 1995). The southernmost lagoon occasionally receives a load of grease dumped into it by trucks. That lagoon had the most complete cover, but it appeared to be only a few inches thick and was fluid. The other lagoons had 50% or more of their surface as open water. Vigorous degassing was noted in several of the

Table 3-1
Wastewater Treatment System Characteristics

Company Name	Influent Flow Rate (MGD)	Retention Time (days)	Typical Influent BOD (mg/L)	Typical Effluent BOD (mg/L)
Beef Processing Plant - SW U.S.	4	8 **	2,800	200-300** <200
Beef Processing Plant - Midwest U.S.	3.0	15 **	2,500	250
Chicken Processing Plant - SE U.S.	0.9	17 ** 25 total	1,700-2,900	104-150**
Small Town POTW - SW U.S.	0.290	85	250	15
Very Small Town POTW - SW U.S.	0.04	94	150	40-100

** Value for anaerobic lagoon(s) only, not for entire WWT system.

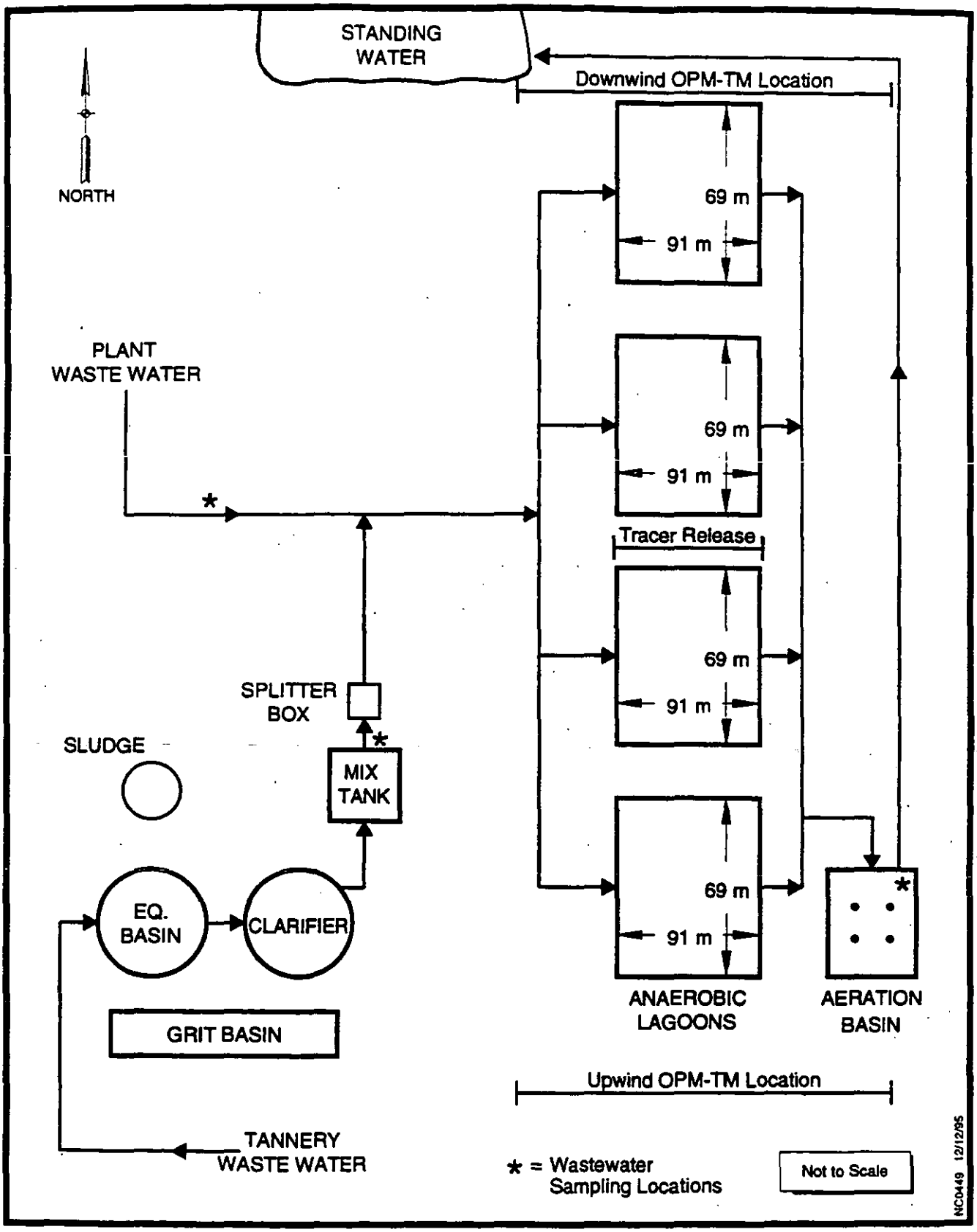


Figure 3-1. Wastewater Treatment System - Beef Processing Plant in SW U.S.

anaerobic lagoons. At times, there was a strong odor (probably caused by sulfur and organo-nitrogen compounds)downwind of the plant itself and downwind of both the WWT tanks and the lagoons.

The berms around the lagoons are very low and were accessible on all four sides. The atmospheric dispersion characteristics at this site are ideal; the area is very flat and there are no trees or buildings anywhere close to the lagoons. The predominant winds are southerly during most of the year and northerly during the winter months; easterly and westerly winds are uncommon. Winds typically are quite strong (i.e., 5m/sec more).

The wastewater sampling locations are shown in Figure 3-1 and the OPM-TM monitoring locations are shown in Figure 3-2. Sampling was conducted from August 21-25, 1995. The winds were consistently from the south throughout the sampling effort. Upwind data were collected the first day of sampling using the FTIR positioned on the southernmost berm of the lagoon system. The FTIR was subsequently repositioned to the northernmost berm of the lagoon system for collection of downwind data.

Inlet wastewater samples were collected within the plant at a lift station. Separate samples were collected for each of the two major waste streams. There were no access points for collecting effluent water from the total lagoon system or from individual lagoons; effluent samples were collected from the aeration basin by dipping water from the area immediately above the pipe where effluent is withdrawn.

3.3 Beef Processing Plant - Midwest U.S.

The plant processes 5,600 head per day with a production rate of 1,270,000 kg beef (2.8 million lb beef) per day. The plant generates about 11.4 million liters per day (3.0 MGD) of wastewater, which includes the water from both beef processing and tannery operations. Grease is removed from the wastewater within the plant at dissolved air flotation (DAF) units. The WWT plant is about 8 km southwest of the main plant.

The WWT system is shown in Figure 3-3. Wastewater from the processing and tannery operations is combined and treated in parallel in four large anaerobic lagoons that are each about 61m by 107m by 6m deep (200 ft by 350 ft by 20 ft deep). Each lagoon holds about 40 million liters (10.5 million gallons), and the retention time of the anaerobic section is about 15 days. After the anaerobic treatment, the wastewater is sent to several large storage basins and ultimately is used as irrigation water on surrounding agricultural lands. There are also two impoundments with an aeration system downstream of the anaerobic lagoons, but this system is inactive and no wastewater is sent to these impoundments. The plant and the lagoons have been in service since 1981. The lagoons have been dredged several times to remove inorganics and grit, most recently during the summer of 1994. The southwest anaerobic lagoon was drained on September 1, 1995.

The influent wastewater contains about 2,500 mg/L of BOD and the system achieves about 90% reduction in BOD. At the time of the sampling, there was very little floating

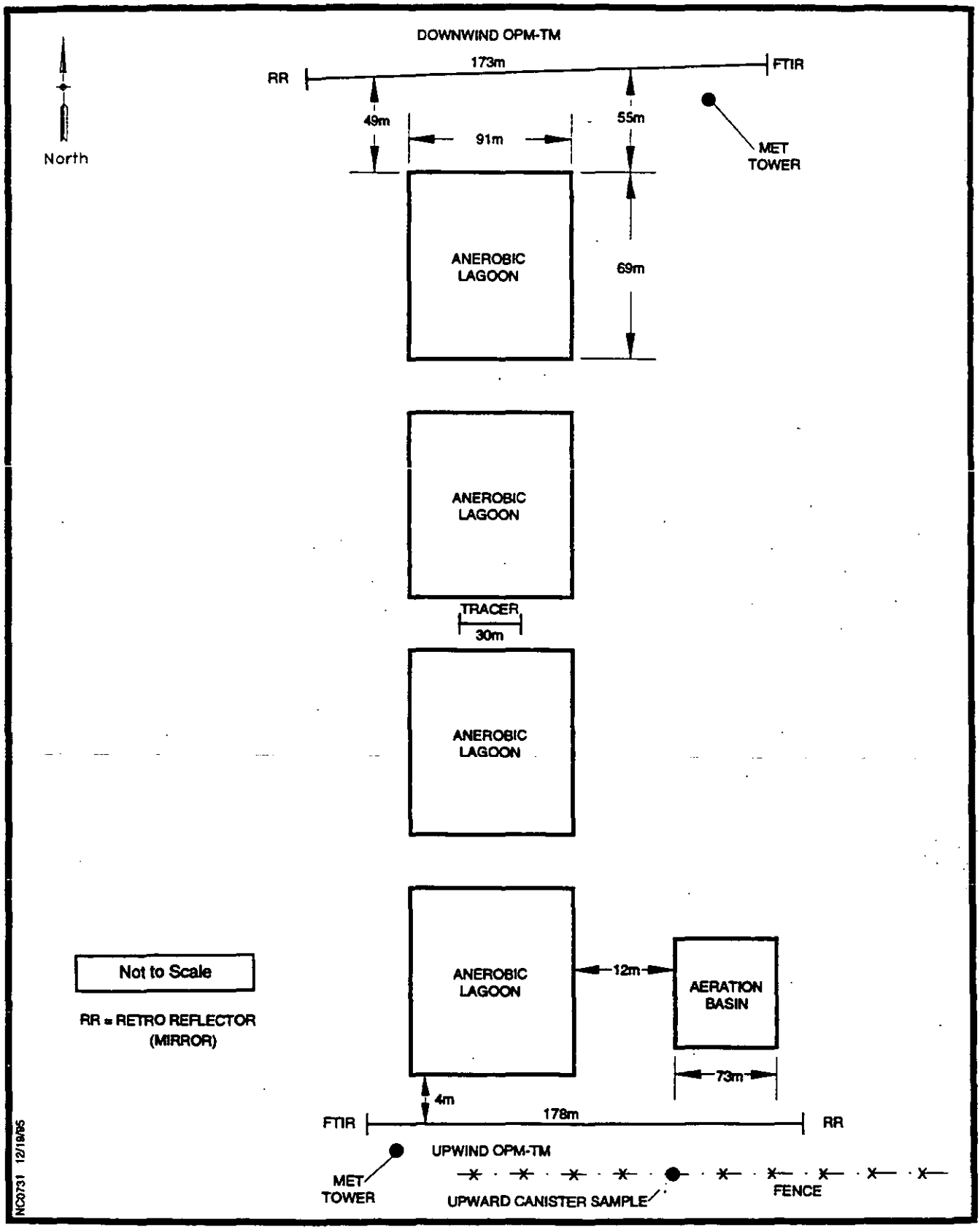


Figure 3-2. Air Sampling Locations At Beef Processing Plant in SW U.S.

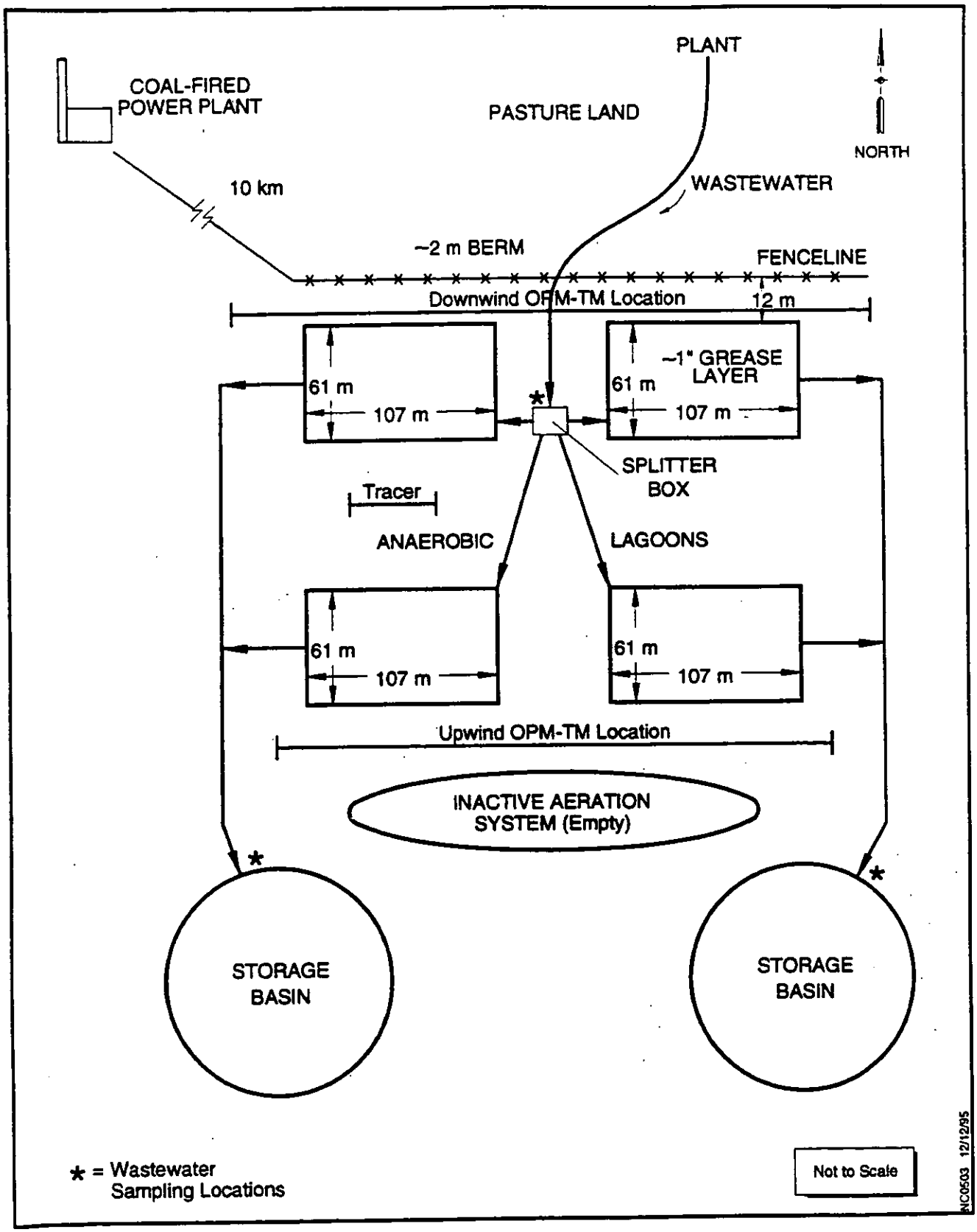


Figure 3-3. Wastewater Treatment System - Beef Processing Plant in Midwest U.S.

grease on the anaerobic lagoons and active degassing was visible in the lagoons, but the odors downwind of the system were minimal. Each of the four lagoons had about 1m (3-4 ft) of freeboard.

The area around the WWT system is pasture and crop land. No feedlots or other large emission sources were noted within several miles of the lagoons. The land to the south of the WWT system is flat for several miles, and the land to the north is relatively flat and open. Typical summertime winds are from the south.

The wastewater sampling locations are shown in Figure 3-3 and the OPM-TM monitoring locations are shown in Figure 3-4. Sampling was performed from August 28 to September 1, 1995. The winds were southerly throughout the sampling effort. Upwind data were collected the first day of sampling using the FTIR positioned on the southern most berm of the 2x2 matrix of anaerobic lagoons. The FTIR was subsequently repositioned to the northern end of the lagoons for collection of downwind data. The FTIR beam was aimed along the road immediately north of the lagoons within the fenceline. This position was only about 12m (40 ft) from the downwind edge of the nearest lagoon, but the fence and the undulating terrain precluded monitoring further downwind.

The influent wastewater samples were collected from the splitter box before the wastewater was divided into the four anaerobic lagoons. The samples were taken by dipping a container into the center of the compartment where the influent entered the box. Separate effluent wastewater samples were collected by the same method at the inlet pipes to the east and west storage basins.

3.4 Chicken Processing Plant - SE U.S.

The plant processes 3.2 million chickens per month with a weight of 1.6 to 1.7 kg (3.5 to 3.8 lb) per bird. The production rate of the plant is 64,000 metric tons/year (70,000 tons/year). The plant generates 3.4 million liters (900,000 gallons) of wastewater per day (21L or 5.5 gallons per chicken that is processed). The WWT system for this plant is shown in Figure 3-5. The wastewater goes to an 8-year-old, 57 million liter (15 million gallon) anaerobic lagoon that is 59m by 133m and almost 5m deep (195 ft by 435 ft and 15-16 ft deep). The lagoon has not been dredged since it was constructed in 1987. After the anaerobic treatment, the wastewater is sent to an aeration tank and clarifier. The sludge is sent to a lagoon located directly east of the anaerobic lagoon. Overflow from the clarifier is discharged to surface water.

The anaerobic lagoon is covered by a floating grease layer that is thick and rigid. After a rain, rainwater percolates down through the grease layer, indicating that it is gas-permeable. There was no visible off-gassing at the time of the sampling (September 4-8, 1995). The wastewater has a BOD concentration of 1,700 to 2,900 mg/L. BOD is monitored monthly at the inlet and twice per week at the outlet of the system.

The anaerobic lagoon is surrounded by grass-covered berms, which were amenable to open path monitoring. The open area to the north of the lagoon is limited by a fence and, just north of this fence, is a forest. The

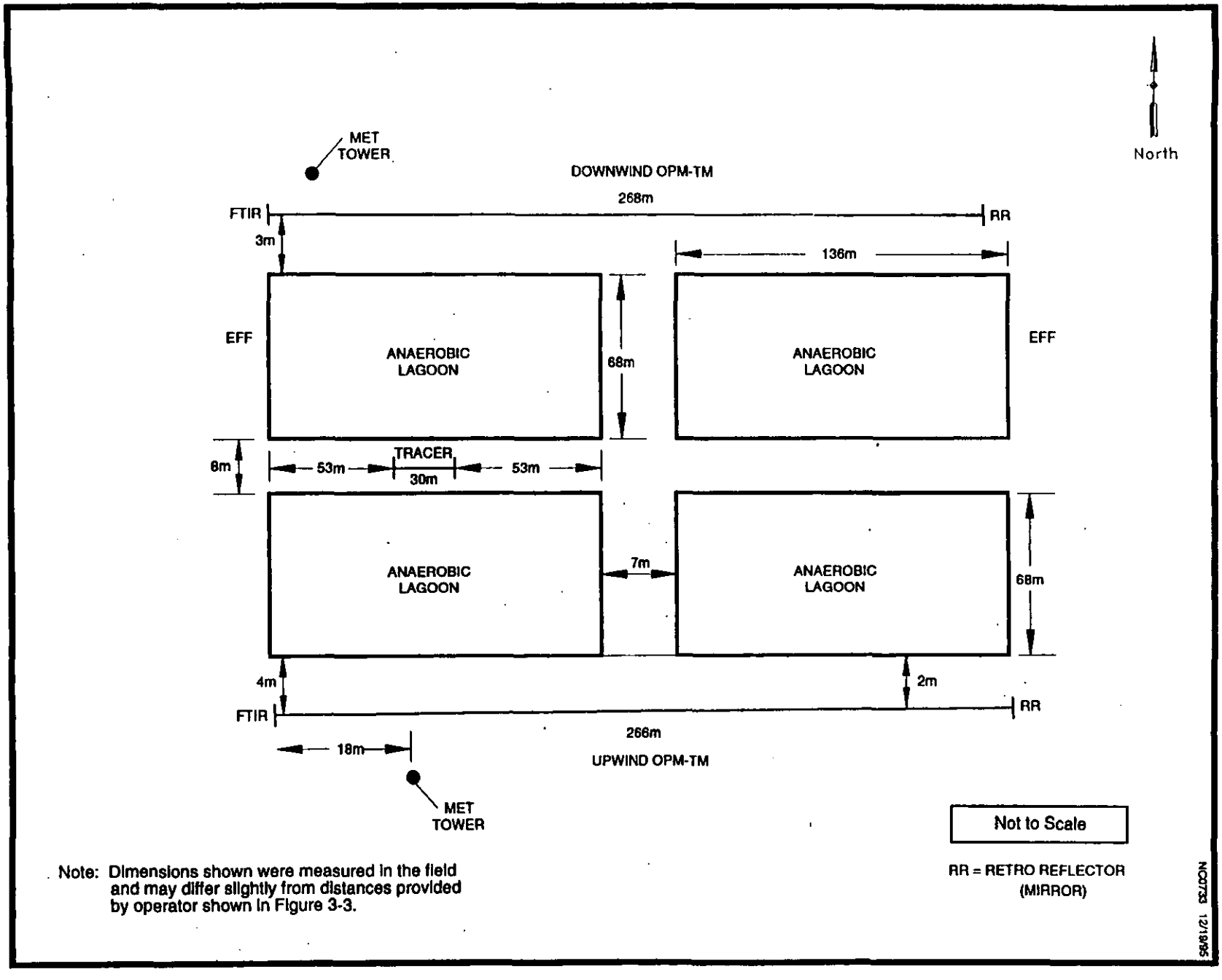


Figure 3-4. Air Sampling Locations At Beef Processing Plant in Midwest U.S.

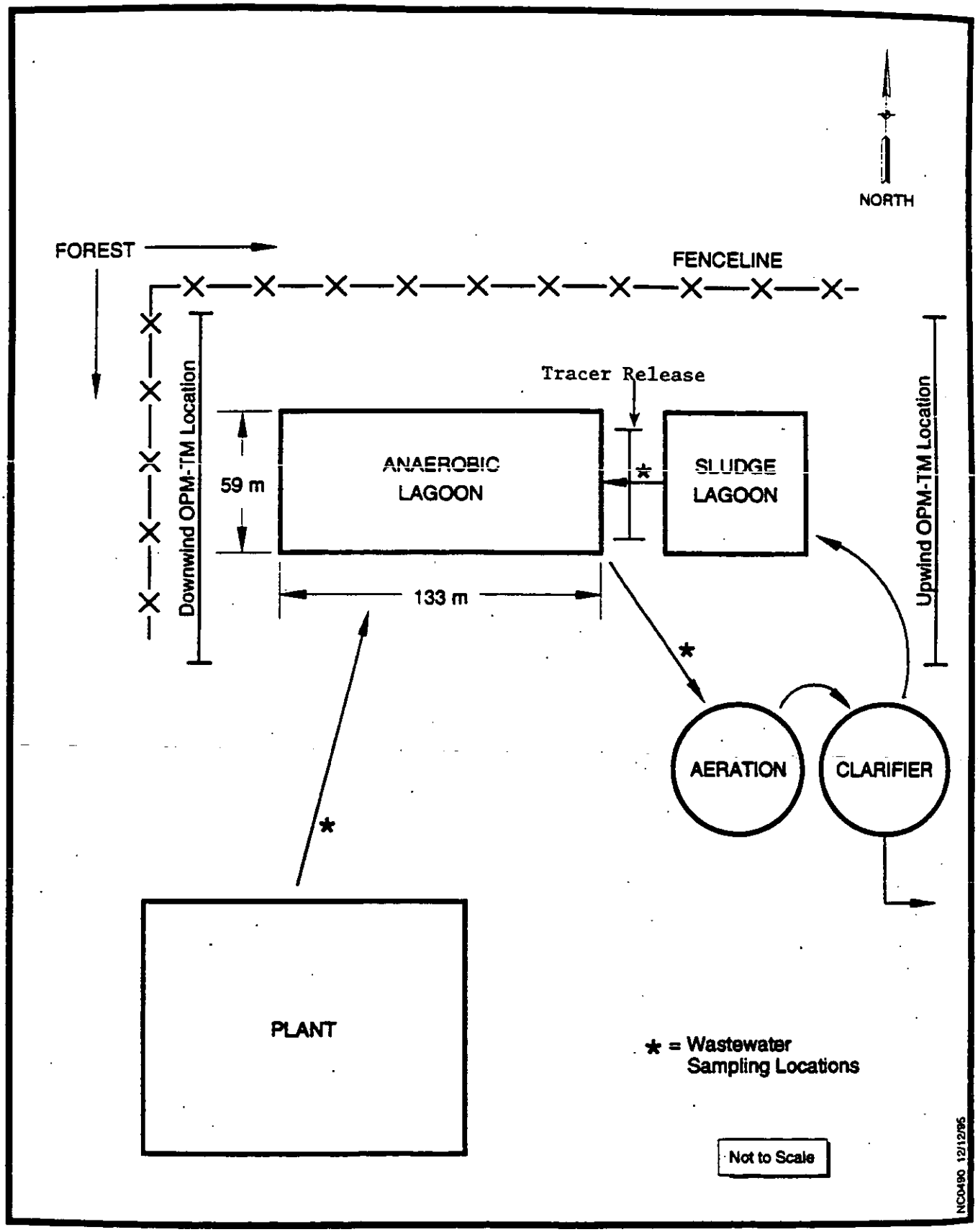


Figure 3-5. Wastewater Treatment System - Chicken Processing Plant in SE U.S.

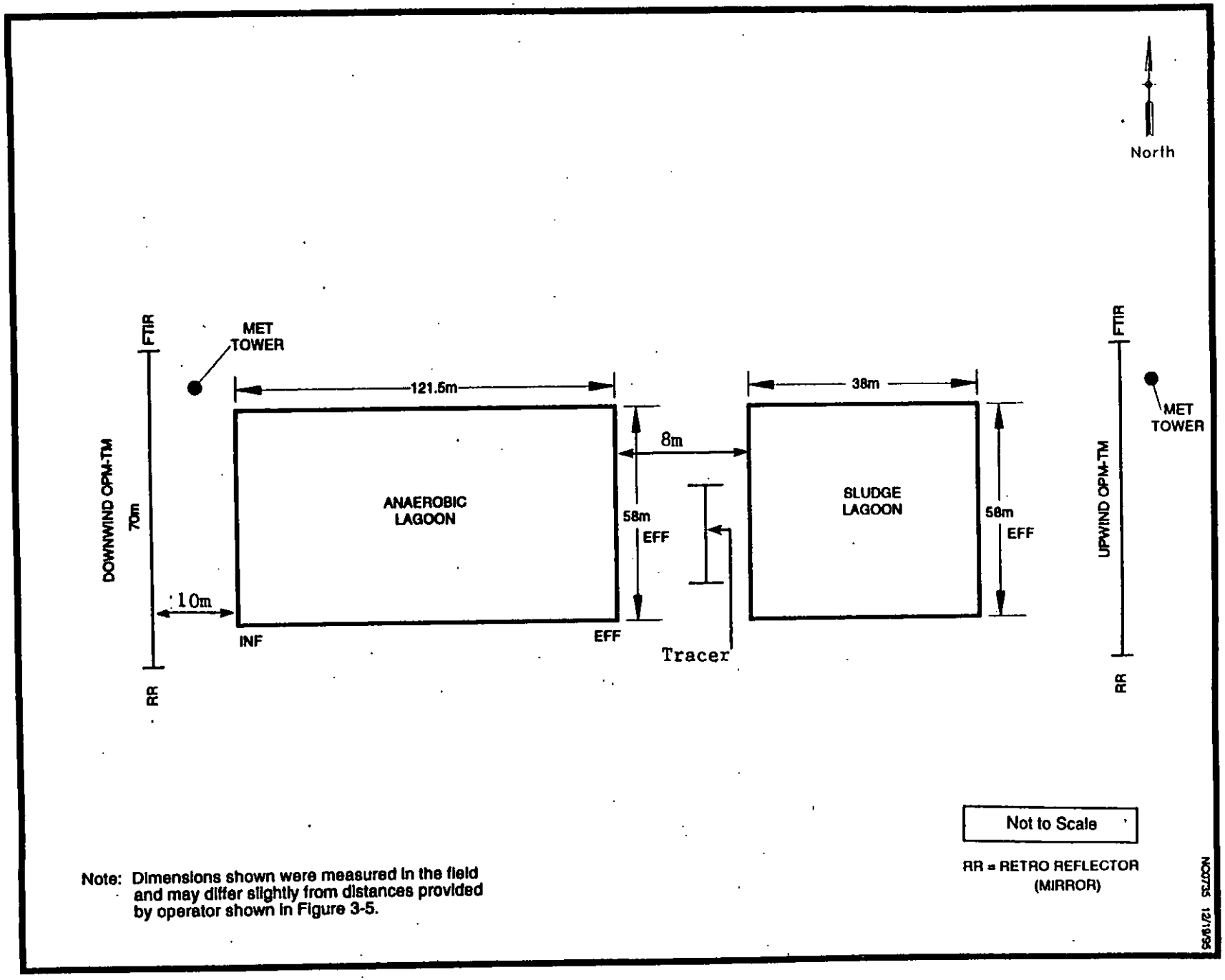


Figure 3-6. Air Sampling Locations At Chicken Processing Plant in SE U.S.

trees may affect wind speed and direction in the immediate area. The area to the south of the lagoon is much more open for at least 50m and was preferable for sampling.

The wastewater sampling locations are shown in Figure 3-5 and the OPM-TM monitoring locations are shown in Figure 3-6. Inlet wastewater samples were collected in the offal room from a pipe roughly 3.7m (12 ft) in diameter that has a constant flow into a floor drain. Effluent wastewater samples were collected inside the pump station building at the discharge from the anaerobic lagoon into the aeration pond. Other effluent samples were taken by dipper from the pipe connecting the sludge lagoon and the anaerobic lagoon.

3.5 Small Town POTW in SW U.S.

The POTW serves a town of about 5,000 people. It is located just outside of town next to a golf course and treats about 1.1 million liters/day (290,000 gallons/day) of wastewater. The WWT system is shown in Figure 3-7. Wastewater goes to a lift station, followed by a facultative lagoon, then on to two oxidation lagoons, and then to a final storage lagoon. (Facultative lagoons are unaerated lagoons with the surface water layer being aerated by wind action and the lower water layers being anaerobic.) The facultative lagoon is 216m by 63.4m and 2-3m deep (710 ft by 210 ft by 8 ft). The first of the two oxidation lagoons is 227m by 70m by about 1.2m deep (745 ft by 230 ft by 4 ft), and the second is 122m by 152m and also about 1.2m deep (400 ft by 500 ft by 4 ft). The wastewater then goes to a large storage lagoon that is 122m by 244m (400 ft by 800 ft) and varies in depth from 0-1.5m (0-5 ft).

The POTW was built in 1992 and had been in operation for 2.5 years at the time of sampling. The influent is predominantly residential wastewater, plus wastewater from a pecan shelling operation and from a 500-bed prison. The discharge from the plant is less than 380,000 liters/day (100,000 gallons/day) of water. Effluent is used to irrigate the adjacent golf course, but up to 380,000 L/day may be discharged to a nearby river.

The typical BOD loading of the influent water is 250 mg/L, and the effluent typically has less than 15 mg/L of BOD.

There are no known large emission sources near the plant. The surrounding terrain is reasonably flat and open. There is a large, open field to the north of the lagoons. It was not possible to measure the total air emissions from the facility, but it was possible to isolate emissions from the facultative and the first oxidation lagoon.

Sampling took place from October 2-6, 1995. The wastewater sampling locations are shown in Figure 3-7 and the OPM-TM monitoring locations are shown in Figure 3-8. Influent wastewater samples were collected from the inlet pipe located across the road from the treatment facility. Samples were collected by dipping a container through a manhole via a pipe 0.6m (2 ft) in diameter. Effluent samples were collected in the same manner from the transfer station where water flows from the first oxidation pond into the second oxidation pond. A final effluent sample was taken from the storage pond at the discharge to the pump station.

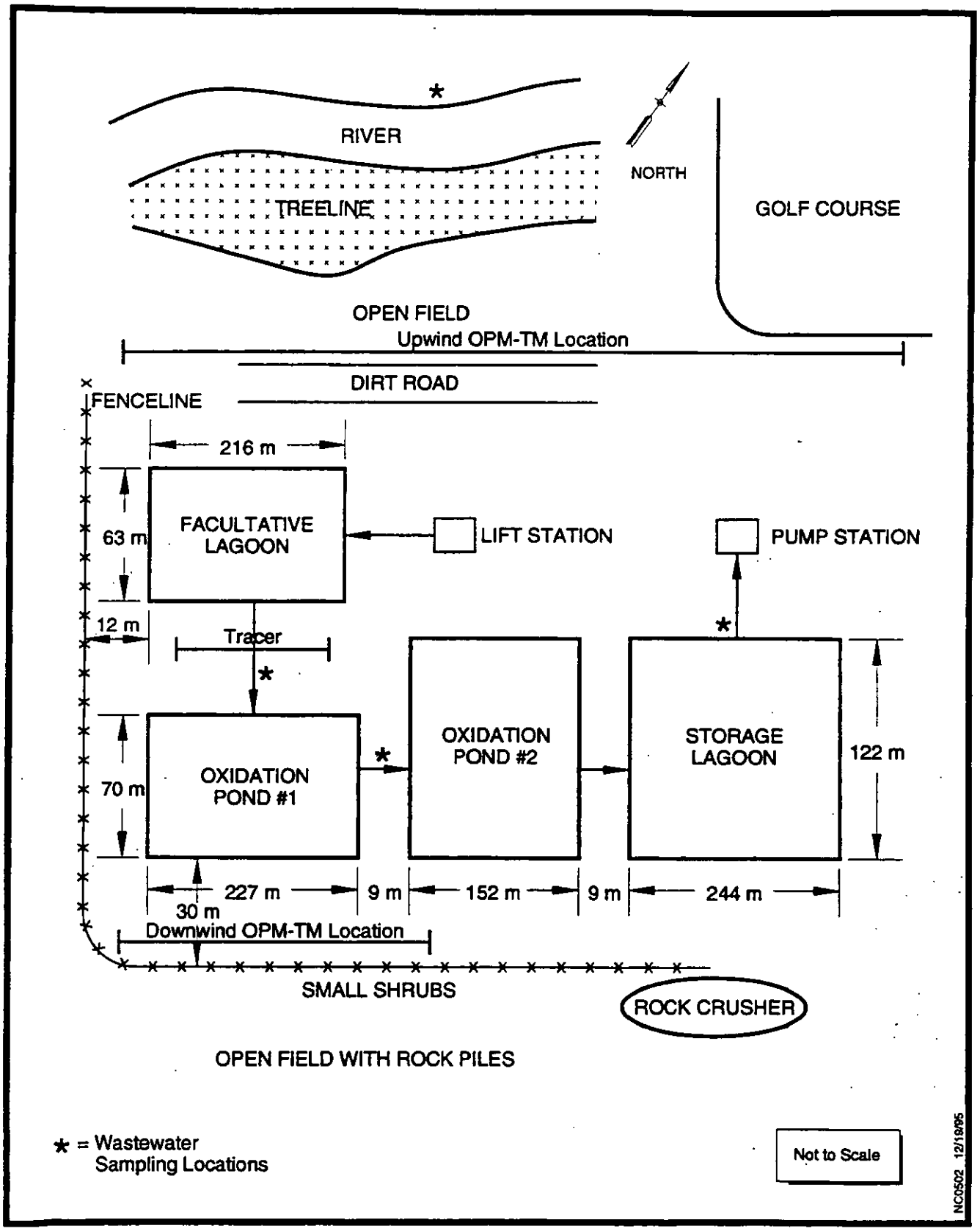
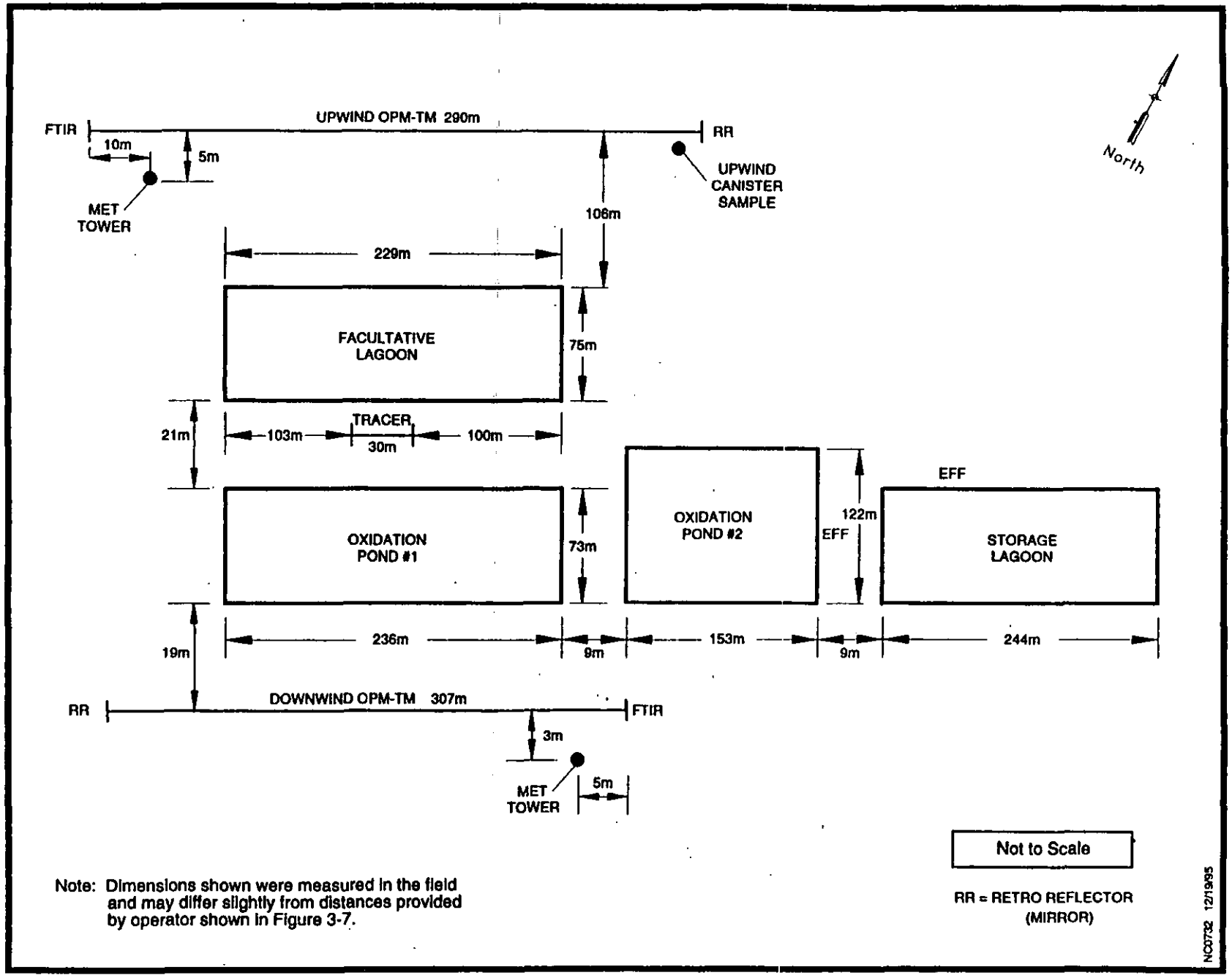


Figure 3-7. POTW for Small Town in SW U.S.



Note: Dimensions shown were measured in the field and may differ slightly from distances provided by operator shown in Figure 3-7.

Figure 3-8. Air Sampling Locations at Small Town POTW in SW U.S.

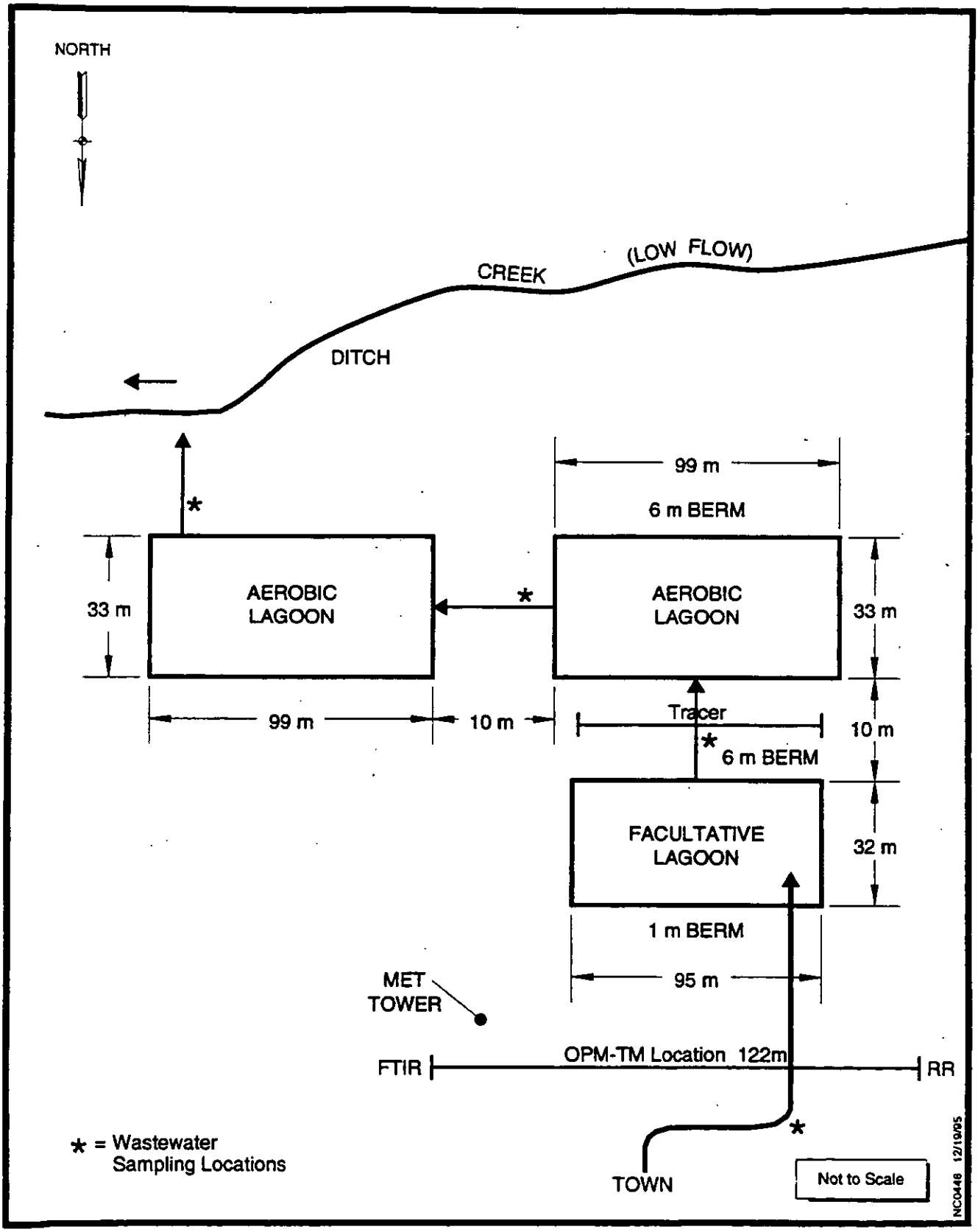


Figure 3-9. POTW for Very Small Town in SW U.S.

3.6 Very Small Town POTW in SW U.S.

The POTW serves a town of about 560 people. All the wastewater is household. No business, industry, or commercial car washes send water to the POTW. No stormwater is sent to the POTW. There are, at most, only two in-sink garbage disposals in town, so relatively little kitchen waste is sent to the POTW. The typical daily influent flow rate is about 167,000 liters (44,000 gallons).

The POTW is shown in Figure 3-9. The plant is built on a gently sloping hill. The POTW consists of one facultative and two aerobic lagoons with gravity flow. The facultative lagoon is designed for a loading of 251,100 L/day (66,340 gallons/day) with 50 kg (111 lb) of BOD. The water level area is 95m by 32m (310 by 105 ft), with 25% of the lagoon 2.7m (9 ft) deep and the remainder 1.8m (6 ft) deep. The side wall slopes are 3:1. The lagoon is designed to achieve 50% removal of BOD. The two aerobic ponds are in series and are designed to provide a further 90% reduction in BOD levels. The water level area of each pond is 33m by 99m (110 by 325 ft). The side wall slopes are 3:1, and the water depth of each pond is 1.2m (4 ft).

At the time of sampling, there was 1.2m (4 ft) of freeboard for each lagoon. A slight odor was noted downwind of the lagoons. Final effluent discharge is into a creek with very low flow.

The predominant summertime winds are from the south or southeast, but a series of storm fronts moved through the area during the sampling period (July 31-August 4, 1995), and the day-to-day wind direction was variable. Open-path monitoring was performed just south of the lagoons within the fenceline of the facility. Emissions from the facultative lagoon and first aerobic lagoon were monitored; emissions from the second aerobic lagoon were not captured. Logistical constraints limited where upwind monitoring could be performed, but with the variable wind direction at the site, it was possible to collect upwind data at the same location where downwind data were collected. There are no other emission sources in the general area, so this approach is valid.

Influent wastewater samples were collected by dipping water from the influent watercourse about 50m upstream of the facultative lagoon. Effluent wastewater samples were collected from the transfer stations where water flows from one lagoon to another and at the weir where water is discharged to the creek. Effluent samples were collected from each of the three lagoons.

SECTION 4
TECHNICAL APPROACH

This section describes the sampling, analysis, and sample handling procedures followed during this program.

4.1 Sampling Procedures

Three air measurement approaches were employed. In one approach, emission rates from lagoons were measured using the transect method. The actual air measurements were made using an FTIR spectrometer employed as an Open Path Monitor; this approach is referred to as OPM-TM. In the second approach, ambient air concentrations were measured using evacuated, stainless-steel canisters. This approach was used as a QC check of the FTIR results. Lastly, meteorological parameters were collected using standard continuous monitoring methods.

Influent and effluent wastewater samples were collected using grab sampling techniques. The temperature, pH, and dissolved oxygen content of the wastewater were measured *in situ*.

All of these methods are described in detail below.

4.1.1 OPM-TM

Emission measurements were made approximately 50 meters downwind of the source. At each site, the FTIR was configured to intersect and horizontally encompass the downwind emission plume. In addition, a set of upwind measurements was made to characterize the background concentration of the target compounds. The background concentrations were subtracted from the concentrations measured downwind of the site.

For any given site, the first day or two of sampling was used to unpack and set up the FTIR and the meteorological station. The upwind measurements were made, and the equipment was then repositioned for the downwind measurements. The FTIR was set up to run automatically during both daylight hours and overnight. The next two to three days generally were used to release tracer gases and determine the emission rate of the GHGs of interest. Data also were collected on the plume capture percentage and, at two sites, the vertical dispersion.

The theory of transect sampling and the equipment used are described below.

OPM-TM Theory of Operation[5]

The transect technique is an indirect emission measurement approach used to map emission plumes. This sampling method is illustrated in Figure 4-1. As illustrated, the centerline of the source gas plume (X) is transected by the sampling axis (Y) at a measured distance downwind of the emission source. The vertical profile can be determined by several methods, for example, by using a tracer gas in conjunction with the FTIR measurements.

If the total cross-sectional area of the plume is covered during the sampling, the plane of sampling is perpendicular to the prevailing wind, and the species

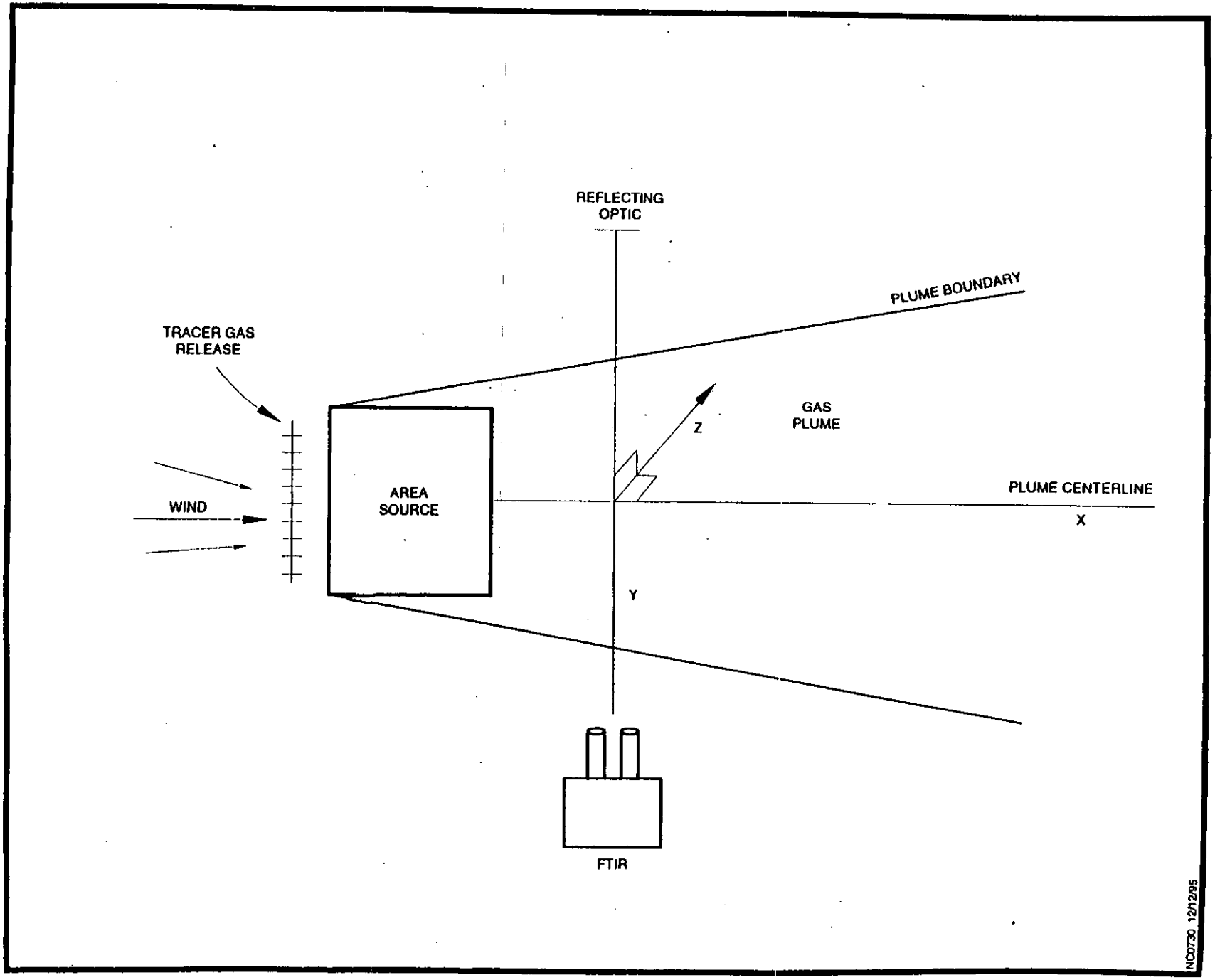


Figure 4-1. Transect Sampling Using Open-Path Monitoring

concentration is constant, then the species concentration in the plume at the sampling plane is equal to the amount being emitted.

The primary advantage of transect sampling is that it is applicable to most emission sources, regardless of size and spatial homogeneity. The method has several potential disadvantages. One disadvantage is that sampling can only be conducted if the meteorological data are within preset limits. Sampling during light and variable winds may not yield acceptable data. A second disadvantage is that it may be difficult to isolate the contribution of the emission source of interest from adjacent or upwind sources. Another disadvantage is that this approach is based on measurement of ambient air downwind of a source, so the measurement methods used must have a high degree of sensitivity (i.e., low detection limits).

A variety of air sampling methods can be used with the transect approach. Traditionally, a series of point samplers have been used along the Y and Z axes to collect a time-integrated sample. This approach has several potential disadvantages: 1) the time resolution is limited by the integration period; 2) a series of point samples can provide only an approximation of the average plume concentration; and 3) the number of point samples required to adequately define the emission plume results in relatively high analytical costs. In this study, an FTIR measurement system was used and the concerns listed above, therefore, are not applicable.

The light beam from the FTIR interacts with the molecules along the entire light path. Thus, the measurement of a given parameter by the FTIR is a path-integrated concentration and has units of concentration times the pathlength (e.g., ppm*meters). The FTIR transmitter/receiver and the retroreflector mark the ends of the path through which the entire emission plume must pass. This path length can be as long as 350 meters (700 total). The exact path length required to ensure that the plume is captured is dependent upon the wind speed, the distance from the source, and the variability in the wind direction.

Emission rates for specific compounds are developed from the ambient air concentration data obtained during the transect sampling. The approach used typically is a basic Gaussian plume model equation for a ground-level, non-buoyant point source. The derivation of this approach has been published.[6] The cross-sectional area of the plume is determined from σ_y and σ_z and multiplied by the wind speed to determine the mass of contaminants moving through a given cross section of the plume over time (i.e. the emission rate at the source). The horizontal encompassing of the plume using the FTIR allows the source term to be calculated using the following equation:

$$Q(t) = \sqrt{\frac{\pi}{2}} * U * \sigma_z * \chi \qquad \textbf{(Eq. 4-1)}$$

where:

$Q(t)$ = emission rate (g/sec);
U = mean wind speed (m/sec);
σ_z = vertical dispersion (m); and
χ = ground-level path-integrated concentration (g/m^2).

The use of a tracer gas in this study allowed for a simpler method of calculating the source term. The ratio of the measured concentrations of the tracer gas and the

compound of interest is multiplied by the known emission rate of the tracer gas to obtain the emission rate of the compound of interest[7]:

$$\frac{Q(t)_{source}}{Q(t)_{tracer}} = \frac{\chi_{source}}{\chi_{tracer}} \qquad \textbf{(Eq. 4-2)}$$

where:

$Q(t)_{tracer}$ = emission rate of tracer (g/sec);
χ_{source} = measured gas path-weighted conc. ($\mu g/m^2$); and
χ_{tracer} = measured tracer gas path-weighted conc. ($\mu g/m^2$).

Strictly speaking, this equation is valid only when the emission source is a point source. However, the approach is valid for line or area sources if the tracer gas exhibits similar behavior to the emission plume. This approach is limited by the degree to which the tracer release approximates the emission source and, in some cases, by differences in atmospheric transport between the tracer gas and the compound(s) of interest.

Ambient Air Monitoring (AAM) data obtained from OPM systems are in path-weighted units of ppm*meter or $\mu g/m^2$, rather than the more conventional units of $\mu g/m^3$ or ppm. The FTIR directly measures χ (in Equations 4-1 and 4-2), while U (in Equation 4-1) is measured by the local meteorological station. The OPM data can be divided by the path length to yield a path-averaged concentration (in ppm or $\mu g/m^3$) along the path that is monitored. This average concentration is analogous to an average obtained from a line of point samplers. The OPM data, however, cannot be used directly to determine if the mass of emissions was equally distributed along the beam path or if there were localized "hot spots" of relatively high air concentrations. Such information can be obtained only if multiple OPM configurations are used; for example, different path lengths could be used and the measured concentrations compared to identify when contributions from any hot spots are observed.

The vertical dispersion can be evaluated using a vertical array of point samplers, or it may be extrapolated from measurement of the wind direction standard deviation (sigma theta) by using Pasquill-Gifford stability classes and the associated dispersion curves. Recent studies have shown, however, that even with the measurement of sigma theta, σ_z values determined by stability class can be in error and introduce as much as 20-40 percent error into a source term measurement.[8]

Another method to address vertical dispersion is to use a tracer gas on the site. The tracer gas is released at a controlled rate and the path-weighted concentration of the tracer is measured at a downwind line. Field measurements of σ_z performed using the tracer gas are preferred to extrapolated or estimated values. In this study, the FTIR measurements were made at a single height above ground. The vertical distribution of the emission plume will not affect the calculated emission rates as long as the emission plume and the tracer gas plume exhibit similar behavior.

In this study, σ_z was measured with the aid of a tracer gas. This can be expressed using Equation 4-1 in slightly rearranged form:

$$\sigma_z = \sqrt{\frac{2}{\pi} * \frac{Q(t)_{tracer}}{\chi * U}} \qquad \textbf{(Eq. 4-3)}$$

The determination of σ_z is considered valid if the wind speed is greater than 4 mph. The measured values can be compared to values from the Turner nomographs[9] as a check of the reasonableness of the tracer data.

The key acceptance criterion to determine if transect data are valid is the percentage of the sampling period that the horizontal boundaries of the emission plume are within the sampling array, or for OPM-TM, within the light path. This was determined by checking to see that the wind direction was within 30° of placing the light path perpendicular to the plume and that the released tracer gas was detected by the FTIR unit.

As long as the tracer gas release mimics the release of gas from the source, the ratio technique is valid *even* if the plume is not Gaussian. Traditionally, however, transect sampling has not been done using a tracer, and the data's validity therefore has depended on the Gaussian nature of the plume and, consequently, on meteorological conditions. For a given sampling period, the meteorological criteria typically used to determine if data are valid are:

- The mean wind speed for the sampling period must be greater than 4 mph;
- The maximum wind speed (gust) must not be greater than three times the mean wind speed; and
- The dispersion class of D, E, or F (class C conditions may yield valid data).

The characterization of the upwind air was a key element of this study. The ambient concentrations measured downwind of the lagoons must be corrected for the upwind concentration (i.e., the upwind concentration is subtracted out). One of the principle criteria for selecting sites was that no other emission sources be present near the facilities to be tested. This selection criterion helped ensure that the upwind concentrations would be relatively low and, most importantly, reasonably constant over time. The upwind air was sampled by FTIR for about 12 hours at the start of the study. In addition, two integrated upwind samples were collected in evacuated canisters each day of monitoring. However, logistical constraints or adverse meteorological conditions hampered the collection of data at an upwind location at some sites. In these cases, upwind data were developed using the existing data set from time periods when the emission plume did not cross the monitoring beam. The one analyte in the upwind air that did vary over time was water vapor. Therefore, relative humidity was continuously monitored to account for changes in water vapor concentration over time.

Another key element of the study was the meteorology encountered during the sampling periods at each site. The site geography dictated where the monitoring could occur at some sites and the monitoring equipment could not be moved to catch short-term fluctuations in the wind direction, so the sampling was at the mercy of the wind conditions. Valid data could not be collected if the wind direction was highly variable, if the wind direction was not within the acceptance criteria, or if the wind speed was too low. The best conditions for monitoring frequently occurred during the nighttime hours. The lack of solar heating during the night results in more stable atmospheric conditions and less variability in the wind direction. The automated equipment used in this study allowed data to be collected continuously during both daytime and

nighttime hours. The five-minute averaging periods of both the FTIR and the meteorological sensors allowed valid data to be collected even if the periods of acceptable meteorological conditions were relatively brief.

Monitoring Equipment

The monitoring equipment for WWT lagoons included an FTIR-OPM, a meteorological station, and cylinders of tracer gases. The meteorological station was located on site within 30m of the FTIR unit and situated so as to avoid the downwash from the vehicle housing the FTIR. Data for both the FTIR and meteorological station were collected every five minutes and stored on a computer disk.

The FTIR was configured so that the light path was positioned based on the current and forecast wind direction. The equipment would have been moved as necessary to collect downwind ambient pollutant concentrations, but wind shifts were minimal.

The light path was situated approximately 50m downwind of the emission source. The farther the downwind distance, the better the Gaussian plume characteristics, but the lower the ambient concentrations to be measured. The equipment was moved closer to the lagoons where logistical constraints precluded sampling at a 50m distance.

Data were collected and analyzed in five-minute samples. A five-minute sample consists of approximately 230 independent measurements averaged to produce the sample value. The infrared spectrum for each sample file was time-stamped and saved to the computer. The FTIR system is capable of real-time quantitation of 25 compounds, and additional compounds may be quantitated during post-processing if needed. Once quantified, the concentration data were time-stamped and written to a data file. The concentration data also appeared on the computer monitor for on-site observation.

The meteorological station was used to collect temperature, wind direction, wind speed, and relative humidity data at a height of 3m (10 ft) above ground surface. These data were collected by the computer at five-minute intervals and written to the concentration data file described above. The following sensors were used:

Temperature--The temperature probe was enclosed in a naturally-aspirated radiation shield. The sensing element is a thermistor device specifically constructed to produce a linear resistance change; it is provided with a temperature translator and an analog 0-1 volt signal representing ambient temperature. Rated accuracy of the probe is ±0.25°C.

Wind Speed--Wind speed was measured using a 3-cup anemometer. A frequency-modulated output signal, proportional to wind speed, is received by the translator and converted to a 0-1 volt output. Rated accuracy is ±1% or 0.067 m/sec (0.15 mph), whichever is greater.

Wind Direction--Wind direction was measured using a light-weight vane rotating on a stainless-steel shaft. The wind direction translator provides a reference voltage to a low torque potentiometer. The wiper arm of the potentiometer is driven by the wind vane sensor, so voltage from the wiper is proportional to wind direction. Rated accuracy is ±0.5% or ±1.8 degrees.

Relative Humidity--A Met One relative humidity sensor was used to continuously

monitor the water vapor content in the ambient air on a continuous basis.

The tracer gas used was pure sulfur hexafluoride (SF_6). This gas is readily detected in the infrared spectrum, is non-reactive, is not present in the atmosphere as a background gas, and does not have any known health effects. The tracer gas was released at water level at the upwind side of the lagoon from gas cylinders through calibrated flow controllers at rates on the order of grams per second.

The tracer gas typically was released during three, twelve-hour periods at each site (1 cylinder has about a 12-hour capacity). The tracer gas was released from a 30-m line located about 0.5 m above the ground surface and 5-10 m upwind of the edge of the lagoon; every 4-5 m along the release line was a release point with a rotameter to set the flow rate. The total gas release rate was approximately 10 L/min. The tracer gas was released close to the edge of the lagoon and close to the ground surface to minimize any differences in dispersion between the source plume and the tracer plume. The tracer gas was released parallel to the ground to avoid any vertical momentum. When multiple lagoons were tested simultaneously, the release was at the midpoint.

4.1.2 Confirmatory Air Measurements

Several additional air concentration measurements were made at each site to confirm and augment the FTIR measurements. Samples were collected in evacuated, Summa-polished, stainless-steel canisters with calibrated veriflow regulators for flow control. First, two 2-hr integrated air samples from the upwind location were collected each day approximately 50m upwind of the nearest lagoon (source). Second, two 20-minute integrated air samples were collected twice each day that monitoring took place as a QC check. The canister was hand-carried alongside the FTIR light beam one meter downwind of the FTIR beam and at the same height above the ground as the FTIR beam during the sampling duration. The sampling interval coincided with four 5-minute averaging periods for the FTIR and meteorological measurements. Both types of samples were analyzed off-site for CH_4, CO_2, and TNMHC content. The downwind sample also was analyzed for the tracer gas. This provided a QC check of the CH_4, CO_2, and SF_6 values measured using FTIR.

4.1.3 Collection of Operational Data

Process operational data were collected for the waste lagoons to assist in the interpretation of the data collected from the monitoring and to develop emission factors. The data collected were as follows:

- Volume;
- Surface area;
- pH;
- temperature;
- BOD loading;
- COD loading;
- Nitrogen loading; and
- Dissolved oxygen content.

These and additional data were used to help estimate overall emissions, for comparison to activity factors, and to explain any data anomalies. Two influent and one effluent wastewater samples were collected during each day of air emissions testing. Samples were collected at the same locations used by plant personnel. Measurements were made on site for temperature, pH, and dissolved oxygen. BOD, COD, nitrate, and other analyses were performed off-site.

All wastewater samples were collected as grab samples by dipping or catching the influent or effluent wastewater. Influent wastewater samples were collected from the influent stream after screening and prior to the anaerobic or facultative lagoon. Effluent wastewater samples were collected at the discharge from the final lagoon in series. In some cases, the air emissions were measured from some, but not all, of the lagoons present at the site due to logistical constraints. In such cases, the effluent samples were collected from the last lagoon in series addressed by the air monitoring, and one or more additional samples were collected of the final effluent from the system.

4.2 Analytical Procedures

The analytical procedures used in this program are divided into three categories: air samples by FTIR, air samples by gas chromatography (GC), and wastewater samples by a variety of analysis methods.

4.2.1 Fourier Transform Infrared Spectroscopy

Fourier transform infrared (FTIR) spectroscopy was used to detect GHGs in real time on a continuous basis. The following discussion is based largely on work published by Griffith[10]. FTIR relies on the use of an infrared light beam, an interferometer, a detector, reflecting optics, and analysis software. Light from the infrared source is passed through an interferometer, which modulates the light intensity by moving a mirror. The light beam then is sent through a telescope toward a modified corner-cube reflector. The reflector returns the beam parallel to but displaced from the launched beam. The returning beam is collected by a second telescope and focused onto a detector. The equipment specifications are given in Table 4-1.

Data Processing

The signal at the detector (i.e., the amount of light that has been transmitted through the atmosphere) is monitored and collected by the computer and assembled into an interferogram. The interferogram is the modulation of the light source intensity as a function of mirror displacement. The interferogram then undergoes a mathematical process called a Fourier transform and is converted into a single beam spectrum. Examples of an interferogram, a single beam spectrum, and reference spectra are given in a recent report for a similar study.[11]

The single beam spectrum shows the intensity of the light which has been transmitted through the atmosphere plotted against wavenumbers (reciprocal centimeters; i.e., cm^{-1}). A wavenumber is inversely proportional to the wavelength of light, and different wavenumbers or wavelengths may be thought of as different colors of light. The spectrum represents the change in transmitted light intensity as the wavenumber (wavelength or color) of the light varies.

For quantitation purposes, the spectrum must be converted into an absorbance spectrum. This is accomplished by the following mathematical steps. The single beam spectrum is normalized by an instrument response function; i.e., one must account for all of the light which is lost because of the reflections within the instrument, reflections off the retroreflector, light scattering, etc. This normalization produces a transmittance function, represented mathematically as:

Table 4-1
FTIR Equipment Specification

Measurement	CH_4, CO, CO_2, N_2O, H_2O and selected, speciated VOCs
Principle	Infrared spectroscopy
Detector	Hg/Cd/Te
Noise equivalent absorbance on 300-m path	$5X10^{-4}$
Number of analyses	12 or more per hour
Accuracy	±10%
Precision	±15%
Computer control	Dell Dimension XPS90
Analysis software	Nicolet OMNIC
Configuration	Dual scope with retroreflector

Hg/Cd/Te = Mercury/Cadmium/Tellurium

$$T = \frac{I(\nu)}{I_0(\nu)} \qquad \textbf{(Eq. 4-4)}$$

where:

$I(\nu)$ = light intensity after the beam has passed through the ambient air;

$I_0(\nu)$ = instrument response function and is the light intensity in the absence of any ambient air; and

$T(\nu)$ = transmittance.

The transmittance is related to the concentration through the following equation:

$$T(\nu) = \frac{I(\nu)}{I_0(\nu)} = e^{-\kappa(\nu)*\rho*L} \qquad \textbf{(Eq. 4-5)}$$

where:

$k(\nu)$ = absorption coefficient is constant for each molecule at a given pressure and temperature;

ρ = concentration (ppm); and

L = path length traversed by the light beam in meters.

By convention, the common logarithm of the transmission is defined as the absorbance and is given by the following equation:

$$A(\nu) = -\log T = 0.4342*\kappa(\nu)*\rho*L \qquad \textbf{(Eq. 4-6)}$$

where $A(\nu)$ is the absorbance.

Equation 4-6 shows that the absorbance is dependent upon both the concentration and the path length. Furthermore, the longer the path length, the higher the absorbance. Equations 4-5 and 4-6 are forms of the Lambert-Beer Law, more commonly referred to as Beer's Law.

Figure 4-2 shows an absorbance spectrum that was collected over a 300-m path length. All of the features visible at this scale in this spectrum can be attributed to water and carbon dioxide, the two primary GHGs. This spectrum can also be used to illustrate the theory of global warming. The regions from approximately 800 to 1200 wave-numbers and from 2100 to 3100 wavenumbers show substantially less absorbance than the region in between or the regions at either end. It is these two low-absorbing or high-transmitting regions that are commonly referred to as the atmospheric windows. Infrared radiation (or heat) leaves the earth through these windows. Increasing the concentrations of GHGs in these windows will increase the temperature of the earth as the infrared light that normally escapes is absorbed and re-emitted toward the earth.

Concentration Determination

To determine the concentration of atmospheric species present, the absorbance spectrum is analyzed using a classical least squares (CLS) fit program and calibrated reference spectra. The CLS program is contained on the FTIR controlling computer and was developed by Nicolet Instruments, Inc. The calibrated reference spectra were collected by Dr. William Herget while at Nicolet. The reference spectra were generated from calibrated gas standards accurate to ±2%.

Each reference spectrum exhibits a distinct pattern of lines, which varies predictably in

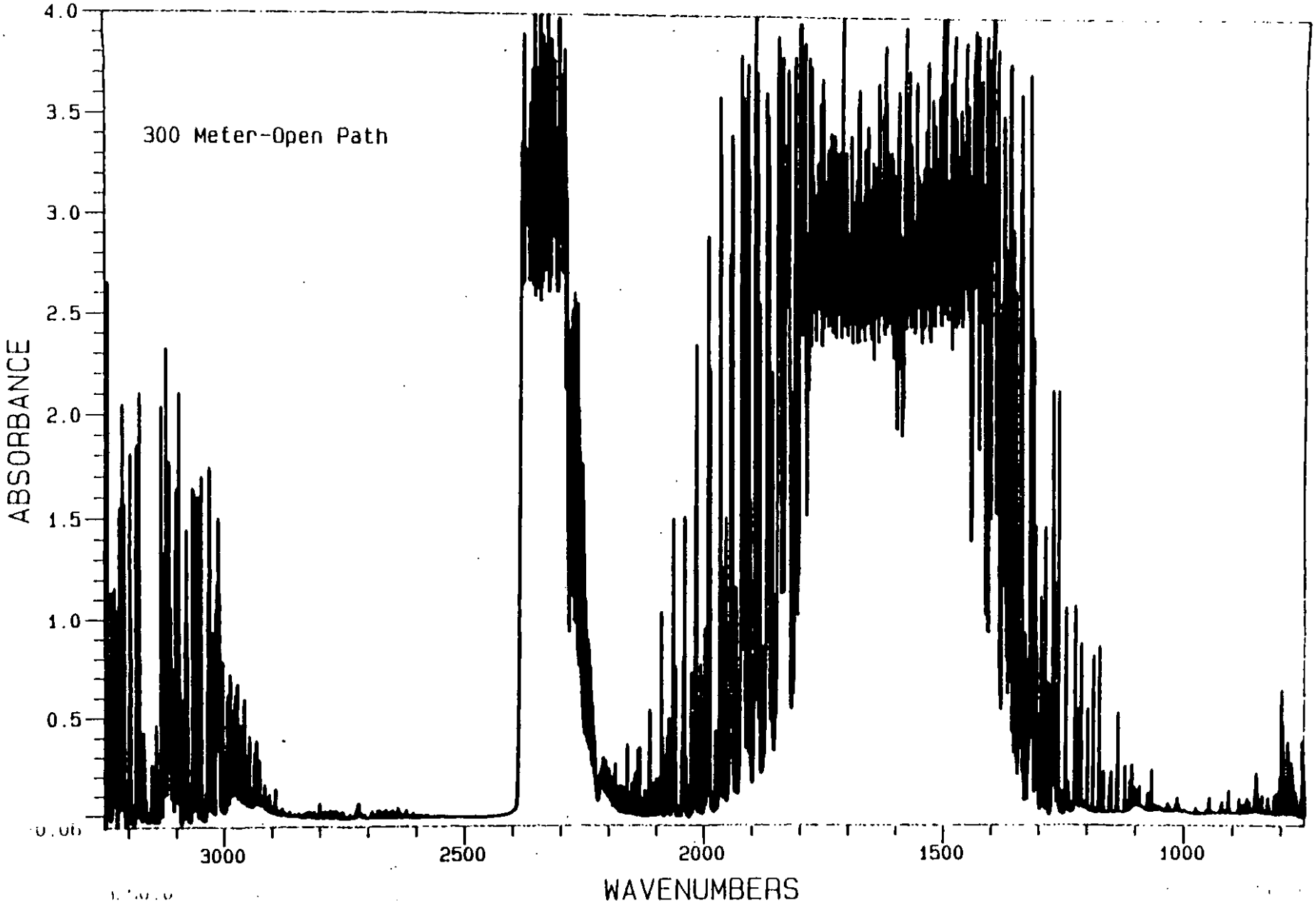


Figure 4-2. Example of an Absorbance Spectrum

relative intensity, line width, and line position. Furthermore, every molecule exhibits a unique spectral pattern, which is dependent upon the manner in which its atoms are connected, i.e., its structure. These spectral patterns are the basis of the sensitivity and specificity of the FTIR; the entire spectral pattern or a significant portion of it can be used for identification and quantitation of a compound. FTIR differs from chromatographic methods, which use a non-speciating detector and rely on a single parameter for identification (i.e., the elution time).

The identification of CH_4 and N_2O in the sample absorbance spectrum shown in Figure 4-2 can be made visually. Figure 4-3 shows the sample absorbance spectrum expanded in the region of 2900 to 2960 cm^{-1}. The lower trace in this region is the CH_4 reference spectrum. This lower trace corresponds to 2.1 ppm of CH_4. Figure 4-4 shows the expansion of the 2190 to 2220 cm^{-1} region. Here, the lower trace is the reference spectrum of N_2O, which corresponds to a concentration of 0.37 ppm. Both of these concentrations are typical of background ambient air.

Quantitation of the species present is made by scaling the calibrated spectra to best fit the sample spectrum. This technique is done by the CLS routine described as follows.

First, the absorbance spectrum is divided into regions around which the compounds of interest exhibit absorption feature(s). For example, the CH_4 region is generally 2910 to 2950 cm^{-1}; for N_2O the region is 2190 to 2220 cm^{-1}.

Second, the reference spectrum of the compound of interest and any other compound that has features in this region are collected in a matrix (See Table 4-2). For CH_4, the matrix would include water. For N_2O, the matrix would include water, carbon dioxide, and carbon monoxide.

Third, each region is quantitated using the CLS routine with the reference spectra identified in the matrix. This calculation is made using the following equation:

$$A_s(\nu) = a + b\nu + \sum_{i=1}^{N} \eta_i * A_i(\nu) + \theta \quad \textbf{(Eq. 4-7)}$$

where:

$A_s(\nu)$ = Absorbance of the sample at ν;

$A_i(\nu)$ = Absorbance of the reference spectra at ν;

η_i = scale factor by which each reference spectra was multiplied to yield the best fit;

$a+b\nu$ = baseline correction term; and

Θ = residual or an error term.

The actual concentration is then determined by:

$$C_s = \frac{\eta_i C_r L_r}{L_s} \quad \textbf{(Eq. 4-8)}$$

where:

Cs = concentration of compound in the sample;

η_i = scale factor determined in the CLS fit;

C_r = concentration of the reference spectra;

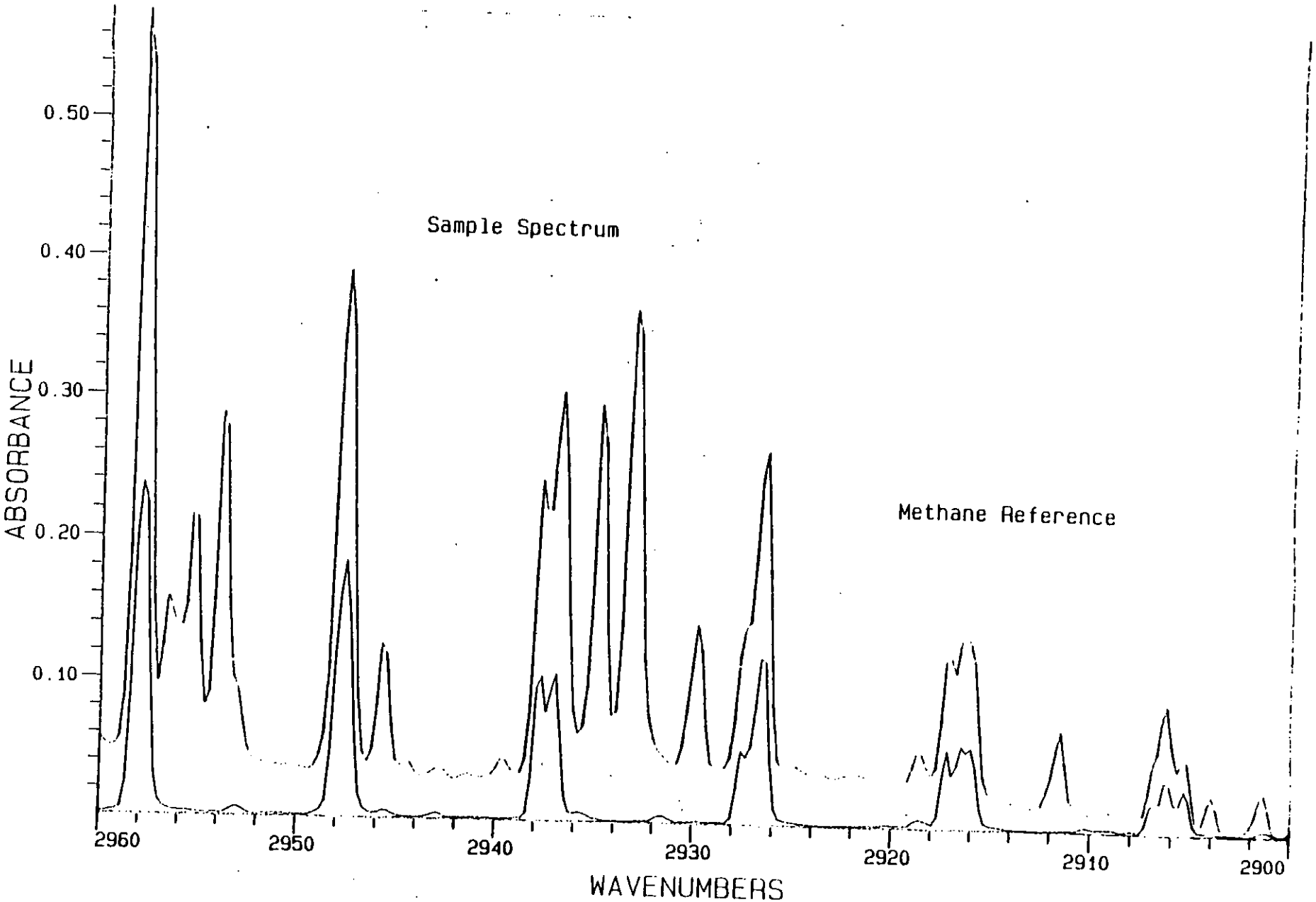


Figure 4-3. Sample Spectrum Versus Methane Reference Standard at 2900 to 2960 Wavenumbers

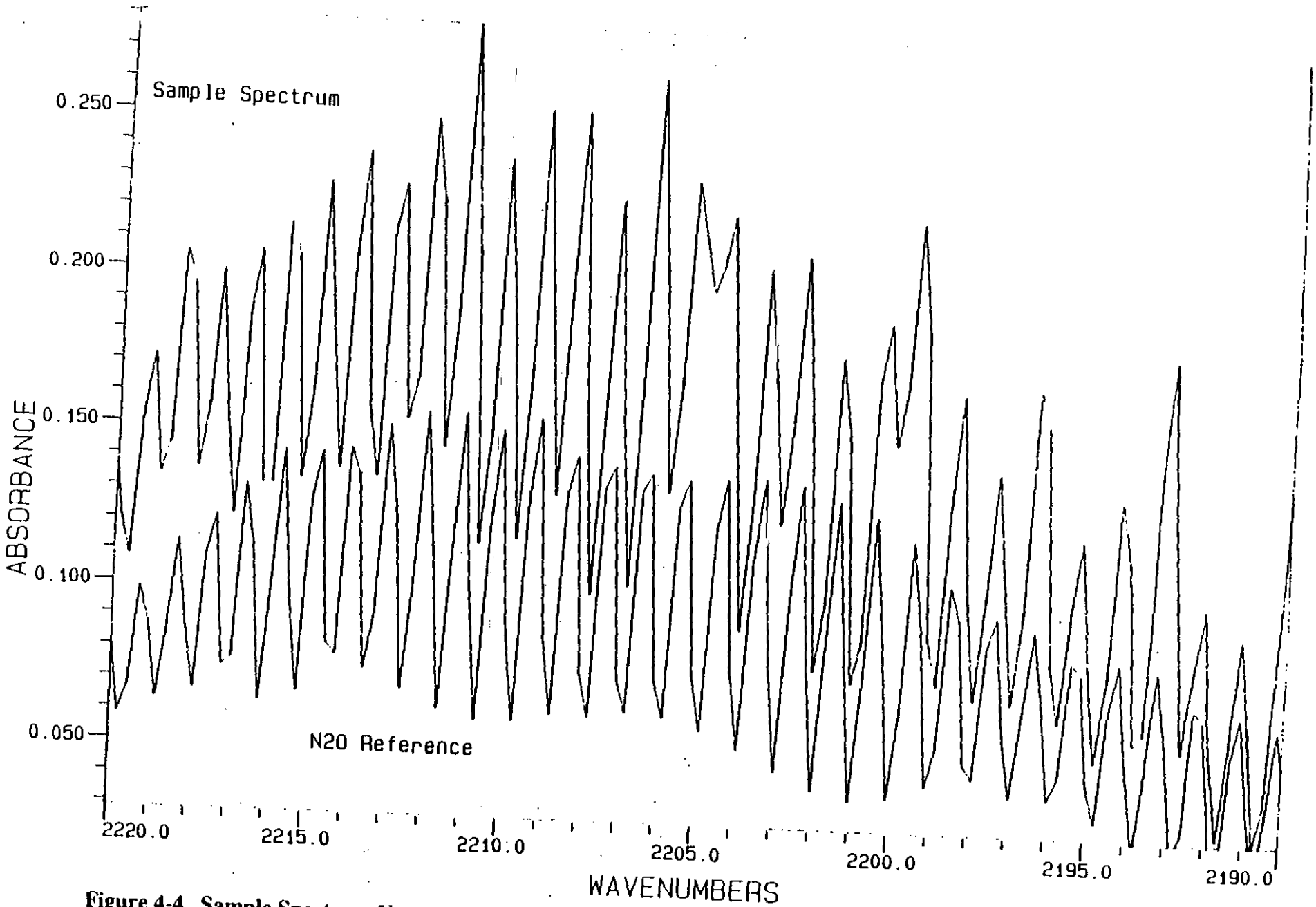


Figure 4-4. Sample Spectrum Versus Nitrous Oxide Reference Standard at 2200 to 2190 Wavenumbers

Table 4-2
Analysis Matrix for FTIR

Region	Compound										
	H_2O	CO_2	SF_6	CH_4	NH_3	N_2O	CO	C_2H_4	H_2S	CFCs	TNMHC
756 - 975	I	S	S	-	S	-	-	S	-	S	-
1020 - 1071	S	I	-	-	I	-	-	I	I	I	-
2092 - 2174	I	I	-	-	-	-	S	-	-	-	-
2190 - 2224	I	I	-	-	-	S	-	-	-	-	-
2500 - 2830	I	-	-	S	-	I	-	-	S	-	I
2950 - 3000	I	-	-	I	-	I	-	I	I	-	S

S = indicates bands used for quantitation.
I = indicates an interferant that must be accounted for, but not quantitated.

L_s = path length over which the sample was collected; and

L_r = path length over which the reference was collected.

Fourth, the exactness of the fit is reported in terms of 95% confidence intervals on the reported concentration. The analysis method is shown in Table 4-2.

Some species, however, show an apparent deviation from Beer's Law due to the finite spectral resolution of the spectrometer. Fortunately, the non-linear response can be easily corrected by use of a correction function, which typically is a polynomial function. The correction function is generated by measurement of a series of spectra over a range of path-weighted concentrations in the laboratory. The actual versus measured path-weighted concentrations are plotted and fit with the appropriate correction function (e.g., polynomial). This function is then used in the field to correct the raw data for non-linear response. In this study, non-linear corrections were applied to the CH_4 and SF_6 data.

4.2.2 Analysis of Canister Samples

Fixed gas analyses were performed for CH_4, CO_2, SF_6, and TNMHC . The canister analyses were subcontracted to Air Toxics, Ltd., in Folsom, CA. Air Toxics used the following methods:

ASTM D-3416/CH_4 and CO_2

An aliquot of the sample was introduced via a sample loop and analyzed by gas chromatography/flame ionization detector (GC/FID). CH_4 is analyzed directly by FID. The CO_2 is backflushed, goes through a reduction step where it is reduced to CH_4, and then analyzed by FID. The QC checks included a single point daily calibration, 10% duplicates, a daily lab blank, and a daily end check.

Method 18/SF_6

An aliquot of the sample is introduced by direct injection and analyzed by GC/ECD. The QC checks included an initial 5 point calibration, a daily calibration check, 10% duplicates, a daily blank, and a daily end check.

Method TO-12/Total Non-methane Hydrocarbons

An aliquot of the sample is cryogenically concentrated, flashed desorbed and analyzed by GC/FID. The QC checks included an initial 5 point calibration, a daily calibration check, 10% duplicates, and a daily blank.

4.2.3 Wastewater Analyses

A number of analyses were performed on the wastewater samples from each site.

SM 2550 Temperature

Temperature measurements were made using a Corning M90 field analyzer, which also provided data on pH. The instrument provided data in increments of 0.1 °C. Temperature is not a critical parameter, and the readings were taken to provide a general value for the temperature of the wastewater streams.

SM 4500 - H^+ pH

The determination of pH was performed by SM 4500 using a Corning M90 field analyzer. The intensity of the acidic or basic nature of water is indicated by pH or

hydrogen ion activity at a given temperature. The basic principle behind pH measurement is determined by the activity of the hydrogen ions. This value was measured by potentiometric means using a standard hydrogen electrode and a reference electrode. The pH was not a critical parameter; the readings were taken only to determine if the wastewater pH was within the range generally considered suitable for biological activity.

Dissolved Oxygen

Dissolved oxygen levels in wastewater were determined by the electrometric method using membrane electrodes. An Orion Model 820 analyzer was used to make *in-situ* measurements. The method is based on the rate of diffusion of molecular oxygen across a membrane. Interferences in the wastewater are minimized because the sensor is protected by an oxygen-permeable membrane, which serves as a diffusion barrier against impurities, making the membrane electrode an excellent method for polluted, highly colored waters and strong waste effluents.

Biological Oxygen Demand (BOD)

BOD is an empirical test used to determine the relative oxygen requirements of wastewaters, effluents, and polluted waters. The test gives an indication of the amount of oxygen needed to stabilize or biologically oxidize organic compounds in waters or wastewaters. BOD measures the oxygen utilized during a specified incubation period (usually 5 days) at 20°C to biologically degrade organic material at a pH of 6.5 to 7.5. Oxygen utilized to oxidize inorganic material, such as sulfides and ferrous iron, is included in this measurement. No inhibitor was added to the dilution water, so the oxygen used to oxidize reduced forms of nitrogen also was measured.

Chemical Oxygen Demand (COD)

COD is a test used to determine the oxygen equivalent of the organic and inorganic matter in a sample that is susceptible to strong chemical oxidation. COD may be related empirically to other measures of organic content for a source, such as BOD and total organic carbon. The sample is refluxed in strong acid solution with a known excess of oxidant, potassium dichromate. The amount of dichromate reduced is determined by titration. The oxidizable matter is calculated in terms of oxygen equivalent.

SM 5310 Total Organic Carbon (TOC)

The quantification of TOC is determined from the breakdown of organic molecules to single carbon units. The conversion of these units to a single molecular form can be measured quantitatively. The methods and instruments used in measuring TOC analyze fractions of total carbon (TC) and measure TOC by two or more determinations. The fractions of total carbon are defined as:

- Inorganic carbon (IC) = carbonate, bicarbonate, and dissolved CO_2;
- Total organic carbon (TOC) = all carbon atoms covalently bonded in organic molecules;
- Dissolved organic carbon (DOC) = the fraction of TOC that passes through a 0.45 µm pore diameter filter;

- Nondissolved organic carbon (NDOC), which is also referred to as particulate organic carbon, = the fraction of TOC retained by a 0.45 μm filter;

- Purgeable organic carbon (POC), which is also referred to as volatile organic carbon, = fraction of TOC removed from an aqueous solution by gas stripping under specified conditions; and

- Nonpurgeable organic carbon (NPOC) = the fraction of TOC that is not removed by gas stripping.

TOC was determined using an instrumental method in which organic carbon is oxidized to CO_2 by persulfate in the presence of ultraviolet light. The CO_2 is then measured directly by a nondispersive infrared analyzer.

The instrument utilizes an ultraviolet lamp submerged in a continuously gas-purged reactor that is filled with a constant-feed persulfate solution. The samples are injected manually and the CO_2 produced is sparged continuously from the solution. The CO_2 is carried in the gas stream to an infrared analyzer that is specifically tuned to the absorptive wavelength of CO_2. The instrument's microprocessor calculates the area of the peaks produced by the analyzer, compares them to the peak area of the calibration standard stored in its memory, and prints out a calibrated organic carbon value in milligrams per liter. Because of the large amounts of organic matter in these samples, all samples were filtered through a 0.45 μm filter. Instead of TOC, the analysis measured dissolved organic carbon (DOC).

SM 2540 Total Suspended Solids

The Total Suspended Solids (TSS) test involves drying samples at a fixed temperature range. The sample is homogenized and filtered using a weighed, standard glass-fiber filter. The residue remaining on the filter is dried to a constant weight at temperatures of 103 -105 °C. The increase in weight of the filter represents the TSS measurement.

SW 846 8260 (Halogenated Volatiles by GC/MS) Dissolved Targeted VOCs

Five VOCs were selected as target compounds: dichlorofluoromethane, trichlorofluoromethane, carbon tetrachloride, methylene chloride, and chloroform. One influent and one effluent sample per site were analyzed for these compounds by SW 846 8260. Method 8260 is a gas chromatography/mass spectrometry (GC/MS) determination of most volatile organic compounds. The samples can be analyzed by direct injection or purge-and-trap methods. A temperature program is used to separate the organic compounds which are then detected with a mass spectrometer (MS) interfaced to the gas chromograph.

Quantitative identification of the VOCs is confirmed by analyzing standards under the same conditions used for the samples and comparing mass spectra and GC retention times. The concentrations of the identified VOCs can be measured by relating the response produced for the compound to the response produced by a compound that is used as an internal standard.

The purge-and-trap method was used to determine VOC concentrations. The success of this method depends on the level of interferences in the sample; results may vary due to the large variability and complexity of matrices of samples. The sample is introduced into the purging chamber and an inert gas is then bubbled through the solution at ambient temperature to transfer the volatile component to the vapor phase. The vapor is swept through a sorbent column, where volatile components are trapped. After purging is completed, the sorbent is heated and backflushed with inert gas to desorb the components onto the gas chromatographic column. The column is heated to elute the components, which are detected with a mass spectrometer.

Nitrogen

Several forms of nitrogen were determined in the wastewater: total nitrogen, ammonia, and nitrates.

SM 4500-N_{org} Total Nitrogen by Kjeldahl Method

The determination of nitrogen by the total Kjeldahl method in water and waste samples utilizes a procedure for converting nitrogen components of biological origin such as amino acids, proteins and peptides to ammonia. This method may not convert the nitrogenous compounds of some industrial wastes such as amines, nitro compounds, hydrazones, oximes, semicarbazones, and some refractory tertiary amines.

The three procedures for determining the presence of ammonia after distillation include: the titrimetric method, which is applicable to concentrations above 1 mg N/liter; the Nesslerization (colorimetric) method, which is applicable to concentrations below 1 mg N/liter; and the potentiometric method, which is applicable to the range 0.05 to 1400 mg/liter.

The sample is heated in the presence of concentrated sulfuric acid (H_2SO_4), potassium sulfate (K_2SO_4), and mercuric sulfate ($HgSO_4$). This process converts amino nitrogen from organic materials to ammonium sulfate [$(NH_4)_2SO_4$]. The formation of a mercury ammonium complex occurs during sample digestion, which is then decomposed by sodium thiosulfate ($Na_2S_2O_3$). The ammonia is distilled and absorbed in boric or sulfuric acid and then determined colorimetrically, or by titration or potentiometry.

SM 4500-NH_3 Nitrogen (Ammonia)

The method for the determination of ammonia is dependent upon the nature of the sample. The selection of the method relies on concentration and interferences. In instances where interferences are present and greater precision is necessary, a preliminary distillation step (SM 4500-NH_3 B.) is required. For high ammonia concentrations a distillation and titration (SM 4500 NH_3 E.) technique is preferred.

SM 4500-NH_3 Preliminary Distillation Step

The sample is treated with a borate buffer to a pH of 9.5. This buffer decreases the hydrolysis of cyanates and organic nitrogen compounds. The sample is distilled into a solution of boric acid when titration is to be used. The ammonia in the distillate is determined either colorimetrically, or by the phenate method, or titrimetrically with standard H_2SO_4 and a mixed indicator or a pH meter.

SM 4500-NH_3 Titrimetric Method

The titrimetric method can only be used on samples that have been prepared through the preliminary distillation.

SM 4500-NO_3 Determination of Nitrate Anion by Ion Chromatography

The determination of anions by ion chromatography (IC) is desirable to characterize water and to assess specific water treatments. Ion chromatography is a rapid method for separating and analyzing complex solutions of ionic species. The common anions such as nitrate, can be determined quickly by a single instrumental technique. The use of hazardous reagents is eliminated with IC and effectively distinguishes oxides such as nitrate (NO_3) and nitrite (NO_2); combined or singly. For this project, the samples were oxidized and total nitrates were measured. This technique employs a carbonate/bicarbonate eluent and ion exchange resins to separate individual ions, and a suppressor column to remove the eluent ions. The detection and quantitation of the anions is performed conductimetrically.

The determination of nitrate (an oxide) is difficult due to procedural complexities, various concentration ranges, and interferences by other constituents. The IC method provides the best procedure for assessing nitrate in water contaminated with high levels of organic matter. Nitrate determinations should begin promptly after sample collection. If storage of the sample is necessary, the sample can be preserved at 4°C for up to 24 hours. Longer storage must include preservation with 2 mL concentrated sulfuric acid (H_2SO_4) at a temperature of 4°C. It is important to note that when the sample is preserved with acid, nitrate and nitrite cannot be determined as individual species.

4.3 Sample Handling and Chain-of-Custody Procedures

Sample chain-of-custody (COC) procedures for this program were based on EPA-recommended protocols. The field crew kept accurate written records of their daily activities in a bound log book. The entries were made in black ink, and contain accurate documentation of the field activities.

For the FTIR, all of the sample spectra were stored on a computer disk for future use and retrieval. These spectra are all time-stamped and dated for identification. The data files containing the concentrations and meteorological parameters were also dated and each measurement was time-stamped in the field immediately after collection. A backup file was created at the field site and hand-carried to the project files.

Storing the absorbance spectra provides an excellent method for validation of data. The absorbance spectra contain all of the information necessary to determine the concentration of the compounds. Therefore, the sampling results can be reproduced by reanalyzing the spectra.

The canister samples were each tagged with an identification number that was recorded on the COC form. These COC forms originated in the laboratory where the canisters were cleaned and certified. They went with the canisters to the site, where the relevant pressure information was recorded. The forms were returned with the canisters after sample collection.

In addition to the COC forms for each of the samples and the computer storage of the FTIR spectra, a field notebook was kept to document the on-site activities. This notebook contains a description of the day-to-day activities, the times that samples were collected, and the time FTIR acquisition was initiated and halted.

Copies of raw data, field notes, laboratory notes, strip chart recordings, and calibration data will be maintained in a central file for future inspection. Copies of laboratory instrument logs and maintenance records also will be available for review.

SECTION 5

RESULTS OF MEASUREMENT PROGRAM

This section contains tabulated results for the measurement program organized by site. The tabulated values have not been adjusted or corrected based on field, method, or system blank values, or percent recovery of control samples. The results are further reduced and discussed in Section 6 and the results of QC checks are summarized in Section 7.

Additional information pertinent to the interpretation of the results is contained in the Appendices to this report. A master log of all sample collection and measurement efforts is contained in Appendix A to this report. The FTIR monitoring generated an extremely large data set of measured concentrations averaged every five minutes. Only a subset of the data was collected during periods of acceptable meteorological conditions and, therefore, only this subset of data is considered to be valid. These valid data were used to develop emission factors. Only the subset of the FTIR and meteorological data that were used to develop emission factors are given in this section. The complete FTIR measurement results are presented in Appendix B, organized chronologically. The 95% confidence interval is given for each data point. A limited number of canister samples were collected to augment the FTIR results. The results of all canister analyses are presented in Appendix C.

Meteorological data were collected throughout the FTIR measurement periods. The complete meteorological measurement results are presented in Appendix D. The average wind direction for a given 5-minute time period was the key parameter for determining whether the air monitoring data were valid for that time period. For each site, data from all valid time periods were used to calculate emission rates based on the ratio of the concentration of the species of interest to the measured concentration of the tracer gas (SF_6), and the release rate of the tracer gas (see Equation 4-2). The tracer gas was released through seven rotometers and the total flow was 7.03 L/min which corresponds to 0.700 g/sec. All individual emission rate determinations for valid sampling periods are given in Appendix E.

Wastewater samples were collected at each site. The complete results of the analysis of these samples are presented in Appendix F. Additional wastewater data were provided by the site operators; these data are summarized in Appendix G.

Several pieces of important information about the monitoring conducted at each site are summarized in Table 5-1 (all tables are located after the text at the end of the section).

5.1 Results of Sampling at Southwest Beef Processing Plant

The FTIR spectra were analyzed for 15 compounds. The typical upwind and downwind concentrations for each compound are shown in Table 5-2. The emission rates for each compound are given

in Table 5-3. The data are presented by 5-minute time periods sorted by the wind direction during the sampling period. Meteorological data for these same time periods are given in Table 5-4. The analytical results for the wastewater samples collected during the field testing are summarized in Table 5-5. One of each type of influent sample and one effluent sample was analyzed for the presence of various chlorinated solvents: carbon tetrachloride, chloroform, dichlorodifluoromethane, methylene chloride, and trichlofluoromethane. Chloroform was detected at 3.74 μg/L in the influent from the slaughterhouse; nothing was detected in the influent sample from the tannery or in the effluent sample.

5.2 Results of Sampling at Midwest Beef Processing Plant

The FTIR spectra were analyzed for the target list of 15 compounds. The typical upwind and downwind concentrations for each compound are shown in Table 5-6. The data for valid time periods were used to calculate emission rates. The emission rates for each compound are given in Table 5-7. The data are given by 5-minute time periods sorted by the wind direction during the sampling period. Meteorological data for these same time periods are given in Table 5-8.

The analytical results for the wastewater samples collected during the field testing are summarized in Table 5-9. The only chlorinated solvent detected in the wastewater samples was 1.01 μg/L of chloroform in the influent sample; nothing was detected in the effluent sample.

5.3 Results of Sampling at Southeast Chicken Processing Plant

The FTIR spectra were analyzed for the target list of 15 compounds. The typical upwind and downwind concentrations for each compound are shown in Table 5-10. The data for valid time periods were used to calculate emission rates. The emission rates for each compound are given in Table 5-11 The data are given by 5-minute time periods sorted by the wind direction during the sampling period. Meteorological data for these same time periods are given in Table 5-12.

The analytical results for the wastewater samples collected during the field testing are summarized in Table 5-13. The only chlorinated solvent detected in the wastewater samples was 1.54 μg/L of chloroform in the influent sample; nothing was detected in the effluent or sludge samples.

5.4 Results of Sampling at POTW for Small Town in Southwest U.S.

The FTIR spectra were analyzed for the target list of 15 compounds. The typical upwind and downwind concentrations for each compound are shown in Table 5-14. The data for valid time periods were used to calculate emission rates. The emission rates for each compound are given in Table 5-15. The data are given by 5-minute time periods sorted by the wind direction during the sampling period. Meteorological data for these same time periods are given in Table 5-16.

The analytical results for the wastewater samples collected during the field testing are summarized in Table 5-17. No

chlorinated solvents were detected in the influent or effluent wastewater samples.

5.5 Results of Sampling at POTW for Very Small Town in Southwest U.S.

The FTIR spectra were analyzed for the target list of 15 compounds. The typical upwind and downwind concentrations for each compound are shown in Table 5-18. The data for valid time periods were used to calculate emission rates. The emission rates for each compound are given in Table 5-19. The data are given by 5-minute time periods sorted by the wind direction during the sampling period. Meteorological data for these same time periods are given in Table 5-20.

The analytical results for the wastewater samples collected during the field testing are summarized in Table 5-21. No analysis was performed for chlorinated solvents in the wastewater samples.

Table 5-1
Acceptable Wind Directions and Tracer Gas Release Rate for Each Site

Site	Date of Field Work	Ideal Wind Direction[a] (deg)	Acceptable Wind Direction[b] (deg)	Tracer Gas Release Rate (g/sec)
Southwest Beef Processing Plant	August 21- 25	176	161 - 191 (upwind = 132 - 180)	0.70
Midwest Beef Processing Plant	August 28 - September 1	164	134 - 194	0.70
Southeast Chicken Processing Plant	September 4 - 8	92	62 - 122 (upwind = (43 - 117)	0.70
POTW for Small Town in Southwest U.S.	October 2 - 6	343	313 - 013	0.70
POTW for Very Small Town in Southwest U.S.	July 31 - August 4	180	150 - 210 (upwind = 300 - 60)	0.70

a The ideal wind direction was perpendicular to the FTIR beam when in the downwind monitoring location.

b Values shown are for collection of both downwind and upwind data, unless otherwise noted. At the Very Small Town POTW, the FTIR was in the same location for both upwind and downwind sampling; data were identified as upwind, downwind, or invalid based on the wind direction.

Table 5-2
Summary of Measured Air Concentrations for Beef Processing Plant in Southwest U.S.

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Methane (CH_4)	Upwind	102	2.3	1.6	2.2 - 2.4
	Downwind	238	61.9	44.3	12.8 - 142
Ethylene (C_2H_4)	Upwind	102	0.0	0.0	0.0
	Downwind	238	0.0293	NA	0-0.824
Ammonia (NH_3)	Upwind	102	0.0	800	0.0 - 0.037
	Downwind	238	0.355	24.2	0.110 - 0.609
Carbon Dioxide (CO_2)	Upwind	102	479	2.5	453 - 510
	Downwind	238	409	6.9	372 - 489
Carbon Monoxide (CO)	Upwind	102	0.197	27.5	0.152 - 0.564
	Downwind	238	0.185	19.4	0.150 - 0.327
Hydrogen Sulfide (H_2S)	Upwind	102	ND	NA	ND
	Downwind	238	ND	NA	ND
Nitrous Oxide (N_2O)	Upwind	102	0.533	1.2	0.520 - 0.551
	Downwind	238	0.511	1.7	0.490 - 0.524
Sulfur Hexafluoride (SF_6)	Upwind	102	0.54 ppb	14.1	0.33 - 0.67 ppb
	Downwind	238	25.3 ppb	66.1	0.99 - 73.3 ppb
Water Vapor (H_2O)	Upwind	102	18,500	6.5	16,500- 20,200
	Downwind	238	16,100	17.4	12,500 - 22,800
Total Hydrocarbons (as Hexane)	Upwind	102	ND	NA	ND
	Downwind	238	100 ppb	166	0.0 - 565 ppb
Carbon Tetrachloride (CCl_4)	Upwind	102	7.0 ppb	14.1	4.1 - 9.2 ppb
	Downwind	238	0.02 ppb	1,540	0.0 - 4.4 ppb

Table 5-2
(Continued)

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Chloroform ($CHCl_3$)	Upwind	102	9.4 ppb	9.3	6.6 - 10.6 ppb
	Downwind	238	0.20 ppb	496	0.0 - 10.0 ppb
Dichloro-difluoromethane (CCl_2F_2)	Upwind	102	4.3 ppb	21.6	0.0 - 6.2 ppb
	Downwind	238	7.3 ppb	23.6	2.8 - 10.4 ppb
Methylene Chloride (CH_2Cl_2)	Upwind	102	49.7 ppb	15.6	31.1 - 64.5 ppb
	Downwind	238	1.0 ppb	394	0.0 - 27.1 ppb
Trichloro-fluoromethane (CCl_3F)	Upwind	102	ND	NA	ND
	Downwind	238	3.0 ppb	56.8	0.0 - 6.5 ppb

NA = Not Applicable.
ND = Not Detected.

Table 5-3
Summary of Measured Emission Rates for Beef Processing Plant in Southwest U.S.

Compound	No. Valid Obs.	Average Emission Rate[b] (g/sec)	%CV	Range (g/sec)
Methane	238	280	146	88.0 to 5,620
Ethylene	238	NA[a]	NA[a]	NA[a]
Ammonia	238	2.17	150	0.441 to 43.4
Carbon Dioxide	238	-1,250	232	-40,000 to 563
Carbon Monoxide	238	-0.138	505	-8.12 to 3.24
Hydrogen Sulfide	238	NA	NA	NA
Nitrous Oxide	238	-0.542	200	-12.9 to -0.039
Sulfur Hexafluoride	238	NA	NA	NA
Water Vapor	238	-9,874	507	-491,000 to 176,000
Total Hydrocarbons (as Hexane)	238	1.44	325	0.0 to 67.0
Carbon Tetrachloride	238	-0.472	185	0-11.5 to -0.71
Chloroform	238	-0.474	191	-11.9 to 0.106
Dichlorodifluoromethane	238	0.197	218	-0.025 to 5.69
Methylene Chloride	238	-7.32	185	-179 to -1.10
Trichlorofluoromethane	238	0.197	265	0.0 to 7.25

[a] Ethylene was released by an EPA auditor as a QC check.
[b] Negative emission rates occur when the upwind concentration exceeds the downwind concentration.
NA = Not Applicable.

Table 5-4
Summary of Meteorological Data for Valid Sampling Periods for Beef Processing Plant in Southwest U.S.

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/23/95	06:50:00	161	-15	7	5.8
8/23/95	14:50:00	161	-15	9.2	5.9
8/23/95	16:00:00	161	-15	8.6	6.8
8/25/95	03:50:00	161	-15	6.1	13.6
8/23/95	22:55:00	161	-15	9.1	5.9
8/24/95	01:45:00	161	-15	5.7	4.9
8/24/95	07:25:00	161	-15	5	6.6
8/24/95	23:30:00	161	-15	8.6	6.9
8/25/95	01:00:00	161	-15	6.2	4.6
8/25/95	01:05:00	161	-15	6	6.3
8/25/95	01:10:00	161	-15	5.6	4.4
8/25/95	03:45:00	161	-15	5.8	4.6
8/23/95	23:20:00	162	-15	8.3	4.7
8/24/95	01:00:00	162	-14	5.2	4.3
8/24/95	01:20:00	162	-14	6	4.8
8/24/95	02:00:00	162	-14	6.1	3.6
8/24/95	03:20:00	162	-14	5.6	10.1
8/25/95	02:55:00	162	-14	6.3	3.6
8/25/95	04:25:00	162	-14	5.3	5
8/23/95	04:40:00	163	-14	5.6	4.2
8/24/95	02:10:00	163	-13	6.4	5
8/24/95	03:15:00	163	-13	5.9	4.2

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/24/95	07:35:00	163	-13	4.8	5
8/24/95	07:45:00	163	-13	4.7	4.3
8/25/95	01:50:00	163	-13	5.8	4.4
8/23/95	23:10:00	163	-13	9.1	4.3
8/24/95	01:15:00	163	-13	6	4.7
8/24/95	03:10:00	163	-13	6.3	4.2
8/24/95	04:15:00	163	-13	6.2	4.2
8/25/95	00:15:00	163	-13	8.6	3.6
8/25/95	02:40:00	163	-13	6.2	6.1
8/25/95	03:25:00	163	-13	6.7	4.4
8/25/95	04:15:00	163	-13	5.3	4.4
8/23/95	04:20:00	164	-13	7.4	5.4
8/23/95	13:05:00	164	-12	11.8	6.9
8/23/95	13:30:00	164	-12	11.5	10.6
8/24/95	07:50:00	164	-12	4.8	7.1
8/24/95	23:35:00	164	-12	9.7	5.4
8/24/95	23:50:00	164	-12	9.5	4.3
8/25/95	04:20:00	164	-12	5.3	4.1
8/24/95	01:50:00	164	-12	6	4.4
8/24/95	03:35:00	164	-12	5.7	6
8/24/95	06:35:00	164	-12	5.4	5.5
8/24/95	23:45:00	164	-12	10.2	4.6
8/25/95	02:35:00	164	-12	6.4	4.7

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/25/95	03:35:00	164	-12	6.2	3.8
8/25/95	04:00:00	164	-12	5.2	8.2
8/25/95	04:30:00	164	-12	5.5	4.2
8/23/95	03:20:00	165	-12	5.2	5
8/24/95	00:35:00	165	-11	5.3	5.4
8/24/95	01:05:00	165	-11	5.7	4.9
8/24/95	02:50:00	165	-11	5.8	5.8
8/25/95	00:50:00	165	-11	5.6	4.9
8/25/95	03:10:00	165	-11	7.4	9.3
8/25/95	03:15:00	165	-11	7	8.2
8/25/95	04:05:00	165	-11	4.7	5.5
8/23/95	02:55:00	165	-11	6.2	5.2
8/23/95	05:30:00	165	-11	7.7	8.1
8/23/95	06:55:00	165	-11	7.6	7.2
8/24/95	00:55:00	165	-11	5.3	6.5
8/24/95	19:55:00	165	-11	6.9	7.4
8/24/95	23:40:00	165	-11	9.9	6.8
8/25/95	00:00:00	165	-11	9.3	5.5
8/25/95	00:05:00	165	-11	8.5	5.8
8/25/95	00:30:00	165	-11	7.7	6.5
8/25/95	00:55:00	165	-11	6.1	6
8/25/95	02:05:00	165	-11	6.2	6.8
8/25/95	03:30:00	165	-11	6.3	6.8

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/24/95	00:30:00	166	-11	5.5	5.8
8/24/95	01:35:00	166	-10	5.8	6.3
8/24/95	01:40:00	166	-10	5.8	6.3
8/24/95	01:55:00	166	-10	6.1	5.4
8/24/95	23:55:00	166	-10	9.4	5.7
8/25/95	00:20:00	166	-10	8.9	4.3
8/25/95	00:45:00	166	-10	5.5	5.2
8/25/95	03:20:00	166	-10	6.8	6.6
8/23/95	04:15:00	166	-10	6.6	5.5
8/23/95	04:25:00	166	-10	6.1	5
8/23/95	04:55:00	166	-10	7.2	5.8
8/23/95	05:55:00	166	-10	8	6.9
8/23/95	06:00:00	166	-10	7.6	7.5
8/24/95	01:30:00	166	-10	6.2	11.9
8/24/95	02:15:00	166	-10	6.3	6.8
8/24/95	02:55:00	166	-10	5.5	8.8
8/24/95	03:05:00	166	-10	5.9	5.2
8/24/95	03:30:00	166	-10	6.2	9.2
8/24/95	03:40:00	166	-10	5.2	6.4
8/24/95	07:30:00	166	-10	5.1	4.7
8/25/95	01:25:00	166	-10	5.8	3.9
8/24/95	00:40:00	167	-10	5	7.9
8/24/95	01:10:00	167	-9	6.2	4.2

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/24/95	03:45:00	167	-9	5.6	3.7
8/25/95	00:40:00	167	-9	6.2	5.7
8/25/95	01:45:00	167	-9	5.4	4.1
8/23/95	04:50:00	167	-9	6.9	5.2
8/23/95	06:10:00	167	-9	7.2	5.7
8/24/95	00:10:00	167	-9	5.4	5.7
8/24/95	06:40:00	167	-9	5.2	5.7
8/25/95	00:10:00	167	-9	9	5.8
8/25/95	00:35:00	167	-9	7.4	6
8/25/95	03:55:00	167	-9	5.6	8.3
8/23/95	05:25:00	168	-9	7.9	8.8
8/23/95	13:25:00	168	-8	12.6	6
8/23/95	23:40:00	168	-8	7.9	5.9
8/24/95	04:20:00	168	-8	5.8	7
8/24/95	19:50:00	168	-8	6.1	7.2
8/25/95	00:25:00	168	-8	8.9	6.4
8/24/95	00:25:00	168	-8	6.4	7.9
8/25/95	02:25:00	168	-8	6.9	7.2
8/25/95	04:40:00	168	-8	6.8	7.5
8/23/95	06:05:00	169	-8	8.5	9.8
8/23/95	23:35:00	169	-7	7.2	7.7
8/24/95	06:30:00	169	-7	4.9	7.4
8/25/95	04:35:00	169	-7	6.8	6.9

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/23/95	04:10:00	169	-7	6.3	8.7
8/23/95	13:20:00	169	-7	7.7	7.5
8/23/95	23:25:00	169	-7	7.7	7
8/24/95	00:15:00	169	-7	5.8	6.8
8/24/95	03:50:00	169	-7	5.3	6.8
8/24/95	03:00:00	170	-7	5.3	7.2
8/25/95	02:00:00	170	-6	6.1	8
8/23/95	04:35:00	170	-6	5	7.4
8/24/95	00:45:00	170	-6	5.5	10.1
8/24/95	03:55:00	170	-6	4.9	7.2
8/24/95	00:50:00	171	-6	5.7	8.5
8/23/95	04:05:00	171	-5	6	6.8
8/23/95	05:00:00	171	-5	7.2	8.2
8/23/95	23:30:00	171	-5	7.5	8.5
8/24/95	02:20:00	171	-5	5.5	11.2
8/23/95	04:30:00	172	-5	5	7.9
8/23/95	05:20:00	172	-4	7.5	7.5
8/23/95	13:00:00	172	-4	8.9	8.6
8/23/95	14:05:00	172	-4	11.8	7.1
8/23/95	12:55:00	172	-4	8.8	7
8/24/95	08:00:00	172	-4	6.1	7
8/25/95	04:10:00	172	-4	5.1	6.6
8/23/95	23:45:00	173	-4	7.3	8.2

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/24/95	02:45:00	173	-3	5.6	6.6
8/25/95	07:45:00	173	-3	7.3	9.3
8/23/95	13:15:00	173	-3	9.6	9.4
8/24/95	04:00:00	174	-3	5.2	8.2
8/24/95	06:25:00	174	-2	5.8	12.5
8/23/95	05:15:00	174	-2	8	8.8
8/23/95	12:35:00	174	-2	12.9	9.3
8/23/95	13:55:00	174	-2	7.6	8.8
8/24/95	00:20:00	174	-2	6	8.1
8/24/95	04:10:00	174	-2	5.7	12.3
8/24/95	07:55:00	174	-2	6.2	11.9
8/25/95	07:40:00	174	-2	8.2	8.2
8/23/95	03:10:00	175	-2	5.1	
8/23/95	03:15:00	175	-1	5	8.5
8/23/95	05:10:00	175	-1	7.2	8.7
8/23/95	15:25:00	175	-1	4.4	10.7
8/23/95	15:20:00	176	-1	7.1	8.7
8/25/95	04:45:00	176	-0	8.1	10.2
8/23/95	02:50:00	176	-0	5.9	7.6
8/23/95	12:40:00	176	0	9.7	9.7
8/24/95	02:35:00	176	0	5.1	7.4
8/24/95	02:40:00	176	0	5.2	6.9
8/25/95	07:50:00	177	0	7	6.1

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/23/95	05:05:00	177	1	6.9	7.1
8/23/95	07:35:00	177	1	5.5	6.9
8/23/95	12:45:00	177	1	11.3	6.1
8/24/95	02:25:00	177	1	5.7	7.5
8/24/95	04:25:00	177	1	5.7	6.9
8/23/95	23:50:00	179	1	7.8	6.6
8/23/95	13:50:00	180	3	9.5	7.9
8/23/95	14:45:00	180	4	8.8	7
8/24/95	02:30:00	180	4	6.1	7.5
8/23/95	11:00:00	180	4	12.3	7.2
8/23/95	15:00:00	180	4	9.1	6.4
8/25/95	04:55:00	180	4	9	6.3
8/23/95	11:10:00	181	4	12.9	6.3
8/24/95	06:45:00	181	5	5.2	6
8/25/95	05:00:00	181	5	8.9	6.9
8/23/95	12:25:00	181	5	11	6.8
8/23/95	13:10:00	181	5	9.6	6.4
8/25/95	04:50:00	181	5	9.6	6.6
8/25/95	07:35:00	181	5	9.1	8.6
8/23/95	11:25:00	182	5	12.7	5.8
8/24/95	07:00:00	182	6	5.1	6.6
8/25/95	05:05:00	182	6	8.6	5.8
8/23/95	15:15:00	183	6	10.1	6.6

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/23/95	15:50:00	183	7	5.4	5.8
8/23/95	12:50:00	183	7	11.8	5.5
8/24/95	08:05:00	183	7	6.9	6.4
8/24/95	19:05:00	183	7	8.2	7.1
8/24/95	06:20:00	184	7	6.1	7
8/23/95	14:10:00	184	8	12.1	6.8
8/23/95	14:35:00	184	8	8.1	6.3
8/24/95	19:45:00	184	8	7.5	5.7
8/24/95	04:30:00	185	8	6.6	6.1
8/23/95	15:40:00	186	9	10.8	6.8
8/24/95	04:05:00	186	10	4.9	6
8/24/95	18:55:00	186	10	11.1	6
8/24/95	19:20:00	186	10	9.4	6.1
8/25/95	08:15:00	186	10	8.7	5.7
8/23/95	07:40:00	186	10	4.8	6.4
8/23/95	10:05:00	186	10	11.9	6.4
8/24/95	19:40:00	186	10	8.2	5.9
8/25/95	05:15:00	186	10	10	6.8
8/25/95	07:55:00	186	10	8.8	6.5
8/24/95	18:50:00	187	10	10.5	5.9
8/25/95	05:10:00	187	11	9.3	5.5
8/23/95	10:50:00	187	11	12.8	6.4
8/23/95	12:00:00	187	11	11.8	6.1

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/24/95	18:45:00	187	11	10.3	5.3
8/24/95	19:15:00	187	11	9.6	5.8
8/25/95	05:40:00	187	11	10.1	6.8
8/24/95	08:15:00	188	11	7.3	5
8/24/95	19:00:00	188	12	9.8	6.3
8/25/95	05:35:00	188	12	9.6	6
8/25/95	07:30:00	188	12	9	6
8/23/95	10:45:00	188	12	11.6	5.8
8/24/95	04:35:00	188	12	6.8	6.1
8/25/95	05:20:00	188	12	9.3	5.3
8/23/95	10:00:00	189	12	12.3	6.5
8/23/95	11:30:00	189	13	12.2	5.5
8/24/95	05:55:00	189	13	5.7	5.3
8/24/95	08:10:00	189	13	6.8	4.8
8/25/95	05:45:00	189	13	9.2	5
8/24/95	08:20:00	190	13	7.1	5.8
8/24/95	19:30:00	190	14	8.1	4.9
8/24/95	19:35:00	190	14	7.5	4.8
8/23/95	10:55:00	190	14	13.2	4.7
8/23/95	11:05:00	190	14	12.1	4.4
8/24/95	19:10:00	190	14	9.7	5.5
8/25/95	05:30:00	190	14	8.6	4.9
8/25/95	08:00:00	190	14	8.4	4.4

Table 5-4
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/25/95	08:20:00	190	14	9.1	4.6
8/25/95	08:25:00	190	14	9	13.2
8/23/95	10:10:00	191	14	11.6	6.3
8/24/95	19:25:00	191	15	9.1	7
8/25/95	08:40:00	191	15	9.4	8
8/23/95	11:50:00	191	15	12.5	4.3
8/25/95	08:35:00	191	15	8.7	4.7
8/25/95	08:45:00	191	15	9.5	4.6
8/23/95	10:15:00	191	15	10.7	4.7

Table 5-5
Results of Wastewater Analyses for
Beef Processing Plant - Southwest U.S.

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
pH	Influent	7	8.14	0.88	6.7 - 8.9
	Influent (Tan.)	7	11.7	1.3	9.1 - 13.0
	Effluent	4	8.7	0.7	7.6 - 9.2
DO (mg/L)	Influent	7	1.9	3.2	0 - 8
	Influent (Tan.)	7	0	0	0
	Effluent	4	0.2	0.3	0 - 0.7
Temp. (°C)	Influent	7	34.1	2.4	31.3 - 37.2
	Influent (Tan.)	7	29.7	1.8	26.3 - 31.7
	Effluent	4	29.6	0.5	29.2 - 30.3
TSS (mg/L)	Influent	7	3,700	5,930	1,190 - 17,100
	Influent (Tan.)	7	3,050	2,980	850 - 9,400
	Effluent	4	379	42.1	330 - 430
BOD (mg/L)	Influent	7	3,420	784	2,410 - 4,470
	Influent (Tan.)	7	5,580	3,650	1,820 - 11,900
	Effluent	4	314	66.5	220 - 370
COD (mg/L)	Influent	7	4,360	556	3,430 - 5,240
	Influent (Tan.)	7	14,100	12,800	2,240 - 31,900
	Effluent	4	683	160	570 - 920
TOC (mg/L)	Influent	7	321	42.4	240 - 365
	Influent (Tan.)	7	1,520	1,490	315 - 3,980
	Effluent	4	22	2.4	19 - 25

Table 5-5
(Continued)

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
TKN (mg/L)	Influent	7	159	15.7	135 - 180
	Influent (Tan.)	7	1,000	917	240 - 2,990
	Effluent	4	380	293	225 - 820
NH_3-N (mg/L)	Influent	7	39.6	10.0	27 - 53
	Influent (Tan.)	7	422	279	22 - 960
	Effluent	4	196	7.50	185 - 200
NO_3-N (mg/L)	Influent	7	0.055	0.026	0.035 - 0.094
	Influent (Tan.)	7	3.03	2.06	1.65 - 5.77
	Effluent	4	0.097	0.059	0.044 - 0.166

Note: Influent (Tan.) is the influent wastewater from tannery operation. Influent is the influent wastewater from the slaughterhouse.

Key:
- DO = Dissolved oxygen
- TSS = Total suspended solids
- BOD = Biological oxygen demand (5-day test)
- COD = Chemical oxygen demand
- TOC = Total organic carbon
- TKN = Total nitrogen by Kjeldahl method
- NH_3-N = Nitrogen (ammonia)
- NO_3-N = Total nitrates

Table 5-6
Summary of Measured Air Concentrations for Beef Processing Plant in Midwest U.S.

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Methane (CH_4)	Upwind	44	2.83	10.7	2.46 - 3.16
	Downwind	342	58.1	41.2	34.8 - 200
Ethylene (C_2H_4)	Upwind	44	0	0	0
	Downwind	342	0	0	0
Ammonia (NH_3)	Upwind	44	277 ppb	37.8	144 - 428 ppb
	Downwind	342	1.04	14.6	0.450 - 2.06
Carbon Dioxide (CO_2)	Upwind	44	501	5.44	458 - 547
	Downwind	342	500	10.3	445 - 669
Carbon Monoxide (CO)	Upwind	44	271 ppb	14.6	224 - 340 ppb
	Downwind	342	255 ppb	29.7	141 - 465 ppb
Hydrogen Sulfide (H_2S)	Upwind	44	0	0	0
	Downwind	342	0	0	0
Nitrous Oxide (N_2O)	Upwind	44	474 ppb	0.87	466 - 480 ppb
	Downwind	342	483 ppb	1.02	471 - 491 ppb
Sulfur Hexafluoride (SF_6)	Upwind	44	0.5 ppb	39.9	0 - 0.8 ppb
	Downwind	342	19.3 ppb	60.6	0.8 - 80.6 ppb
Water Vapor (H_2O)	Upwind	44	17,500	10.6	14,900 - 20,200
	Downwind	342	19,000	10.2	15,900 - 24,200
Total Hydrocarbons (as Hexane)	Upwind	44	0	0	0
	Downwind	342	244 ppb	48.7	0 - 817 ppb
Carbon Tetrachloride (CCl_4)	Upwind	44	7.4 ppb	75.0	0 - 14.6 ppb
	Downwind	342	11.0 ppb	110	0 - 32.0 ppb

Table 5-6
(Continued)

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Chloroform ($CHCl_3$)	Upwind	44	9.5 ppb	54.9	0 -18.1 ppb
	Downwind	342	12.5 ppb	86.5	0 - 32.7 ppb
Dichloro-difluoromethane (CCl_2F_2)	Upwind	44	4.5	32.8	2.2 - 6.7
	Downwind	342	5.1 ppb	72.5	0 - 9.1 ppb
Methylene Chloride (CH_2Cl_2)	Upwind	44	63.6 ppb	38.7	21.1 - 95.3 ppb
	Downwind	342	76.6 ppb	67.2	0 - 156 ppb
Trichloro-fluoromethane (CCl_3F)	Upwind	44	0	0	0
	Downwind	342	0.1 ppb	313	0 - 1.8 ppb

Table 5-7
Summary of Measured Emission Rates for Beef Processing Plant in Midwest U.S.

Compound	No. Valid Obs.	Average Emission Rate[a] (g/sec)	%CV	Range (g/sec)
Methane	300	226	189	137 - 7,590
Ethylene	300	0	0	0
Ammonia	300	3.50	149	0.960 -92.6
Carbon Dioxide	300	-188	413	-11,250 - 993
Carbon Monoxide	300	0.0022	79,000	-1.16 - 28.6
Hydrogen Sulfide	300	0	0	0
Nitrous Oxide	300	0.125	149	-0.0137 - 3.23
Sulfur Hexafluoride	300	N/A	N/A	N/A
Water Vapor	300	3,570	228	-9,650 -87,800
Total Hydrocarbons (as Hexane)	300	7.50	204	0 - 268
Carbon Tetrachloride	300	0.0563	1,060	-6.00 - 1.25
Chloroform	300	0.0555	1,010	-6.88 - 1.04
Dichloro-difluoromethane	300	0.0405	2.15	0.166 - 408
Methylene Chloride	300	0.112	1,390	-20.0 - 2.59
Trichloro-fluoromethane	300	0.00404	0.0544	0.0119 - 295

[a] Negative emission rates occur when the upwind concentration exceeds the downwind concentration.

N/A = Not applicable.

Table 5-8
Summary of Meteorological Data for Valid Sampling Periods for Beef Processing Plant in Midwest U.S.

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	23:20:00	134.8	-29.2	16.5	5.9
8/31/95	14:00:00	134.8	-29.2	12	15.1
8/31/95	16:50:00	134.8	-29.2	12.1	9.1
8/31/95	16:55:00	134.8	-29.2	11.7	15.7
8/31/95	17:15:00	135	-29	10.2	10.8
8/30/95	23:40:00	135.9	-28.1	13.8	6.1
8/30/95	23:55:00	135.9	-28.1	15.8	6.6
8/30/95	23:45:00	136.1	-27.9	14.3	5.5
8/31/95	22:35:00	136.1	-27.9	12.9	4.9
8/30/95	23:15:00	136.8	-27.2	16.4	6.3
8/31/95	12:45:00	136.8	-27.2	9.9	12.1
8/31/95	22:05:00	136.8	-27.2	9.7	5
8/31/95	22:10:00	136.8	-27.2	10	4.8
8/31/95	22:15:00	136.8	-27.2	9.8	5.3
8/30/95	21:50:00	137.2	-26.8	7.7	6.3
8/31/95	14:05:00	137.2	-26.8	14.6	14
8/31/95	21:15:00	137.2	-26.8	9.6	5.5
8/31/95	22:00:00	137.2	-26.8	9.7	4.9
8/31/95	21:55:00	138.1	-25.9	10.1	5
8/31/95	17:45:00	139.1	-24.9	10.6	13.5
8/31/95	21:50:00	139.1	-24.9	10.6	5.4
8/30/95	19:10:00	139.9	-24.1	16.1	6.9
8/30/95	19:15:00	139.9	-24.1	13.5	6.4

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/31/95	20:50:00	139.9	-24.1	8.9	5.4
8/31/95	23:30:00	139.9	-24.1	9.3	5.4
8/31/95	21:10:00	140	-24	9.9	5.4
8/31/95	21:20:00	140	-24	9.5	5.3
8/31/95	23:25:00	140	-24	10	5.2
8/30/95	00:00:00	140.9	-23.1	17.2	5.3
8/30/95	22:15:00	140.9	-23.1	10.3	6.4
8/31/95	23:20:00	140.9	-23.1	9.9	4.7
8/31/95	00:05:00	141.1	-22.9	17.5	6.5
8/31/95	21:45:00	141.1	-22.9	10.3	5.4
8/31/95	23:10:00	141.1	-22.9	10.4	5.7
8/31/95	14:20:00	141.8	-22.2	12.8	14
8/31/95	17:00:00	141.8	-22.2	10.9	11.5
8/31/95	20:55:00	141.8	-22.2	8.3	4.7
8/30/95	21:30:00	142	-22	8.4	8.5
8/31/95	00:10:00	142	-22	17.8	5.7
8/31/95	12:15:00	142	-22	9.5	14.1
8/31/95	21:35:00	142	-22	10.2	5.7
8/31/95	21:40:00	142	-22	10.8	5.9
8/31/95	22:40:00	142	-22	13.7	5.5
8/31/95	23:15:00	142	-22	10.1	4.9
8/30/95	22:00:00	142.9	-21.1	9.4	13.9
8/31/95	23:05:00	142.9	-21.1	10.9	5.4
8/30/95	19:20:00	143.1	-20.9	16.2	8.3

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/31/95	16:20:00	143.1	-20.9	12.5	9.6
8/31/95	23:35:00	143.1	-20.9	8.8	5.5
8/31/95	00:15:00	144	-20	18.5	5.3
8/30/95	18:20:00	144.2	-19.8	5.6	4.3
8/31/95	00:35:00	144.2	-19.8	19.4	6
8/31/95	01:10:00	144.2	-19.8	15.3	5.9
8/31/95	00:30:00	144.9	-19.1	21.3	6.3
8/31/95	00:40:00	144.9	-19.1	18	6.4
8/31/95	21:05:00	144.9	-19.1	9.4	4.6
8/31/95	21:30:00	144.9	-19.1	10.1	5
8/31/95	01:15:00	145.1	-18.9	14.1	5.9
8/31/95	21:00:00	145.1	-18.9	8.6	4.2
8/31/95	21:25:00	145.1	-18.9	9.8	4.7
8/31/95	23:00:00	145.1	-18.9	11.7	5
8/30/95	18:25:00	145.8	-18.2	4.7	4.8
8/30/95	19:25:00	145.8	-18.2	17.8	6.8
8/30/95	19:35:00	145.8	-18.2	16.5	6.4
8/31/95	01:05:00	145.8	-18.2	15.6	5.4
8/31/95	01:20:00	145.8	-18.2	15.2	6
8/31/95	00:20:00	146.2	-17.8	18.9	6.3
8/31/95	00:25:00	146.2	-17.8	20.8	5.4
8/31/95	16:25:00	146.2	-17.8	12.4	16.2
8/31/95	16:40:00	146.2	-17.8	13.3	15.4
8/31/95	17:05:00	146.2	-17.8	11.2	12.8

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	19:30:00	146.9	-17.1	17	8.5
8/31/95	00:45:00	146.9	-17.1	17.8	6.6
8/31/95	01:00:00	146.9	-17.1	16.4	5.5
8/31/95	22:45:00	147.1	-16.9	13.5	5.8
8/30/95	19:40:00	148	-16	15.1	6.1
8/30/95	21:55:00	148	-16	8	8.8
8/31/95	02:05:00	148	-16	15	5.8
8/31/95	15:20:00	148	-16	14.2	9.2
8/31/95	00:50:00	148.1	-15.9	17.6	6
8/31/95	00:55:00	148.1	-15.9	17	6.1
8/31/95	02:10:00	148.1	-15.9	17.8	5.9
8/31/95	15:30:00	148.1	-15.9	12.8	15.9
8/31/95	23:40:00	148.1	-15.9	8.2	5.7
8/31/95	22:55:00	148.9	-15.1	12.7	5
8/30/95	22:20:00	149	-15	9.3	6.6
8/31/95	01:35:00	149	-15	15.3	5.2
8/30/95	18:15:00	149.9	-14.1	6.2	8.5
8/31/95	10:40:00	149.9	-14.1	4.9	38.5
8/31/95	16:05:00	149.9	-14.1	12.6	13.9
8/31/95	01:40:00	150.1	-13.9	16.7	6.4
8/31/95	01:55:00	150.1	-13.9	15.6	6.1
8/31/95	02:00:00	150.1	-13.9	15.3	6.8
8/31/95	02:15:00	150.1	-13.9	18.3	6.3
8/31/95	14:40:00	150.1	-13.9	13.4	9.8

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/31/95	22:50:00	150.1	-13.9	13	5.7
8/31/95	01:25:00	150.8	-13.2	15.4	6.5
8/30/95	18:10:00	151	-13	5.2	8.8
8/31/95	15:00:00	151	-13	12	14.1
8/31/95	23:45:00	151	-13	8.7	6.8
8/30/95	21:45:00	151.9	-12.1	8	7.7
8/31/95	01:30:00	151.9	-12.1	15.4	6.9
8/31/95	01:45:00	151.9	-12.1	17	6.6
8/31/95	02:20:00	151.9	-12.1	17.4	6.3
8/31/95	14:15:00	151.9	-12.1	11.2	10.8
8/31/95	02:25:00	152.1	-11.9	17	7.2
8/30/95	19:45:00	152.8	-11.2	15.6	7.7
8/31/95	15:35:00	152.8	-11.2	15.7	11.8
8/31/95	01:50:00	154.1	-9.9	16.3	6.8
8/31/95	02:30:00	154.1	-9.9	16.7	7
8/31/95	16:10:00	154.1	-9.9	13.1	13.1
8/30/95	22:10:00	155.2	-8.8	10.1	7.4
8/31/95	02:35:00	155.9	-8.1	17.7	7
8/31/95	02:40:00	155.9	-8.1	15.9	6.8
8/31/95	14:35:00	156.1	-7.9	11.6	13.1
8/31/95	15:25:00	156.1	-7.9	14.5	8.6
8/31/95	15:45:00	156.1	-7.9	13.6	12.9
8/31/95	15:55:00	156.1	-7.9	12.5	11.7
8/31/95	23:50:00	157	-7	9.3	7.2

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	22:05:00	157.1	-6.9	9.1	9.3
8/31/95	14:30:00	157.1	-6.9	12.7	9.1
8/31/95	14:55:00	157.1	-6.9	10.8	15.1
8/31/95	15:10:00	157.1	-6.9	12.4	15
8/30/95	21:35:00	157.9	-6.1	7.4	7.9
8/31/95	02:45:00	157.9	-6.1	15.8	6.6
8/29/95	22:50:00	158	-6	14.3	6.4
8/31/95	02:50:00	158	-6	16.5	6.1
8/31/95	14:45:00	158	-6	10.6	23.5
8/31/95	14:50:00	159.1	-4.9	12.7	12.4
8/31/95	15:05:00	159.1	-4.9	15.8	18
8/29/95	22:55:00	159.8	-4.2	14.8	6.6
8/31/95	15:15:00	159.8	-4.2	14.6	15
8/31/95	16:00:00	159.8	-4.2	11	12.4
8/29/95	22:45:00	160.2	-3.8	13.2	6.3
8/31/95	02:55:00	160.2	-3.8	15.3	7.2
8/31/95	16:35:00	160.2	-3.8	8.7	13.5
8/31/95	15:50:00	160.9	-3.1	11.8	9.6
8/29/95	23:15:00	161.1	-2.9	12.1	6.5
8/29/95	23:00:00	161.8	-2.2	14.9	27.6
8/31/95	16:15:00	161.8	-2.2	10.5	11.9
8/29/95	23:30:00	162.2	-1.8	13.8	7
8/30/95	18:30:00	162.2	-1.8	5.6	11
8/29/95	23:25:00	162.9	-1.1	13.1	7.2

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/29/95	23:35:00	162.9	-1.1	14.4	7.9
8/30/95	19:50:00	162.9	-1.1	14	8.6
9/1/95	00:05:00	162.9	-1.1	11	5.9
8/29/95	00:00:00	163.1	-0.9	15.5	6.9
8/29/95	23:10:00	163.1	-0.9	12.7	6.3
8/29/95	23:20:00	163.1	-0.9	12.5	7.1
8/31/95	00:00:00	163.1	-0.9	11.1	5.3
8/31/95	23:55:00	163.1	-0.9	10.8	7.4
8/29/95	23:05:00	163.8	-0.2	13.9	6.9
8/29/95	23:40:00	163.8	-0.2	14.1	7
8/29/95	23:50:00	163.8	-0.2	14.7	6.9
8/30/95	00:15:00	163.8	-0.2	15.3	6.4
8/31/95	14:10:00	163.8	-0.2	12.2	13.6
9/1/95	00:10:00	163.8	-0.2	10.5	6.8
8/29/95	23:45:00	164.2	0.2	14.9	7.2
8/29/95	23:55:00	164.2	0.2	14.8	6.8
8/30/95	00:10:00	164.2	0.2	15.2	7.9
8/30/95	18:50:00	164.2	0.2	5.1	8
8/31/95	15:40:00	164.2	0.2	12.6	9.7
8/30/95	00:05:00	164.9	0.9	15	6.5
8/30/95	00:35:00	164.9	0.9	15.7	7.5
8/30/95	00:20:00	165.1	1.1	14.7	7.2
8/30/95	21:40:00	165.1	1.1	8.9	7.6
9/1/95	00:15:00	166	2	11.3	6.6

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	00:25:00	166.1	2.1	14.9	7.5
8/30/95	00:30:00	166.1	2.1	15.4	7.4
8/30/95	20:15:00	166.1	2.1	14.2	7.2
8/30/95	18:55:00	166.9	2.9	4.8	12.3
8/30/95	00:40:00	167	3	14.5	8
8/30/95	00:55:00	167	3	15	8
8/30/95	01:00:00	167	3	14.5	7.2
8/31/95	14:25:00	167	3	12.3	15.2
9/1/95	00:20:00	167	3	10.7	6.6
8/30/95	00:45:00	167.9	3.9	14.9	7.7
8/29/95	22:40:00	168.1	4.1	13.3	8.8
8/30/95	00:50:00	169.2	5.2	14.6	7.4
8/30/95	18:35:00	169.9	5.9	4.8	7.4
8/31/95	10:20:00	170.1	6.1	4.8	15.4
9/1/95	00:35:00	170.1	6.1	10.8	6.9
8/29/95	22:35:00	171.2	7.2	13.1	8.3
8/30/95	07:30:00	171.2	7.2	15.3	7.5
9/1/95	00:25:00	171.2	7.2	10.2	6.8
8/30/95	20:10:00	172.1	8.1	15.1	8.7
8/30/95	20:20:00	172.1	8.1	13.8	8.6
9/1/95	00:30:00	172.1	8.1	10.5	7.4
8/30/95	04:30:00	173.2	9.2	15.3	6.9
8/30/95	01:05:00	174.1	10.1	13.7	8.3
8/30/95	07:20:00	174.1	10.1	14.6	7.9

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	07:25:00	174.1	10.1	14.5	8.5
8/30/95	20:05:00	174.1	10.1	13.2	9.1
8/30/95	20:30:00	174.1	10.1	12.6	7.7
9/1/95	00:40:00	174.1	10.1	9.2	7.2
8/30/95	01:10:00	175	11	13.8	7.4
8/30/95	01:15:00	175	11	13.7	7.1
8/30/95	04:25:00	175	11	15.3	8.1
8/29/95	22:25:00	175.1	11.1	13.4	8.3
8/30/95	04:20:00	175.1	11.1	15	8.7
8/30/95	07:15:00	175.1	11.1	15.1	7
8/30/95	07:35:00	175.1	11.1	15.1	7.6
8/30/95	07:45:00	175.1	11.1	14.9	8
9/1/95	00:55:00	175.1	11.1	10.3	8
9/1/95	01:00:00	175.1	11.1	10.4	6.5
8/30/95	01:20:00	176.2	12.2	15.2	7.5
8/30/95	07:05:00	176.2	12.2	13.8	8.5
8/30/95	07:10:00	176.2	12.2	14.5	6.8
8/30/95	07:40:00	176.9	12.9	14.6	8.1
8/29/95	22:30:00	177.1	13.1	14.3	7.2
8/30/95	01:25:00	177.1	13.1	14.7	6.9
8/30/95	07:00:00	177.1	13.1	13.7	6.8
8/30/95	07:50:00	177.1	13.1	14.6	7.6
8/30/95	08:05:00	177.8	13.8	13.3	8.6
8/30/95	06:55:00	178	14	13.5	6.6

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	04:10:00	178.9	14.9	14.1	7.7
8/30/95	04:15:00	178.9	14.9	14.7	6.6
8/30/95	04:35:00	178.9	14.9	15.2	6.6
8/30/95	06:50:00	178.9	14.9	13.1	7
8/30/95	17:50:00	178.9	14.9	5.1	6.8
8/30/95	18:45:00	178.9	14.9	4.5	9.1
9/1/95	01:05:00	178.9	14.9	10.3	7.1
8/30/95	01:30:00	179.1	15.1	15.6	7.7
8/30/95	01:35:00	179.1	15.1	16.1	7.2
8/30/95	01:40:00	179.1	15.1	16.1	7.7
8/30/95	03:55:00	179.1	15.1	15.3	7.1
8/30/95	04:00:00	179.1	15.1	15.3	7.1
8/30/95	04:05:00	179.1	15.1	14.8	8
8/30/95	04:40:00	179.1	15.1	16.2	7.6
8/30/95	06:15:00	179.1	15.1	14.4	7.7
8/30/95	06:25:00	179.1	15.1	14.3	7.2
8/30/95	06:30:00	179.1	15.1	13.6	7.7
8/30/95	06:40:00	179.1	15.1	13.7	7.9
8/30/95	07:55:00	179.1	15.1	14.8	7.7
9/1/95	00:45:00	179.1	15.1	10.4	6.9
9/1/95	00:50:00	179.1	15.1	11.1	7
8/30/95	01:45:00	179.8	15.8	15.6	7.2
8/30/95	04:45:00	179.8	15.8	16.5	8.2
8/30/95	06:20:00	179.8	15.8	14.8	6.4

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
9/1/95	01:10:00	179.8	15.8	11.4	8
9/1/95	02:10:00	179.8	15.8	8.3	7.1
9/1/95	02:15:00	179.8	15.8	8.4	7.9
8/30/95	03:30:00	180.9	16.9	14.4	7.2
8/30/95	03:35:00	180.9	16.9	15.2	7.9
8/30/95	02:00:00	181.1	17.1	15.4	8.6
8/30/95	03:50:00	181.1	17.1	15.7	7.5
8/30/95	04:50:00	181.1	17.1	15.9	7.1
8/30/95	06:35:00	181.1	17.1	14	7.1
8/30/95	06:45:00	181.1	17.1	12.5	7.1
8/30/95	08:00:00	181.1	17.1	14.3	7.7
8/30/95	20:25:00	181.1	17.1	14	7.4
9/1/95	01:15:00	181.1	17.1	11.4	6.9
9/1/95	02:20:00	181.1	17.1	8	6.8
8/29/95	22:20:00	181.8	17.8	13.9	7.5
8/30/95	03:45:00	182	18	15.2	7.2
8/30/95	01:50:00	182.2	18.2	15.2	6.9
8/30/95	02:05:00	182.2	18.2	14.8	7.1
8/30/95	20:35:00	182.2	18.2	12.1	9
9/1/95	01:40:00	182.2	18.2	8.6	7.7
9/1/95	02:05:00	182.2	18.2	8.7	7.4
8/30/95	02:10:00	182.9	18.9	14.4	6.9
8/30/95	03:40:00	182.9	18.9	16.1	7.5
8/30/95	04:55:00	182.9	18.9	16.8	7.5

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	05:05:00	182.9	18.9	15.3	7.2
8/30/95	06:10:00	182.9	18.9	15.5	6.9
8/30/95	01:55:00	183.1	19.1	15.5	6.6
8/30/95	03:25:00	183.1	19.1	14.6	6.9
8/30/95	08:10:00	183.1	19.1	13.3	7.9
8/30/95	08:15:00	183.1	19.1	12.7	8.6
8/30/95	18:05:00	183.1	19.1	4.5	8
8/30/95	21:25:00	183.1	19.1	7.8	13.6
8/30/95	02:50:00	184	20	12.3	7
8/30/95	05:15:00	184	20	16.2	6.9
8/30/95	05:55:00	184	20	15.1	6.6
8/30/95	06:00:00	184	20	15	7.9
8/30/95	08:20:00	184	20	11.8	7.9
8/30/95	19:55:00	184	20	13.7	15
9/1/95	01:20:00	184	20	10.8	6.9
9/1/95	01:50:00	184	20	8.6	7.2
9/1/95	02:00:00	184	20	8.7	7.7
8/30/95	03:20:00	184.1	20.1	14.2	7.9
8/30/95	05:10:00	184.1	20.1	16.1	6.5
8/30/95	06:05:00	184.1	20.1	15.5	6.1
9/1/95	01:35:00	184.1	20.1	9.2	6.8
8/30/95	02:25:00	184.9	20.9	13.7	6.3
8/30/95	03:15:00	184.9	20.9	14.3	5.8
8/30/95	05:00:00	184.9	20.9	15.8	8.3

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	05:20:00	184.9	20.9	15.6	6.5
8/30/95	12:55:00	184.9	20.9	10.4	13.2
8/30/95	02:15:00	185.2	21.2	14.3	7.1
8/30/95	05:45:00	185.2	21.2	15.7	6.8
8/30/95	05:50:00	185.2	21.2	15.7	8
8/30/95	08:40:00	185.2	21.2	13.3	7.9
8/30/95	17:55:00	185.2	21.2	6.1	5.4
9/1/95	01:25:00	185.2	21.2	10.1	6.9
9/1/95	01:45:00	185.2	21.2	7.9	7.6
9/1/95	01:55:00	185.2	21.2	8.4	7.4
8/30/95	02:20:00	185.9	21.9	13.6	6.9
8/30/95	02:55:00	185.9	21.9	12.7	7.1
8/30/95	03:05:00	185.9	21.9	13.7	6.8
8/30/95	03:10:00	185.9	21.9	14	7.1
8/30/95	08:25:00	185.9	21.9	12.3	8.3
8/30/95	08:35:00	185.9	21.9	12.5	7.2
8/30/95	08:45:00	186.1	22.1	13.2	8
8/30/95	05:30:00	186.8	22.8	14.7	7.1
9/1/95	02:25:00	186.8	22.8	8.2	7.6
8/30/95	02:30:00	187.2	23.2	12.6	7.1
8/30/95	02:35:00	187.2	23.2	13	7
8/30/95	02:40:00	187.2	23.2	12.2	7.6
8/30/95	02:45:00	187.2	23.2	11.7	7.1
8/30/95	03:00:00	187.2	23.2	14	7.4

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	05:25:00	187.2	23.2	16.2	6.8
8/30/95	05:40:00	187.2	23.2	15.2	6.5
8/30/95	18:00:00	187.2	23.2	5.2	14.2
9/1/95	01:30:00	187.2	23.2	9.7	5.4
8/30/95	08:50:00	187.9	23.9	13.4	7.1
8/30/95	05:35:00	188.1	24.1	13.8	7.1
8/29/95	22:15:00	188.8	24.8	13.3	9.7
8/30/95	08:30:00	188.8	24.8	12.6	7.9
8/30/95	12:20:00	188.8	24.8	10.8	10.3
8/30/95	20:00:00	188.8	24.8	11.7	20.7
8/30/95	09:00:00	189.2	25.2	12.8	7.5
8/30/95	08:55:00	190.1	26.1	12.6	8.1
8/30/95	09:05:00	190.1	26.1	13.6	7
8/30/95	12:25:00	190.1	26.1	10	8.7
8/30/95	13:50:00	190.1	26.1	10	9.1
8/30/95	17:45:00	190.1	26.1	5.1	11.4
8/30/95	12:15:00	190.8	26.8	11.1	11.5
8/30/95	09:10:00	191.2	27.2	13.4	8.2
8/30/95	09:20:00	191.2	27.2	13.1	8.2
8/30/95	20:40:00	191.2	27.2	9.4	8
8/30/95	20:45:00	191.2	27.2	8	9.4
8/30/95	09:25:00	191.9	27.9	12.6	8.2
9/1/95	03:35:00	191.9	27.9	7.7	8.1
8/30/95	09:15:00	193	29	13.3	8

Table 5-8
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal (WD) (deg)	Wind Speed (mph)	Sigma Theta
8/30/95	09:50:00	193	29	11	9.3
8/30/95	13:00:00	193	29	10.7	10.1
8/30/95	12:30:00	193.1	29.1	9.2	9.1
8/30/95	11:45:00	193.9	29.9	12.6	9.9
8/30/95	12:00:00	194.2	30.2	12	11
9/1/95	02:30:00	194.2	30.2	8.8	7.5
8/30/95	09:45:00	194.9	30.9	12.2	8.8

Table 5-9
Results of Wastewater Analyses for
Beef Processing Plant - Midwest U.S.

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
pH	Influent	8	6.8	0.1	6.7 - 7.1
	Effluent	4	7.1	0.1	7.0 - 7.2
DO (mg/L)	Influent	8	0.4	0.3	0 - 0.7
	Effluent	4	0.3	0.15	0.1 - 0.4
Temp. (°C)	Influent	8	30.6	2.3	28.4 - 33.4
	Effluent	4	27.2	1.3	26.0 - 29.1
TSS (mg/L)	Influent	8	1,430	485	890 - 2,190
	Effluent	4	582	196	405 - 840
BOD (mg/L)	Influent	8	2,410	686	1,530 - 3,340
	Effluent	4	292	17.6	275 - 310
COD (mg/L)	Influent	8	4,300	1,150	2,910 - 5,720
	Effluent	4	922	109	830 - 1,040
TOC (mg/L)	Influent	8	312	88.4	195 - 425
	Effluent	4	59	12	46 - 75
TKN (mg/L)	Influent	8	164	38.1	115 - 205
	Effluent	4	245	7.07	235 - 250
NH_3-N (mg/L)	Influent	8	47	18	24 - 75
	Effluent	4	214	7.5	205 - 220
NO_3-N (mg/L)	Influent	8	0.0766	0.0176	0.051 - 0.093
	Effluent	4	0.0453	0.0040	0.041 - 0.050

Table 5-10
Summary of Measured Air Concentrations for Chicken Processing Plant in Southeast U.S.

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Methane (CH_4)	Upwind	12	1.92	4.25	1.80 - 2.09
	Downwind	70	9.80	77.6	4.01 - 29.9
Ethylene (C_2H_4)	Upwind	12	0	0	0
	Downwind	70	0	0	0
Ammonia (NH_3)	Upwind	12	2.8 ppb	346	0 - 33.9 ppb
	Downwind	70	2.6 ppb	369	0 - 44.1 ppb
Carbon Dioxide (CO_2)	Upwind	12	434	7.58	391 - 505
	Downwind	70	510	9.66	411 - 587
Carbon Monoxide (CO)	Upwind	12	206 ppb	1.65	200 - 209 ppb
	Downwind	70	298 ppb	17.3	193 - 419 ppb
Hydrogen Sulfide (H_2S)	Upwind	12	0	0	0
	Downwind	70	9.69	28.9	0 - 15.6
Nitrous Oxide (N_2O)	Upwind	12	542 ppb	0.40	539 - 546 ppb
	Downwind	70	563 ppb	0.87	557 - 586 ppb
Sulfur Hexafluoride (SF_6)	Upwind	12	0	0	0
	Downwind	70	26.8 ppb	178	0 - 157 ppb
Water Vapor (H_2O)	Upwind	12	16,400	3.27	15,400 - 17,300
	Downwind	70	16,500	5.01	13,700 - 18,100
Total Hydrocarbons (as Hexane)	Upwind	12	0	0	0
	Downwind	70	0	0	0
Carbon Tetrachloride (CCl_4)	Upwind	12	0	0	0
	Downwind	70	1.4 ppb	289	0 - 17.9 ppb
Chloroform ($CHCl_3$)	Upwind	12	0.5 ppb	346	0 -6.4 ppb

Table 5-10
(Continued)

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
	Downwind	70	9.6 ppb	107	0 - 28.3 ppb
Dichloro-difluoromethane (CCl_2F_2)	Upwind	12	7.9 ppb	12.2	5.9 - 8.7
	Downwind	70	10.7 ppb	49.8	0 - 19.6 ppb
Methylene Chloride (CH_2Cl_2)	Upwind	12	0	0	0
	Downwind	70	25.7 ppb	114	0 - 90.4 ppb
Trichloro-fluoromethane (CCl_3F)	Upwind	12	7.9 ppb	6.54	6.4 - 8.4 ppb
	Downwind	70	3.4 ppb	105	0 - 10.1 ppb

Table 5-11
Summary of Measured Emission Rates for Chicken Processing Plant in Southeast U.S.

Compound	No. Valid Obs.	Average Emission Rate[a] (g/sec)	%CV	Range (g/sec)
Methane	68	179	107	10.8 - 898
Ethylene	68	0	0	0
Ammonia	68	-0.061	520	-0.373 - 1.86
Carbon Dioxide	68	12,400	101	-47.7 - 40,600
Carbon Monoxide	68	5.63	128	-0.349 - 32.0
Hydrogen Sulfide	68	833	99.0	0 - 2,800
Nitrous Oxide	68	2.64	101	0.024 - 9.48
Sulfur Hexafluoride	68	N/A	N/A	N/A
Water Vapor	68	2,540	2,720	-242,000 - 163,000
Total Hydrocarbons (as Hexane)	68	0	0	0
Carbon Tetrachloride	68	0.549	291	0 - 8.04
Chloroform	68	5.28	110	-0.175 - 15.6
Dichloro-difluoromethane	68	0.014	9,490	-5.18 - 3.62
Methylene Chloride	68	9.96	114	0 - 26.3
Trichloro-fluoromethane	68	-2.71	108	-8.50 - 0.175

[a] Negative emission rates occur when the upwind concentration exceeds the downwind concentration.

N/A = Not applicable.

Table 5-12
Summary of Meteorological Data for Valid Sampling Periods for Chicken Processing Plant in the Southeast U.S.

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
9/6/95	12:55:00	121.1	29.1	4	72.2
9/7/95	12:45:00	119	27	5.1	16.8
9/6/95	11:55:00	115	23	7.1	31.5
9/7/95	12:25:00	113	21	4.8	45.1
9/6/95	16:00:00	110	18	5.6	29
9/6/95	12:15:00	108	16	6.1	57.1
9/6/95	10:20:00	106	14	6.4	23.9
9/6/95	11:15:00	105.8	13.8	4	43.6
9/6/95	09:00:00	103.9	11.9	1.2	22.9
9/6/95	15:35:00	103	11	5.2	34.1
9/6/95	10:40:00	101	9	3.9	50.3
9/6/95	15:55:00	97.9	5.9	4.2	34.3
9/6/95	10:50:00	96.9	4.9	4.2	42.5
9/6/95	11:40:00	94	2	5.4	26.1
9/6/95	15:30:00	94	2	6.6	39.3
9/7/95	12:40:00	94	2	4.4	29.6
9/6/95	16:20:00	88	-4	5	37.7
9/6/95	10:00:00	87.9	-4.1	4.1	48.7
9/6/95	10:15:00	87.9	-4.1	5.1	34.4
9/6/95	17:20:00	87.9	-4.1	3.6	40
9/6/95	12:35:00	87	-5	6.4	40.7
9/6/95	12:05:00	85.9	-6.1	6.6	30.3
9/6/95	14:35:00	85.9	-6.1	5.8	35.3
9/7/95	12:20:00	85.9	-6.1	6.6	28.2
9/6/95	12:40:00	85	-7	6.4	26
9/6/95	15:00:00	85	-7	5.2	41.3
9/6/95	18:00:00	84.1	-7.9	3	31.8
9/6/95	11:35:00	83	-9	6.1	28.1

Table 5-12
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
9/6/95	08:30:00	82.1	-9.9	1.4	47
9/6/95	18:30:00	80.8	-11.2	2.6	25.5
9/6/95	16:05:00	80.1	-11.9	5.1	34.5
9/6/95	18:15:00	80.1	-11.9	3.1	33.2
9/6/95	13:20:00	79	-13	4.4	58.4
9/6/95	14:25:00	78.9	-13.1	7	38.2
9/6/95	16:15:00	78.9	-13.1	5.9	21.7
9/6/95	17:05:00	78.9	-13.1	5.1	21.2
9/6/95	13:15:00	78	-14	6.6	23.8
9/6/95	11:30:00	77.1	-14.9	5.5	35.8
9/6/95	14:10:00	77.1	-14.9	5.5	29.6
9/6/95	14:30:00	77.1	-14.9	6.5	33.1
9/6/95	14:40:00	77.1	-14.9	6.9	25.2
9/6/95	10:35:00	76	-16	4.4	54.6
9/6/95	15:05:00	76	-16	6	49.8
9/6/95	15:40:00	76	-16	6	27.9
9/6/95	15:50:00	76	-16	7.4	27.7
9/6/95	15:45:00	75.1	-16.9	6.3	32
9/6/95	16:55:00	74.9	-17.1	6.6	29.6
9/6/95	18:05:00	74.9	-17.1	4	31.5
9/6/95	18:20:00	74.9	-17.1	2.6	28.7
9/6/95	11:50:00	72	-20	6.5	42.7
9/6/95	09:55:00	71.8	-20.2	4.1	44.1
9/6/95	10:05:00	70.9	-21.1	3.5	50.7
9/6/95	10:45:00	70.9	-21.1	4	44.5
9/6/95	14:45:00	70.9	-21.1	4.4	43.6
9/6/95	18:25:00	70.9	-21.1	2.9	18
9/6/95	08:10:00	70	-22	1.1	17.5
9/6/95	09:25:00	69	-23	2.5	59.9
9/6/95	11:10:00	69	-23	4.6	28.5

Table 5-12
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
9/6/95	17:55:00	69	-23	3.5	25.5
9/6/95	11:25:00	68.1	-23.9	5.2	37.4
9/6/95	13:45:00	67.9	-24.1	7.5	27.2
9/6/95	14:05:00	67.9	-24.1	6.3	40
9/6/95	10:10:00	65	-27	6.9	24.3
9/6/95	13:05:00	65	-27	5.5	38.1
9/6/95	17:40:00	63	-29	5.3	34.9
9/6/95	18:35:00	63	-29	1.3	16.7
9/6/95	17:00:00	61.9	-30.1	5.1	29.5
9/6/95	18:40:00	61.9	-30.1	1.1	28.1

Table 5-13
Results of Wastewater Analyses for Chicken Processing Plant - Southeast U.S.

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
pH	Influent	2	6.8	0	6.8
	Effluent	1	6.1	–	–
	Sludge	0	–	–	–
DO (mg/L)	Influent	6	4.9	0.7	4.0 - 5.7
	Effluent	3	0.9	0.6	0.2 - 1.5
	Sludge	1	0	–	–
Temp. (°C)	Influent	6	24.8	0.9	23.5 - 26.2
	Effluent	3	24.5	0.7	23.8 - 25.2
	Sludge	1	23.8	–	–
TSS (mg/L)	Influent	6	879	167	660 - 1,100
	Effluent	3	100	56.8	60 - 165
	Sludge	1	43,500	–	–
BOD (mg/L)	Influent	6	1,400	118	1,240 - 1,600
	Effluent	3	73.3	12.6	60 - 85
	Sludge	1	4,350	–	–
COD (mg/L)	Influent	6	2,430	795	1,795 - 3,970
	Effluent	3	200	45.8	160 - 250
	Sludge	1	8,500	–	–
TOC (mg/L)	Influent	6	223	87.0	160 - 395
	Effluent	3	26.3	9.3	16 - 34
	Sludge	1	120	–	–
TKN (mg/L)	Influent	6	117	17.5	95 - 140
	Effluent	3	76.7	10.4	65 - 85
	Sludge	1	565	–	–

Table 5-13
(Continued)

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
NH_3-N (mg/L)	Influent	6	7.3	2.1	5 - 11
	Effluent	3	81.7	6.5	75 - 88
	Sludge	1	88	–	–
NO_3-N (mg/L)	Influent	6	1.76	1.01	1.12 - 3.80
	Effluent	3	0.0300	0.0072	0.024 - 0.038
	Sludge	1	0.478	–	–

Key: DO = Dissolved oxygen
TSS = Total suspended solids
BOD = Biological oxygen demand (5-day test)
COD = Chemical oxygen demand
TOC = Total organic carbon
TKN = Total nitrogen by Kjeldahl method
NH_3-N = Nitrogen (ammonia)
NO_3-N = Total nitrates

Table 5-14
Summary of Measured Air Concentrations for POTW in Small Town in Southwest U.S.

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Methane (CH_4)	Upwind	52	2.14	4.20	2.09 - 2.56
	Downwind	72	2.20	3.18	2.06 - 2.46
Ethylene (C_2H_4)	Upwind	52	0	0	0
	Downwind	72	0	0	0
Ammonia (NH_3)	Upwind	52	0	0	0
	Downwind	72	0.2 ppb	849	0 - 15.4 ppb
Carbon Dioxide (CO_2)	Upwind	52	351	4.82	329 - 385
	Downwind	72	342	7.40	291 - 384
Carbon Monoxide (CO)	Upwind	52	123 ppb	3.58	117 - 134 ppb
	Downwind	72	131 ppb	3.12	127 - 143 ppb
Hydrogen Sulfide (H_2S)	Upwind	52	0	0	0
	Downwind	72	0	0	0
Nitrous Oxide (N_2O)	Upwind	52	466 ppb	0.55	460 - 469 ppb
	Downwind	72	478 ppb	1.72	470 - 497 ppb
Sulfur Hexafluoride (SF_6)	Upwind	52	0.03 ppb	289	0 - 0.4 ppb
	Downwind	72	11.5 ppb	66.7	0 - 41.1 ppb
Water Vapor (H_2O)	Upwind	52	25,000	5.36	23,000 - 27,800
	Downwind	72	7,590	6.81	6,500 - 8,220
Total Hydrocarbons (as Hexane)	Upwind	52	0	0	0
	Downwind	72	0	0	0
Carbon Tetrachloride (CCl_4)	Upwind	52	0	0	0
	Downwind	72	0	0	0

Table 5-14
(Continued)

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Chloroform ($CHCl_3$)	Upwind	52	0.2 ppb	376	0 -5.0 ppb
	Downwind	72	0	0	0
Dichloro-difluoromethane (CCl_2F_2)	Upwind	52	8.9	2.82	8.2 - 9.4
	Downwind	72	5.8 ppb	51.6	0 - 11.8 ppb
Methylene Chloride (CH_2Cl_2)	Upwind	52	0.9 ppb	379	0 - 19.4 ppb
	Downwind	72	0	0	0
Trichloro-fluoromethane (CCl_3F)	Upwind	52	0.8	60.8	0 - 1.4
	Downwind	72	4.4 ppb	31.2	0.9 - 5.7 ppb

Table 5-15
Summary of Measured Emission Rates for POTW in Small Town in Southwest U.S.

Compound	No. Valid Obs.	Average Emission Rate[a] (g/sec)	%CV	Range (g/sec)
Methane	72	-3.49	575	-101 - 59.3
Ethylene	72	0	0	0
Ammonia	72	0.0004	849	0 - 0.031
Carbon Dioxide	72	-17,500	290	-216,000 - 3,150
Carbon Monoxide	72	-2.26	305	-27.6 - 1.09
Hydrogen Sulfide	72	0	0	0
Nitrous Oxide	72	-5.41	306	-66.7 - 1.57
Sulfur Hexafluoride	72	N/A	N/A	N/A
Water Vapor	72	315,000	299	-123,000 - 3.46×10^6
Total Hydrocarbons (as Hexane)	72	0	0	0
Carbon Tetrachloride	72	0	0	0
Chloroform	72	0.376	294	-0.167 - 3.49
Dichloro-difluoromethane	72	0.007	46,500	-9.57 - 19.4
Methylene Chloride	72	1.20	294	-0.534 - 11.2
Trichloro-fluoromethane	72	-5.54	306	-70.9 - 3.98

[a] Negative emission rates occur when the upwind concentration exceeds the downwind concentration.

N/A = Not applicable.

Table 5-16
Summary of Meteorological Data for Valid Sampling Periods for POTW in Small Town in Southwest U.S.

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
10/6/95	09:20:00	313.4	-29.6	5.9	13.5
10/5/95	15:50:00	315.4	-27.6	10.4	24.1
10/5/95	17:20:00	318.2	-24.8	9.8	11.5
10/6/95	09:30:00	320.9	-22.1	7.2	9.4
10/6/95	09:25:00	323.3	-19.7	5.7	8.7
10/5/95	16:50:00	323.3	-19.7	8.4	10.3
10/5/95	16:25:00	324	-19	11.7	33.4
10/6/95	10:00:00	326.9	-16.1	10.8	5.4
10/5/95	17:10:00	328.9	-14.1	6.9	13
10/5/95	15:55:00	328.9	-14.1	11.3	20.2
10/5/95	16:15:00	329.4	-13.6	7.6	17.8
10/6/95	09:45:00	329.9	-13.1	12.4	10.2
10/6/95	09:40:00	331.4	-11.6	11.4	23.4
10/6/95	09:50:00	332.3	-10.7	11.3	16.1
10/5/95	16:45:00	335.3	-7.7	10.4	18.6
10/6/95	10:05:00	335.3	-7.7	11.2	9.9
10/5/95	16:00:00	335.9	-7.1	9.9	25
10/5/95	18:00:00	336.4	-6.6	8.6	21.4
10/5/95	17:50:00	337.3	-5.7	6.9	10.1
10/5/95	15:35:00	337.3	-5.7	9.9	34.7
10/5/95	17:15:00	337.3	-5.7	10	15.8
10/5/95	17:05:00	338.4	-4.6	8.8	18.3
10/5/95	17:45:00	338.4	-4.6	9.4	20.2
10/6/95	09:35:00	338.9	-4.1	8.4	19.2
10/6/95	10:25:00	339.8	-3.2	10.7	21.2
10/5/95	17:25:00	340.4	-2.6	9.6	25.1
10/6/95	10:10:00	340.4	-2.6	10.6	28.5
10/6/95	10:15:00	343.3	0.3	10.8	26.2
10/5/95	16:30:00	344.3	1.3	7.6	29.4

Table 5-16
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
10/5/95	16:55:00	344.3	1.3	8.5	22.1
10/5/95	16:40:00	344.3	1.3	9.4	28.1
10/5/95	17:00:00	344.9	1.9	10.3	25.2
10/6/95	10:35:00	346.3	3.3	10.3	26.2
10/5/95	17:55:00	346.3	3.3	11	21.1
10/6/95	09:55:00	347.4	4.4	10.4	30
10/5/95	16:10:00	347.9	4.9	10.4	31.6
10/6/95	10:20:00	347.9	4.9	10.4	16.9
10/5/95	18:30:00	350.8	7.8	8	18.6
10/5/95	16:05:00	350.8	7.8	10.8	28.5
10/6/95	10:30:00	351.4	8.4	9.5	25.2
10/5/95	16:35:00	352.1	9.1	9.5	20
10/5/95	18:35:00	355.3	12.3	7.4	14.5
10/5/95	18:20:00	355.3	12.3	8.1	20
10/6/95	11:35:00	356.4	13.4	11.4	28.2
10/6/95	11:05:00	356.9	13.9	9.3	25.9
10/5/95	15:45:00	356.9	13.9	11	34.3
10/5/95	17:30:00	357.3	14.3	7.5	25.5
10/5/95	18:25:00	357.3	14.3	10.5	32.8
10/5/95	19:30:00	357.8	14.8	4.3	1.5
10/5/95	15:40:00	358	15	10	31.5
10/5/95	18:05:00	359.3	16.3	8.2	21.4
10/5/95	19:25:00	359.8	16.8	4.8	9.9
10/6/95	11:30:00	0.9	17.9	9.1	24
10/6/95	11:55:00	2	19	7.6	15.9
10/6/95	11:00:00	2.9	19.9	12.2	12.3
10/5/95	19:00:00	4	21	7.8	19.5
10/5/95	18:10:00	4.9	21.9	6.5	17.4
10/5/95	18:40:00	4.9	21.9	6.6	24.9
10/6/95	11:10:00	4.9	21.9	11.7	27
10/5/95	19:15:00	6	23	4.4	5.5
10/5/95	18:50:00	6.9	23.9	6.7	11.4

Table 5-16
(Continued)

Date	Time	Wind Direction (WD) (Deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
10/5/95	18:55:00	6.9	23.9	7.5	27.7
10/5/95	18:15:00	6.9	23.9	8.1	21.2
10/5/95	19:20:00	7.9	24.9	5.5	16.8
10/5/95	19:05:00	8.8	25.8	6.6	25.2
10/5/95	19:10:00	11	28	5.6	12.6
10/6/95	11:45:00	11	28	9.4	22.4
10/5/95	18:45:00	11.9	28.9	7.2	15.7
10/6/95	11:40:00	11.9	28.9	10.8	21.1
10/5/95	16:20:00	13	30	7.3	29.9
10/5/95	17:40:00	13	30	8.6	24.1
10/6/95	11:20:00	13	30	11.5	22.1

Table 5-17
Results of Wastewater Analyses for
Small Town POTW -Southwestern U.S.

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
pH	Influent	7	7.2	0.3	6.9 - 7.5
	Effluent	5	8.1	0.3	7.6 - 8.4
DO (mg/L)	Influent	7	0.6	0.3	0.2 - 1.1
	Effluent	5	5.8	3.3	3.4 - 11.5
Temp. (°C)	Influent	7	24.5	1.5	22.3 - 26.9
	Effluent	5	21.6	2.9	18.4 - 26.2
TSS (mg/L)	Influent	7	183	86.4	60 - 325
	Effluent	5	80	14.1	65 - 95
BOD (mg/L)	Influent	7	163	65.9	68 - 235
	Effluent	5	97.4	30.7	65 - 135
COD (mg/L)	Influent	7	149	68.0	32 - 245
	Effluent	5	114	27.7	75 - 140
TOC (mg/L)	Influent	7	53	12.1	37 - 69
	Effluent	5	25.8	5.4	18 - 33
TKN (mg/L)	Influent	7	31.7	5.3	23.8 - 39.4
	Effluent	5	18.0	1.0	16.8 - 19.0
NH_3-N (mg/L)	Influent	7	19.6	3.6	13.8 - 25.7
	Effluent	5	1.4	0.9	0.5 - 2.6
NO_3-N (mg/L)	Influent	7	0.0307	0.0193	0.015 - 0.072
	Effluent	5	0.177	0.229	0.069 - 0.587

Table 5-18
Summary of Measured Air Concentrations for POTW in Very Small Town in Southwest U.S.

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Methane (CH_4)	Upwind	62	2.16	11.2	1.92 - 2.83
	Downwind	154	2.11	15.9	1.61 - 2.81
Ethylene (C_2H_4)	Upwind	62	0	0	0
	Downwind	154	18.6 ppb	199	0 - 220 ppb
Ammonia (NH_3)	Upwind	62	25.5 ppb	120	0 - 120 ppb
	Downwind	154	93.3 ppb	41.9	16.7 - 214 ppb
Carbon Dioxide (CO_2)	Upwind	62	668	9.03	549 - 803
	Downwind	154	528	7.04	482 - 691
Carbon Monoxide (CO)	Upwind	62	175 ppb	22.0	124 - 337 ppb
	Downwind	154	143 ppb	11.4	113 - 190 ppb
Hydrogen Sulfide (H_2S)	Upwind	62	0	0	0
	Downwind	154	0.126	549	0 - 4.30
Nitrous Oxide (N_2O)	Upwind	62	515 ppb	1.45	500 - 533 ppb
	Downwind	154	504 ppb	1.31	493 - 518 ppb
Sulfur Hexafluoride (SF_6)	Upwind	62	0.6 ppb	73.8	0 - 3.5 ppb
	Downwind	154	85.4 ppb	75.8	0.5 - 282 ppb
Water Vapor (H_2O)	Upwind	62	25,000	5.36	23,000 - 27,800
	Downwind	154	27,200	5.16	23,300 - 29,500
Total Hydrocarbons (as Hexane)	Upwind	62	0	0	0
	Downwind	154	0	0	0
Carbon Tetrachloride (CCl_4)	Upwind	62	11.9 ppb	45.1	0 - 20.7 ppb
	Downwind	154	8.62 ppb	77.3	0 - 18.8 ppb

Table 5-18
(Continued)

Compound	Location	No. Obs.	Average (ppm)	%CV	Range (ppm)
Chloroform ($CHCl_3$)	Upwind	62	16.2 ppb	41.4	3.3 -25.9 ppb
	Downwind	154	10.8 ppb	76.1	0 - 22.5 ppb
Dichloro-difluoromethane (CCl_2F_2)	Upwind	62	0	0	0
	Downwind	154	1.2 ppb	127	0 - 4.7 ppb
Methylene Chloride (CH_2Cl_2)	Upwind	62	66.0 ppb	36.7	22.2 - 102 ppb
	Downwind	154	57.8 ppb	58.5	0 - 106 ppb
Trichloro-fluoromethane (CCl_3F)	Upwind	62	0	0	0
	Downwind	154	0.3 ppb	239	0 - 3.2 ppb

Table 5-19
Summary of Measured Emission Rates for POTW in Very Small Town in Southwest U.S.

Compound	No. Valid Obs.	Average Emission Rate[a] (g/sec)	%CV	Range (g/sec)
Methane	154	-72.8	705	-4,790 - 158
Ethylene	154	0.016	199	0 - 0.167
Ammonia	154	-13.4	663	-779 - 3.21
Carbon Dioxide	154	6,700	1410	-498,000 - 975,000
Carbon Monoxide	154	7.78	624	-1.45 - 448
Hydrogen Sulfide	154	4.49	1030	0 - 566
Nitrous Oxide	154	-0.248	2740	-38.4 - 56.5
Sulfur Hexafluoride	154	N/A	N/A	N/A
Water Vapor	154	264,000	519	67.0 - 1.12×10^8
Total Hydrocarbons (as Hexane)	154	0	0	0
Carbon Tetrachloride	154	-2.84	635	-174 - 9.28
Chloroform	154	-3.52	605	-210 - 7.06
Dichloro-difluoromethane	154	0.0284	632	0 - 2.21
Methylene Chloride	154	-9.74	598	-528 - 27.2
Trichloro-fluoromethane	154	0.0163	846	0 - 1.69

[a] Negative emission rates occur when the upwind concentration exceeds the downwind concentration.

N/A = Not applicable.

Table 5-20
Summary of Meteorological Data for Valid Sampling Periods for POTW in Very Small Town in Southwest U.S.

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/2/95	21:16:34	150.1	-29.9	3.9	9.6
8/3/95	04:11:46	150.1	-29.9	2.5	8.2
8/3/95	00:16:36	150.8	-29.2	1.5	8
8/2/95	21:36:33	151	-29	4.8	6.5
8/3/95	04:06:45	151	-29	2.4	8.8
8/3/95	12:56:34	151	-29	6.5	20.7
8/2/95	16:00:43	151.9	-28.1	11.3	13.9
8/2/95	21:11:34	151.9	-28.1	4.2	7.1
8/1/95	19:59:46	152.8	-27.2	1.1	68.7
8/2/95	15:55:43	152.8	-27.2	11.9	19.6
8/2/95	16:05:44	153.2	-26.8	11.5	11.8
8/2/95	22:26:34	153.2	-26.8	3.3	5.7
8/3/95	12:36:34	153.9	-26.1	7.7	12
8/2/95	14:45:42	154.1	-25.9	13.8	10.7
8/3/95	01:46:39	154.1	-25.9	1.1	17.3
8/3/95	02:21:40	154.1	-25.9	1.1	13.9
8/3/95	07:51:53	154.1	-25.9	4.6	13.5
8/3/95	14:51:37	154.1	-25.9	5.4	23.3
8/2/95	15:45:44	154.8	-25.2	10.3	13.4
8/2/95	15:00:42	155.2	-24.8	11.9	10.1
8/2/95	22:21:35	155.2	-24.8	3.2	5.5
8/3/95	00:21:35	155.2	-24.8	2.7	8.5
8/3/95	04:01:45	155.9	-24.1	2.4	9

Table 5-20
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/3/95	07:41:52	155.9	-24.1	3.6	8.1
8/2/95	14:40:42	156.1	-23.9	13.5	10.9
8/2/95	22:01:35	156.1	-23.9	3.7	9.2
8/3/95	03:31:45	156.1	-23.9	1.6	13.7
8/4/95	02:09:24	156.1	-23.9	3.2	8.7
8/2/95	12:49:41	157	-23	11.9	11
8/2/95	16:10:44	157.1	-22.9	12.3	16.1
8/3/95	12:41:35	157.1	-22.9	4.4	30.3
8/2/95	12:59:41	157.9	-22.1	11	10.1
8/4/95	02:19:25	158	-22	3	5.8
8/3/95	15:26:36	159.1	-20.9	6.6	9.4
8/2/95	13:30:15	159.8	-20.2	15.2	7.4
8/2/95	15:50:46	160.2	-19.8	11.1	13.9
8/2/95	12:54:41	161.8	-18.2	10.7	10.9
8/2/95	14:50:44	162.2	-17.8	13.7	9.9
8/4/95	02:14:24	162.2	-17.8	3.3	6
8/2/95	15:25:43	163.1	-16.9	11.9	9.7
8/2/95	22:16:35	163.1	-16.9	2.9	9.4
8/3/95	00:41:36	163.1	-16.9	1.1	12.1
8/2/95	11:39:39	163.8	-16.2	10.1	10.7
8/2/95	14:35:41	164.2	-15.8	11.6	14.3
8/3/95	07:56:53	164.2	-15.8	3	22.1
8/4/95	02:24:24	164.2	-15.8	3	6.5
8/3/95	02:26:40	165.1	-14.9	1.1	13.4

Table 5-20
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/3/95	02:31:41	165.1	-14.9	1.1	11.4
8/3/95	12:51:34	166	-14	6.2	43.5
8/2/95	11:59:39	167	-13	13.4	9.7
8/2/95	12:44:40	167	-13	9.9	10.7
8/2/95	13:55:16	167	-13	9.9	13.9
8/2/95	14:20:16	167	-13	11.2	11.7
8/2/95	14:55:42	167	-13	12.2	12.1
8/3/95	00:31:36	167	-13	2.6	8.7
8/3/95	00:36:36	167	-13	1.5	9.8
8/2/95	22:11:34	167.9	-12.1	2.5	7.2
8/3/95	00:26:35	167.9	-12.1	2.8	8.2
8/3/95	05:41:50	167.9	-12.1	1.1	7.1
8/3/95	11:51:33	168.1	-11.9	8.5	24.1
8/3/95	11:56:34	168.1	-11.9	6.2	20
8/2/95	13:45:15	169.2	-10.8	10.9	16.2
8/2/95	15:40:43	169.2	-10.8	12.7	8
8/2/95	15:30:43	169.9	-10.1	11.5	10.3
8/2/95	22:06:34	170.1	-9.9	2.6	9.9
8/3/95	13:16:34	170.1	-9.9	7.7	35.6
8/2/95	11:44:40	170.8	-9.2	12.2	12.4
8/2/95	15:05:43	170.8	-9.2	10.2	13.1
8/3/95	05:21:49	170.8	-9.2	1.1	6.1
8/2/95	14:00:16	171.2	-8.8	11.8	11.9
8/3/95	13:11:34	171.2	-8.8	6.2	41.4

Table 5-20
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/3/95	03:56:46	171.9	-8.1	3.1	11.2
8/2/95	12:04:39	172.1	-7.9	12.2	13.6
8/2/95	15:15:42	172.1	-7.9	11.4	12.4
8/2/95	13:50:15	172.8	-7.2	10.2	14
8/2/95	13:20:16	173.2	-6.8	12	11
8/3/95	04:46:48	175.1	-4.9	1.6	16.2
8/3/95	13:06:35	175.1	-4.9	7.1	15.1
8/3/95	13:36:35	175.1	-4.9	8.3	21.8
8/3/95	13:46:35	175.1	-4.9	5.1	29.4
8/2/95	13:40:16	176	-4	11.8	16.1
8/2/95	15:10:43	176	-4	10.8	11.7
8/2/95	10:54:38	176.2	-3.8	11.3	9.7
8/2/95	13:25:16	176.2	-3.8	11.7	13
8/2/95	15:20:42	176.2	-3.8	10.2	14.8
8/2/95	12:29:39	176.9	-3.1	10.5	11.3
8/4/95	02:29:24	176.9	-3.1	3.5	7.2
8/2/95	15:35:43	177.1	-2.9	11.1	11.4
8/2/95	10:59:39	178.9	-1.1	11	8.5
8/2/95	11:29:38	178.9	-1.1	12.5	11
8/2/95	12:14:40	178.9	-1.1	10.5	12.3
8/2/95	11:14:38	179.1	-0.9	13.7	11.5
8/2/95	12:09:39	179.1	-0.9	11.5	13.2
8/3/95	03:41:45	179.1	-0.9	3.4	7.9
8/3/95	03:51:46	179.1	-0.9	2.4	11.2

Table 5-20
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/3/95	12:46:35	179.1	-0.9	8	19
8/2/95	13:35:15	179.8	-0.2	12.6	8.6
8/3/95	14:16:37	179.8	-0.2	7	14.5
8/2/95	11:24:39	180.2	0.2	11.2	10.8
8/3/95	05:01:49	180.9	0.9	1.2	9.4
8/3/95	09:36:52	180.9	0.9	7.6	19.2
8/3/95	09:41:52	180.9	0.9	7.4	15.8
8/2/95	11:34:38	182.9	2.9	10.3	8.7
8/2/95	14:05:18	184	4	11.1	11
8/2/95	14:15:15	184	4	9.9	10.6
8/2/95	12:39:40	185.2	5.2	9.8	12.3
8/2/95	12:24:39	186.1	6.1	9.9	16.2
8/2/95	11:19:39	186.8	6.8	12.7	9.3
8/2/95	12:34:40	186.8	6.8	10.5	11.9
8/2/95	14:10:19	186.8	6.8	11.2	10.7
8/2/95	13:04:42	187.2	7.2	10.9	12.8
8/2/95	11:04:39	187.9	7.9	11.6	11.5
8/2/95	12:19:40	188.1	8.1	10.2	12.9
8/3/95	03:36:45	188.1	8.1	2.8	8.5
8/4/95	02:34:25	188.1	8.1	3.4	6.1
8/3/95	11:41:33	188.8	8.8	6.5	17.3
8/3/95	13:01:35	188.8	8.8	7.2	22.3
8/3/95	04:41:48	189.9	9.9	1.3	10.8
8/3/95	14:01:35	189.9	9.9	6	17.5

Table 5-20
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/2/95	13:09:41	190.1	10.1	11.1	10.8
8/3/95	02:06:41	190.1	10.1	1.1	51.4
8/3/95	12:21:34	190.8	10.8	3.9	49.2
8/3/95	05:16:49	191.2	11.2	1.1	9.3
8/3/95	08:36:53	191.2	11.2	4.6	27.7
8/3/95	08:46:52	192.2	12.2	5.7	18.8
8/3/95	13:26:34	192.2	12.2	4.4	27
8/3/95	04:31:47	193.9	13.9	1.3	38.3
8/3/95	08:31:52	195.1	15.1	2.9	43
8/3/95	03:46:45	195.8	15.8	3.3	7.6
8/2/95	11:09:38	196.2	16.2	11.3	13.6
8/3/95	11:16:32	196.2	16.2	6.5	22.3
8/3/95	13:31:34	196.2	16.2	6.6	37.1
8/3/95	04:51:48	197.1	17.1	1.7	10.7
8/3/95	09:26:51	197.1	17.1	8.2	18.5
8/3/95	08:56:52	198.2	18.2	5.8	23.8
8/3/95	09:21:55	198.2	18.2	6.7	18.9
8/3/95	13:51:36	198.2	18.2	5.1	21.6
8/4/95	02:44:24	198.9	18.9	2.8	9.8
8/3/95	04:56:49	199.8	19.8	1.2	19.1
8/3/95	09:31:52	199.8	19.8	6.8	14.1
8/4/95	03:44:24	202	22	2.7	10.6
8/3/95	12:31:34	203.2	23.2	5.2	42.9
8/3/95	05:06:48	203.9	23.9	1.2	11

Table 5-20
(Continued)

Date	Time	Wind Direction (WD) (deg)	Deviation from Ideal WD (deg)	Wind Speed (mph)	Sigma Theta
8/3/95	08:41:51	204.1	24.1	5.3	14.1
8/3/95	12:11:34	204.1	24.1	6.7	27.3
8/3/95	13:21:35	204.1	24.1	6.6	17.4
8/3/95	11:31:33	205.2	25.2	6.6	15.9
8/3/95	09:16:52	205.9	25.9	7.7	13.4
8/3/95	08:51:53	206.1	26.1	6.7	18.3
8/4/95	04:44:24	206.1	26.1	1.1	43
8/3/95	09:01:52	207.9	27.9	6.6	15.7
8/3/95	09:11:52	208.1	28.1	7.9	13.2
8/3/95	02:16:41	209.2	29.2	1.1	11.9
8/3/95	14:26:36	209.9	29.9	7	14.2

Table 5-21
Results of Wastewater Analyses for
Very Small Town POTW - Southwest U.S.

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
pH	Influent	5	8.4	0.5	7.5 - 8.8
	Effluent	6	9.2	0.3	8.9 - 9.7
	Final Effluent	3	9.6	0.2	9.4 - 9.8
DO (mg/L)	Influent	5	0.1	0.1	0.0 - 0.3
	Effluent	6	4.5	2.8	1.9 - 9.5
	Final Effluent	3	9.6	4.4	5.3 - 14.0
Temp. (°C)	Influent	5	30.7	4.0	26.4 - 36.6
	Effluent	6	29.8	4.4	25.5 - 38.2
	Final Effluent	3	28.0	1.3	26.5 - 29.0
TSS (mg/L)	Influent	5	135	82.9	75 - 270
	Effluent	6	52	10	40 - 65
	Final Effluent	3	43	5.8	40 - 50
BOD (mg/L)	Influent	5	147	55.6	74 - 200
	Effluent	6	42.3	9.33	26 - 51
	Final Effluent	3	18	1.1	17 - 19
COD (mg/L)	Influent	5	211	54.1	140 - 290
	Effluent	6	135	19.8	120 - 170
	Final Effluent	3	118	32.2	95 - 155
TOC (mg/L)	Influent	5	31	13	21 - 51
	Effluent	6	18	0.75	17 - 19
	Final Effluent	3	19	2.1	17 - 21
TKN (mg/L)	Influent	5	27.9	2.5	25.55 - 31.85
	Effluent	6	6.48	2.79	3.85 - 10.85
	Final Effluent	3	4.55	1.60	2.80 - 5.95

Table 5-21
(Continued)

Parameter (units)	Sampling Location	No. of Observ.	Average	Standard Deviation	Range
NH_3-N (mg/L)	Influent	5	22.7	2.92	19.1 - 26.6
	Effluent	6	2.1	0.53	1.4 - 2.8
	Final Effluent	3	0.42	0.17	0.23 - 0.56
NO_3-N (mg/L)	Influent	5	0.0356	0.0103	0.023 - 0.047
	Effluent	6	0.144	0.037	0.095 - 0.197
	Final Effluent	3	0.028	0.007	0.022 - 0.035

Note: Air measurements were made downwind of ponds #1 and #2. Final effluent is discharge from pond #3.

Key:
- DO = Dissolved oxygen
- TSS = Total suspended solids
- BOD = Biological oxygen demand (5-day test)
- COD = Chemical oxygen demand
- TOC = Total organic carbon
- TKN = Total nitrogen by Kjeldahl method
- NH_3-N = Nitrogen (ammonia)
- O_3-N = Total nitrates

SECTION 6

DISCUSSION OF RESULTS

This section contains further reduction and discussion of the data presented in Sections 5 and 7, and in the appendices.

6.1 Discussion of Results by Site

The FTIR spectra were reduced and concentrations determined for 15 target analytes: CH_4, two tracer gases (SF_6 and C_2H_4), six inorganic compounds (NH_3, CO_2, CO, H_2S, N_2O, and H_2O), TNMHC, and five halogen-containing compounds (CCl_4, $CHCl_3$, CCl_2F_2, CH_2Cl_2, and CCl_3F). The air measurement data were reviewed to identify those compounds found at each site in significantly greater concentrations in the downwind air compared with the upwind air. Any such compounds were initially assumed to have been emitted from the lagoons being tested.

The compounds possibly being emitted from each site are identified in Table 6-1. For some of these compounds, the measurement uncertainty was rather large and the data, therefore, are suspect. The validity of the data for each site are discussed in the following subsections. Many of the target analytes were found at the same concentration levels upwind and downwind of the lagoons; i.e., they had no quantifiable emission rate. Only CH_4, NH_3, and the SF_6 tracer gas generally were present in greater amounts in the downwind air.

The minimum quantifiable emission rate varied from site to site, depending on the variability in the measured concentrations, and from one 5-minute period to another, depending on the measured concentration of SF_6. The detection limit for a given compound, in terms of g/sec, is dependent on the smallest difference between downwind and upwind concentrations that could be identified apart from the measurement variability within each of the upwind and downwind data sets. While it was being released, the tracer gas typically was detected downwind at a concentration level of roughly 50 ppbv or 300 $\mu g/m^3$. The following typical detection limits were calculated based on the standard deviation of the upwind measurements and the typical downwind concentration of SF_6:

Compound	Detection Limit (g/sec)
CH_4	0.15
CO_2	150
NH_3	0.05
N_2O	0.03

The high detection limit for CO_2 was due to the high background concentrations (e.g., 500 ppmv) and the measurement variability (e.g., %CV = 7.5%).

For a given compound, for each increment of 0.5 ppmv (500 ppbv) that the downwind concentration exceeded the average upwind concentration, its emission rate was about 1 g/sec (depending on the molecular weight of the compound).

Table 6-1
Compounds Possibly being Emitted from Each Site

Site	Compound	Average Downwind Conc. (ppm)	Average Upwind Conc. (ppm)	Maximum Downwind Conc. (ppm)	Average Emission Rate (g/sec)
Southwest Beef Processing Plant	Methane	61.9	2.3	142	280
	Ammonia	355 ppb	0	609 ppb	2.17
	TNMHC[a]	100 ppb	0	565 ppb	1.44
Midwest Beef Processing Plant	Methane	58.1	2.83	200	226
	Ammonia	1.04	0.277	2.06	3.50
	TNMHC[a]	244 ppb	0	817 ppb	7.50
Southeast Chicken Processing Plant	Methane	9.80	1.92	29.9	179
	Carbon Dioxide	510	434	587	12,400
	Ammonia[a]	2.6 ppb	2.8 ppb	44.1 ppb	0.0659
	Hydrogen	9.69	0	15.6	833
	Carbon	298 ppb	206 ppb	419 ppb	5.63
	Nitrous Oxide	563 ppb	542 ppb	586 ppb	2.64
	Chloroform	9.6 ppb	0.5 ppb	28.3 ppb	5.28
	Methylene	25.7 ppb	0	90.4 ppb	9.96
POTW for Small Town in Southwest U.S.	Methane[b]	2.20	2.14	2.46	<0.15
	Carbon Dioxide[b]	342	351	384	<150
	Ammonia[b]	0.2 ppb	0	15.4 ppb	<0.05
POTW for Very Small Town in Southwest U.S.	Methane[b]	2.11	2.16	2.81	<0.15
	Carbon Dioxide[b]	528	668	691	<150
	Ammonia[b]	93.3 ppb	25.5 ppb	214 ppb	<0.05
	Ethylene[a]	18.6 ppb	0	220 ppb	0.016
	Hydrogen	0.126	0	4.3	4.5

a The measured concentrations for these compounds generally were less than 3 times the 95% confidence interval. Therefore, these data are highly suspect.

b Methane, carbon dioxide, and ammonia values are shown for the POTWs for comparison purposes. No quantifiable emissions of these compounds were detected at either POTW.

The results of the wastewater analyses performed by Radian were compared with the results reported by the plants. These data are shown in Table 6-2.

Three sets of wastewater data were considered:

1. Data generated by Radian;

2. Data generated by the plant from samples collected during the same week that Radian collected samples; and

3. Average long-term data generated by the plant.

The original intent was to compare data sets #1 and #2 to identify any bias between the two data sets. The average long-term plant values would be corrected for this bias and evaluated for correlations with the air emissions data. The individual plants, however, do not routinely generate all of the data needed for this exercise, so the Radian data set was used in the evaluations. This data set is preferable because data are available for all the parameters of interest, data are available for the influent as well as the effluent streams, and the effluent data correspond to the portions of the WWT system generating the air emissions that were measured.

There are two potential concerns related to the use of the analytical results generated by Radian. One, these wastewater data do not address long-term variability. A review of long-term data provided by the plants (see Appendix G), however, indicates there is no discernable seasonal variation in system performance. Two, the WWT systems have retention times of one week to three months (see Table 3-1), so effluent samples collected concurrently with influent samples may not accurately represent system removal. This is true, however, only if the influent loadings or the system performance vary over time periods of several weeks. The long-term data provided by the plants indicate that all five WWT systems have reasonably constant influent loadings and BOD removal. The samples were not collected at the exact same time as the plant samples, so there may be some variability between the two data sets due to short-term temporal variability.

In general, the Radian data agree well with the data provided by the individual plants. For the three meat processing plants, however, the Radian data for the effluent BOD are higher than the plant data. This may be due to differences in where in the WWT system that the samples were collected or differences in the bacteria used by the laboratories to seed the samples during analysis. Also, the BOD test in general tends to be more analyst-dependent than most other analytical tests.

Activity factors were developed for each site based on information provided by the plant operators and from the wastewater data. These activity factors are given in Table 6-3. At most of the sites, the OPM-TM monitoring captured emissions from the first two or three lagoons in series, but not for the final polishing or retention lagoons. Effluent samples were collected from the last lagoon addressed by the OPM-TM monitoring. Removal rates were calculated for the lagoons whose emissions were measured during the air monitoring and not for the entire WWT system. For the two POTWs, the effluent sampling location was one or two lagoons upstream from where the

Table 6-2
Comparison of Wastewater Data By Site

Site	Parameter	Influent (mg/L)			Effluent (mg/L)		
		Average Radian Value	Plant Value for Same Week	Average Long-Term Plant Value	Average Radian Value	Plant Value for Same Week	Average Long-Term Plant Value
Beef Processing Plant in Southwest (For the influent values, the top value is for combined influent and the bottom value is for influent from slaughterhouse only)	BOD	4,000 3,420	-- --	-- 2,040	314	161	179
	COD	6,960 4,360	-- --	-- --	683	--	--
	TOC	641 321	-- --	-- --	22	--	--
	TKN	383 159	-- 64	-- 149	380	255	242
	Ammonia	142 39.6	-- 16	-- 34	196	202	186
	Nitrates	0.848 0.055	-- --	-- --	0.097	--	--
Beef Processing Plant in Midwest	BOD	2,410	2,970	2,080	292	44	57
	COD	4,300	--	--	1,150	--	--
	TOC	312	--	--	59	--	--
	TKN	164	198	215	245	209	222
	Ammonia	47	--	--	214	195	210
	Nitrates	0.0766	--	--	0.0453	--	--

Table 6-2
(Continued)

Site	Parameter	Influent (mg/L)			Effluent (mg/L)		
		Average Radian Value	Plant Value for Same Week	Average Long-Term Plant Value	Average Radian Value	Plant Value for Same Week	Average Long-Term Plant Value
Chicken Processing Plant in Southeast	BOD	1,400	--	--	73.3	2.70	1.64
	COD	2,430	--	--	200	--	--
	TOC	223	--	--	87.0	--	--
	TKN	117	--	--	76.7	0.97	1.17
	Ammonia	7.3	--	--	81.7	--	--
	Nitrates	1.76	--	--	0.0300	--	--
POTW for Small Town in Southwest	BOD	163	--	--	97.4 36 (final eff.)	-- --	-- --
	COD	149	--	--	114	--	--
	TOC	53	--	--	25.8	--	--
	TKN	31.7	--	--	18.0	--	--
	Ammonia	19.6	--	--	1.4 0.20 (final eff.)	-- --	-- --
	Nitrates	0.0307	--	--	0.177	--	--

Table 6-2
(Continued)

Site	Parameter	Influent (mg/L)			Effluent (mg/L)		
		Average Radian Value	Plant Value for Same Week	Average Long-Term Plant Value	Average Radian Value	Plant Value for Same Week	Average Long-Term Plant Value
POTW for Very Small Town in Southwest	BOD	147	--	--	42.3 18 (final eff.)	-- 18 (final eff.)	-- 52.7 (final eff.)
	COD	211	--	--	135	--	--
	TOC	31	--	--	18	--	--
	TKN	27.9	--	--	6.48	--	--
	Ammonia	22.7	--	--	2.1 0.42 (final eff.)	-- <0.10 (final eff.)	-- 1.03 (final eff.)
	Nitrates	0.0356	--	--	0.144	--	--

Table 6-3
Activity Factor Data By Site

Parameter	Units	Southwest Beef Processing Plant	Midwest Beef Processing Plant	Southeast Chicken Processing Plant	POTW for Small Town in the Southwest	POTW for Very Small Town in the Southwest
Plant Production Rate	# head/birds per day	5,000	5,600	125,000[a]	n/a	n/a
	kg meat per day	1,140,000	1,270,000	210,000[a]	n/a	n/a
	# people served	n/a	n/a	n/a	5,000	560
Influent Flowrate	L/day	15,000,000	10,600,000	3,400,000	1,100,000	167,000
Influent BOD	kg/day	60,000	25,500	4,760	179	24.6
BOD removal	kg/day	55,300	22,450	4,510	72.2	17.5
	Percent	92%	88%	95%	40%	71%
COD removal	kg/day	94,200	33,400	7,580	38.5	12.7
	Percent	90%	73%	92%	23%	36%
TOC removal	kg/day	9,290	2,680	462	29.9	2.17
	Percent	97%	81%	61%	51%	42%
TKN removal	kg/day	45	-859	137	15.1	3.58
	Percent	0.8%	-49%	34%	43%	77%

Table 6-3
(Continued)

Parameter	Units	Southwest Beef Processing Plant	Midwest Beef Processing Plant	Southeast Chicken Processing Plant	POTW for Small Town in the Southwest	POTW for Very Small Town in the Southwest
Ammonia removal (kg/day)	kg/day	2,940 kg/day in effluent	2,270 kg/day in effluent	278 kg/day in effluent	20.0	3.44
	Percent	n/a	n/a	n/a	93%	91%
Nitrate removal (kg/day)	kg/day	11.3	0.332	5.9	0.19 kg/day in effluent	0.24 kg/day in effluent
	Percent	89%	41%	98%	n/a	n/a
Influent Chloroform	kg/day	0.0561	0.0107	0.00524	0	--

a Assuming 25 days of operation per month

Notes:
1. The removal rates shown are for the portion of the WWT system generating the air emissions that were measured. The removal rates for the entire WWT system will be higher in most cases.
2. The removal rates were calculated using the results of the wastewater analyses performed by Radian. The effluent flowrate was assumed to be equal to the influent flowrate. In reality, some evaporation and other losses occur and the effluent flowrate would be somewhat lower. Thus, the removals shown are biased low.
3. N/A = Not applicable.

plants collect their samples, so final effluent samples also were collected from the same locations used by the plants.

The plants collect effluent samples at the discharge point from the entire WWT system, so removal rates reported by the individual sites would include any additional removal achieved in the final polishing lagoons. Also, in calculating removal rates, the effluent flowrate was assumed to be equal to the influent flowrate. Some evaporative and other losses occur, so the amount of remaining material (effluent concentration * effluent flowrate) probably is biased high and the actual removal rates would be higher than those calculated.

For the meat processing plants, BOD removals of 88-95% were calculated versus a theoretical maximum of 100%. Therefore, any bias introduced by the assumed effluent flowrates, by the omission of the polishing lagoons, or by differences in analytical results for effluent BOD levels is small.

The largest unknown factor related to the activity factors is the variability in the influent flowrate for the meat processing plants. It is not known how accurately the plants measure this parameter. The temporal variability in this parameter also is not known, but is reported by the plant operators to be small.

The data are discussed below by site.

6.1.1 Sampling at Southwest Beef Processing Plant

Methane and ammonia were found in appreciably higher concentrations downwind of the lagoons compared with the upwind air. The downwind concentration of CH_4 averaged 61.9 ppmv and was as high as 142 ppmv. Ammonia concentrations up to 0.609 ppmv were measured.

The data trends are illustrated in several data plots. Figure 6-1 shows the measured CH_4 concentration as a function of wind direction. The CH_4 concentration decreases whenever the FTIR beam is not directly downwind of the lagoons. Based on this observation, only time periods when the wind direction was within ±15° of the ideal wind direction (i.e., 176 deg) were considered to be valid for this site.

The measured downwind CH_4 and NH_3 concentrations (for valid wind directions) as a function of time are shown in Figure 6-2. [In this and subsequent figures, the time plotted on the x-axis are the valid 5-minute measurement periods. See table 5-4 for the specific time periods shown in this plot.] All wind speeds are greater than 1.8 m/sec (4 mph). The downwind concentrations are inversely correlated with wind speed; i.e., as the wind speed increases, the measured concentrations decrease.

Figure 6-3 shows emission rates for CH_4 and NH_3 versus time. Wind speed is also shown. As expected, the emission rates show some correlation with wind speed. Assuming the emission process is diffusion limited, the increased wind enhances mass transfer by reducing the thickness of the boundary layers at the water-air interface, thereby increasing the emission rates. There also appears to be short-term temporal variability in the emission rate due to factors other than wind speed.

An average emission rate for TNMHC of 1.44 g/sec was determined, but the

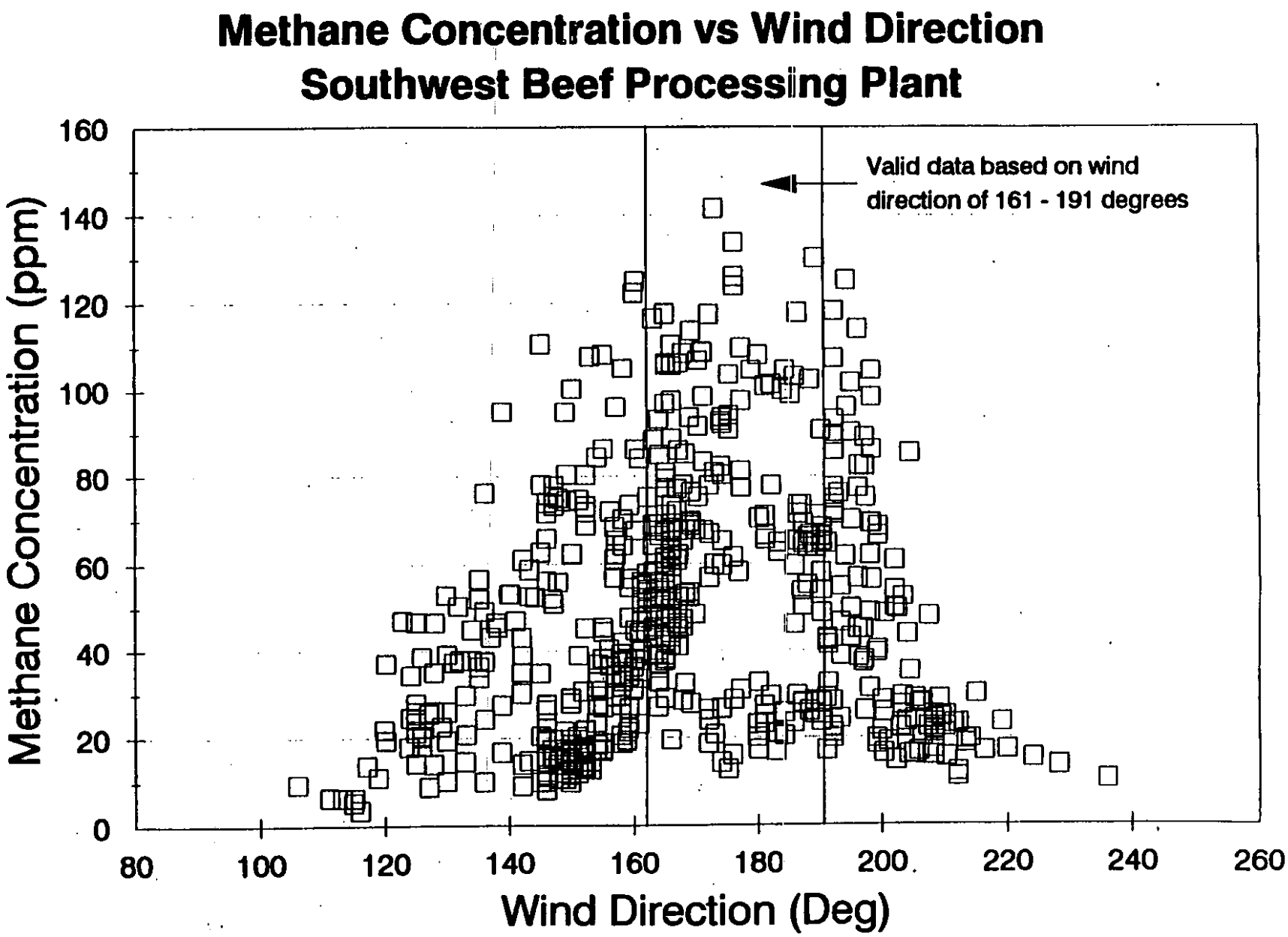


Figure 6-1. Methane Concentration vs Wind Direction Southwest Beef Processing Plant

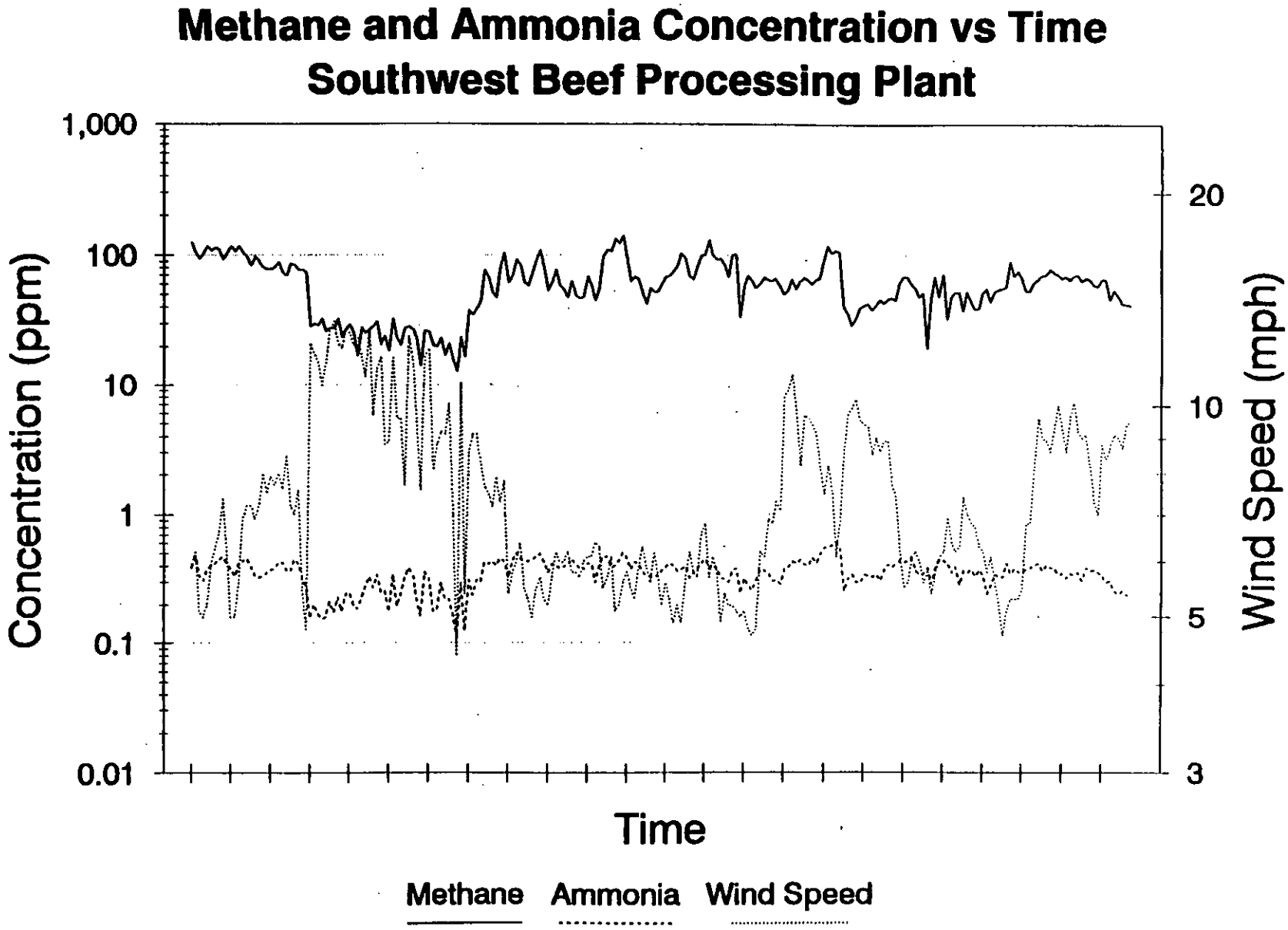


Figure 6-2. Methane and Ammonia Concentration vs Time Southwest Beef Processing Plant

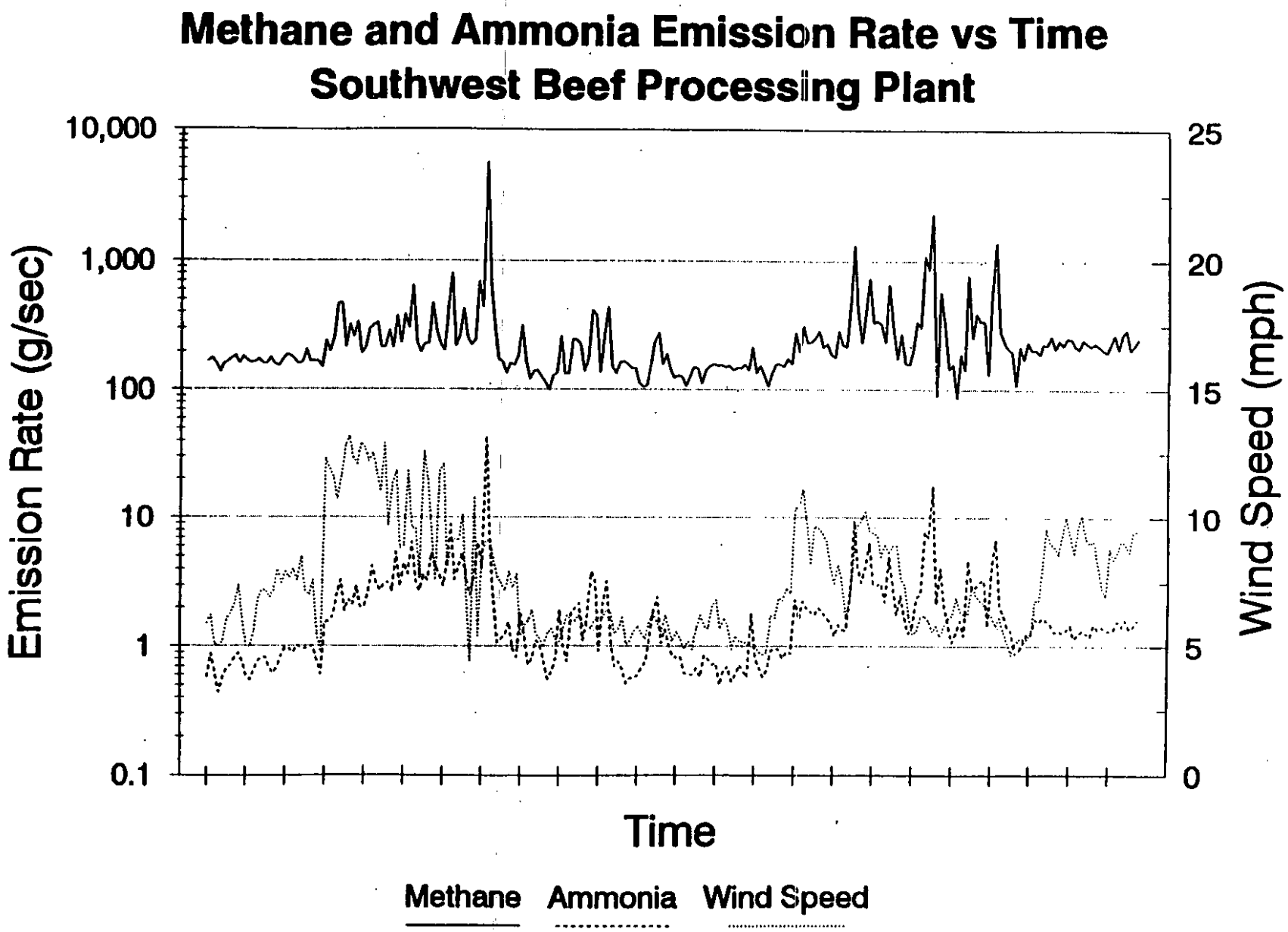


Figure 6-3. Methane and Ammonia Emission Rate vs Time Southwest Beef Processing Plant

uncertainty in the measurement data is very high as evidenced by the 95% confidence intervals for each 5-minute average value shown in Appendix B. In general, if the measured value is not at least three times the 95% confidence interval, the FTIR data are highly suspect. No other compounds were found at significantly higher levels downwind than upwind.

At this site, an additional set of monitoring was performed where three canisters were collected in a vertical array downwind of the lagoons adjacent to the center of the FTIR path. These data are given in Appendix C-1. The A044, A043, and A042 samples were collected 69 cm, 127 cm, and 196 cm above the ground surface. Surprisingly, no concentration profile was apparent and the levels of CH_4, CO_2, and TNMHC were fairly constant. This implies that the emission plume was well mixed vertically by the time it reached the samplers, which were about 50m from the edge of the nearest lagoon and 200m from the midpoint of the set of four anaerobic lagoons. When similar sampling has been performed within a few meters of the emission source, the measured concentrations have shown a strong dependence with height.[10,11]

A check was made of the reasonableness of the σ_z values by comparing results obtained from Equation 4-3 to values from Turner nomographs.[8] Three time periods were selected from when the wind direction was ideal. The three time periods covered different portions of the diurnal solar cycle and therefore covered a range of atmospheric stability classes. The three time periods were:

Date	Time	σ_z (Calc.)	σ_z (Turner method)
8/23	0250	3.7	4.5
8/23	1240	17	7.5
8/25	0750	7.9	7.5

The two approaches to determining σ_z show good agreement considering that the Turner method yields only approximate answers.

The influent wastewater at this site is very concentrated relative to typical WWT systems in other industries.[4] Influent BOD levels up to 11,900 mg/L were found. The influent wastewater from the slaughterhouse showed relatively little variability, while the influent wastewater from the tannery showed a great deal more variability. For example, the %CV for the influent BOD was 23% for the wastewater from the slaughterhouse and 65% for the wastewater from the tannery.

The WWT system is anaerobic. The average DO content of the influent wastewater was 1.4 ppm and the effluent, even after aeration, contained only 0.2 ppm DO. The WWT system is serving to reduce the level of contaminants in the wastewater. As shown in Table 6-3, removal rates of 90-97% for BOD, COD, and TOC were found. About 89% of the nitrates were removed in the lagoons. Ammonia was formed as a byproduct of the biodegradation at a rate of almost 3,000 kg/day. Total Kjeldahl nitrogen (TKN) levels were essentially the same in the influent and effluent wastewaters. The TKN levels, however did differ greatly between the influent streams from the slaughterhouse and the tannery, 159 versus 1,000 mg/L.

6.1.2 Sampling at Midwest Beef Processing Plant

Methane and NH_3 were found in appreciably higher concentrations downwind of the lagoons compared with the upwind air. The downwind concentration of CH_4 averaged 58.1 ppmv and was as high as 200 ppmv. Ammonia concentrations up to 2.06 ppmv were measured.

Figure 6-4 shows the CH_4 and NH_3 downwind concentrations as a function of time. The downwind concentrations vary inversely with wind speed. Figure 6-5 shows the relationship between downwind CH_4 concentration and wind speed. The CH_4 concentration decreases exponentially with wind speed. Ammonia is not included in the figure, but it exhibited a similar trend. Figure 6-6 shows emission rates and wind speed as a function of time.

An average emission rate for TNMHC of 7.50 g/sec was determined, but the uncertainty in the measurement data is very high as evidenced by the 95% confidence intervals for each 5-minute average value shown in Appendix B. As previously mentioned, if the measured value is not at least three times the 95% confidence interval, the FTIR data are highly suspect. No other compounds were consistently found at significantly higher levels downwind than upwind.

The influent wastewater at this site is very concentrated relative to wastewater treated in most other industries.[4] The influent samples that were collected were combined wastewaters from the slaughterhouse and tannery operations. Both influent and effluent data showed variability of <±30% for most parameters.

The WWT system is anaerobic, with both influent and effluent DO levels of 0.3 to 0.4 ppm. The WWT system is serving to reduce the level of contaminants in the wastewater. As shown in Table 6-3, removal rates of 73-88% for BOD, COD, and TOC were found. About 41% of the nitrates were removed in the lagoons. Ammonia was formed as a byproduct of the biodegradation at a rate of over 2,000 kg/day. The measured TKN levels increased by about 50% across the lagoon system.

6.1.3 Sampling at Southeast Chicken Processing Plant

The FTIR was positioned at this site to detect any air emissions from either the anaerobic lagoon or the sludge storage lagoon. A variety of compounds were found at elevated levels in the downwind air: CH_4, CO_2, CO, N_2O, and chloroform. Methane was found at an average downwind concentration of 9.80 ppmv, with a maximum of 29.9 ppmv.

Figure 6-7 shows the CH_4 and CO_2 downwind concentrations, and wind speed, as a function of time. As was the case for the two beef processing plants, the downwind concentrations appear to vary inversely with wind speed. The CO_2 concentration gradually decreased over the sampling period, but the CH_4 concentration did not show this same trend, indicating that the decrease in CO_2 concentration likely was real and not due to problems with the FTIR alignment or response. Figure 6-8 shows the relationship between downwind CH_4 concentration and wind speed. The CH_4 concentration shows no obvious relationship with wind speed, indicating that increasing wind speeds do not act to dilute the emissions to the same extent as seen at other

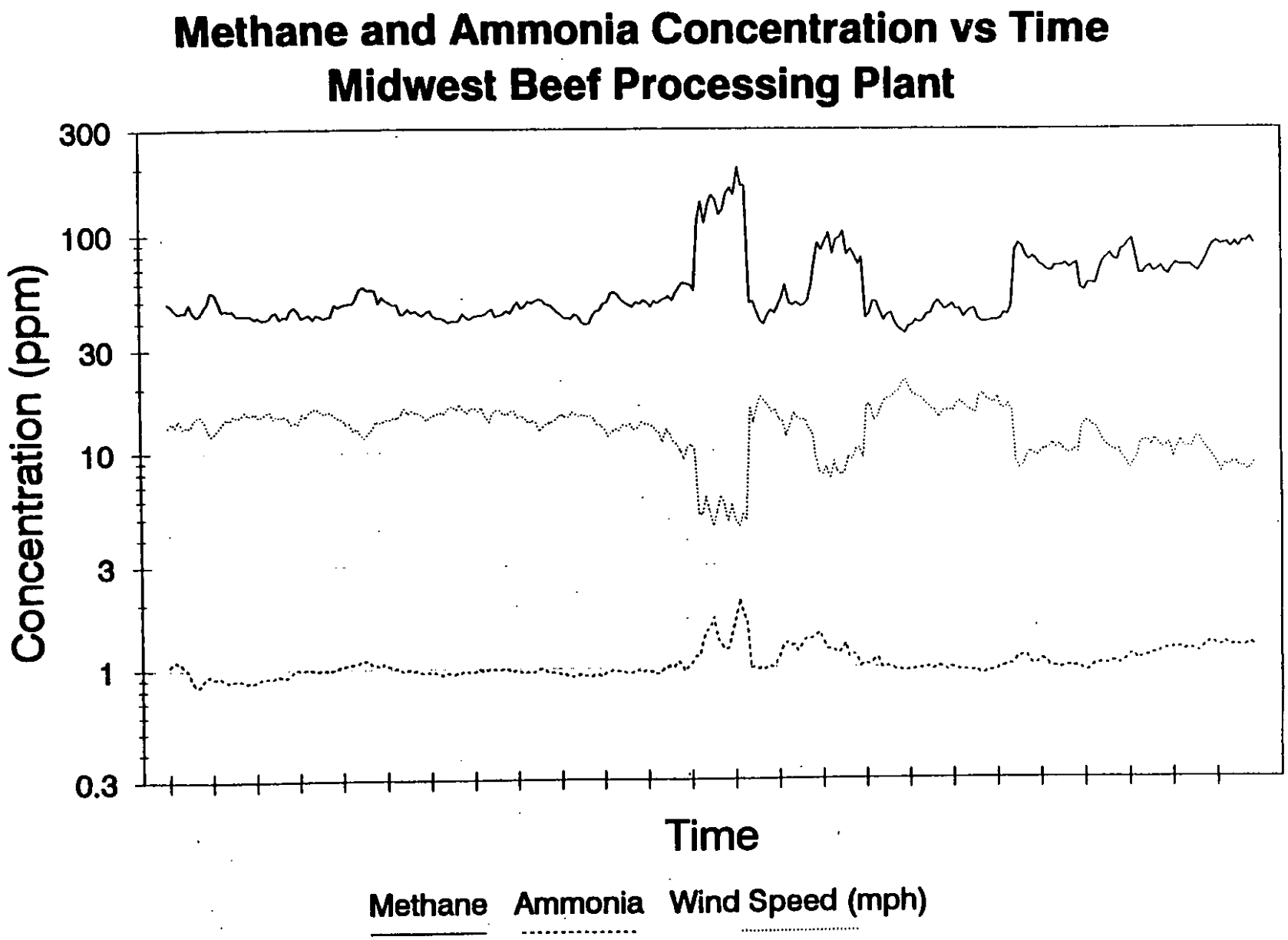


Figure 6-4. Methane and Ammonia Concentration vs Time Midwest Beef Processing Plant

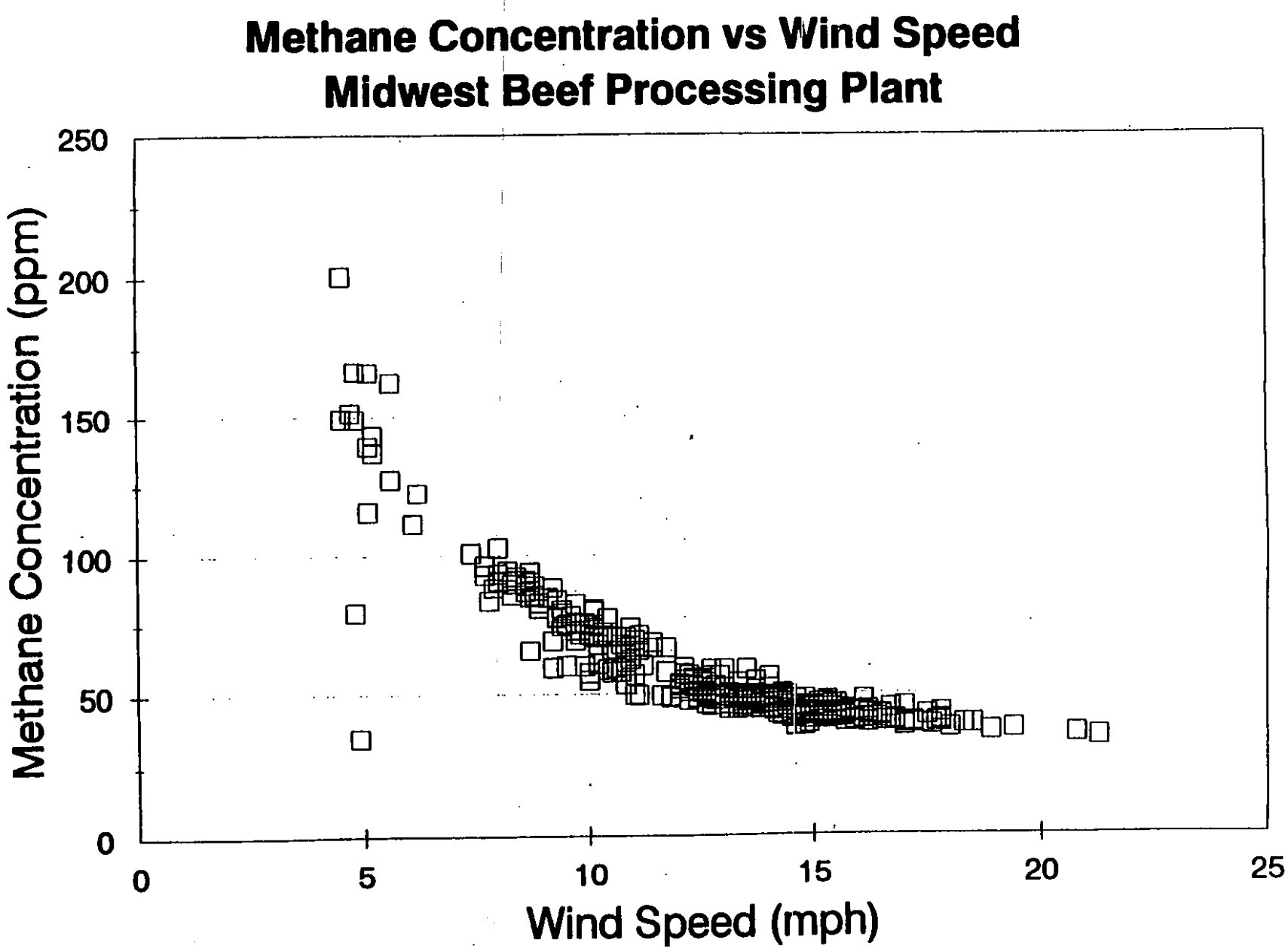


Figure 6-5. Methane Concentration vs Wind Speed Midwest Beef Processing Plant

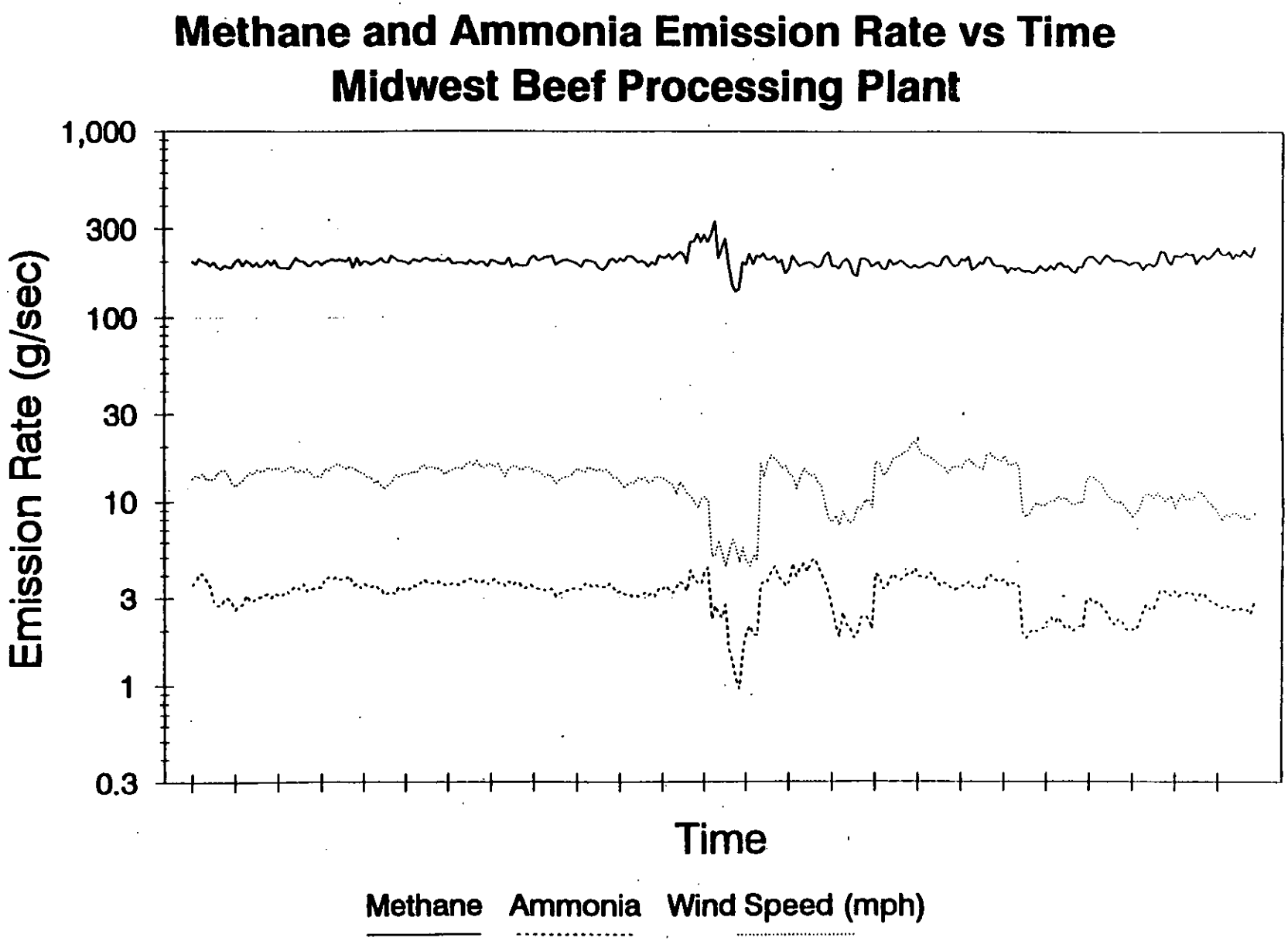


Figure 6-6. Methane and Ammonia Emission Rate vs Time Midwest Beef Processing Plant

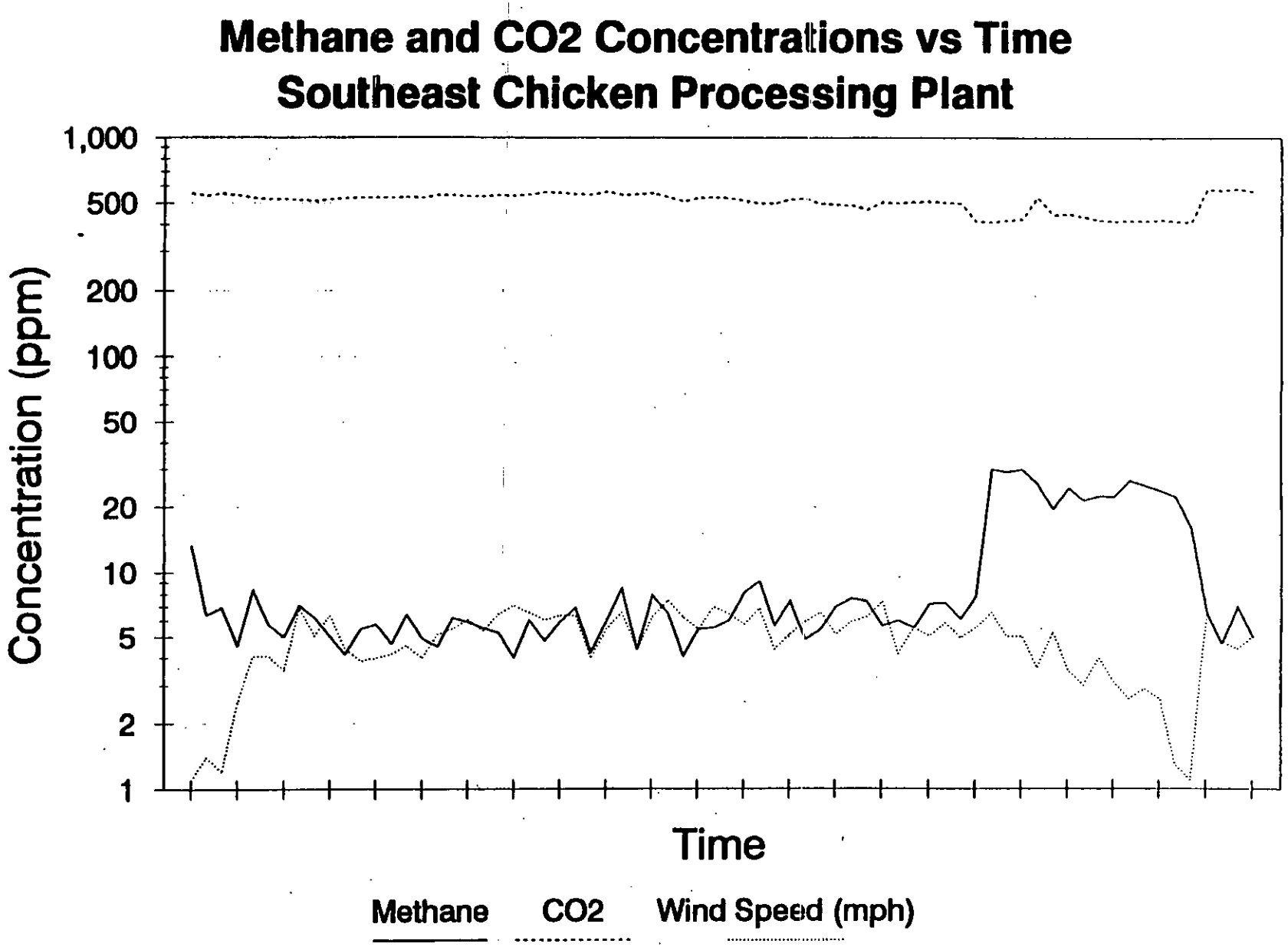


Figure 6-7. Methane and Carbon Dioxide Concentration vs Time Southeast Chicken Processing Plant

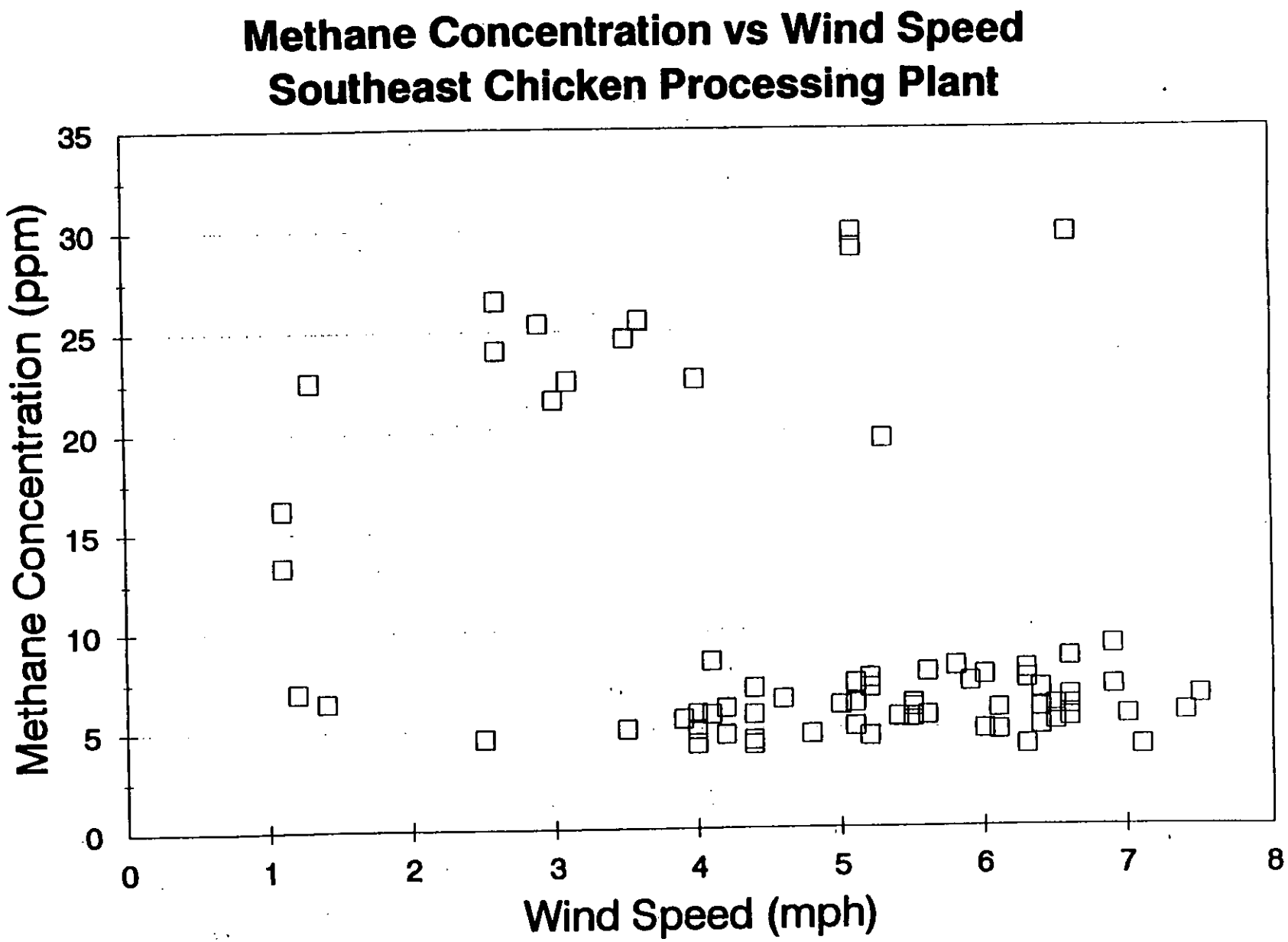


Figure 6-8. Methane Concentration vs Wind Speed Southeast Chicken Processing Plant

sites. This probably is due in some way to the presence of the thick, floating fat layer on top of the lagoon. Figure 6-9 shows emission rates and wind speed as a function of time. The emission rates varied with wind speed. The emission rates of both CH_4 and CO_2 tended to decrease during the sampling period.

The average emission rate for CO_2 is exceedingly large. The upwind CO_2 data at this site had a large variability (CV=7.58%), so the uncertainty in the emission rate data also is large (i.e., there is potentially a large uncertainty in the calculation of downwind concentration minus average upwind concentration). Given the magnitude of the calculated average emission rate, it is probable that a bias exists and the "true" CO_2 emission rate is significantly lower.

The downwind air had slightly more N_2O, CO, and $CHCl_3$ on average than the upwind air at the site. The N_2O appears to be being emitted from the WWT system. The CO, however, is likely coming from some combustion source such as the pump used to transfer fluid between the sludge lagoon and the anaerobic lagoon, or the diesel generator used to provide power to the FTIR unit. Chloroform was detected in the downwind air consistently during some times and was not detected during other long stretches of time. There may have been an intermittent source, other than the WWT system, releasing $CHCl_3$ during the test period. If the source of the $CHCl_3$ was a one time spike in the influent wastewater, the downwind concentrations would be expected to show a gradual decrease over time, rather than the "on or off" behavior that was seen.

Small amounts of NH_3 were found in both the upwind and downwind air, but it was detected during relatively few monitoring periods. Ammonia was found during only one of 12 valid 5-minute upwind monitoring periods and five of 70 downwind monitoring periods. If the one upwind data point is excluded, the average NH_3 emission rate is 0.0659 g/sec, with a range of 0-2.09 g/sec. However, the 95% confidence interval for the NH_3 data is very large and the average upwind and downwind concentrations were nearly equal, indicating that the lagoons were not sources of NH_3 emissions.

The 95% confidence intervals also were large for H_2S and methylene chloride, indicating that these data are suspect and the measured emissions likely are artifacts of the data reduction process. No evidence of TNMHC (i.e., C-H bond stretch) was found in either the upwind or downwind air.

The influent wastewater at this site is concentrated; the BOD levels are greater than 1,000 mg/L. The influent wastewater had an average DO level of 4.9 ppm, but the effluent had an average of only 0.9 ppm. Removal rates of 95% and 92% were found for BOD and COD, respectively. The TOC removal was 61%. About 98% of the nitrates were removed in the lagoons. Ammonia was formed at a rate of about 280 kg/day as a byproduct of the biodegradation. The TKN levels decreased by 43% across the system. Samples of the influent to the sludge lagoon were collected and analyzed, but these results were not used in any of the calculations of removal rates. However, any emissions from the sludge lagoon would contribute to the total emissions that were measured and would thereby introduce a positive bias to the emission factors that were developed for this site.

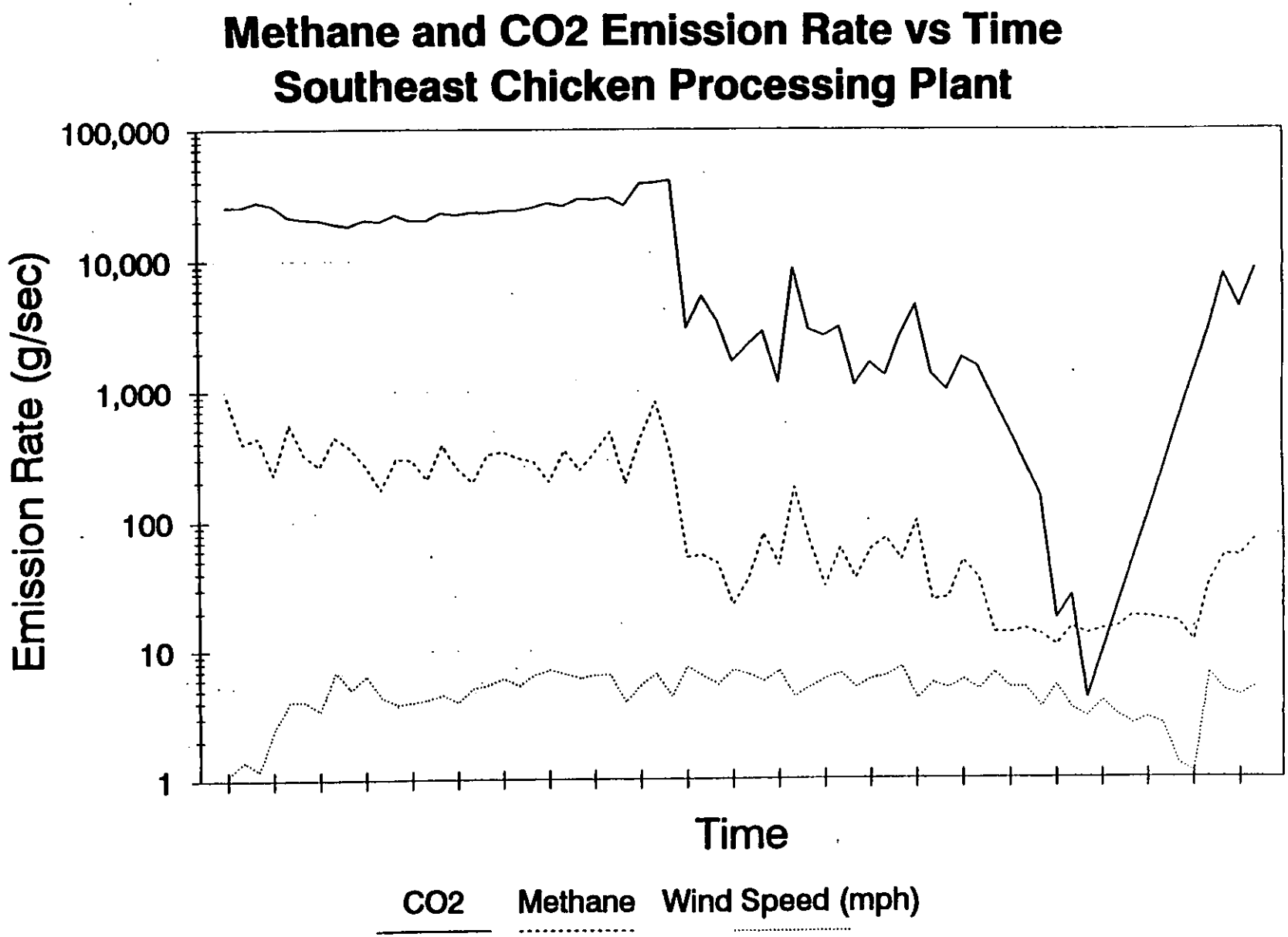


Figure 6-9. Methane and Carbon Dioxide Emission Rate vs Time Southeast Chicken Processing Plant

6.1.4 Sampling at POTW for Small Town in the Southwest U.S.

The upwind and downwind data collected at this site are essentially equivalent. None of the target analytes were detected in significantly greater concentrations downwind of the lagoons versus upwind. Therefore, there were no quantifiable emission rates for GHGs.

The POTW operator reports that the treated effluent is used for irrigation purposes and they have no discharge. Therefore, the plant is not required to report effluent wastewater data to the applicable regulatory agency. No wastewater data for specific time periods were obtained from the plant operator.

The wastewater treatment system has both facultative and aerobic lagoons. The DO level was found to increase across the WWT system from 0.6 to 5.8 ppm. The BOD removal was about 40% for the lagoons where air emissions were monitored. The total WWT system had a BOD removal of about 78% (see data in Appendix- F4). Ammonia is removed by the lagoons and nitrates are created. The NH_3 removal efficiency was 93%.

The influent wastewater contained relatively low levels of BOD (i.e., 68-235 mg/L) and COD (i.e., 32-245 mg/L). For several of the influent wastewater samples, the analytical results for BOD exceeded those for COD. COD levels, however, should always exceed BOD levels. The BOD results would be biased high by any nitrogeneous demand, which is oxidation of reduced forms of nitrogen mediated by microorganisms. No chemical inhibitor for nitrogenous demand was added to these samples during analysis, so some bias may exist. Such bias would add a small amount to the BOD levels; this would not be detectable for the concentrated wastewaters from the meat processing plants, but could impact the BOD levels for the wastewater samples from the POTWs.

The BOD removal rates and the high levels of DO in the effluent indicate that aerobic processes were occurring. Therefore, emissions of CO_2 would be expected. The detection limit for CO_2, however, was so high (i.e., 150 g/sec) that no detectable emission rate was found. Both the upwind and downwind air had about 350 ppm of CO_2 with a CV of about 5%.

6.1.5 Sampling at POTW for Very Small Town in the Southwest U.S.

The upwind and downwind data collected at this site are essentially equivalent for most compounds. Hydrogen sulfide was detected in greater concentrations downwind of the lagoons. Slightly higher amounts of ethylene also were detected downwind. For both of these compounds, the measured values are not significantly greater than the 95% confidence interval, so it is likely the concentrations reflect data reduction artifacts and not actual emissions.

For this site, the upwind data set was collected at the same location as the downwind data set. Upwind data were collected when a north wind was blowing. Under these conditions, the town and a highway were upwind. The downwind data were collected when a south wind was blowing and, at these times, only farmland was upwind of the POTW.

Hydrogen sulfide was detected in the downwind air on only one day from about two o'clock in the afternoon until nine

o'clock at night. During this time period, H_2S was routinely detected at levels of two to five ppmv. No H_2S was detected at other times that day or on other days (FTIR is not very sensitive for H_2S, which has a detection limit of about 1 ppmv by this method). The wind direction was generally not ideal during the seven-hour period when H_2S was detected. Only five of the 5-minute monitoring periods were valid in terms of wind direction. Hydrogen sulfide was not detected during any of the 149 other valid 5-minute averaging periods. The lack of correlation of H_2S detection or concentration with wind direction indicates that the H_2S is not being emitted from the lagoons.

The BOD removal was 71% for the lagoons where air emissions were monitored. The total WWT system had a BOD removal of about 88% (see data in Appendix- F5). The cumulative amount of BOD removal by lagoon is:

Lagoon 1 - 50%;
Lagoon 2 - 71%; and
Lagoon 3 - 88%.

Ammonia is removed by the lagoons and nitrates are created. The NH_3 removal was 91%. The lagoons appear to be aerobic. The DO content increased from 0.1 ppm in the influent wastewater to 3.5 ppm after the first lagoon, 4.5 ppm after the second lagoon, and 9.6 ppm after the final lagoon. The BOD removal rates and the high levels of DO in the effluent indicate that aerobic processes were occurring. Normally, emissions of CO_2 would be expected. The detection limit for CO_2, however, was so high (i.e., 150 g/sec) that no quantifiable emission rate was found. The average upwind CO_2 concentration exceeded the average downwind CO_2 concentration by over 100 ppm. The source of the increased CO_2 levels in the upwind air is not known, but presumably is some source or combination of sources in the nearby town.

6.2 Intersite Comparison of Results

The upwind data at the five sites showed average CH_4 concentrations ranging from 1.92 to 2.83 ppmv and average CO_2 concentrations ranging from 351 to 668 ppmv (see Section 5). The upper end of the range for both compounds is higher than typical background levels (see Section 6.4), indicating that other emission sources were present in the general area, such as livestock operations and fossil fuel combustion.

The variability in CH_4 emission rates was relatively small. The two beef processing plants had average CH_4 emission rates of 280 and 226 g/sec (RPD = 21.3%). The average CH_4 emission rate at the chicken processing plant was 179 g/sec. The average emission rate for NH_3 also showed a relatively small amount of variability: 2.17 g/sec at one beef processing plant and 3.50 g/sec at the other beef processing plant. Emission rates for the two beef processing plants were expected to be very similar for both compounds because of similarities in design and influent wastewater at the two sites.

Some total non-methane hydrocarbons (TNMHC) were detected, but the FTIR method is not particularly well-suited for measuring this analyte. Only an approximate value can be determined based on the stretch of the total number of C-H bonds present.

Very low levels of chlorinated solvents were detected in some of the upwind and

downwind air samples (e.g., 1-10 ppbv). The reported values, while low, are substantially higher than typical data reported from canister/GC studies (e.g., <1 ppbv).

Surprisingly, no quantifiable emissions were detected from the POTWs. It was expected that either CH_4 or CO_2 would be emitted from the POTWs. The DO level in the lagoons exceeds 2 mg/L and BOD removal is taking place, so it is highly probable that CO_2 is being generated, but the levels were too small to detect given the very high detection limit for quantifying CO_2 emissions. The POTWs are not major sources of N_2O emissions.

At all three meat processing plants, large amounts of CH_4 were detected downwind of the WWT system. For the two beef processing plants, the concentration of CH_4 (and NH_3) exhibited an exponential-type relationship with wind speed, as shown in Figure 6-5. The downwind CH_4 concentration at the chicken processing plant did not show a clear relationship between concentration and wind speed, as shown in Figure 6-8. At the chicken processing plant, however, the range of wind speeds was much smaller than for the meat processing plants and the number of valid measurement periods also was much smaller, making it more difficult to identify trends and relationships.

At all three meat processing plants, the downwind concentrations tended to decrease as the wind speed increased. The wind served to dilute the emissions and thereby lower the downwind concentrations. As the wind speed increased, the amount of diluent air increased. The emission rates at these sites tended to increase with increasing wind speed. The trend is most apparent for the two beef processing plants. At those sites, increasing winds will decrease the thickness of the boundary layer at the air-water interface, maximize the concentration gradient above the liquid surface, and promote mixing of the surface liquid layer with the bulk liquid. All of these actions will tend to enhance the emission rate. The effect is not as apparent for the chicken processing plant where a thick, floating fat layer was present on the liquid surface. The fat layer minimizes the effect of changing wind speed and causes the emission process to more closely resemble diffusion through a porous media such as soil rather than evaporation from a liquid surface.

In general, anaerobic degradation can be expected to produce a mixture of CH_4 and CO_2 (in somewhere between a 50:50 and a 70:30 ratio). Therefore, emissions of CO_2 would be expected wherever quanitifiable emission rates of CH_4 were found. The lack of quantifiable CO_2 emission rates may be due to the high detection limit for CO_2 emission rates, as previously discussed. The absence of CO_2 emissions also could be due to the presence of cyanobacteria (blue-green algae) in the anaerobic lagoons. These microorganisms can take up and use CO_2 as it is generated from other bacertia in the lagoons. No floating mats of algae were observed, however, in any of the lagoons.

The wastewater data for all three meat processing plants are very similar, with the two beef processing plants showing very good agreement. All three WWT systems had high removal rates for BOD removal (88-95%), as well as high removal rates for COD, TOC, and nitrates. All three WWT systems generated large amounts of ammonia as a by-product of the

biodegradation of the wastewater. The only parameter that showed variable behavior from system to system was TKN. TKN levels decreased across the WWT system at the chicken processing plant and increased at the beef processing plant in the Midwest. The TKN levels at the beef processing plant in the SW U.S. appeared to decrease across the WWT system, but the influent wastewater from the tannery operations was very high in TKN and had a highly variable composition, and this variability may have masked overall removal of total nitrogen in the system.

The two POTWs had similar influent wastewater and exhibited similar performance in terms of removal of BOD, COD, TOC, TKN, and ammonia. Both systems generated nitrates as a by-product of biodegradation.

6.3 Development of Emission Factors

Emission factors were developed for each site by dividing the average emission rates shown in Table 6-1 by the activity factors shown in Table 6-3. Emission factors based on the emission rate of ammonia from the chicken processing plant (deleting the one upwind data point) also are included. The resulting emission factors are given in Table 6-4. For CH_4, the emission factor based on COD should be the best predictor of emissions from other facilities. COD data, however, are not always available and estimates based on other activity factors may be necessary. Therefore, a variety of emission factors are included in Table 6-4. Subsequent work under this contract will assess the uncertainty associated with using these emission factors for developing national and global emission inventories.

Average values for each emission factor are given in Table 6-5, along with an estimate of the uncertainty developed through standard error propagation methods.

The CVs for the emission factors were calculated by first pooling the CVs for the emission rates averaged across the sites and the activity factors averaged across the sites. The error term was added by taking the square root of the sum of the squares of each pooled CV term. The CVs were taken from the measurement data summarized in this report, except for the CV in the influent wastewater flowrate and the number of animals/meat processed per day, each of which were assumed to have variability of +/-10%.

The CVs for the emission factors provide an estimate of the possible spread of derived emission factors, based on the variability of each of the measurements that go into the derivation. The uncertainty estimates are based on a normal distribution of results, which implies that the reported values (based on averages) have the highest probability of representing the true population parameter. The derived emission factors all appear to be reliable to within a factor of two, based on random error in the measurements, and assuming that the sites and samples accurately represent the population of interest.

The COD content of the influent wastewater should be a better indicator of its CH_4 emission potential than the BOD content. The 5-day BOD test will not fully degrade all of the biological material in wastewaters containing proteins and fatty acids. The ultimate BOD from a 20-day or longer test might yield results that are 50 to 100% higher than the 5-day test results. The

Table 6-4
Calculated Emission Factors By Site

Compound	Emission Factor gram emitted per	Southwest Beef Processing Plant	Midwest Beef Processing Plant	Southeast Chicken Processing Plant	POTW for Small Town in the Southwest	POTW for Very Small Town in the Southwest
Methane	head/bird	4,840	3,490	124	NC	NC
	kg meat produced	21.2	15.4	73.6		
	L of wastewater	1.61	1.84	4.55		
	g BOD in influent	0.403	0.766	3.25		
	g BOD removed	0.437	0.870	3.43		
	g COD removed	0.257	0.585	2.04		
	g TOC removed	2.60	7.29	33.5		
Ammonia	head/bird	37.5	54.0	NC	NC	NC
	kg meat produced	0.164	0.238			
	L of wastewater	0.0125	0.0285			
	g BOD in influent	0.00312	0.0119			
	g NH_3 in effluent	0.063	0.133			
	g TKN removed	4.17	negative value			
	g Nitrate removed	16.6	911			

Table 6-4
(Continued)

Compound	Emission Factor gram emitted per	Southwest Beef Processing Plant	Midwest Beef Processing Plant	Southeast Chicken Processing Plant	POTW for Small Town in the Southwest	POTW for Very Small Town in the Southwest
Carbon Dioxide	bird	NC	NC	8,570	NC	NC
	kg meat produced			5,100		
	L of wastewater			315		
	g BOD removed			238		
Nitrous Oxide	head/bird	NC	NC	1.82	NC	NC
	kg meat produced			1.09		
	L of wastewater			0.0671		
	g BOD removed			0.0506		
	g TKN removed			1.67		
Chloroform	g chloroform in influent	NC	NC	87,100	NC	NC

NC = Not Calculated.

Table 6-5
Average Emission Factors

Compound	Emission Factor	Average	Range	Uncertainty (%)
Methane	g CH_4/head of cattle	4,200	3,500 - 4,800	169
	g CH_4/chicken	120	N/A	107
	g CH_4/kg meat	37	15 - 74	151
	g CH_4/L of wastewater	2.7	1.6 - 4.6	151
	g CH_4/g influent BOD	1.5	0.40 - 3.2	157
	g CH_4/g BOD removed	1.6	0.43 - 3.4	158
	g CH_4/g COD removed	0.96	0.26 - 2.0	163
Ammonia	g NH_3/head of cattle	46	37 - 54	150
	g NH_3/chicken	0.046	N/A	150
	g NH_3/kg meat	0.14	0.027 - 0.24	150
	g NH_3/L of wastewater	0.014	0.0017 - 0.028	150
	g NH_3/g influent BOD	0.40	0.0031 - 1.2	156
	g NH_3/g NH_3 in effluent	0.072	0.020 - 0.13	150

Table 6-5
(Continued)

Compound	Emission Factor	Average	Range	Uncertainty (%)
Carbon Dioxide	g CO_2/bird	8,600	N/A	101
	g CO_2/kg meat	5,100	N/A	101
	g CO_2/L of wastewater	320	N/A	101
	g CO_2/g BOD removed	240	N/A	103
Nitrous Oxide	g N_2O/bird	1.8	N/A	101
	g N_2O/kg meat	1.1	N/A	101
	g N_2O/L of wastewater	0.067	N/A	101
	g N_2O/g BOD removed	0.051	N/A	103
	g TKN removed	1.7	N/A	103

N/A = Not applicable.

suspended solids associated with the wastewaters also are biodegradable and their ultimate BOD would not be exerted in the 5 days it takes to run a standard BOD test. It is possible that the lagoons are a sink for suspended and colloidal material (i.e., insoluble BOD) and this material builds up over time in the lagoon sediments. If so, the degradation of the sediments may occur during summer months or whenever the sediment is resuspended, thereby increasing the CH_4 (and CO_2) emissions. However, no seasonal trend is evident in the BOD effluent levels in the long-term wastewater data provided by the plants and shown in Appendix G.

Two of the sets of emission factors should be viewed with caution. The emission factor for $CHCl_3$ is based on data from one field site and the emission factor implies that many times more $CHCl_3$ is being emitted than is present in the influent wastewater. Obviously, this is not possible unless $CHCl_3$ is being generated as a degradation by-product. More likely, the one influent wastewater sample that was analyzed yielded a result that is lower than the actual amount of $CHCl_3$ entering the lagoon. The emission factors for CO_2 also are based on data from one field site; i.e., the chicken processing plant. As previously discussed, the OPM-TM approach is not very sensitive for CO_2 given the high background levels and the measurement variability. A background level of 500 ppmv with a CV of 7.5% indicates that the CO_2 concentration can be expected to vary by ±37.5 ppmv. This large absolute uncertainty in the upwind CO_2 concentration may result in a large positive or negative bias in the calculated emission rates. A review of the CO_2 emission factors in Table 6-4 suggests that the emission factors are biased high. For example, the value of 238 g CO_2/g BOD removed vastly exceeds any plausible emission scenario.

6.4 Comparison of Results With Other Studies

The upwind ambient concentrations measured at the five sites were compared with typical ambient levels of certain GHGs that have been published.[1] These results are summarized below:

Compound	Typical Ambient Conc. (ppm)	Average Upwind Conc. (ppm)
CH_4	1.72	2.27
CO_2	353	487
N_2O	0.31	0.51
H_2O	10,000	20,500

The agreement is reasonable. All of the sites where measurements were made were in rural surroundings, which may account for the elevated levels of CH_4, CO_2, and N_2O versus the typical ambient concentrations. Livestock operations produce and release CH_4 and agricultural fields are sources of N_2O. The measured water vapor is a function of the ambient temperature and relative humidity, both of which were relatively high, at the times of sampling.

A number of previously published studies contain estimated or measured values for the emission fluxes of CH_4 from liquid surfaces or slurries. These studies are summarized in Table 6-6. The key comparison is the emission flux (i.e., emission rate per area). As shown in Table 6-6, the average methane emission flux for the three meat processing plants ranged from 6,100 to 23,000 μg/sec-

Table 6-6
Comparison of Measured Methane Emission Fluxes With Other Studies

Source Type	Basis	Reported Value	Units	Normalized Flux ($\mu g/sec\text{-}m^2$)	Ref.
Beef Processing Plant in SW	OPM-TM	280	g/sec	11,000	--
Beef Processing Plant in Midwest	OPM-TM	226	g/sec	6,100	--
Chicken Processing Plant in SE	OPM-TM	180	g/sec	23,000	--
Lagoons at Swine Farm	OPM-TM	2.4	g/sec	1,400	10
Lagoons at Dairy Farm	OPM-TM	29	g/sec	9,400	10
Pig Slurry Tank	Field Measurements	1.21-1.93	g/m^3-day	56 - 90	12
Pig Solid Manure Tank	Field Measurements	28.25 -82.5	g/m^3-day	1,300 - 3,800	12
Municipal WWT Lagoons	Estimated U.S. Average	59-186	m^3/hectare-day	46 - 140	13
Municipal Anaerobic WWT Lagoons	Estimate	131	kg/hectare-day	150	13
Facultative Pond	Pilot-Scale Experiments	41.6	kg/hectare-day	48	13
Aerated Industrial WWT System	Field Measurements	1054	$\mu g/m^2$-min	18	14
Aerated Industrial WWT System	Field Measurements	316,000	μg/min	33	15
Lake Sediments	Field Measurements	0.3-279	$\mu mol/m^2$-hr	1 - 1,200	16
Rice Paddies	Field Measurements	15 - 25	mg/m^2-hr	4.2 - 6.9	17
Rice Paddies	Field Measurements	3 - 7	mg/m^2-hr	0.8 - 2	18
Rice Paddies	Field Measurements	60	mg/m^2-hr	17	19

m^2. Results for livestock lagoons in previous studies were similar (1,400 to 9,400), as were measurements at a manure tank (1,300 to 3,800). The emission flux from municipal WWT systems, industrial WWT systems, and rice paddies were substantially lower, as expected given the much lower BOD and COD levels in such waters.

There are very few published emission factors which can be compared with the emission factors developed in this study. The most widely reported emission factor for CH_4 is 0.22 g CH_4/g BOD. The reference (Orlich) for this factor does not provide information about how it was developed. It is very close to the theoretical value for the anaerobic degradation of glucose. The Buswell-Mueller equation predicts methane production from the anaerobic degradation of carbohydrates, fats, oils, waxes, and any compound with the formula CnHaOb. A given carbohydrate will yield approximately 0.25g CH_4/g COD removal. In theory, a maximum CH_4 and CO_2 yield could be calculated for a given wastewater if all of the compounds comprising the wastewater were identified and quantified.

The emission factors determined in this study are substantially higher than those based on glucose degradation. Glucose is a simple sugar and its biodegradation over short periods of time cannot be directly compared with the microbial degradation of complex mixtures of amino and fatty acids, such as are present in the wastewaters at the meat processing plants.

Biogas generation rates were measured in-situ using a collection vessel in an aerobic lagoon used to treat domestic wastewater in Portugal.[20] The wastewater averaged 700 mg/L of COD. The biogas emission rate averaged 119 m^3/day (or 19.57 L per m^3 of wastewater per day). The biogas production rate varied by a factor of four during three different times of day. The biogas production rate was found to increase with increased air temperature and it also was found to increase exponentially with increasing COD removal efficiency. The biogas was up to 80% CH_4 and 7 to 28% CO_2. The CH_4 production rate was up to 0.026 m^3 CH_4 per m^3 of wastewater per day. The authors report that this is far below the theoretical value [based on a conversion value of 0.50 m^3 CH_4 per kg COD removed assuming BOD/COD ratio for domestic wastewater of 70%].

The CH_4 production rate corresponds to an overall emission rate of about 0.7 g/sec for a lagoon that has a volume of about 5% of the volume of the lagoon systems at the meat processing plants. When adjusted for wastewater volume, the Portugal study found CH_4 emissions to be about 5-10% of the values measured at the meat processing plants, which is reasonable agreement given the differences in COD loading. The variability in emission rate as a function of time in the Portugal study is similar to the temporal variability observed in the current study, but the FTIR measurement approach allowed better time resolution of emissions. In the current study, no evidence was found for diurnal variation in emissions, so there is no apparent correlation with air temperature. The opposite finding in the Portugal study is surprising considering that the bulk temperature of the WWT lagoons should not change appreciably with changes in air temperature.

Emissions of N_2O were measured at a POTW in Durham, NH using a closed chamber.[21] The aeration tanks were found to account for 91% of the total N_2O emissions from the system, which equaled 35 kg/year. This corresponded to 3.2 g N_2O per person per year or 1.6 g N_2O per million liters of wastewater. The authors cite a recent lab investigation that developed an emission factor of 23 μg N_20 per g of suspended solids in the raw wastewater. The emission rate of 35 kg/year corresponds to 0.001 g/sec, which is well below the detection limit for N_2O using the OPM-TM approach, so there is no way to directly compare the results of the Durham study to the current study.

Measurements at WWT systems at a refinery and at a chemical plant provided data that could be used to generate emission factors if unpublished BOD data are included.[14,15] The calculations yield emission factors of 0.00053 to 0.0023 g CH_4/g BOD, which indicates that WWT processes for these industries emit substantially less CH_4 per gram of BOD removed than WWT systems for the meat processing industry.

SECTION 7

QUALITY ASSURANCE

Quality assurance (QA) activities for this program were designed to ensure the reliability of the measurement data for its intended use. The activities included the use of standard analytical methods to enhance comparability with similar studies, adherence to specific criteria for representative sampling conditions, calibration of all measuring equipment, and on-going control of the measurement processes through analysis of QC samples.

The QC checks of measurement quality served two purposes. First, QC activities such as routine calibration and analysis of blanks, replicates, and reference materials were used to provide on-going control and evaluation of the performance and effectiveness of the measurement processes throughout the course of the project. Second, results for analysis of QC samples provided a means of estimating the precision and accuracy of the measurement data. Results of QC indicators are discussed in this section, including:

- Calibration of measurement equipment;
- Analysis of laboratory control standards;
- Replicate analyses;
- Analysis of spiked samples;
- Analysis of blank samples;
- Collection of air canisters from upwind locations; and
- Collection of air canisters from along the FTIR beam path.

Additional checks were conducted to monitor the effectiveness of the sampling and analysis program, including comparison of wastewater measurements with historical records and analysis of tracer gas in the emission plume. Results for these checks are discussed in Section 6 of this report.

7.1 Summary of Data Quality

Results for analysis of QC samples indicate that the measurement data are accurate and precise within normal ranges for the analytical methods, and are well within the data quality objectives for precision and accuracy established in the test plan. Sampling conditions met prescribed criteria for collecting a sufficient amount of valid data. Considerations regarding beam path siting and wastewater sample collection, relative to the pattern of lagoons at each location, are discussed in the interpretation of results in Section 6.

Estimates of accuracy and precision for the various measurement parameters are presented in Table 7-1, along with percent data capture. Accuracy estimates are expressed in terms of percent recovery of known standards. For the FTIR, various amounts of gas standards were introduced into a closed cell that was placed in line during open path monitoring. Recovery

Table 7-1
Summary of Accuracy and Precision Estimates

Measurement	QC Measure	Accuracy (% Recovery)	Precision	Data Capture
FTIR Measurements				
CH_4	Gas Std QC Check/ Std Dev of Valid Data Sets	103.9±5.6 %	5.85% Std Dev	>100%
SF_6		110.2±5.1 %	n/a	>100%
Wastewater Measurements				
TKN	Matrix Spikes/ Duplicate Analyses	99±10 %	5.7 % RPD	98%
NH_3		96±10 %	7.1 % RPD	98%
NO_3		99±6 %	15.8 % RPD	98%
TOC		91%	4.4 % RPD	98%
COD	Lab Control Standard/ Duplicate Analyses	99±3 %	5.8 % RPD	98%
TSS		101±23 %	5.0 % RPD	98%
BOD_5		100±6 %	5.3 % RPD	98%
Air Canisters				
CH_4	Lab Control Standard/ Duplicate Analyses	100±9 %	0 % RPD	77%
CO_2		103±14 %	0 % RPD	77%
TNMHC		99±2 %	20.2 % RPD	77%
SF_6		94±17 %	0 % RPD	77%
Volatile Organic Compounds in Wastewater by GC/MS				
Carbon tetrachloride	Matrix Spikes/Std Dev for Lab Control Samples	105±3 %	16 % Std Dev	80%
Chloroform		109±2 %	5 % Std Dev	80%
Dichlorodifluoromethane		95±9%	8 % Std Dev	80%
Methylene chloride		107±3%	9 % Std Dev	80%
Trichlorofluoromethane		103±3 %	11 % Std Dev	80%

estimates for air canisters were based on target analytes spiked into blank evacuated canisters. Recoveries for wastewater sample were based on target analytes spiked into either an aliquot of an actual sample (matrix spike) or into a clean laboratory matrix (laboratory control samples). Precision estimates are expressed in terms of the relative percent difference (RPD) between duplicate measurements, and as the relative standard deviation (RSD) for sets of recovery data (= %CV). The accuracy of the CH_4 concentrations measured by FTIR are based on data from three of the field sites. The QC checks at the two beef processing plants were not meaningful due to the very high ambient CH_4 levels relative to the matrix spike. For the FTIR data, the precision values are based on the upwind data. No precision was calculated for SF_6, because it was rarely detected in the upwind air.

Data capture refers to the amount of valid data collection, expressed as a percentage of the amount of data planned to be collected. Data capture objectives were 95% for FTIR and meteorological data, and 90% for wastewater analyses. The goal was to collect at least ten valid 5-minute sets of upwind and ten valid 5-minute sets of downwind data at each site. This goal was exceeded. The goal for canister sampling was to collect two upwind canisters and two canisters along the FTIR beam path during each day of downwind FTIR monitoring. Some of these samples were not collected due to unacceptable meteorological conditions or collection of less than a full day of FTIR data at a given site.

The data capture goal for wastewater samples was to collect 6-8 influent and 3-4 effluent samples at each site. This goal was met or exceeded at each site except at the Very Small Town POTW, where only 5 influent wastewater samples were collected. The initial round of influent wastewater sampling at this site was canceled due to difficulty in removing a manhole cover to access the sample stream. At each site, one influent and one effluent sample were to be collected and analyzed for VOCs. These samples were collected at four of the five sites, but were inadvertently missed for the Very Small Town POTW, which was the first site tested.

Laboratory blank samples were analyzed with each analysis batch to assess potential bias due to contamination/malfunction of laboratory equipment. No significant laboratory-related problems were noted that would affect the measurement data.

The data quality objectives set forth in the QA Project Plan included a precision of 10% for the FTIR and GC analysis of gas samples and an accuracy of ±10% for these same samples. For the wastewater measurements, the data quality objectives included a precision of 25% RPD and an accuracy of ±10 to 25%. As shown in Table 7-1, the data quality objectives were exceeded in all cases.

7.2 Results of Quality Control Measures

Quality control measures for field and laboratory activities are discussed below. Records were maintained for all measurement activities, including sample collection, chain-of-custody, source and certification of standards, calibration,

analysis, QC checks, and data reduction. These records are maintained in laboratory notebooks and project files at Radian.

7.2.1 Field QC

Activities designed to control and assess the quality of the measurement data included those intended to ensure collection of representative samples and measurement data, such as siting of the FTIR beam path, measurement of a known tracer released upwind of the beam path to correlate to measurements of the emission plume, and meteorological criteria for representative FTIR data collection. Results for these activities are discussed in Sections 5 and 6 of this report.

A number of QC checks were performed related to the field measurements. First, a known tracer was released upwind from the beam path. The rotameters used to control the tracer release rates were each calibrated with the tracer gas at five flow settings, with a minimum of seven readings at each setting. Correlation coefficients for the rotameter calibrations were all greater than 0.9995, indicating a reliable linear response within the calibration range.

A multipoint calibration check of the FTIR was conducted to ensure accurate operation of the instrument. The correlation coefficient for CH_4 was 0.99994 and for sulfur hexafluoride was 0.99889. Numerous background spectra were taken upwind at each site to record any excess compounds of interest to be subtracted from the spectra. Operational checks of the FTIR were performed at each site to ensure proper signal intensity, spectral linearity, system alignment, and signal-to-noise ratio. Calibrations and QC checks of the FTIR were performed using known amounts of CH_4 and SF_6 gas standards (certified accurate $\pm 2\%$ by Scott Specialty Gases) in a closed cell that was placed in line during open path monitoring. Results of the QC checks of the FTIR instrument are summarized in Table 7-2.

Meteorological sensors were calibrated prior to use in the field. An independent audit of the meteorological equipment was conducted following the field effort. Results for the audit, summarized in Table 7-3, indicate that the meteorological equipment was accurate within normal limits.

The results of the analysis of canister samples are compared with the associated FTIR results in Tables 7-4 and 7-5. There is good agreement between the two measurement methods. Unfortunately, the analysis of SF_6 in the canister samples yielded mostly "less than" values. The relatively poor detection limit of the laboratory for SF_6 in canisters (versus the FTIR measurement) made it difficult to independently assess the FTIR data for SF_6. There is good confirmation, however, between the FTIR analysis for CH_4 and the independent analysis of the canister samples for this same compound. This provides proof that the FTIR data are of good quality.

7.2.2 Laboratory QC

Air canister and wastewater sample analyses were performed at off-site laboratories using standard reference methods. Wastewater samples were analyzed by Radian; air canister samples, by Air Toxics, Inc. QC activities included regular calibration or standardization, and analysis of laboratory control samples,

Table 7-2
Summary of Spiked Sample Results for FTIR

Date	Time	Methane		SF_6	
		Measured (ppm)	Recovery[a] (%)	Measured (ppm)	Recovery[b] (%)
8/03	17:49	31,315	104.73	210.20	107.24
8/04	11:28	31,551	105.52	216.53	110.48
8/23	9:34	–[c]	–	235.95	120.38
8/23	16:24	–[c]	–	210.49	107.39
8/24	12:20	–[c]	–	211.10	107.70
8/24	18:23	–[c]	–	238.90	121.89
8/25	09:21	–[c]	–	208.54	106.40
8/30	16:17	–[c]	–	208.41	106.33
8/31	20:17	–[c]	–	212.73	108.53
9/01	12:56	–[c]	–	211.70	108.01
9/06	16:41	35,053	117.24	217.00	110.71
10/05	12:45	31,483	105.30	211.00	107.65
10/06	12:07	30,586	102.29	216.20	110.31

a Recovery versus 29,900 ppm*m.
b Recovery versus target of 196 ppm*m.
c High CH_4 values in downwind ambient air made determination difficult of relatively small spike addition. Recoveries varied from negative values to +250%.

Table 7-3
Results of Calibration of Meteorological Sensors

Sensor	Reference Value	Measured Value	Relative Error
Wind Speed	18.5 MPH	18.9 MPH	2.2 %
Temperature	77.1 °F	78.2 °F	1.4 %
Barometric Pressure	29.22 in Hg	29.3 in Hg	0.3 %
Wind Direction	4-pt linearity check OK.		

Table 7-4
Comparison of Upwind Data

Site	Compound	Average Value by FTIR (ppm)	Average Value by Canister (ppm)	RPD
SW Beef	CH_4	2.3	3.20	29.5%
	CO_2	479	490	2.3%
	TNMHC	0	0.097	NC
Midwest Beef	CH_4	2.83	3.95	33.0%
	CO_2	501	620	21.2%
	TNMHC	0	0.042	NC
SE Chicken	CH_4	1.92	2.35	20.1%
	CO_2	434	261	49.8%
	TNMHC	0	0.028	NC
Small Town POTW	CH_4	2.14	2.02	5.8%
	CO_2	351	354	0.8%
	TNMHC	0	0.037	NC
Very Small Town POTW	CH_4	2.16	2.80	25.8%
	CO_2	668	420	45.6%
	TNMHC	0	0.167	NC

NC = Not calculated.

Table 7-5a
Summary of Comparisons of FTIR Beam Path Data

Compound	No. Observations	Average RPD
Methane	15[a]	±18.3%
Carbon Dioxide	20	±27.0%
Sulfur Hexafluoride	5	±40.5%
Total Non-Methane Hydrocarbons	5	±148%

[a] One outlier removed.

Table 7-5b
Comparison of FTIR Beam Path Data

Date	Time	Compound	Average FTIR Data (ppm)	Canister Data (ppm)	RPD (%)
8/02	1125-1145	CH_4	1.94	<2	NC
		CO_2	531	430	20.9
		SF_6	0.4 ppb	38 ppb	42.3
		TNMHC	0	<0.022	NC
8/02	1556-1616	CH_4	1.75	<2	NC
		CO_2	507	420	18.8
		SF_6	0.35 ppb	22 ppb	43.0
		TNMHC	0	0.47	NC
8/03	1134-1154	CH_4	1.85	<2	NC
		CO_2	484	420	14.2
		SF_6	0.4 ppb	46 ppb	30.3
		TNMHC	0	0.01	NC

Table 7-5b
(Continued)

Date	Time	Compound	Average FTIR Data (ppm)	Canister Data (ppm)	RPD (%)
8/03	1540-1600	CH_4	1.61	<2	NC
		CO_2	502	450	10.8
		SF_6	0.4 ppb	<20 ppb	NC
		TNMHC	0	<0.020	NC
8/23	1050-1110	CH_4	27.8	26	6.8
		CO_2	402	380	5.6
		SF_6	7.96 ppb	<19 ppb	NC
		TNMHC	0	0.041	NC
8/23	1455-1515	CH_4	22.0	18	20.2
		CO_2	468	370	23.5
		SF_6	3.77 ppb	<20 ppb	NC
		TNMHC	0	0.048	NC
8/24	0925-0945	CH_4	26.6	240	160
		CO_2	438	920	71.0
		SF_6	4.24 ppb	<23 ppb	NC
		TNMHC	0	0.02	NC
8/24	1830-1850	CH_4	47.7	63	27.6
		CO_2	452	760	50.8
		SF_6	16.4 ppb	<19 ppb	NC
		TNMHC	0.17	0.037	130
8/30	1225-1245	CH_4	61.8	67	8.0
		CO_2	522	600	14.0
		SF_6	15.9 ppb	<24 ppb	NC
		TNMHC	0.28	0.027	165

Table 7-5b
(Continued)

Date	Time	Compound	Average FTIR Data (ppm)	Canister Data (ppm)	RPD (%)
8/30	1445-1505	CH_4	52.9	58	9.2
		CO_2	546	570	4.2
		SF_6	15.9 ppb	30 ppb	61.3
		TNMHC	0.25	0.064	118
8/30	1730-1750	CH_4	121	140	14.8
		CO_2	620	680	9.3
		SF_6	29.42 ppb	38 ppb	25.4
		TNMHC	0.49	0.029	178
8/31	1210-1230	CH_4	42.9	66	42.4
		CO_2	539	730	30.1
		SF_6	0.91 ppb	NM	NC
		TNMHC	0.12	<0.026	NC
8/31	1755-1815	CH_4	47.5	57	18.2
		CO_2	572	67	158
		SF_6	0.98 ppb	NM	NC
		TNMHC	0.22	<0.024	NC
9/01	0940-1000	CH_4	84.6	120	34.6
		CO_2	475	700	38.3
		SF_6	13.5 ppb	<24 ppb	NC
		TNMHC	0.38	0.056	149
9/06	1352-1413	CH_4	4.21	3.1	30.4
		CO_2	523	640	20.1
		SF_6	3.21 ppb	<24 ppb	NC
		TNMHC	0	<0.018	NC

Table 7-5b
(Continued)

Date	Time	Compound	Average FTIR Data (ppm)	Canister Data (ppm)	RPD (%)
9/07	1219-1241	CH_4	5.87	5.8	1.2
		CO_2	580	530	9.0
		SF_6	8.83 ppb	<21 ppb	NC
		TNMHC	0	<0.010	NC
10/04	1435-1455	CH_4	2.51	2.2	13.2
		CO_2	458	420	8.6
		SF_6	2.50 ppb	<29 ppb	NC
		TNMHC	0	0.19	NC
10/04	1735-1755	CH_4	2.42	2.1	14.4
		CO_2	446	370	18.5
		SF_6	8.66 ppb	<22 ppb	NC
		TNMHC	0	0.072	NC
10/05	1615-1635	CH_4	2.20	1.9	14.5
		CO_2	362	350	3.4
		SF_6	9.83 ppb	<19 ppb	NC
		TNMHC	0	<0.019	NC
10/06	1050-1110	CH_4	2.17	1.8	18.8
		CO_2	325	360	10.2
		SF_6	10.3 ppb	<16 ppb	NC
		TNMHC	0	0.018	NC

NM = Not Measured.
NC = Not Calculated.

blanks, spikes, and duplicates, according to method requirements. A detailed summary of results for analysis of laboratory control samples, matrix spikes, and duplicate analyses.is presented in Table 7-6, which shows the number of QC samples analyzed, the average, range of results, and standard deviation for each parameter.

Results for analysis of QC samples indicated good precision and accuracy for each measurement technique. Laboratory blank samples were also analyzed with each batch of samples analyzed. No significant contamination problems were identified.

Analysis of wastewater samples for conventional wastewater parameters (e.g., BOD, COD, etc.) were performed at Radian according to procedures in "Standard Methods for the Examination of Water and Wastewater." Every procedure involved specific calibration or standardization of instruments and titrants, and on-going analysis of laboratory control samples, blanks, spikes, and duplicates, as appropriate to the method. Laboratory control samples were prepared from sources independent of that used for calibration to verify the accuracy of the calibration standards.

Analysis for TOC was not feasible in many wastewater samples due to the large amount of suspended solids that interfered with the instrument and precluded getting reliable measurements. The samples were subsequently filtered prior to analysis, resulting in determination of dissolved total organic carbon. A comparison of results for wastewater analyses conducted by Radian with historical wastewater analysis data from each site is discussed in Section 6.

In addition to the conventional wastewater analyses, wastewater samples were analyzed by GC/MS Method 8260 for a target list of VOCs. In addition to instrument tuning and calibration, surrogate spikes were added to each sample to assess the effectiveness of individual determinations, in accordance with method requirements. Surrogate recoveries were within specification for all the samples, indicating effective performance of the method in the sample matrix. Methylene chloride was detected in the laboratory blanks at approximately the same concentration range as reported in the samples, but these concentrations were all below the blank tolerance and method reporting limit for methylene chloride (a common laboratory contaminant), and suggest that the concentrations of methylene chloride in the samples are artifacts of the analysis.

Air canister samples were analyzed by Air Toxics Laboratory using EPA methods. QC measures included multipoint calibration of the gas chromatograph, and analysis of blanks and laboratory control standards (LCS) in each analysis batch to monitor system cleanliness and overall performance. Duplicate analyses were performed on a subset of samples. No problems involving analysis of blank samples were noted. Total non-methane hydrocarbons (TNMHC) was the only parameter detected in the air canister laboratory blanks; it was detected in only one out of ten blanks, and at a very low concentration (0.013 ppmv). Results for analysis of QC samples show precision and accuracy within normal limits for the methods.

Table 7-6
Detailed Summary of Precision and Accuracy QC Checks

Wastewater Analyses					
Matrix Spikes	*Count*	*Average % Recovery*	*Min*	*Max*	*Std Dev*
TOC	11	91	71	102.3	8.6
NO3-N	20	99	84.8	109.5	6.3
NH3-N	12	96	83.7	120	10.2
TKN	8	99	88.4	118	9.5
BOD	NA	–	–	–	–
TSS	NA	–	–	–	–
COD	NA	–	–	–	–
Lab Control Samples	*Count*	*Average % Recovery*	*Min*	*Max*	*Std Dev*
TOC	24	100	97	104.4	1.7
NO3-N	42	100	91.8	105.2	2.6
NH3-N	24	98	89.7	108	4.4
TKN	11	98	90.9	103	4.8
BOD	47	100	88	116	6.5
TSS	5	101	70	124	23.4
COD	12	99	93.4	103.8	3.0
Duplicate Analyses	*# Pairs*	*Avg RPD*	*Min*	*Max*	
TOC	10	4.4	1.3	11.6	
NO3-N	5	15.8	4.1	30.8	
NH3-N	9	7.1	0.9	18.3	
TKN	7	5.7	0.9	13.1	
BOD	18	5.3	1.1	12.9	
TSS	11	5.0	1.5	16	
COD	8	5.8	1.7	8	

Table 7-6
(Continued)

Air Canister Analyses					
Lab Control Samples	*Count*	*Average % Recovery*	*Min*	*Max*	*Std Dev*
CH4	8	100	84	115	8.7
CO2	8	103	86	124	13.5
TNMHC	7	99	95	101	2.1
SF6	7	94	72	121	16.8
Duplicate Analyses	*# Pairs*	*Avg RPD*	*Min*	*Max*	
CH4	3	0	0	0	
CO2	3	0	0	0	
TNMHC	1	20.2	20.2	20.2	
SF6	2	0	0	0	
VOC Analyses (Wastewater)					
Matrix Spikes	*Count*	*Average % Recovery*	*Min*	*Max*	*Std Dev*
Carbon tetrachloride	4	105	101	110	3.4
Chloroform	4	109	106	112	2.2
Dichlorodifluoromethane	4	95	85	105	8.6
Methylene chloride	4	107	103	111	3.0
Trichlorofluoromethane	4	103	98	107	3.4
Lab Control Samples	*Count*	*Average % Recovery*	*Min*	*Max*	*Std Dev*
Carbon tetrachloride	8	99	73	109	15.8
Chloroform	8	102	95	110	4.8
Dichlorodifluoromethane	8	91	80	102	7.9
Methylene chloride	8	97	87	111	8.8
Trichlorofluoromethane	8	97	79	109	11.3

7.3 Results of QA Audits

A systems audit was conducted by EPA at one of the sites. A copy of the audit report is given as Appendix H to this report.

SECTION 8

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APPENDIX A

MASTER LOG

Appendix A
Master Log

Sample ID	Date	Time	Sample Type	Location	Canister ID	Comments
A001	7/31/95	1845	water	effluent pond 3	n/a	effluent from entire system
A002	7/31/95	1900	water	effluent pond 2	n/a	
A003	7/31/95	1920	water	effluent pond 1	n/a	
A004	8/01/95	1642	water	effluent pond 3	n/a	effluent from entire system
A005	8/01/95	1705	water	effluent pond 2	n/a	
A006	8/01/95	1745	water	influent	n/a	
A007	8/01/95	1925-2123	air	upwind	20998	
A008	8/02/95	1106-1306	air	upwind	21009	
A009	8/02/95	1143	water	effluent pond 3	n/a	effluent from entire system
A010	8/02/95	1202	water	effluent pond 2	n/a	
A011	8/02/95	1400	water	influent	n/a	
A012	8/02/95	1125-1145	air	beam path	14881	
A013	8/02/95	1556-1616	air	beam path	429	
A014	8/02/95	1547-1748	air	upwind	12693	
A015	8/02/95	1800	water	effluent pond 2	n/a	
A016	8/02/95	1830	water	influent	n/a	
A017	8/03/95	1040-1245	air	upwind	14009	

Master Log Cont.

Sample ID	Date	Time	Sample Type	Location	Canister ID	Comments
A018	8/03/95	1134-1154	air	beam path	11889	
A019	8/03/95	1130	water	effluent pond 2	n/a	
A020	8/03/95	1230	water	influent	n/a	
A021	8/03/95	1440-1615	air	upwind	14011	
A022	8/03/95	1540-1600	air	beam path	95562	
A023	8/03/95	1535	water	effluent pond 2	n/a	
A024	8/03/95	1630	water	influent	n/a	
A025	8/21/95	PM	water	influent tanning	n/a	
A026	8/21/95	PM	water	influent slaughter	n/a	
A027	8/21/95	PM	water	effluent	n/a	
A028	8/22/95	AM	water	influent tanning	n/a	
A029	8/22/95	AM	water	influent slaughter	n/a	
A030	8/22/95	AM	water	effluent	n/a	
A031	8/22/95	PM	water	influent tanning	n/a	
A032	8/22/95	PM	water	influent slaughter	n/a	
A033	8/23/95	930	water	influent tanning	n/a	
A034	8/23/95	930	water	influent slaughter	n/a	
A035	8/23/95	930	water	effluent	n/a	

Master Log Cont.

Sample ID	Date	Time	Sample Type	Location	Canister ID	Comments
A036	8/23/95	1037-1232	air	upwind	13667	
A037	8/23/95	1050-1110	air	beam path	9571	
A038	8/23/95	1442-1641	air	upwind	436	
A039	8/23/95	1440	water	influent tanning	n/a	
A040	8/23/95	1500	water	influent slaughter	n/a	
A041	8/23/95	1455-1515	air	beam path	13851	
A042	8/24/95	845-905	air	vertical disp.	14889	Canister 77" above ground
A043	8/24/95	845-905	air	vertical disp.	14110	Canister 50" above ground
A044	8/24/95	845-905	air	vertical disp.	14869	Canister 27" above ground
A045	8/24/95	925-945	air	beam path	11878	
A046	8/24/95	900-100	air	upwind	94941	
A047	8/24/95	1040	water	effluent	n/a	
A048	8/24/95	1030	water	influent tanning	n/a	
A049	8/24/95	1055	water	influent slaughter	n/a	
A050	8/24/95	1410	water	influent tanning	n/a	
A051	8/24/95	1350	water	influent slaughter	n/a	
A052	8/24/95	1830-1850	air	beam path	13670	
A053	8/28/95	AM	water	influent	n/a	

Master Log Cont.

Sample ID	Date	Time	Sample Type	Location	Canister ID	Comments
A054	8/28/95	PM	water	effluent	n/a	
A055	8/28/95	PM	water	influent	n/a	
A056	8/29/95	AM	water	effluent	n/a	
A057	8/29/95	AM	water	influent	n/a	
A058	8/29/95	PM	water	influent	n/a	
A059	8/30/95	1050-1250	air	upwind	13864	South central location
A060	8/30/95	1225-1245	air	beam path	413	
A061	8/30/95	AM	water	influent	n/a	
A062	8/30/95	PM	water	influent	n/a	
A063	8/30/95	PM	water	effluent	n/a	
A064	8/30/95	1305-1505	air	upwind	R-16	
A065	8/30/95	1445-1505	air	beam path	9413	
A066	8/30/95	1600-1800	air	upwind	5712	
A067	8/30/95	1730-1750	air	beam path	10984	
A068	8/31/95	1015-1245	air	upwind	10782	SE corner
A069	8/31/95	AM	water	influent	n/a	
A070	8/31/95	PM	water	effluent	n/a	
A071	8/31/95	PM	water	effluent	n/a	

Master Log Cont.

Sample ID	Date	Time	Sample Type	Location	Canister ID	Comments
A072	8/31/95	1210-1230	air	beam path	20946	no tracer
A073	8/31/95	1725-2005	air	upwind	10786	
A074	8/31/95	1755-1815	air	beam path	10779	no tracer
A075	9/01/95	0835-1125	air	upwind	10773	
A076	9/01/95	0940-1000	air	beam path	21073	tracer on
A077	9/05/95	AM	water	effluent	n/a	
A078	9/05/95	1130	water	influent	n/a	
A079	9/05/95	PM	water	influent	n/a	
A080	9/06/95	1330	water	influent	n/a	
A081	9/06/95	AM	water	effluent	n/a	
A082	9/06/95	1335-1451	air	upwind	10977	tracer on
A083	9/06/95	1352-1413	air	beam path	11034	tracer on
A084	9/06/95	1515	water	influent	n/a	
A085	9/06/95	AM	water	effluent	n/a	
A086	9/06/95	1100	water	sludge	n/a	
A087	9/07/95	1122-1430	air	upwind	9423	
A088	9/07/95	1219-1241	air	beam path	12719	tracer on
A089	9/07/95	1145	water	influent	n/a	

Master Log Cont.

Sample ID	Date	Time	Sample Type	Location	Canister ID	Comments
A090	9/07/95	1630	water	influent	n/a	
A091	10/04/95	940	water	influent	n/a	
A092	10/04/95	1000	water	effluent	n/a	
A093	10/04/95	1130	water	influent	n/a	
A094	10/04/95	1155	water	effluent	n/a	
A095	10/04/95	1215-1515	air	upwind	440	tracer on
A096	10/04/95	1435-1455	air	beam path	12338	tracer on
A097	10/04/95	1340	water	influent	n/a	
A098	10/04/95	1400	water	effluent	n/a	
A099	10/04/95	1515-1815	air	upwind	12695	
A100	10/04/95	1735-1755	air	beam path	12088	
A101	10/05/95	920	water	influent	n/a	
A102	10/05/95	935	water	effluent	n/a	
A103	10/05/95	1140	water	influent	n/a	
A104	10/05/95	1520-1820	air	upwind	12082	
A105	10/06/95	1615-1635	air	beam path	3	
A106	10/06/95	855-1155	air	upwind	94304	
A107	10/06/95	900	water	influent	n/a	

Master Log Cont.

Sample ID	Date	Time	Sample Type	Location	Canister ID	Comments
A108	10/06/95	0920	water	effluent	n/a	
A109	10/06/95	0910	water	storage pond	n/a	
A110	10/06/95	1130	water	influent	n/a	
A111	10/06/95	1050-1110	air	beam path	9422	
A112	10/06/95	1050-1110	air	upwind	9419	

APPENDIX B

COMPLETE RESULTS OF FTIR MONITORING

B1 - Beef Processing Plant in Southwest U.S.
B2 - Beef Processing Plant in Midwest U.S.
B3 - Chicken Processing Plant in Southeast U.S.
B4 - POTW for Small Town in Southwest U.S.
B5 - POTW for Very Small Town in Southwest U.S.

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 6											
08/21/95	21:19:46	19187.2364	317.3	498.38	16.82	0.00066673	0.0002	2.3358	0.175	0	0.006
08/21/95	21:24:46	19120.7135	323.9	493.10	16.18	0.00066635	0.0002	2.3067	0.17	0	0.006
08/21/95	21:29:46	19171.1299	317.2	491.52	15.82	0.00066586	0.0002	2.3350	0.169	0	0.006
08/21/95	21:34:47	19192.0498	322.2	487.51	16.19	0.00066524	0.0002	2.3439	0.169	0	0.006
08/21/95	21:39:47	19161.9235	321.4	473.42	16.2	0.00055293	0.0002	2.4231	0.171	0.04943172	0.006
08/21/95	21:44:48	18957.0537	317.2	480.71	16.6	0.00055241	0.0002	2.3246	0.17	0	0.006
08/21/95	21:49:47	19057.1509	302.5	478.94	16.34	0.00055241	0.0002	2.2991	0.168	0	0.006
08/21/95	21:54:47	19018.2186	288	478.60	16.76	0.00055138	0.0002	2.3964	0.172	0.03881742	0.006
08/21/95	21:59:47	18856.7191	306.1	478.64	17.32	0.00055066	0.0002	2.2985	0.17	0	0.006
08/21/95	22:04:48	18775.0506	232.8	470.22	17.31	0.00055036	0.0002	2.3357	0.173	0	0.006
08/21/95	22:09:48	18774.5577	288.7	486.61	17.88	0.00054984	0.0002	2.3633	0.174	0	0.006
08/21/95	22:14:49	18711.2857	300.8	477.24	17.9	0.00054943	0.0002	2.3208	0.174	0	0.006
08/21/95	22:19:48	18912.8389	285.3	484.14	17.97	0.00065944	0.0002	2.3212	0.172	0	0.006
08/21/95	22:24:48	19032.5108	298.1	475.90	18.26	0.00055005	0.0002	2.3080	0.174	0	0.006
08/21/95	22:29:48	19181.7804	298.4	468.20	17.9	0.00054953	0.0002	2.3917	0.175	0	0.006
08/21/95	22:34:49	19011.7141	288.8	472.95	18.28	0.00054943	0.0002	2.3593	0.177	0	0.006
08/21/95	22:39:49	19253.395	282.5	487.49	18.56	0.00054922	0.0002	2.3254	0.176	0	0.006
08/21/95	22:44:50	19177.1552	292.4	473.17	18.29	0.00054892	0.0002	2.3626	0.177	0	0.006
08/21/95	22:49:50	19249.785	287.5	478.52	18.83	0.00054851	0.0002	2.3586	0.177	0	0.007
08/21/95	22:54:49	19054.6269	285	485.54	18.84	0.00054851	0.0002	2.3411	0.18	0	0.007
08/21/95	22:59:49	18986.5776	274	484.13	19.04	0.00054779	0.0002	2.3336	0.178	0	0.007
08/21/95	23:04:50	18896.3524	282.8	483.99	19.48	0.00054737	0.0002	2.3494	0.184	0	0.007
08/21/95	23:09:50	18918.526	269	480.94	19.46	0.00065673	0.0002	2.3577	0.183	0	0.007
08/21/95	23:14:49	18879.8837	265.1	497.20	19.89	0.00054758	0.0002	2.3294	0.181	0	0.007
08/21/95	23:19:50	18893.8759	257.5	502.87	20.29	0.00065734	0.0002	2.3797	0.185	0	0.007
08/21/95	23:24:50	19138.0681	248.3	490.46	19.26	0.00065673	0.0002	2.3391	0.182	0	0.007
08/21/95	23:29:50	18888.8409	278.8	499.44	19.95	0.00054727	0.0002	2.3698	0.185	0	0.007
08/21/95	23:34:51	18959.2998	250	505.85	20.37	0.00065623	0.0002	2.3965	0.184	0	0.007
08/21/95	23:39:51	18966.8465	249.1	493.49	19.98	0.00054686	0.0002	2.3768	0.185	0	0.007
08/21/95	23:44:50	18972.2722	248.4	508.46	20.63	0.00054696	0.0002	2.3378	0.186	0	0.007
08/21/95	23:49:51	18994.9551	246.1	506.72	19.82	0.00065623	0.0002	2.3319	0.186	0	0.007
08/21/95	23:54:50	19075.0154	258.6	509.56	20.19	0.00054686	0.0002	2.3428	0.188	0	0.007
08/21/95	23:59:50	18921.2618	272.4	493.35	19.92	0.00065561	0.0002	2.3526	0.187	0	0.007
08/22/95	00:04:51	19044.5803	276.7	501.19	20.38	0.00054655	0.0002	2.3097	0.186	0	0.007
08/22/95	00:09:50	19318.4025	254.3	485.88	20.81	0.00065586	0.0002	2.3229	0.188	0	0.007
08/22/95	00:14:50	19676.5795	280.2	491.86	20.04	0.00054676	0.0002	2.3632	0.188	0	0.007
08/22/95	00:19:50	19622.5372	288.6	483.04	20.75	0.00065586	0.0002	2.3141	0.188	0	0.007
08/22/95	00:24:51	19798.8686	296	490.32	20.8	0.00065623	0.0002	2.2968	0.187	0	0.007
08/22/95	00:29:51	20109.6043	296.4	489.51	20.49	0.00054707	0.0002	2.3492	0.188	0	0.007
08/22/95	00:34:52	20184.5143	315.1	489.72	20.54	0.0006566	0.0002	2.2904	0.191	0	0.007
08/22/95	00:39:52	20122.3714	299.5	489.91	20.73	0.00065599	0.0002	2.2949	0.189	0	0.007
08/22/95	00:44:53	20220.3788	293	487.76	21.8	0.00065574	0.0003	2.3235	0.188	0	0.008
08/22/95	00:49:51	20079.5981	309.7	490.75	21.2	0.00054624	0.0003	2.3620	0.191	0	0.007
08/22/95	00:54:50	20038.0189	302.9	485.77	21.15	0.00065512	0.0003	2.2678	0.19	0	0.007
08/22/95	00:59:50	20227.4713	319	478.80	21.31	0.00054583	0.0003	2.2914	0.191	0	0.007
08/22/95	01:04:51	20056.6256	300.5	480.55	20.99	0.00054583	0.0003	2.3887	0.194	0.03667996	0.007
08/22/95	01:09:51	20091.6979	300.4	482.59	21.27	0.00054542	0.0003	2.3235	0.191	0	0.007
08/22/95	01:14:51	19926.4805	295.3	485.84	21.27	0.00054552	0.0003	2.3141	0.192	0	0.007
08/22/95	01:19:51	19743.5211	287	496.30	21.63	0.00054563	0.0003	2.3026	0.196	0.01178555	0.008
08/22/95	01:24:52	19907.4311	299.3	477.91	21.09	0.00054594	0.0003	2.3061	0.194	0	0.007
08/22/95	01:29:52	19797.3382	289.6	499.12	21.16	0.00065488	0.0003	2.3052	0.193	0	0.007
08/22/95	01:34:52	19892.6909	248.9	484.90	21.12	0.00065512	0.0003	2.3126	0.193	0	0.007
08/22/95	01:39:52	19819.9906	265.2	481.72	21.3	0.00054604	0.0003	2.3251	0.194	0	0.007
08/22/95	01:44:52	19896.8424	268.6	480.59	21.14	0.00065475	0.0003	2.2032	0.19	0	0.007
08/22/95	01:49:53	20068.5887	328.1	476.63	21.37	0.00054521	0.0003	2.3161	0.191	0	0.007
08/22/95	01:54:53	20114.9041	327.6	487.38	21.38	0.0005448	0.0003	2.2685	0.193	0	0.007
08/22/95	01:59:53	20091.8909	327	475.27	22.26	0.00054491	0.0003	2.2897	0.196	0	0.008
08/22/95	02:04:54	19849.921	322.6	487.55	21.84	0.00065413	0.0003	2.2862	0.197	0	0.008
08/22/95	02:09:54	19649.7483	299.9	468.63	21.35	0.00054542	0.0003	2.2798	0.194	0	0.007
08/22/95	02:14:55	19794.8215	300.6	474.34	21.76	0.0005446	0.0003	2.3353	0.195	0	0.008
08/22/95	02:19:54	19713.2643	290.9	495.21	21.75	0.00054419	0.0003	2.2867	0.196	0	0.008

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/22/95	02:24:54	19953.7615	307.8	481.10	21.08	0.00054398	0.0003	2.2619	0.193	0	0.007
08/22/95	02:29:53	19751.9821	294.5	491.57	22.36	0.00065253	0.0003	2.3285	0.197	0	0.008
08/22/95	02:34:53	19537.6259	301.1	487.33	22.02	0.00054378	0.0003	2.2566	0.199	0	0.008
08/22/95	02:39:53	19545.9935	271.4	481.86	22.04	0.00054398	0.0003	2.3054	0.198	0	0.008
08/22/95	02:44:54	19481.276	311.3	482.42	21.83	0.00054388	0.0003	2.2941	0.199	0	0.008
08/22/95	02:49:54	19293.3621	285	484.07	22.2	0.00054378	0.0003	2.2534	0.201	0	0.008
08/22/95	02:54:54	19413.1014	275.8	484.50	21.86	0.00065253	0.0003	2.2849	0.201	0	0.008
08/22/95	02:59:54	19409.4037	302.9	473.30	21.92	0.00054378	0.0003	2.2708	0.202	0	0.008
08/22/95	03:04:55	19491.5353	284.3	480.30	22.21	0.00043486	0.0003	2.3178	0.201	0	0.008
08/22/95	03:09:55	19370.9387	299.1	469.30	21.85	0.00054367	0.0003	2.2649	0.202	0	0.008
08/22/95	03:14:55	19354.6999	279.6	471.78	21.97	0.00054378	0.0003	2.2708	0.199	0	0.008
08/22/95	03:19:56	19425.5971	282	472.61	22.01	0.00054398	0.0003	2.3087	0.198	0	0.008
08/22/95	03:24:56	19242.6026	313.4	476.96	22.08	0.00054398	0.0003	2.3098	0.201	0	0.008
08/22/95	03:29:57	19529.2924	286	467.88	21.58	0.00054367	0.0003	2.3346	0.199	0	0.008
08/22/95	03:34:57	19126.152	301.9	470.75	21.69	0.00054346	0.0003	2.3196	0.2	0	0.008
08/22/95	03:39:57	19457.254	296	485.56	22.41	0.00043461	0.0003	2.2121	0.201	0	0.008
08/22/95	03:44:57	19217.2944	299.2	478.12	21.75	0.00054295	0.0003	2.3076	0.2	0	0.008
08/22/95	03:49:57	19271.0367	282.3	466.36	21.85	0.00054202	0.0003	2.2776	0.202	0	0.008
08/22/95	03:54:56	19156.9361	278.8	466.49	22.04	0.00054192	0.0003	2.3032	0.202	0	0.008
08/22/95	03:59:57	19225.9303	277.3	471.72	22.27	0.00054233	0.0003	2.2745	0.202	0	0.008
08/22/95	04:04:59	18813.0808	237.6	470.49	22.3	0.00065105	0.0003	2.2993	0.199	0	0.008
08/22/95	04:09:59	18539.0986	296.9	473.31	22.74	0.00054254	0.0003	2.2939	0.201	0	0.008
08/22/95	04:14:59	18496.238	293.4	471.36	22.77	0.00054254	0.0003	2.3504	0.208	0	0.008
08/22/95	04:19:59	18546.8818	319.9	473.48	22.49	0.00054223	0.0003	2.2893	0.202	0	0.008
08/22/95	04:24:59	18894.2346	283.1	465.02	22.09	0.00065068	0.0003	2.3034	0.198	0	0.008
08/22/95	04:29:58	18714.431	290.4	463.28	22.25	0.00054223	0.0003	2.3186	0.201	0	0.008
08/22/95	04:34:58	18560.0038	293.6	467.62	21.92	0.00054223	0.0003	2.3067	0.202	0	0.008
08/22/95	04:39:58	18416.7904	308.6	479.19	22.39	0.00054244	0.0003	2.3054	0.206	0	0.008
08/22/95	04:44:59	18329.8738	279.4	480.65	22.29	0.00054213	0.0003	2.3334	0.203	0	0.008
08/22/95	04:49:59	18437.4489	288	465.10	22.19	0.00054182	0.0003	2.2767	0.205	0	0.008
08/22/95	04:54:59	18316.233	268.9	472.95	22.42	0.00054212	0.0003	2.2628	0.203	0	0.008
08/22/95	04:59:58	18296.4996	292.5	482.82	21.95	0.0004337	0.0003	2.2900	0.201	0	0.008
08/22/95	05:04:58	18259.9604	300.8	469.81	22.49	0.00054212	0.0003	2.2259	0.204	0	0.008
08/22/95	05:09:57	17959.6834	287.1	458.66	22.28	0.00054202	0.0003	2.2689	0.202	0	0.008
08/22/95	05:14:58	17760.3648	286.9	465.46	22.26	0.00054161	0.0003	2.2802	0.204	0	0.008
08/22/95	05:19:58	17615.1449	232.2	464.24	22.73	0.0005412	0.0003	2.2611	0.204	0	0.008
08/22/95	05:24:57	17648.041	276.1	464.88	22.01	0.00054069	0.0003	2.3099	0.203	0	0.008
08/22/95	05:29:57	17595.822	279.6	462.35	22.34	0.00054038	0.0003	2.2912	0.203	0	0.008
08/22/95	05:34:58	17727.5395	281.9	469.28	22.34	0.00054028	0.0003	2.2984	0.202	0	0.008
08/22/95	05:39:58	17668.2684	283.2	467.80	22.06	0.00043255	0.0003	2.2871	0.205	0	0.008
08/22/95	05:44:58	17418.3949	272.6	464.62	22.37	0.00054089	0.0003	2.2620	0.202	0	0.008
08/22/95	05:49:58	17285.9413	295.4	470.92	22.7	0.00043263	0.0003	2.3092	0.204	0	0.008
08/22/95	05:54:59	16976.8273	279	474.70	23.01	0.00043263	0.0003	2.2507	0.208	0	0.008
08/22/95	06:00:00	16972.8586	263.6	479.62	23.21	0.00054048	0.0003	2.2365	0.206	0	0.008
08/22/95	06:04:59	17117.2601	248.1	496.18	23.07	0.0004323	0.0003	2.2674	0.204	0	0.008
08/22/95	06:09:59	17104.4778	261.2	470.06	23.08	0.00054017	0.0003	2.3196	0.206	0	0.008
08/22/95	06:14:59	16875.9845	247.4	474.49	22.86	0.00054017	0.0003	2.2687	0.204	0	0.008
08/22/95	06:19:59	16819.7516	241.7	468.69	23.13	0.00043247	0.0003	2.3062	0.207	0	0.008
08/22/95	06:24:59	16932.8108	231.3	477.19	22.77	0.00043214	0.0003	2.2763	0.204	0	0.008
08/22/95	06:29:59	16998.7179	223.2	471.18	22.43	0.00043197	0.0003	2.3014	0.203	0	0.008
08/22/95	06:34:58	16775.8629	243.6	477.78	22.24	0.00043189	0.0003	2.3096	0.204	0	0.008
08/22/95	06:39:58	16714.047	260	472.15	22.91	0.00053997	0.0003	2.2668	0.206	0	0.008
08/22/95	06:44:59	16660.0724	243.1	465.17	22.62	0.00053976	0.0003	2.2973	0.207	0	0.008
08/22/95	06:49:59	16556.3302	228.9	467.76	22.38	0.00053976	0.0003	2.2367	0.202	0	0.008
08/22/95	06:54:59	16590.557	232.8	473.52	22.13	0.00054017	0.0003	2.2601	0.204	0	0.008
08/22/95	06:59:58	16485.5473	237.6	461.85	22.73	0.00054017	0.0003	2.2893	0.206	0	0.008
08/22/95	07:04:58	16516.1035	207.1	471.48	22.21	0.00054007	0.0003	2.2532	0.204	0	0.008
08/22/95	07:09:59	16514.9449	247.1	453.16	22.37	0.00054038	0.0003	2.2977	0.205	0	0.008
08/22/95	07:14:59	16481.3266	239	470.04	22.59	0.0005409	0.0003	2.2772	0.205	0	0.008
08/22/95	07:20:00	16551.8754	225	473.57	22.5	0.0005411	0.0003	2.3257	0.205	0	0.008
08/22/95	07:25:00	16648.2392	211.2	471.59	23.13	0.00054131	0.0003	2.2356	0.205	0	0.008
08/22/95	07:29:59	16595.0837	218.4	461.37	22.53	0.00054152	0.0003	2.3221	0.207	0	0.008

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/22/95	07:35:00	16611.2516	202.4	470.74	22.56	0.00043346	0.0003	2.3126	0.204	0	0.008
08/22/95	07:40:09	16629.7184	224.2	475.96	22.02	0.0003254	0.0003	2.3147	0.207	0	0.008
08/22/95	07:45:01	16794.5844	235.7	471.98	21.92	0.0004342	0.0003	2.2948	0.203	0	0.008
08/22/95	07:50:01	16975.0973	250.3	478.36	21.64	0.00043478	0.0003	2.2695	0.199	0	0.008
08/22/95	07:55:02	17149.1159	253	461.08	21.74	0.00043519	0.0003	2.2956	0.203	0	0.008
08/22/95	08:00:02	17134.1668	269.5	464.28	21.87	0.00043585	0.0003	2.3275	0.202	0	0.008
08/22/95	08:05:02	17306.5997	222.9	471.25	21.48	0.00043634	0.0003	2.3126	0.203	0	0.007
08/22/95	08:10:02	17601.7604	239.6	465.73	21.5	0.000437	0.0003	2.2953	0.205	0	0.007
08/22/95	08:15:01	17793.9723	267.6	468.64	21.86	0.00043757	0.0003	2.3334	0.202	0	0.008
08/22/95	08:20:01	18471.8832	271.5	460.52	21.7	0.00043806	0.0003	2.3196	0.203	0	0.008
08/22/95	08:25:01	18110.8093	261.8	470.57	21.34	0.00043815	0.0003	2.3485	0.208	0	0.007
08/22/95	08:30:02	18434.5511	288.5	459.81	21.14	0.00043823	0.0003	2.2799	0.2	0	0.007
08/22/95	08:35:02	18539.5209	278	468.84	21.31	0.00043848	0.0003	2.2899	0.2	0	0.007
08/22/95	08:40:02	18706.0912	293.7	473.52	21.08	0.00043905	0.0003	2.3336	0.203	0	0.007
08/22/95	08:45:02	18944.6433	325.4	479.45	20.37	0.00054933	0.0002	2.3743	0.202	0	0.007
08/22/95	08:50:02	19019.5716	318.9	477.58	20.11	0.00043946	0.0002	2.3589	0.203	0	0.007
08/22/95	08:55:03	19088.3473	360.5	485.82	21.04	0.0003296	0.0003	2.3534	0.202	0	0.007
08/22/95	09:00:03	18934.9752	359.4	474.62	20.51	0.00043946	0.0002	2.3424	0.197	0	0.007
08/22/95	09:05:03	18912.4528	357.4	495.49	20.92	0.00043946	0.0002	2.3028	0.198	0	0.007
08/22/95	09:10:03	19184.15	349	505.71	21.26	0.00043946	0.0003	2.3138	0.197	0	0.007
08/22/95	09:15:03	19231.8316	358.5	481.65	20.8	0.00043946	0.0002	2.2566	0.195	0	0.007
08/22/95	09:20:04	19090.4348	387.7	492.42	20.69	0.00043946	0.0002	2.2588	0.193	0	0.007
08/22/95	09:25:04	19207.002	373.6	486.70	20.22	0.00043946	0.0002	2.2852	0.186	0	0.007
08/22/95	21:17:30	19207.002	373.6	486.70	20.22	0.00043946	0.0002	2.2852	0.186	0	0.007
08/22/95	21:19:19	15104.6273	263.6	400.79	21.27	0	0.0003	23.9720	0.161	0.06108517	0.007
08/22/95	21:35:17	15783.4857	283.8	399.03	20.75	0	0.0002	15.8531	0.15	0.04185872	0.007
08/22/95	21:51:21	16168.7837	287.6	395.52	20.65	0	0.0002	27.3789	0.17	0.05163675	0.007
08/22/95	22:06:25	16252.3913	285.9	399.14	19.98	0	0.0002	22.9409	0.166	0.0502085	0.007
Downwind Data											
Run 7											
08/22/95	22:15:08	16878.4197	307.7	412.42	21.04	0	0.0003	20.4606	0.166	0.0438412	0.007
08/22/95	22:20:09	16976.6979	282.5	414.76	22.07	0	0.0003	26.0928	0.18	0.04427353	0.008
08/22/95	22:25:09	16881.6523	303.9	410.68	22.07	0	0.0003	24.3122	0.173	0.03654371	0.008
08/22/95	22:30:09	16925.92	306.1	414.17	22.07	0	0.0003	18.1316	0.168	0.0406807	0.008
08/22/95	22:35:09	16838.4293	284.9	410.46	22.53	0	0.0003	21.2083	0.176	0.04306728	0.008
08/22/95	22:40:09	16848.8677	298.2	412.02	22.78	0	0.0003	17.9663	0.181	0.03567954	0.008
08/22/95	22:45:08	16704.0565	286.3	405.39	22.55	0	0.0003	25.6238	0.176	0.04850598	0.008
08/22/95	22:50:08	16738.4058	301.9	406.59	22.4	0	0.0003	27.6864	0.18	0.04532347	0.008
08/22/95	22:55:09	16651.2269	298	403.47	22.68	0	0.0003	19.4172	0.17	0.02971221	0.008
08/22/95	23:00:09	16578.1054	297.2	406.66	23.07	0	0.0003	21.9022	0.179	0.02562185	0.008
08/22/95	23:05:09	16549.1074	295.8	412.75	23.24	0	0.0003	34.9463	0.201	0.05921458	0.008
08/22/95	23:10:08	16549.4492	290.7	412.05	23.03	0	0.0003	50.2930	0.237	0.08654551	0.008
08/22/95	23:15:09	16874.1849	367.6	429.26	23.45	0.00382873	0.0003	95.0161	0.418	0.24930483	0.008
08/22/95	23:20:09	17237.6242	553.1	426.77	27.45	0.02854599	0.0003	73.2880	0.323	0.54674875	0.01
08/22/95	23:25:09	16836.5352	405.5	416.52	23.47	0.00153091	0.0003	38.9569	0.214	0.33865965	0.008
08/22/95	23:30:09	16551.0711	310.9	411.69	23.29	0	0.0003	37.8451	0.222	0.12065518	0.008
08/22/95	23:35:09	16577.7376	307.9	420.98	22.87	0	0.0003	56.6565	0.262	0.14524523	0.008
08/22/95	23:40:09	16651.7893	305.5	410.01	22.95	0	0.0003	43.1855	0.231	0.16026673	0.008
08/22/95	23:45:10	16463.1338	271	408.71	23	0	0.0003	14.2063	0.178	0.03552565	0.008
08/22/95	23:50:10	16352.887	257	407.71	22.94	0	0.0003	6.3048	0.172	0	0.008
08/22/95	23:55:10	16279.8506	245.1	398.82	23.05	0	0.0003	13.6304	0.18	0.00927733	0.008
08/23/95	00:00:09	16207.5834	254.1	402.11	23.06	0	0.0003	10.9567	0.178	0.01036095	0.008
08/23/95	00:05:10	16236.1336	276.4	408.39	23.49	0	0.0003	24.5226	0.204	0.04557098	0.008
08/23/95	00:10:10	16318.6027	279	412.38	24.08	0	0.0003	52.0384	0.258	0.11671791	0.008
08/23/95	00:15:08	16316.9039	259.8	403.62	23.22	0	0.0003	25.9267	0.215	0.07908981	0.008
08/23/95	00:20:09	16077.3583	248.8	402.78	23.84	0	0.0003	6.3134	0.188	0	0.008
08/23/95	00:25:09	16182.673	243.1	414.68	23.85	0	0.0003	47.0112	0.273	0.08298025	0.008
08/23/95	00:30:10	16626.7861	380.9	430.96	25.84	0.02503706	0.0003	110.7219	0.507	0.31045956	0.009
08/23/95	00:35:08	16500.6567	335.6	425.88	26.45	0.02503233	0.0003	76.2517	0.345	0.24858189	0.009
08/23/95	00:40:08	16495.9706	372.5	421.28	25.34	0.01424945	0.0003	53.1387	0.269	0.31294407	0.009
08/23/95	00:45:09	16603.766	341.9	418.67	23.35	0.00184917	0.0003	45.5069	0.251	0.25746911	0.008
08/23/95	00:50:10	16323.318	279	418.87	24.03	0	0.0003	46.4513	0.256	0.12871582	0.008

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	00:55:09	16044.483	238.2	413.72	23.77	0	0.0003	37.0384	0.246	0.05244857	0.008
08/23/95	01:00:08	16218.1908	253.5	412.89	23.38	0	0.0003	34.3181	0.232	0.0569985	0.008
08/23/95	01:05:09	16546.6499	289.6	406.97	23.57	0	0.0003	37.2947	0.235	0.08748056	0.008
08/23/95	01:10:09	16770.6932	305.4	411.23	23.66	0	0.0003	33.7027	0.235	0.11427867	0.008
08/23/95	01:15:10	16603.5793	272.8	401.58	23.43	0	0.0003	25.4766	0.215	0.07251136	0.008
08/23/95	01:20:10	16503.1205	271	401.61	23.28	0	0.0003	25.8882	0.215	0.0565964	0.008
08/23/95	01:25:10	16667.795	284.1	408.92	22.98	0	0.0003	46.6654	0.267	0.06223339	0.008
08/23/95	01:30:10	16772.1169	283.2	408.09	23.2	0	0.0003	53.0159	0.273	0.08474772	0.008
08/23/95	01:35:09	16910.0893	291.6	408.62	22.73	0	0.0003	44.8888	0.255	0.11156033	0.008
08/23/95	01:40:09	16936.5642	314.9	405.33	23.05	0	0.0003	37.8523	0.244	0.09439835	0.008
08/23/95	01:45:11	16958.4238	304.6	405.54	23.08	0	0.0003	36.3503	0.237	0.13300597	0.008
08/23/95	01:50:10	17135.9283	376	418.84	24.02	0.00141353	0.0003	46.4970	0.268	0.22736127	0.008
08/23/95	01:55:10	17224.4374	454	414.52	26.86	0.02630847	0.0003	58.7824	0.294	0.39984525	0.009
08/23/95	02:00:11	17176.7329	385.7	418.85	24.28	0.02173018	0.0003	53.2533	0.286	0.33996873	0.008
08/23/95	02:05:11	17084.9446	374.9	414.53	24.6	0.01227523	0.0003	60.9454	0.304	0.33012759	0.009
08/23/95	02:10:11	17057.5565	461.9	424.10	29.79	0.04189952	0.0004	74.9207	0.352	0.43354066	0.01
08/23/95	02:15:10	16896.8981	425.7	422.42	30.92	0.04665793	0.0004	78.0092	0.362	0.38628426	0.011
08/23/95	02:20:10	16893.9574	395.2	422.47	27.34	0.03438361	0.0003	71.5868	0.341	0.36834932	0.01
08/23/95	02:25:11	17067.5794	422.7	420.14	28.57	0.03580725	0.0003	62.7350	0.311	0.39897956	0.01
08/23/95	02:30:11	17167.1824	511	422.37	32.12	0.04859261	0.0004	74.5102	0.35	0.49612184	0.011
08/23/95	02:35:11	17219.4889	521.2	428.06	31.01	0.04676644	0.0004	86.3422	0.399	0.51171814	0.011
08/23/95	02:40:10	17140.1476	499.6	432.08	31.78	0.04897371	0.0004	108.2848	0.501	0.47399169	0.011
08/23/95	02:45:11	16954.9372	470.9	435.47	31.72	0.04983298	0.0004	124.7987	0.595	0.44730253	0.011
08/23/95	02:50:11	16676.9886	435.2	430.90	33.52	0.05680336	0.0004	125.9818	0.602	0.39849073	0.012
08/23/95	02:55:11	16883.8661	491.5	427.57	31.96	0.04541238	0.0004	105.7876	0.492	0.48457931	0.011
08/23/95	03:00:11	16981.38	475.8	422.88	29.94	0.04013972	0.0004	96.0327	0.446	0.46421044	0.01
08/23/95	03:05:12	16862.9004	467.3	425.59	33.7	0.05767058	0.0004	107.7915	0.502	0.44857307	0.012
08/23/95	03:10:12	16590.0566	373.8	421.55	29.97	0.04402012	0.0004	94.1069	0.44	0.33448788	0.01
08/23/95	03:15:12	16430.9741	356.1	427.41	33.44	0.05731269	0.0004	103.6473	0.484	0.30693167	0.012
08/23/95	03:20:11	16556.3194	409.3	427.98	33.71	0.05589362	0.0004	117.5193	0.561	0.38204808	0.012
08/23/95	03:25:11	16518.5122	442.4	427.84	33.32	0.05185615	0.0004	100.2917	0.475	0.42740729	0.012
08/23/95	03:30:12	16434.9787	417.9	421.57	31.31	0.04316255	0.0004	75.3053	0.362	0.39733344	0.011
08/23/95	03:35:12	16039.3917	301.6	414.41	26.78	0.02473948	0.0003	49.1412	0.282	0.2170376	0.009
08/23/95	03:40:12	16369.7132	365	422.32	28.03	0.03156358	0.0003	74.0204	0.364	0.33260658	0.01
08/23/95	03:45:12	16144.3995	344.6	416.57	27.13	0.02517161	0.0003	52.7143	0.291	0.30033077	0.009
08/23/95	03:50:12	16078.0499	330.2	423.46	31.8	0.04621153	0.0004	65.7258	0.332	0.28309962	0.011
08/23/95	03:55:11	16251.4512	362.3	433.50	33.86	0.05830427	0.0004	94.8553	0.447	0.3306068	0.012
08/23/95	04:00:12	16614.0366	457.4	439.92	34.65	0.06011196	0.0004	122.2081	0.585	0.44802868	0.012
08/23/95	04:05:12	16651.7186	428.5	432.36	32.71	0.04970016	0.0004	108.8157	0.517	0.40734639	0.011
08/23/95	04:10:12	16809.1058	445.8	432.77	32.08	0.04851832	0.0004	113.6225	0.538	0.42345227	0.011
08/23/95	04:15:12	17005.2174	473.1	429.41	32.09	0.04537786	0.0004	110.4651	0.522	0.45031298	0.011
08/23/95	04:20:12	17216.2373	484.3	429.63	31.24	0.04403685	0.0004	93.1618	0.438	0.47247413	0.011
08/23/95	04:25:13	17219.5061	451.2	427.65	31.19	0.04415369	0.0004	105.6788	0.498	0.41484944	0.011
08/23/95	04:30:13	17222.0407	420.3	425.81	33.11	0.05246722	0.0004	117.3522	0.559	0.37941174	0.012
08/23/95	04:35:13	17107.3505	390.1	422.97	31.84	0.05016215	0.0004	106.9194	0.508	0.33510047	0.011
08/23/95	04:40:12	17233.9656	454.4	427.89	33.05	0.0536492	0.0004	116.5179	0.558	0.42485831	0.011
08/23/95	04:45:12	17185.6643	472.5	426.38	33.15	0.04862662	0.0004	105.0384	0.502	0.44749483	0.012
08/23/95	04:50:13	17212.0515	461.2	424.99	31.95	0.04637877	0.0004	106.1714	0.503	0.43572208	0.011
08/23/95	04:55:13	17296.6106	480.3	424.86	32.3	0.04627921	0.0004	97.4889	0.46	0.4591071	0.011
08/23/95	05:00:13	17380.3726	423.7	421.17	29.82	0.03948113	0.0004	83.4314	0.4	0.39459433	0.01
08/23/95	05:05:13	17220.8881	394.6	420.82	30.87	0.0413784	0.0004	97.5019	0.459	0.33590161	0.011
08/23/95	05:10:12	17244.0809	388.7	415.28	31.36	0.04319519	0.0004	90.8427	0.436	0.32488409	0.011
08/23/95	05:15:12	17328.7391	391.9	414.74	30.19	0.03983917	0.0004	80.3520	0.39	0.33830815	0.01
08/23/95	05:20:13	17443.7427	405.6	413.49	29.2	0.03422274	0.0003	77.8208	0.383	0.35414039	0.01
08/23/95	05:25:13	17492.9992	421.4	415.65	28.57	0.03132246	0.0003	78.0119	0.379	0.36958338	0.01
08/23/95	05:30:13	17612.178	428.2	414.91	28.85	0.03329232	0.0003	80.9274	0.393	0.38486786	0.01
08/23/95	05:35:13	17520.557	419.6	415.46	28.7	0.03207504	0.0003	77.8521	0.381	0.38240816	0.01
08/23/95	05:40:13	17049.5404	274.3	405.91	25.43	0.01817014	0.0003	39.1796	0.27	0.16601884	0.009
08/23/95	05:45:14	17114.5258	289.6	408.97	24.12	0.00929961	0.0003	47.0004	0.292	0.21973031	0.008
08/23/95	05:50:14	17500.8105	441.5	420.10	29.45	0.03809253	0.0004	84.3474	0.411	0.42096571	0.01
08/23/95	05:55:14	17547.0409	445.8	419.52	30.26	0.03877871	0.0004	88.6261	0.426	0.42299123	0.011
08/23/95	06:00:14	17589.056	453.5	415.92	29.61	0.03488581	0.0004	73.2752	0.365	0.42686361	0.01

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	06:05:13	17630.6135	398.1	414.80	28.01	0.03166566	0.0003	69.3149	0.354	0.36686615	0.01
08/23/95	06:10:13	17662.3807	413.9	419.22	28.24	0.03156321	0.0003	85.9732	0.418	0.36465809	0.01
08/23/95	06:15:13	17750.3246	437.4	420.14	28.72	0.03404496	0.0003	80.4479	0.396	0.40073299	0.01
08/23/95	06:20:14	17500.411	319.9	407.56	24.6	0.01754123	0.0003	38.5991	0.274	0.23723975	0.009
08/23/95	06:25:14	16564.0856	210.4	395.97	23.64	0	0.0003	6.3484	0.221	0.02613875	0.008
08/23/95	06:30:14	16482.3381	225	406.20	23.49	0	0.0003	29.7137	0.258	0.1119875	0.008
08/23/95	06:35:14	16743.8967	307	413.35	23.72	0.00312815	0.0003	43.1238	0.287	0.24949676	0.008
08/23/95	06:40:14	17149.5161	404.5	414.50	25.86	0.01898825	0.0003	52.5320	0.31	0.37167336	0.009
08/23/95	06:45:13	17366.496	387.3	413.45	25.45	0.01889118	0.0003	56.2373	0.322	0.3442512	0.009
08/23/95	06:50:15	17840.6523	468.1	420.65	29.76	0.03773911	0.0004	84.0699	0.411	0.45341004	0.01
08/23/95	06:55:15	17973.8833	442.3	417.76	29.12	0.03456078	0.0003	77.3106	0.386	0.42231329	0.01
08/23/95	07:00:15	18107.1461	442.1	418.41	27.43	0.02873221	0.0003	65.3210	0.346	0.41504488	0.01
08/23/95	07:05:15	17971.2147	356	414.16	26.52	0.02535675	0.0003	52.1533	0.305	0.30764018	0.009
08/23/95	07:10:15	17875.3414	413.9	415.02	26.88	0.02640519	0.0003	55.9508	0.32	0.3769233	0.009
08/23/95	07:15:15	17894.7156	426.2	417.19	29.59	0.03590103	0.0004	68.8340	0.355	0.39664147	0.01
08/23/95	07:20:16	17886.983	452.3	418.73	30.34	0.03827272	0.0004	71.7965	0.367	0.4280274	0.011
08/23/95	07:25:16	17997.5928	426.8	424.27	28.21	0.03515746	0.0003	80.3310	0.406	0.41518261	0.01
08/23/95	07:30:16	17791.0087	372.3	414.59	27.29	0.02789915	0.0003	62.3300	0.337	0.33673629	0.009
08/23/95	07:35:16	17759.6218	363.3	421.76	29.12	0.03462336	0.0003	77.2611	0.389	0.32178089	0.01
08/23/95	07:40:16	17658.7902	318.9	419.32	28.38	0.03680132	0.0003	73.1803	0.376	0.2712474	0.01
Run 8											
08/23/95	09:54:49	21332.7984	465.8	395.75	40.71	0.00562202	0.0005	24.3720	0.195	0.15124328	0.014
08/23/95	09:59:50	21473.1997	512.4	395.12	43.5	0.00882214	0.0005	28.3562	0.206	0.15736493	0.015
08/23/95	10:04:51	21614.8009	491.3	398.99	44.41	0.01092961	0.0005	29.6044	0.198	0.19993465	0.015
08/23/95	10:09:50	21466.4162	468.1	392.80	43.78	0.00871672	0.0005	29.0748	0.195	0.16958989	0.015
08/23/95	10:14:50	21624.6077	451.1	396.41	40.57	0.00552412	0.0005	32.5305	0.208	0.15511728	0.014
08/23/95	10:19:49	21451.225	434.7	393.17	37.92	0.00232056	0.0005	19.7796	0.193	0.09392729	0.013
08/23/95	10:24:56	21239.7229	439.4	393.61	35.63	0.00198905	0.0004	16.1313	0.187	0.08044596	0.012
08/23/95	10:29:49	21124.5898	456	391.99	36.17	0	0.0004	17.4885	0.188	0.06389432	0.013
08/23/95	10:34:48	21215.8431	450.7	394.49	35.72	0	0.0004	15.9621	0.182	0.06951187	0.012
Run 9											
08/23/95	10:44:51	21120.6993	483.2	399.55	36.71	0.00442833	0.0004	26.0036	0.195	0.15975201	0.013
08/23/95	10:49:51	21070.3547	493.5	403.50	38.62	0.00952798	0.0005	27.6289	0.189	0.20861847	0.013
08/23/95	10:54:50	21062.4073	486.7	398.70	39.52	0.00664866	0.0005	27.8129	0.187	0.17297602	0.014
08/23/95	10:59:50	21267.1692	504.7	402.62	40.08	0.00942767	0.0005	32.6334	0.195	0.22837154	0.014
08/23/95	11:04:50	21395.5791	486.5	401.03	39.75	0.00543578	0.0005	23.6516	0.176	0.17793873	0.014
08/23/95	11:09:50	21425.1742	515.4	404.99	37.28	0.01031881	0.0004	27.2165	0.187	0.2432132	0.013
08/23/95	11:14:50	21511.809	487.1	402.80	37.95	0.00410685	0.0005	22.4379	0.182	0.15228656	0.013
08/23/95	11:19:51	21190.4077	459.9	397.96	35.9	0	0.0004	15.6338	0.171	0.07024776	0.012
08/23/95	11:25:03	21686.2533	535.6	409.21	37.95	0.01033028	0.0005	29.3898	0.191	0.24648266	0.013
08/23/95	11:29:55	21619.1421	508.6	418.15	38.47	0.00644853	0.0005	25.3293	0.178	0.19679135	0.013
08/23/95	11:34:54	21511.419	495.6	417.26	41.44	0.00255716	0.0005	18.4632	0.166	0.15053913	0.014
Run 10											
08/23/95	11:44:50	21334.9755	474.2	483.04	21.29	0.00356242	0.0003	19.1303	0.206	0.18502298	0.007
08/23/95	11:49:54	21698.3079	485.5	488.57	21.31	0.00412437	0.0003	17.1452	0.207	0.18559663	0.007
08/23/95	11:54:50	21231.7353	453.6	455.02	19.64	0.00066832	0.0002	16.0050	0.201	0.12531059	0.007
08/23/95	11:59:49	21536.3793	479.5	456.02	19.66	0.00646046	0.0002	27.9815	0.208	0.22578184	0.007
08/23/95	12:04:50	21412.7063	474.7	446.93	19.68	0.00501798	0.0002	21.0542	0.199	0.17139175	0.007
08/23/95	12:09:50	21332.3664	461.6	453.90	19.5	0.00189638	0.0002	16.2844	0.182	0.1473598	0.007
08/23/95	12:14:50	21297.7389	442.8	462.10	20.08	0.00078057	0.0002	16.8370	0.182	0.14206447	0.007
08/23/95	12:19:50	20785.9019	435.2	451.31	19.77	0.00055704	0.0002	11.0789	0.19	0.06784732	0.007
08/23/95	12:24:52	21635.4523	496.2	462.05	20.66	0.00870103	0.0002	25.1633	0.196	0.27698287	0.007
08/23/95	12:29:52	21870.6856	484.3	472.20	21.27	0.00558684	0.0003	19.2362	0.182	0.27543115	0.007
08/23/95	12:34:51	22129.5882	526.7	470.57	21.7	0.00915904	0.0003	26.6067	0.213	0.32983724	0.008
08/23/95	12:39:51	21671.5628	485.6	466.12	21.08	0.00749463	0.0003	28.6427	0.21	0.27305064	0.007
08/23/95	12:44:51	21985.3774	503	464.56	21.38	0.01074647	0.0003	30.9396	0.211	0.34388708	0.007
08/23/95	12:49:52	21546.4364	475.5	465.20	20.94	0.00436335	0.0002	20.8877	0.191	0.2518435	0.007
08/23/95	12:54:52	21401.8641	492.5	468.49	20.71	0.00761768	0.0002	24.0152	0.199	0.25496814	0.007
08/23/95	12:59:51	21572.0607	478.2	468.20	20.71	0.00380744	0.0002	18.5848	0.193	0.17682201	0.007
08/23/95	13:04:51	21905.4261	533.1	465.60	21.21	0.0081763	0.0003	32.8199	0.214	0.34318057	0.007
08/23/95	13:09:52	21510.1819	475.8	458.40	20.3	0.00302245	0.0002	23.1997	0.194	0.19634699	0.007
08/23/95	13:14:52	21878.4925	466.9	463.28	20.44	0.00649982	0.0002	20.7212	0.185	0.24284657	0.007

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	13:19:53	21694.0496	528.6	472.33	21.12	0.01032906	0.0003	27.7690	0.196	0.32918253	0.007
08/23/95	13:24:51	22129.3615	560.3	472.81	21.47	0.00932373	0.0003	28.5340	0.204	0.38923754	0.007
08/23/95	13:29:52	22125.8056	523.2	468.37	21.83	0.00875243	0.0003	27.0183	0.209	0.33640749	0.008
08/23/95	13:34:52	21938.1362	514	450.42	20.04	0.00392449	0.0002	19.7754	0.184	0.22111711	0.007
08/23/95	13:39:52	21805.2892	467.3	460.93	19.82	0.00235686	0.0002	16.4187	0.177	0.17092813	0.007
08/23/95	13:44:51	21893.3303	467.1	461.89	20.04	0.0022438	0.0002	14.8717	0.186	0.13597436	0.007
08/23/95	13:49:52	21955.3838	466.1	471.78	20.57	0.00392593	0.0002	23.0442	0.194	0.22119824	0.007
08/23/95	13:54:52	22324.4258	466.5	466.75	19.53	0.00370974	0.0002	14.2370	0.173	0.16457754	0.007
08/23/95	13:59:52	21405.1312	495.2	477.62	20.46	0.00426948	0.0002	21.3917	0.182	0.28965025	0.007
08/23/95	14:04:52	22757.1018	566.2	478.15	21.14	0.00854841	0.0003	26.4195	0.208	0.36195763	0.007
08/23/95	14:09:53	21848.6781	525.2	458.16	20.64	0.00932039	0.0002	25.6908	0.183	0.32228336	0.007
08/23/95	14:14:53	21157.0071	468.9	459.53	20.04	0.00584249	0.0002	19.5790	0.179	0.17089285	0.007
08/23/95	14:19:53	22153.6557	493.3	471.97	20.67	0.00247635	0.0002	13.9522	0.183	0.14880615	0.007
08/23/95	14:24:54	22004.2567	518.5	468.23	20.56	0.00382779	0.0002	19.4054	0.178	0.25803785	0.007
08/23/95	14:29:53	20809.2572	424	442.09	21.37	0.00134851	0.0003	9.9651	0.152	0.06607719	0.007
08/23/95	14:34:56	21519.2694	458.9	454.16	22.23	0.00359999	0.0003	20.3861	0.171	0.18022443	0.008
08/23/95	14:39:53	22082.8656	521.4	445.95	21.71	0.00393752	0.0003	31.2404	0.197	0.24243891	0.008
08/23/95	14:44:52	21973.7247	481.5	452.92	21.52	0.00225166	0.0003	20.1046	0.177	0.18497387	0.007
08/23/95	14:49:53	22343.0405	507.5	482.03	22.18	0.00778385	0.0003	23.1398	0.188	0.29849382	0.008
08/23/95	14:54:53	21528.1248	462.5	454.73	20.78	0	0.0002	12.2248	0.172	0.11790068	0.007
08/23/95	14:59:54	21781.1034	473.6	465.34	21.57	0.00484372	0.0003	17.2672	0.174	0.22213547	0.008
08/23/95	15:04:54	21309.7324	506.4	471.56	21.02	0.00506809	0.0003	28.2802	0.197	0.27367674	0.007
08/23/95	15:09:54	20522.9071	455	464.92	21.67	0.00123888	0.0003	21.4909	0.177	0.14202041	0.008
08/23/95	15:14:55	21663.798	496.9	471.80	21.66	0.00394765	0.0003	21.0932	0.19	0.22039163	0.008
08/23/95	15:19:55	20660.8905	468.2	459.61	21.29	0.00463114	0.0003	15.9361	0.164	0.16999689	0.007
08/23/95	15:24:55	20397.304	456.7	451.03	21.94	0.00407453	0.0003	12.8006	0.147	0.11023857	0.008
08/23/95	15:29:58	19420.1734	428.7	464.10	22.25	0.00192761	0.0003	8.9851	0.145	0.077331	0.008
08/23/95	15:34:56	21131.9279	480.1	475.07	23.28	0.00498638	0.0003	21.5169	0.17	0.27119094	0.008
08/23/95	15:39:56	20676.9633	506.5	453.71	23.49	0.00711752	0.0003	23.3660	0.17	0.298371	0.008
08/23/95	15:44:57	19670.0876	491.8	461.48	21.8	0.00519787	0.0003	19.7978	0.167	0.24192685	0.008
08/23/95	15:49:57	18454.8009	436	462.87	24.1	0.00214499	0.0003	16.8809	0.156	0.1246351	0.008
08/23/95	15:54:57	18198.2892	437.5	443.47	24.56	0.00101532	0.0003	10.6223	0.147	0.02854165	0.009
08/23/95	15:59:58	20149.6268	516.8	450.00	23.64	0.00678732	0.0003	37.7605	0.215	0.31323477	0.008
08/23/95	16:05:04	19955.8906	496.6	471.07	21.81	0.00554601	0.0003	29.5434	0.197	0.28012993	0.008
Run 11											
08/23/95	16:59:50	20560.8944	403.4	470.43	21.95	0.00045299	0.0003	20.0087	0.166	0.14190002	0.008
08/23/95	17:04:50	19617.8436	406.5	451.98	25.05	0	0.0003	3.5816	0.148	0	0.009
08/23/95	17:09:51	20178.9192	432	471.56	25.7	0	0.0003	14.6370	0.157	0.13263023	0.009
08/23/95	17:14:51	19876.7669	427.1	461.77	24.67	0.00147169	0.0003	13.9736	0.158	0.17331987	0.009
08/23/95	17:19:51	19548.0203	404.7	459.23	25.18	0	0.0003	8.6949	0.144	0.04685061	0.009
08/23/95	17:24:52	20009.8463	439	449.39	25.93	0.00124484	0.0003	20.6979	0.161	0.20619024	0.009
08/23/95	17:29:51	19315.3495	403	447.76	26.36	0	0.0003	5.2603	0.138	0	0.009
08/23/95	17:34:51	19527.1133	429.9	460.84	26.49	0.0015852	0.0003	19.3383	0.163	0.13383654	0.009
08/23/95	17:39:52	19114.099	387.9	451.89	25.9	0	0.0003	10.0939	0.139	0.04545995	0.009
08/23/95	17:44:52	19380.4362	448.8	468.71	27.03	0.00316925	0.0003	30.1805	0.177	0.24969188	0.009
08/23/95	17:49:51	19800.7242	517.8	463.45	27.44	0.00452585	0.0003	30.5858	0.18	0.34124939	0.01
08/23/95	17:54:52	19071.6091	425.2	458.70	26.71	0.00090517	0.0003	24.2195	0.168	0.09787159	0.009
08/23/95	17:59:52	18506.0734	372.2	454.32	26.9	0	0.0003	9.3883	0.137	0	0.009
08/23/95	18:04:51	19374.9547	447.8	450.56	27.43	0.00554013	0.0003	27.3694	0.17	0.26015984	0.01
08/23/95	18:09:51	19894.0874	558.7	465.60	28.64	0.0180036	0.0003	39.3226	0.211	0.41827224	0.01
08/23/95	18:14:52	19588.9704	469	463.42	27.09	0.01041148	0.0003	34.9782	0.182	0.31777643	0.009
08/23/95	18:19:52	18849.4629	385.7	439.00	27.32	0	0.0003	16.6284	0.148	0.09317551	0.01
08/23/95	18:24:52	18964.6334	379.2	457.86	27.85	0.00045176	0.0003	22.4957	0.159	0.12784943	0.01
08/23/95	18:29:53	19218.7117	433	471.05	28.8	0.00440229	0.0003	37.4430	0.195	0.26120263	0.01
08/23/95	18:34:53	19233.0095	494.6	461.06	29.3	0.01241218	0.0003	38.9242	0.198	0.35656804	0.01
08/23/95	18:39:54	19504.4272	504.3	460.29	29.17	0.01376372	0.0003	34.6969	0.186	0.38854295	0.01
08/23/95	18:44:54	19229.6841	436.1	463.80	24.87	0.0030461	0.0003	23.3334	0.167	0.26659007	0.009
Run 12											
08/23/95	19:24:51	18882.2438	383.5	438.84	36.69	0	0.0004	13.7412	0.129	0.02127215	0.013
08/23/95	19:29:52	18958.4641	390.3	438.37	37.52	0	0.0004	19.3775	0.142	0.04927023	0.013
08/23/95	19:34:52	18947.903	389.3	434.27	37.18	0	0.0004	20.4952	0.139	0.10333952	0.013
08/23/95	19:39:51	18855.5316	367.4	433.81	37.44	0	0.0004	12.8498	0.134	0.02888316	0.013

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	19:44:52	18635.3607	373.2	431.65	37.3	0	0.0004	10.6015	0.129	0.0203194	0.013
08/23/95	19:49:52	18696.1319	376.1	420.67	37.34	0	0.0004	11.5431	0.134	0	0.013
08/23/95	19:54:51	18474.4219	345.4	415.21	37.14	0	0.0004	11.9730	0.129	0	0.013
08/23/95	19:59:52	18324.5185	377.8	412.25	37.61	0	0.0004	8.0592	0.132	0	0.013
08/23/95	20:04:52	18241.5836	353.6	421.13	37.46	0	0.0004	20.3732	0.14	0	0.013
08/23/95	20:09:51	18189.7446	360.8	413.55	36.87	0	0.0004	15.8325	0.133	0	0.013
08/23/95	20:14:52	18193.9701	345.8	412.38	36.84	0	0.0004	13.8446	0.133	0.01755053	0.013
08/23/95	20:19:52	18149.4684	352.3	411.41	36.37	0	0.0004	11.5287	0.138	0.01898971	0.013
08/23/95	20:24:51	18028.4274	336.3	411.18	36.77	0	0.0004	10.6976	0.132	0	0.013
08/23/95	20:29:51	17885.0407	332.5	408.57	36.83	0	0.0004	15.1214	0.137	0	0.013
08/23/95	20:34:52	17744.9433	336.3	407.64	37.08	0	0.0004	15.8119	0.14	0	0.013
08/23/95	20:39:51	17482.6632	328.7	404.55	37.01	0	0.0004	9.9529	0.133	0	0.013
08/23/95	20:44:51	17361.3718	320.9	406.40	37.31	0	0.0004	9.8263	0.133	0	0.013
08/23/95	20:49:52	17318.9295	322.8	403.35	37.23	0	0.0004	11.0545	0.135	0	0.013
08/23/95	20:54:52	17269.8348	279	404.16	37.43	0	0.0004	17.2667	0.141	0	0.013
08/23/95	20:59:53	17173.6582	316.2	403.46	37.3	0	0.0004	27.5110	0.156	0	0.013
08/23/95	21:04:53	17113.8956	313.2	403.46	37.39	0	0.0004	15.0168	0.142	0	0.013
08/23/95	21:09:52	17028.9526	304.2	402.86	37.47	0	0.0004	12.6892	0.14	0	0.013
08/23/95	21:14:52	16909.4121	306.6	399.97	37.34	0	0.0004	14.4845	0.141	0.01918902	0.013
08/23/95	21:19:53	16881.6037	309.5	397.83	37.32	0	0.0004	16.2092	0.149	0	0.013
08/23/95	21:24:53	16859.3532	312.1	398.24	36.99	0	0.0004	17.9876	0.154	0.03014755	0.013
08/23/95	21:29:51	16706.842	306.2	399.01	36.99	0	0.0004	16.3303	0.146	0.01651465	0.013
08/23/95	21:34:51	16593.9269	307.9	396.79	37.17	0	0.0004	16.6102	0.147	0.01628387	0.013
08/23/95	21:39:52	16477.0563	311.6	394.73	37.37	0	0.0004	20.3153	0.151	0.02180632	0.013
08/23/95	21:44:52	16332.9893	298.6	394.69	37.27	0	0.0004	19.6429	0.152	0.02345788	0.013
08/23/95	21:49:52	16268.2778	299.1	394.40	37.44	0	0.0004	16.6485	0.148	0.01923879	0.013
08/23/95	21:54:52	16201.8109	292.6	396.94	37.72	0	0.0005	28.9518	0.167	0.02143813	0.013
08/23/95	21:59:52	16122.8952	295.9	394.21	37.89	0	0.0005	26.3747	0.164	0	0.013
08/23/95	22:04:52	16056.3012	308.8	388.99	38.22	0	0.0005	14.7040	0.149	0	0.013
08/23/95	22:09:51	15966.797	285.2	389.87	38.06	0	0.0005	15.3147	0.15	0	0.013
08/23/95	22:14:52	16045.5732	305.3	390.39	38.32	0	0.0005	19.6007	0.157	0.02424768	0.013
08/23/95	22:19:51	15914.6762	295.3	389.73	38.01	0	0.0005	30.6673	0.176	0.04877108	0.013
08/23/95	22:24:52	15892.5398	294.3	392.08	38.19	0	0.0005	36.9245	0.188	0.07815119	0.013
08/23/95	22:29:52	15816.163	284.5	390.43	38.07	0	0.0005	33.6891	0.183	0.07315677	0.013
08/23/95	22:34:51	15707.2755	281.6	388.37	38.11	0	0.0005	26.9679	0.171	0.05114513	0.013
08/23/95	22:39:51	15780.333	293	391.71	38.27	0	0.0005	27.4086	0.175	0.09682804	0.013
08/23/95	22:44:52	15762.0884	304	391.49	38.19	0	0.0005	36.5177	0.192	0.1071593	0.013
08/23/95	22:49:52	15795.9394	328.7	391.67	38.03	0	0.0005	37.2675	0.194	0.15941511	0.013
08/23/95	22:54:52	15922.0652	374.5	393.98	38.08	0.00098879	0.0005	35.1019	0.191	0.23895787	0.013
08/23/95	22:59:51	15768.2566	332.8	392.70	37.87	0	0.0005	32.8342	0.186	0.16180176	0.013
08/23/95	23:04:51	15847.796	345.2	389.03	38.02	0	0.0005	30.8903	0.187	0.1838053	0.013
08/23/95	23:09:52	16015.8905	431.5	395.85	38.49	0.00461436	0.0005	38.8966	0.202	0.31520466	0.013
08/23/95	23:14:52	15778.6914	362.6	392.11	37.53	0.00076863	0.0004	34.4677	0.193	0.21126245	0.013
08/23/95	23:19:52	15822.6027	388	401.70	35.35	0.0110881	0.0004	44.4943	0.223	0.30234273	0.012
08/23/95	23:24:51	15926.4372	486.5	408.74	38.98	0.03334897	0.0005	76.4191	0.329	0.43123291	0.014
08/23/95	23:29:51	15978.7962	488.1	401.86	38.29	0.03069304	0.0005	67.6514	0.295	0.42224853	0.013
08/23/95	23:34:51	15862.1987	496.8	399.11	38.82	0.02912544	0.0005	52.3590	0.245	0.43447279	0.013
08/23/95	23:39:53	15818.8949	481.3	397.75	37.33	0.02189057	0.0004	47.2756	0.238	0.40530398	0.013
08/23/95	23:44:52	15781.2217	509	406.54	39.72	0.0393956	0.0005	80.8620	0.357	0.45786444	0.014
08/23/95	23:49:52	15700.3356	479.7	409.78	40.93	0.04310003	0.0005	104.6932	0.477	0.43461023	0.014
08/23/95	23:54:53	15328.9124	371.4	399.25	37.24	0.03188791	0.0004	68.3830	0.332	0.29463557	0.013
08/23/95	23:59:53	14947.8782	309.3	391.63	36.32	0.00784345	0.0004	44.7152	0.247	0.19456121	0.013
08/24/95	00:04:53	14713.4375	249	389.41	35.45	0	0.0004	40.3576	0.228	0.08075456	0.012
08/24/95	00:09:53	15128.6319	392.7	398.09	35.83	0.01513931	0.0004	62.1015	0.288	0.32391579	0.012
08/24/95	00:14:54	15285.1006	480.5	398.38	38.39	0.03028435	0.0005	68.8243	0.314	0.43487458	0.013
08/24/95	00:19:54	15370.3695	528.4	407.72	43.05	0.05763834	0.0005	92.0146	0.41	0.50567021	0.015
08/24/95	00:24:54	15458.6759	493.8	406.17	40.6	0.0463419	0.0005	85.1632	0.383	0.45556812	0.014
08/24/95	00:29:54	15335.8988	489.6	398.74	38.95	0.03300151	0.0005	61.6799	0.29	0.44143601	0.014
08/24/95	00:34:55	15382.2566	488.5	398.08	38.91	0.03450669	0.0005	58.1112	0.28	0.43628652	0.014
08/24/95	00:39:55	15390.855	494.4	402.21	40.49	0.04765105	0.0005	71.9329	0.33	0.44604867	0.014
08/24/95	00:44:55	15470.4321	505.3	406.82	44.49	0.06910913	0.0005	91.5289	0.41	0.46928907	0.015
08/24/95	00:49:54	15505.4792	527.4	409.94	44.23	0.06433267	0.0005	108.9850	0.499	0.49724472	0.015

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	00:54:54	15349.527	480.4	399.91	40.21	0.04403566	0.0005	79.4010	0.365	0.43046219	0.014
08/24/95	00:59:54	15091.7249	420.8	395.86	36.33	0.01552189	0.0004	53.6008	0.273	0.35548378	0.013
08/24/95	01:04:55	15164.926	460.6	399.12	38.46	0.03451705	0.0005	61.3167	0.297	0.41702678	0.013
08/24/95	01:09:55	15175.2564	449.5	401.98	40.3	0.04332561	0.0005	77.0500	0.355	0.40230924	0.014
08/24/95	01:14:55	15012.7118	442.4	396.43	36.98	0.01789616	0.0004	58.2677	0.294	0.38547251	0.013
08/24/95	01:19:54	14989.5745	446.1	399.59	36.31	0.01669037	0.0004	54.1932	0.279	0.39493308	0.013
08/24/95	01:24:54	14880.3108	375.8	390.96	34.72	0.00173373	0.0004	38.1347	0.241	0.29603502	0.012
08/24/95	01:29:55	15130.2695	446.5	394.43	36.14	0.01582936	0.0004	47.5547	0.264	0.40440771	0.013
08/24/95	01:34:55	15189.4319	487.7	396.35	38.77	0.03383358	0.0005	62.8372	0.306	0.45534354	0.013
08/24/95	01:39:55	15062.3482	457.4	396.85	36.65	0.02102953	0.0004	49.7036	0.27	0.41408666	0.013
08/24/95	01:44:55	14968.7312	432.9	396.48	34.83	0.00877703	0.0004	46.6433	0.264	0.38326349	0.012
08/24/95	01:49:55	14977.1075	431.2	391.67	35.21	0.00974853	0.0004	47.7307	0.271	0.37466869	0.012
08/24/95	01:54:56	15106.8261	458.7	398.03	39.02	0.03759318	0.0005	68.2267	0.333	0.41937525	0.014
08/24/95	01:59:56	15027.2583	455.3	397.96	35.78	0.01646419	0.0004	57.8498	0.295	0.41333788	0.012
08/24/95	02:04:56	14752.4651	361.4	390.83	34.1	0.00238116	0.0004	41.8392	0.255	0.28433193	0.012
08/24/95	02:09:56	14919.6415	370.9	393.47	33.8	0.00801241	0.0004	44.9318	0.263	0.29786661	0.012
08/24/95	02:14:56	15117.632	446.3	396.85	36.76	0.02753351	0.0004	55.4552	0.292	0.4029215	0.013
08/24/95	02:19:56	15217.0298	495.5	407.06	42.77	0.0552417	0.0005	98.5009	0.461	0.4693378	0.015
08/24/95	02:24:57	15271.3761	497.9	410.57	41.02	0.05071171	0.0005	109.7793	0.52	0.47146719	0.014
08/24/95	02:29:57	15168.4627	435.2	408.03	40.66	0.04880772	0.0005	108.2417	0.509	0.39360713	0.014
08/24/95	02:34:56	14927.1983	434.7	414.17	43.12	0.06385956	0.0005	133.7092	0.664	0.39963722	0.015
08/24/95	02:39:56	14985.276	463.6	411.59	44.03	0.06428099	0.0005	123.8545	0.597	0.44096978	0.015
08/24/95	02:44:56	14858.9303	514.5	418.28	46.74	0.07329177	0.0006	141.5348	0.707	0.505453	0.016
08/24/95	02:49:57	14826.5246	482.6	411.51	44.26	0.06472385	0.0005	96.8215	0.467	0.46518916	0.015
08/24/95	02:54:57	14685.1199	422.5	401.37	40.84	0.04517268	0.0005	63.2957	0.319	0.37867243	0.014
08/24/95	02:59:57	14811.4521	465.4	402.66	40.4	0.04700985	0.0005	67.7356	0.338	0.43032923	0.014
08/24/95	03:04:56	14922.4532	442.6	399.76	35.96	0.03135787	0.0004	65.1318	0.33	0.41154501	0.012
08/24/95	03:09:56	14839.8863	417.1	405.21	34.93	0.01644213	0.0004	51.2062	0.286	0.36172683	0.012
08/24/95	03:14:56	14706.194	396.4	394.74	34.41	0.01167364	0.0004	42.8729	0.266	0.33323923	0.012
08/24/95	03:19:56	14737.0933	394.2	394.27	36.67	0.02614761	0.0004	55.5628	0.3	0.33419234	0.013
08/24/95	03:24:57	14629.078	355.7	385.40	33.88	0.00669513	0.0004	47.6583	0.278	0.26737331	0.012
08/24/95	03:29:57	14871.8625	385.9	398.34	34.64	0.02042497	0.0004	52.0616	0.292	0.33285134	0.012
08/24/95	03:34:57	15003.437	414.6	392.16	36.19	0.02759437	0.0004	52.6904	0.299	0.337517	0.013
08/24/95	03:39:57	15092.5426	438.9	393.16	38.33	0.03611562	0.0005	59.5397	0.314	0.36721147	0.013
08/24/95	03:44:58	15028.0968	450.4	394.68	39.5	0.03935953	0.0005	67.6201	0.344	0.39316281	0.014
08/24/95	03:49:58	15009.9825	464.5	401.52	38.92	0.04118988	0.0005	69.6178	0.348	0.41946652	0.014
08/24/95	03:54:58	14983.3893	450.9	403.96	42.81	0.05306169	0.0005	75.2430	0.369	0.40244752	0.015
08/24/95	03:59:57	14992.3605	410.6	402.28	40.7	0.04908191	0.0005	82.2285	0.396	0.36346558	0.014
08/24/95	04:04:57	15086.6944	438	403.77	40.69	0.05139146	0.0005	103.1722	0.496	0.3778084	0.014
08/24/95	04:09:57	15129.3629	462.5	402.41	40.78	0.0479476	0.0005	93.6155	0.445	0.39418775	0.014
08/24/95	04:14:58	14996.1983	403.6	396.62	39.27	0.0459555	0.0005	68.9597	0.348	0.32504054	0.014
08/24/95	04:19:58	14832.6315	422.9	398.79	37.16	0.03477149	0.0004	65.2619	0.335	0.35775758	0.013
08/24/95	04:24:58	14864.1247	443.3	404.78	38.93	0.0399701	0.0005	81.2249	0.392	0.38608958	0.014
08/24/95	04:29:57	14892.5969	464.2	402.26	40.09	0.04738834	0.0005	99.1431	0.475	0.41783965	0.014
08/24/95	04:34:57	14902.1569	488.3	406.22	41.39	0.05003268	0.0005	102.4394	0.496	0.45451763	0.014
08/24/95	04:39:57	14767.9739	403.6	404.55	39.88	0.04709072	0.0005	114.0840	0.55	0.33125884	0.014
08/24/95	04:44:58	14679.2183	345.6	397.33	38.89	0.05130285	0.0005	85.4424	0.412	0.25618956	0.014
08/24/95	04:49:58	14927.4714	406.3	397.58	41.92	0.05129306	0.0005	96.0510	0.457	0.3145758	0.015
08/24/95	04:54:58	14924.5496	422.1	400.39	39.67	0.04739739	0.0005	93.2714	0.447	0.33275562	0.014
08/24/95	04:59:58	14969.7827	414.9	390.11	38.94	0.04155387	0.0005	77.2589	0.383	0.30213128	0.014
08/24/95	05:04:58	14886.675	389.1	394.98	37.24	0.03408716	0.0004	66.5661	0.337	0.26858519	0.013
08/24/95	05:09:59	14935.0453	381.1	390.98	36.37	0.03215773	0.0004	72.0589	0.358	0.26668177	0.013
08/24/95	05:14:59	14900.2889	401.3	405.06	36.32	0.03497288	0.0004	74.7324	0.369	0.31464767	0.013
08/24/95	05:19:59	14834.3637	371.5	399.50	36.34	0.03476296	0.0004	69.9834	0.35	0.27279721	0.013
08/24/95	05:24:59	14814.1721	376.4	395.95	38	0.04068817	0.0005	82.4665	0.398	0.27843259	0.013
08/24/95	05:29:59	14776.2607	387.6	399.00	38.2	0.04249532	0.0005	88.9955	0.428	0.2793013	0.013
08/24/95	05:35:00	14760.8972	381.5	396.76	39.81	0.0478927	0.0005	104.6321	0.505	0.27470733	0.014
08/24/95	05:40:00	14640.8226	374.7	389.73	40.4	0.05391593	0.0005	98.4344	0.474	0.27876373	0.014
08/24/95	05:45:01	14668.4873	388.2	400.13	41.08	0.05455379	0.0005	101.7161	0.491	0.284868	0.014
08/24/95	05:50:01	14719.8002	383.3	403.27	42.92	0.05919896	0.0005	118.2244	0.589	0.2836797	0.015
08/24/95	05:55:00	14842.7642	442.4	413.28	42.99	0.0633161	0.0005	130.1884	0.654	0.38616341	0.015
08/24/95	06:00:00	14724.8701	417.2	405.46	42.75	0.06080774	0.0005	125.2469	0.621	0.34140901	0.015

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	06:05:00	14704.9794	407.9	403.17	41.58	0.05731862	0.0005	107.4748	0.526	0.34272435	0.014
08/24/95	06:10:01	14623.9205	364.7	405.90	38.36	0.04705487	0.0005	86.1990	0.426	0.28060245	0.013
08/24/95	06:15:01	14653.7076	352.8	400.40	38.89	0.04414092	0.0005	89.5113	0.439	0.26247122	0.014
08/24/95	06:20:01	14862.6516	432.6	407.22	39.31	0.04988953	0.0005	100.0249	0.489	0.40408357	0.014
08/24/95	06:25:00	14923.0622	429.6	396.17	37.85	0.04536279	0.0005	92.6867	0.457	0.38158748	0.013
08/24/95	06:30:00	14711.9623	380.4	398.85	39.57	0.05009822	0.0005	93.6065	0.46	0.3253691	0.014
08/24/95	06:35:01	14784.9396	365.7	404.62	36.66	0.04307872	0.0004	84.9918	0.426	0.31479774	0.013
08/24/95	06:40:01	14753.9521	362	402.54	35.32	0.03446959	0.0004	67.5283	0.362	0.29966996	0.012
08/24/95	06:45:01	14865.4891	418.4	410.70	38.23	0.04783572	0.0005	100.8800	0.502	0.37158875	0.013
08/24/95	06:50:00	14704.2819	339.8	406.56	37.56	0.04346008	0.0004	90.1424	0.453	0.28599538	0.013
08/24/95	06:55:00	14469.0394	298.1	402.22	37.42	0.04588764	0.0004	77.4286	0.402	0.23342372	0.013
08/24/95	07:00:00	14625.2252	409.6	415.71	40.88	0.05427919	0.0005	101.3636	0.509	0.37963121	0.014
08/24/95	07:05:01	14538.8899	383.7	407.21	33.85	0.03368324	0.0004	73.2763	0.389	0.34189023	0.012
08/24/95	07:10:01	14197.5482	300.2	396.16	31.33	0.01826632	0.0004	45.2313	0.305	0.22166712	0.011
08/24/95	07:15:01	14077.9151	262.9	398.48	28.13	0.00118148	0.0003	38.2050	0.293	0.17324847	0.01
08/24/95	07:20:00	14178.8521	258.1	401.86	29	0.00075214	0.0003	34.1646	0.283	0.15891695	0.01
08/24/95	07:25:01	14399.7411	313.7	400.97	29.64	0.01171418	0.0004	33.5112	0.283	0.2451381	0.01
08/24/95	07:30:01	14527.735	364	409.11	32.77	0.03138715	0.0004	56.8710	0.341	0.31860105	0.011
08/24/95	07:35:01	14600.4339	333.5	400.39	34.98	0.03388545	0.0004	69.0535	0.373	0.27968943	0.012
08/24/95	07:40:02	14574.0797	296.6	400.25	37.09	0.0414235	0.0004	71.9413	0.382	0.22379451	0.013
08/24/95	07:45:03	14693.6819	327.9	415.01	37	0.03714114	0.0004	64.2729	0.354	0.25858848	0.013
08/24/95	07:50:02	14800.2357	374.6	414.55	36.92	0.03911643	0.0004	56.0505	0.329	0.30862111	0.013
08/24/95	07:55:02	15045.6498	417.1	416.37	34.38	0.03326605	0.0004	59.7490	0.34	0.37586313	0.012
08/24/95	08:00:02	15271.9286	426.7	412.92	35.2	0.03158016	0.0004	66.8104	0.364	0.36349632	0.012
08/24/95	08:05:02	15396.6691	428.8	419.89	33.88	0.03077362	0.0004	64.8330	0.35	0.35118765	0.012
08/24/95	08:10:03	15568.3533	408.6	407.51	33.85	0.0313633	0.0004	63.8051	0.345	0.30527672	0.012
08/24/95	08:15:03	15627.0494	393.2	424.19	32.79	0.02824296	0.0004	66.0221	0.346	0.31121574	0.011
08/24/95	08:20:03	15725.1795	377.4	410.39	31.75	0.02719283	0.0004	58.0039	0.318	0.28911419	0.011
08/24/95	08:25:03	15700.5128	312.1	408.90	29.77	0.01840329	0.0004	45.0293	0.284	0.21561253	0.01
08/24/95	08:30:03	15784.1596	359.2	410.32	30.65	0.02278931	0.0004	45.0645	0.275	0.23378125	0.011
08/24/95	08:35:04	15980.2488	390.3	419.52	30.65	0.02074109	0.0004	49.6806	0.299	0.23644847	0.011
08/24/95	08:40:04	16122.6451	373.4	407.10	31.04	0.02098321	0.0004	46.5610	0.287	0.22709952	0.011
08/24/95	08:45:04	16174.337	358	415.61	30.56	0.01563995	0.0004	38.5151	0.257	0.21206902	0.011
08/24/95	08:50:03	16336.2121	362	416.38	31.06	0.01960315	0.0004	37.2090	0.252	0.21486802	0.011
08/24/95	08:55:03	16380.5462	369	418.08	30.18	0.01710041	0.0004	35.3600	0.244	0.19764125	0.01
08/24/95	09:00:03	16321.7946	347.3	413.73	32.94	0.01492489	0.0004	29.0481	0.23	0.16977063	0.011
08/24/95	09:05:04	16435.3323	395.1	413.49	32.74	0.00966455	0.0004	24.8323	0.218	0.14815313	0.011
08/24/95	09:10:04	16456.3948	387.5	409.56	32.57	0.01066498	0.0004	25.1542	0.217	0.15469719	0.011
08/24/95	09:15:04	16490.0312	416.9	418.13	33.42	0.01319378	0.0004	28.0939	0.221	0.17338831	0.012
08/24/95	09:20:03	16470.6022	412.9	415.84	32.75	0.00682063	0.0004	23.3374	0.21	0.13872274	0.011
08/24/95	09:25:03	16658.5167	428.3	412.22	33.13	0.00869569	0.0004	22.4848	0.211	0.16015476	0.012
08/24/95	09:30:03	16519.9631	427.9	413.81	32.46	0.00737759	0.0004	23.2304	0.206	0.15206642	0.011
08/24/95	09:35:04	16612.6156	424	414.49	32.06	0.00352759	0.0004	30.0142	0.217	0.14760743	0.011
08/24/95	09:40:04	16915.7042	446	422.07	32.35	0.00331206	0.0004	28.8650	0.222	0.15489419	0.011
08/24/95	09:45:04	16914.4898	453.1	416.33	31.43	0.00276005	0.0004	24.3970	0.205	0.18856684	0.011
08/24/95	09:50:04	17002.0616	439.9	423.39	30.98	0	0.0004	19.7875	0.195	0.13630391	0.011
08/24/95	09:55:07	17228.3743	457.9	419.54	28.44	0.00044243	0.0003	21.5976	0.195	0.19256934	0.01
08/24/95	10:00:05	17193.8539	483.8	419.74	30.12	0	0.0004	21.9302	0.197	0.188064	0.01
08/24/95	10:05:06	17091.0263	499.5	436.23	32.48	0	0.0004	25.2245	0.209	0.2071465	0.011
08/24/95	10:10:05	16990.4122	485.3	429.09	32.94	0	0.0004	24.2063	0.198	0.21454641	0.011
08/24/95	10:15:05	17457.6871	498.1	416.84	33.43	0	0.0004	22.3993	0.193	0.19887591	0.012
08/24/95	10:20:04	17379.2111	455.3	434.18	32.59	0	0.0004	19.6393	0.197	0.14602234	0.011
08/24/95	10:25:04	17590.3952	483.8	440.14	32.81	0	0.0004	20.3364	0.185	0.18425251	0.011
08/24/95	10:30:04	17446.9412	500.2	425.30	32.24	0	0.0004	23.6877	0.189	0.21443007	0.011
08/24/95	10:35:05	17364.1717	510.8	429.77	32.97	0	0.0004	28.5368	0.196	0.25256815	0.011
08/24/95	10:40:05	17495.3699	510	427.18	32.38	0	0.0004	27.4166	0.2	0.26440077	0.011
08/24/95	10:45:04	17623.2266	485.6	434.25	32.4	0	0.0004	26.1520	0.184	0.26086226	0.011
08/24/95	10:50:04	17506.0882	495.6	427.59	32.17	0	0.0004	25.7968	0.183	0.27336734	0.011
08/24/95	10:55:04	17493.9083	501.7	433.81	34.34	0	0.0004	22.3201	0.175	0.24094146	0.012
08/24/95	11:00:05	17363.9918	505.1	431.23	34.12	0	0.0004	27.7140	0.19	0.23688802	0.012
08/24/95	11:05:06	17383.2591	505.4	437.80	33.97	0	0.0004	22.5848	0.177	0.2480252	0.012
08/24/95	11:10:05	17632.233	484.3	445.68	33.87	0	0.0004	21.0829	0.168	0.2426812	0.012

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	11:15:05	17820.9291	471.5	431.42	33.18	0	0.0004	23.4477	0.172	0.23043536	0.012
08/24/95	11:20:06	17632.1215	422.4	426.62	32.69	0	0.0004	23.5296	0.17	0.15651098	0.011
08/24/95	11:25:07	17901.7572	468.2	435.32	32.12	0	0.0004	24.2613	0.17	0.22714566	0.011
08/24/95	11:30:07	17900.0924	431.4	433.26	32.92	0	0.0004	15.2973	0.152	0.10971165	0.011
08/24/95	11:35:07	17925.3099	447.6	415.68	32.06	0	0.0004	13.6697	0.15	0.10107166	0.011
08/24/95	11:40:07	18239.8083	429.8	447.61	32.86	0	0.0004	13.6320	0.15	0.08567439	0.011
08/24/95	11:45:07	18287.2124	452.1	441.04	32.99	0	0.0004	17.2234	0.151	0.15868084	0.011
08/24/95	11:50:07	18383.3073	450.1	436.42	33.35	0	0.0004	18.6559	0.16	0.20132362	0.012
08/24/95	11:55:09	18357.2776	469.6	446.01	33.78	0	0.0004	17.0661	0.152	0.18469257	0.012
08/24/95	12:00:08	18658.9279	534.4	429.06	34.45	0	0.0004	29.3918	0.178	0.33035347	0.012
Run 13											
08/24/95	18:39:54	15647.4486	510.1	451.79	33.11	0.01534376	0.0004	38.8425	0.191	0.37029597	0.012
08/24/95	18:44:54	15742.8919	534.3	452.62	33.68	0.01375004	0.0004	50.3845	0.206	0.37727395	0.012
08/24/95	18:49:55	16243.4617	543	452.16	33.34	0.0201137	0.0004	53.8582	0.243	0.38977399	0.012
08/24/95	18:54:56	16210.1647	562.2	446.28	32.4	0.01601986	0.0004	65.2082	0.209	0.43026384	0.011
08/24/95	18:59:54	16037.2446	563.8	450.07	33.82	0.01783469	0.0004	55.3248	0.232	0.42042147	0.012
08/24/95	19:04:55	16203.5542	575.4	454.18	34.17	0.02000397	0.0004	62.6767	0.25	0.44542924	0.012
08/24/95	19:09:55	16119.4886	555.3	445.19	35.21	0.01976583	0.0004	66.1455	0.24	0.41053856	0.012
08/24/95	19:14:54	15805.3038	553	444.11	36.1	0.01714685	0.0004	64.6535	0.222	0.40652787	0.013
08/24/95	19:19:54	15615.5411	583	444.83	36.61	0.02089036	0.0004	59.7658	0.239	0.46378861	0.013
08/24/95	19:24:55	15654.6472	550.2	440.73	36.63	0.0213328	0.0004	64.6728	0.241	0.42109594	0.013
08/24/95	19:29:55	15983.6045	589.8	448.46	37.27	0.02653313	0.0004	66.3854	0.351	0.49131651	0.013
08/24/95	19:34:54	16267.7054	627.8	456.23	38.05	0.03797158	0.0005	90.6997	0.5	0.55472513	0.013
08/24/95	19:39:55	16413.8134	638.4	448.92	38.18	0.03127261	0.0005	117.7078	0.425	0.557015	0.013
08/24/95	19:44:55	16665.2748	645.9	453.35	37.92	0.03555222	0.0005	104.7179	0.445	0.58106374	0.013
08/24/95	19:49:54	16903.05	662.6	451.33	38.35	0.03776132	0.0005	108.5794	0.432	0.60915558	0.013
08/24/95	19:54:54	16865.9053	605	439.86	36.36	0.01851089	0.0004	106.2194	0.283	0.54324952	0.013
08/24/95	19:59:55	15861.0125	370.6	419.53	34.76	0	0.0004	74.3313	0.139	0.13518357	0.012
08/24/95	20:04:54	16108.3696	355	410.81	34.15	0	0.0004	27.8973	0.122	0.02196565	0.012
08/24/95	20:09:54	16213.4509	340.5	410.14	33.39	0	0.0004	14.4367	0.123	0.0445579	0.012
08/24/95	20:14:55	16176.867	338.7	406.65	33.03	0	0.0004	14.6540	0.12	0.01472382	0.011
08/24/95	20:19:55	16125.8999	339.8	409.08	32.98	0	0.0004	9.8910	0.124	0.02986964	0.011
08/24/95	20:24:56	15989.5497	337.9	409.23	32.72	0	0.0004	12.8527	0.127	0.03792662	0.011
08/24/95	20:29:56	15920.2387	335.6	407.43	32.73	0	0.0004	16.3245	0.13	0.03925136	0.011
08/24/95	20:34:55	15817.0074	326.2	404.25	32.79	0	0.0004	18.4888	0.13	0.02397722	0.011
08/24/95	20:39:55	15779.3352	314.3	401.23	32.29	0	0.0004	17.0484	0.128	0.02071646	0.011
08/24/95	20:44:56	15768.1078	306.2	404.92	32.66	0	0.0004	12.9697	0.131	0.02428635	0.011
08/24/95	20:49:56	15734.0644	332.5	404.03	32.74	0	0.0004	16.4572	0.13	0.03344508	0.011
08/24/95	20:54:57	15673.5531	327.7	401.94	32.45	0	0.0004	14.6424	0.131	0.03520866	0.011
08/24/95	20:59:57	15602.9335	327.1	401.56	32.6	0	0.0004	13.6412	0.131	0.03351961	0.011
08/24/95	21:04:57	15559.056	325.8	402.09	32.57	0	0.0004	14.5968	0.136	0.03507084	0.011
08/24/95	21:09:58	15471.4315	330.3	400.48	32.78	0	0.0004	18.0391	0.139	0.04809367	0.011
08/24/95	21:14:58	15271.8304	326.1	397.40	32.93	0	0.0004	18.7157	0.136	0.05909676	0.011
08/24/95	21:19:57	15019.6957	315.2	394.76	33.19	0	0.0004	17.1959	0.13	0.02986067	0.012
08/24/95	21:24:57	14879.7846	315.1	395.84	33.22	0	0.0004	11.9881	0.132	0.02717647	0.012
08/24/95	21:29:58	14766.0606	316.5	394.28	33.61	0	0.0004	13.6596	0.142	0.02827446	0.012
08/24/95	21:34:58	14634.7081	288.8	393.43	33.83	0	0.0004	18.4837	0.138	0.0265849	0.012
08/24/95	21:39:59	14585.5049	311.9	391.32	33.87	0	0.0004	17.1808	0.138	0.03979947	0.012
08/24/95	21:44:59	14531.4338	315.6	391.58	33.88	0	0.0004	16.6898	0.141	0.04379348	0.012
08/24/95	21:49:58	14503.7126	312.6	388.96	34.11	0	0.0004	18.0368	0.139	0.03176547	0.012
08/24/95	21:54:58	14514.5093	308.5	389.70	34.23	0	0.0004	16.8567	0.142	0.03375209	0.012
08/24/95	21:59:59	14522.7532	310.3	388.41	34.07	0	0.0004	17.3080	0.15	0.02984386	0.012
08/24/95	22:04:59	14491.5504	310.6	387.09	34.06	0	0.0004	21.5922	0.145	0.03404063	0.012
08/24/95	22:09:58	14483.2985	309.3	386.90	34.17	0	0.0004	17.5155	0.141	0.02250474	0.012
08/24/95	22:14:58	14505.1444	305.7	387.65	34.06	0	0.0004	13.1630	0.142	0.02947795	0.012
08/24/95	22:19:59	14495.2994	309.4	385.84	34.3	0	0.0004	13.5744	0.158	0.03299318	0.012
08/24/95	22:24:59	14500.8827	311.5	385.52	34.23	0	0.0004	23.4267	0.156	0.0413843	0.012
08/24/95	22:29:57	14483.8959	313.3	384.01	33.99	0	0.0004	21.8835	0.15	0.04923146	0.012
08/24/95	22:34:58	14557.948	316.1	383.60	34.2	0	0.0004	17.0249	0.152	0.05773935	0.012
08/24/95	22:39:59	14573.8672	321	385.49	34.12	0	0.0004	17.3737	0.154	0.07793748	0.012
08/24/95	22:44:59	14538.4192	320.5	383.09	34.24	0	0.0004	18.3201	0.155	0.06244883	0.012
08/24/95	22:49:59	14619.1277	318	388.10	34.3	0	0.0004	18.6415	0.19	0.1187963	0.012

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	22:54:59	14586.2755	337.6	383.91	34.73	0	0.0004	34.4393	0.18	0.11464298	0.012
08/24/95	22:59:59	14528.9128	330.5	385.09	34.43	0	0.0004	29.4862	0.164	0.12111383	0.012
08/24/95	23:04:59	14614.5242	364.6	385.43	34.98	0	0.0004	22.1653	0.174	0.18846488	0.012
08/24/95	23:10:01	14569.3062	353.3	387.56	34.76	0	0.0004	27.4171	0.187	0.17684571	0.012
08/24/95	23:15:00	14559.6844	376.8	382.97	34.9	0	0.0004	33.9763	0.185	0.20680806	0.012
08/24/95	23:19:59	14541.9999	394.7	384.19	34.99	0	0.0004	31.2411	0.197	0.23522722	0.012
08/24/95	23:24:59	14510.672	411	387.93	35.4	0.00242252	0.0004	36.1742	0.203	0.27836952	0.012
08/24/95	23:30:00	14419.9418	367.3	386.28	35.46	0.00275131	0.0004	39.8667	0.196	0.2555416	0.012
08/24/95	23:35:00	14551.3443	432.8	380.56	35.17	0.00671319	0.0004	35.8510	0.184	0.32036245	0.012
08/24/95	23:40:00	14488.5497	446.9	383.72	35.85	0.00924092	0.0004	29.0361	0.191	0.34191397	0.012
08/24/95	23:45:01	14382.6091	415.5	383.94	35.62	0.00649064	0.0004	32.6437	0.207	0.30076989	0.012
08/24/95	23:50:01	14337.5401	413.4	382.29	35.69	0.00439795	0.0004	39.3163	0.211	0.29774128	0.012
08/24/95	23:55:01	14335.3239	445.7	383.80	36.13	0.00945203	0.0004	41.2949	0.215	0.34247126	0.013
08/25/95	00:00:00	14295.5311	439.5	383.65	36.38	0.00944847	0.0004	42.2855	0.212	0.33454166	0.013
08/25/95	00:05:00	14181.2632	433.9	380.25	36.11	0.00900391	0.0004	38.1569	0.214	0.3285328	0.013
08/25/95	00:10:00	14215.3943	442.8	384.68	36.3	0.01307158	0.0004	41.0633	0.225	0.34271696	0.013
08/25/95	00:15:01	14157.8008	421.8	382.74	35.8	0.00560105	0.0004	45.5126	0.22	0.30827726	0.012
08/25/95	00:20:01	14244.3935	462.2	382.59	36.05	0.01065498	0.0004	43.1876	0.227	0.37336377	0.013
08/25/95	00:25:00	14282.1221	487	382.96	37.24	0.01921928	0.0004	45.6117	0.231	0.4076684	0.013
08/25/95	00:30:00	14206.8644	474	383.29	35.44	0.01317148	0.0004	47.1979	0.229	0.38965618	0.012
08/25/95	00:35:00	14225.5859	491.3	383.92	36.51	0.0207255	0.0004	44.9251	0.279	0.41505822	0.013
08/25/95	00:40:01	14228.3126	502.9	386.80	38.46	0.02859929	0.0005	60.8605	0.301	0.43698843	0.013
08/25/95	00:45:01	14137.4435	491	385.45	36.94	0.0246173	0.0004	67.7830	0.303	0.42637169	0.013
08/25/95	00:50:01	14049.367	499.5	383.48	36.43	0.01530004	0.0004	67.3946	0.28	0.43954817	0.013
08/25/95	00:55:01	14034.3695	510.8	384.36	35.95	0.01508144	0.0004	60.4566	0.268	0.45943738	0.012
08/25/95	01:00:02	13818.5348	442.6	377.59	35.28	0.00436894	0.0004	56.0536	0.245	0.36349619	0.012
08/25/95	01:05:02	13752.0513	428.2	379.23	34.8	0.00458478	0.0004	47.6817	0.257	0.34735176	0.012
08/25/95	01:10:02	13698.0719	429.3	380.65	34.87	0.00218199	0.0004	51.2457	0.318	0.35129975	0.012
08/25/95	01:15:01	13580.5032	402	376.11	34.91	0.00152623	0.0004	70.1364	0.257	0.31374927	0.012
08/25/95	01:20:01	13068.8467	245	365.76	34.39	0	0.0004	50.8661	0.197	0.02919974	0.012
08/25/95	01:25:02	13621.9015	453.3	379.23	36.36	0.01504713	0.0004	19.4828	0.275	0.38577342	0.013
08/25/95	01:30:02	13504.6165	428.3	375.64	35.25	0.00904492	0.0004	56.9863	0.246	0.36266876	0.012
08/25/95	01:35:02	13093.886	300.6	370.60	35.1	0.00413475	0.0004	45.3986	0.232	0.18399642	0.012
08/25/95	01:40:02	13119.2457	311	374.60	35.48	0.00859266	0.0004	38.2065	0.249	0.21155337	0.012
08/25/95	01:45:03	13316.6938	371.9	379.13	34.88	0.00641852	0.0004	46.2131	0.318	0.29264112	0.012
08/25/95	01:50:03	13531.6991	448.6	379.60	36.22	0.01578034	0.0004	67.5916	0.297	0.3876523	0.013
08/25/95	01:55:03	13266.4914	339.1	374.52	34.63	0.00467612	0.0004	62.1967	0.259	0.24065729	0.012
08/25/95	02:00:02	13638.4174	485.3	385.00	37.09	0.02489834	0.0004	48.4668	0.337	0.445017	0.013
08/25/95	02:05:02	13732.9136	483.2	388.95	39.07	0.03371802	0.0005	71.2125	0.396	0.43746409	0.014
08/25/95	02:10:03	13575.7452	419.1	376.74	35.18	0.01510432	0.0004	86.1985	0.279	0.34077095	0.012
08/25/95	02:15:03	13655.3855	453	382.10	37.45	0.02750253	0.0004	54.7077	0.342	0.38079587	0.013
08/25/95	02:20:03	13116.9649	269.5	368.81	34.22	0.0015213	0.0004	73.0361	0.227	0.10410031	0.012
08/25/95	02:25:03	13695.597	473.6	382.43	36.86	0.026881	0.0004	32.4001	0.307	0.41322734	0.013
08/25/95	02:30:04	13427.8144	401.8	376.52	35.58	0.01467806	0.0004	64.1166	0.26	0.31247956	0.012
08/25/95	02:35:04	13534.6924	404.2	378.48	35.27	0.01891839	0.0004	48.0592	0.273	0.35607884	0.012
08/25/95	02:40:04	13642.7563	456.1	381.38	36.99	0.02707802	0.0004	52.0392	0.321	0.39540439	0.013
08/25/95	02:45:03	13480.612	374.8	377.75	34.29	0.00402669	0.0004	67.5397	0.298	0.29090148	0.012
08/25/95	02:50:03	13451.6507	393.2	377.28	33.59	0.00380325	0.0004	61.0280	0.274	0.30143451	0.012
08/25/95	02:55:04	13355.2035	348.4	375.94	34.32	0.00554293	0.0004	52.4209	0.252	0.2883411	0.012
08/25/95	03:00:04	13045.2685	281.3	366.49	33.38	0	0.0004	44.3295	0.218	0.13490948	0.012
08/25/95	03:05:04	13256.9005	330.4	370.61	33.45	0	0.0004	26.7063	0.238	0.22204243	0.012
08/25/95	03:10:03	13462.0552	432.7	374.82	34.8	0.01108793	0.0004	37.5827	0.274	0.36318416	0.012
08/25/95	03:15:03	13430.5307	429.2	373.73	34.08	0.010327	0.0004	52.1438	0.255	0.35579221	0.012
08/25/95	03:20:03	13446.098	442.7	372.43	35.02	0.00999516	0.0004	44.1788	0.243	0.37275429	0.012
08/25/95	03:25:04	13318.074	414.1	372.03	34.3	0.00868979	0.0004	38.7817	0.244	0.33488261	0.012
08/25/95	03:30:04	13327.1069	440.5	375.36	36.11	0.02193333	0.0004	38.9477	0.275	0.37275811	0.013
08/25/95	03:35:04	13241.8211	423	376.05	34.36	0.00716907	0.0004	51.8301	0.291	0.33781541	0.012
08/25/95	03:40:04	13176.5391	389.3	374.86	33.68	0.00467076	0.0004	56.7137	0.286	0.26949197	0.012
08/25/95	03:45:05	13209.0295	401.5	374.14	35.37	0.00347326	0.0004	55.2005	0.256	0.24323682	0.012
08/25/95	03:50:05	13246.5841	418.5	376.41	35.2	0.01161372	0.0004	44.1733	0.281	0.28600135	0.012
08/25/95	03:55:05	13332.3887	455.8	376.45	36.49	0.01671188	0.0004	52.6522	0.285	0.34628313	0.013
08/25/95	04:00:05	13233.7194	443.9	377.46	36.84	0.01951844	0.0004	54.6845	0.291	0.32812667	0.013

Site: Beef Processing plant in SW U.S.											
Upwind Data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/25/95	04:05:06	13217.3168	457.5	378.15	37.68	0.0209121	0.0004	55.7196	0.295	0.32841756	0.013
08/25/95	04:10:06	13374.2775	503	385.92	39.99	0.0390145	0.0005	57.0616	0.417	0.41897234	0.014
08/25/95	04:15:06	13270.7614	444.6	379.13	37.99	0.03100671	0.0005	88.4879	0.337	0.34627768	0.013
08/25/95	04:20:06	13389.6666	465.9	382.88	37.5	0.02969437	0.0004	69.0371	0.36	0.37659826	0.013
08/25/95	04:25:07	13277.0193	453	380.64	36.88	0.02405434	0.0004	75.0610	0.326	0.36016495	0.013
08/25/95	04:30:07	13258.5345	442.5	378.77	35.42	0.02438406	0.0004	66.4591	0.289	0.35947523	0.012
08/25/95	04:35:07	13358.4332	442.1	375.47	34.76	0.01942484	0.0004	53.6755	0.283	0.37666836	0.012
08/25/95	04:40:06	13352.3255	467.3	378.22	34.63	0.02086742	0.0004	53.2447	0.311	0.38615603	0.012
08/25/95	04:45:06	13303.2976	486.6	385.07	34.74	0.02034726	0.0004	61.5810	0.316	0.40433372	0.012
08/25/95	04:50:07	13271.2543	496.9	389.34	35.09	0.02193307	0.0004	65.4566	0.333	0.41509157	0.012
08/25/95	04:55:07	13136.2975	446.3	386.65	33.93	0.02042477	0.0004	70.3478	0.334	0.36327701	0.012
08/25/95	05:00:07	13126.555	491.1	387.93	35.85	0.02545388	0.0004	70.9359	0.359	0.39961499	0.012
08/25/95	05:05:06	13014.4462	474.3	384.07	35.04	0.02402459	0.0004	77.8326	0.341	0.38384737	0.012
08/25/95	05:10:06	12947.4451	467.7	380.35	35.55	0.02466575	0.0004	73.2512	0.332	0.37980889	0.012
08/25/95	05:15:07	12809.0549	430.8	379.48	35.28	0.02128239	0.0004	71.4173	0.314	0.34422909	0.012
08/25/95	05:20:07	12806.5133	455.3	379.63	34.64	0.01996892	0.0004	66.5932	0.332	0.34776467	0.012
08/25/95	05:25:07	12645.2219	429.4	375.41	35.78	0.02235255	0.0004	71.3756	0.317	0.30257727	0.012
08/25/95	05:30:06	12648.275	441	376.07	35.17	0.02322485	0.0004	68.3425	0.306	0.32165872	0.012
08/25/95	05:35:06	12652.097	452	376.25	36.22	0.02312021	0.0004	64.5950	0.321	0.34865708	0.013
08/25/95	05:40:07	12601.4895	434.5	378.72	35.08	0.02127027	0.0004	69.2389	0.329	0.33966985	0.012
08/25/95	05:45:07	12612.4018	455.3	379.67	35.7	0.02322485	0.0004	71.0492	0.374	0.35513303	0.012
08/25/95	05:50:07	12421.6961	362.2	375.53	35.04	0.02059621	0.0004	82.4984	0.323	0.25369304	0.012
08/25/95	05:55:07	12467.2131	405.1	372.92	36.01	0.0252677	0.0004	69.2635	0.351	0.26422171	0.013
08/25/95	06:00:07	12507.0344	423.6	377.35	36.6	0.02752864	0.0004	76.1798	0.391	0.31043168	0.013
08/25/95	06:05:08	12408.7574	404	376.05	36.55	0.02522923	0.0004	85.9547	0.349	0.31319044	0.013
08/25/95	06:10:08	12380.5155	363.2	375.76	35.28	0.02294118	0.0004	75.0698	0.326	0.25420128	0.012
08/25/95	06:15:08	12342.8262	357	373.51	35.81	0.02065399	0.0004	69.3911	0.297	0.2432823	0.012
08/25/95	06:20:08	12253.8953	309.2	373.03	34.74	0.01969065	0.0004	60.8939	0.274	0.21681475	0.012
08/25/95	06:25:09	12228.5276	308.4	373.61	35.44	0.0202423	0.0004	52.5656	0.277	0.21678854	0.012
08/25/95	06:30:09	12238.8349	322.8	374.38	35.56	0.02186225	0.0004	54.1743	0.304	0.2302606	0.012
08/25/95	06:35:09	12328.4592	325.4	375.03	34.85	0.01914306	0.0004	62.0040	0.328	0.22786772	0.012
08/25/95	06:40:09	12356.361	333.2	376.51	35.35	0.01872225	0.0004	68.5884	0.283	0.22259889	0.012
08/25/95	06:45:09	12462.7795	330.1	374.87	34.41	0.0163462	0.0004	56.5566	0.266	0.2082506	0.012
08/25/95	06:50:10	12442.8495	341.6	375.52	34.16	0.01591938	0.0004	49.8217	0.264	0.20531639	0.012
08/25/95	06:55:10	12413.5573	343.1	370.87	34.63	0.0168975	0.0004	50.1728	0.262	0.20865687	0.012
08/25/95	07:00:10	12458.5012	339.8	376.14	34.29	0.01743926	0.0004	48.9214	0.263	0.213304	0.012
08/25/95	07:05:11	12495.6383	321.8	375.02	34.45	0.01656105	0.0004	49.9082	0.258	0.20374448	0.012
08/25/95	07:10:11	12474.5849	313.2	374.66	34.93	0.01754497	0.0004	48.6892	0.258	0.20530888	0.012
08/25/95	07:15:11	12354.5081	306.9	374.74	34.31	0.01752829	0.0004	48.1233	0.252	0.19803707	0.012
08/25/95	07:20:11	12298.0868	319.4	374.49	34.96	0.02087148	0.0004	43.8743	0.289	0.21632423	0.012
08/25/95	07:25:11	12315.9067	315.1	376.85	35.03	0.01857095	0.0004	56.8794	0.309	0.2332772	0.012
08/25/95	07:30:12	12490.5388	390.6	378.48	34.82	0.02161181	0.0004	63.6593	0.321	0.30712659	0.012
08/25/95	07:35:12	12669.1843	446.5	380.51	35.62	0.0216283	0.0004	66.5598	0.314	0.38528806	0.012
08/25/95	07:40:12	12704.4756	416.7	384.13	34.12	0.02205883	0.0004	65.1191	0.301	0.36359043	0.012
08/25/95	07:45:12	12765.0665	415.1	385.03	34.86	0.02183734	0.0004	59.9236	0.296	0.3719953	0.012
08/25/95	07:50:13	12841.8271	421.3	383.04	33.86	0.0221675	0.0004	58.2881	0.319	0.35870054	0.012
08/25/95	07:55:13	12943.294	416.1	383.88	33.64	0.02132661	0.0004	65.1289	0.317	0.33915839	0.012
08/25/95	08:00:13	13092.3808	387	382.65	34.12	0.01830432	0.0004	65.1255	0.302	0.29864365	0.012
08/25/95	08:05:13	13309.366	363.6	382.98	32.93	0.01745262	0.0004	61.7722	0.284	0.24717269	0.011
08/25/95	08:10:14	13573.8638	371.2	381.41	33.71	0.01693933	0.0004	55.0123	0.257	0.25988203	0.012
08/25/95	08:15:14	13758.358	395.2	384.50	33.07	0.01640843	0.0004	46.0235	0.271	0.30574372	0.011
08/25/95	08:20:14	13784.5417	372.3	387.09	33.26	0.01510719	0.0004	54.0590	0.255	0.25463273	0.012
08/25/95	08:25:14	13787.3398	371.6	383.37	32.75	0.01259648	0.0004	48.7524	0.239	0.23966172	0.011
08/25/95	08:30:15	13968.6493	338.5	383.81	32.53	0.01194604	0.0004	43.0776	0.238	0.20231554	0.011
08/25/95	08:35:15	14339.0269	371	389.98	32.63	0.01546773	0.0004	42.9093	0.238	0.25252993	0.011
08/25/95	08:40:15	14579.7416	353.4	387.94	31.94	0.01416468	0.0004	42.3844	0.238	0.23948197	0.011
08/25/95	08:45:15	14906.7222	378.4	391.82	31.3	0.01241952	0.0004	41.3929	0.229	0.23377275	0.011
08/25/95	08:50:15	15129.135	368.7	388.04	31.59	0.01154896	0.0004	37.9418	0.233	0.21624049	0.011
08/25/95	08:55:16	15511.8009	366.3	391.57	30.94	0.01035074	0.0004	40.3177	0.23	0.20250019	0.011
08/25/95	09:00:16	15900.7606	379.7	392.74	30.88	0.01035851	0.0004	39.6130	0.23	0.22061432	0.011

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 6											
08/21/95	21:19:46	0.5202678	0.059	0.17234843	0.018	0	0.009	0	1.637	0.06367224	0.007
08/21/95	21:24:46	0.52031192	0.059	0.17758351	0.018	0	0.008	0	1.591	0.05963874	0.007
08/21/95	21:29:46	0.52014822	0.059	0.17756287	0.018	0	0.008	0	1.578	0.05526644	0.006
08/21/95	21:34:47	0.52066382	0.059	0.18848562	0.018	0	0.008	0	1.584	0.05532607	0.007
08/21/95	21:39:47	0.5200836	0.059	0.17306631	0.019	0	0.008	0	1.603	0.05385514	0.007
08/21/95	21:44:48	0.52103614	0.059	0.18340119	0.018	0	0.009	0	1.589	0.05247926	0.007
08/21/95	21:49:47	0.52214097	0.059	0.1807496	0.018	0	0.008	0	1.576	0.05225829	0.007
08/21/95	21:54:47	0.51940351	0.058	0.18019222	0.018	0	0.009	0	1.606	0.05227118	0.007
08/21/95	21:59:47	0.52213964	0.059	0.18700551	0.019	0	0.009	0	1.593	0.05275361	0.007
08/21/95	22:04:48	0.5209666	0.059	0.19537623	0.019	0	0.009	0	1.618	0.05382478	0.007
08/21/95	22:09:48	0.52432885	0.059	0.1796882	0.019	0	0.009	0	1.628	0.0468465	0.007
08/21/95	22:14:49	0.52492563	0.059	0.19164126	0.019	0	0.009	0	1.63	0.05428371	0.007
08/21/95	22:19:48	0.52403471	0.059	0.17541095	0.019	0	0.009	0	1.609	0.04879853	0.007
08/21/95	22:24:48	0.52584506	0.059	0.17227476	0.019	0	0.009	0	1.631	0.05478469	0.007
08/21/95	22:29:48	0.52447433	0.059	0.17068496	0.019	0	0.009	0	1.635	0.05473349	0.007
08/21/95	22:34:49	0.52536518	0.059	0.17340018	0.019	0	0.009	0	1.656	0.05285519	0.007
08/21/95	22:39:49	0.5259374	0.059	0.18355083	0.019	0	0.01	0	1.646	0.05151726	0.008
08/21/95	22:44:50	0.52564213	0.059	0.18015429	0.019	0	0.009	0	1.658	0.05148834	0.007
08/21/95	22:49:50	0.52700366	0.059	0.17771564	0.019	0	0.01	0	1.655	0.05243708	0.008
08/21/95	22:54:49	0.52941708	0.06	0.23201764	0.019	0	0.01	0	1.685	0.05101097	0.008
08/21/95	22:59:49	0.52609329	0.059	0.17846855	0.019	0	0.01	0	1.669	0.05412122	0.008
08/21/95	23:04:50	0.53171957	0.059	0.18512205	0.019	0	0.01	0	1.726	0.05298585	0.008
08/21/95	23:09:50	0.53107246	0.059	0.18454002	0.02	0	0.01	0	1.717	0.0553839	0.008
08/21/95	23:14:49	0.53323291	0.06	0.18628654	0.02	0	0.01	0	1.695	0.05344376	0.008
08/21/95	23:19:50	0.53628164	0.06	0.19599752	0.02	0	0.01	0	1.734	0.0553263	0.008
08/21/95	23:24:50	0.52844491	0.06	0.20719681	0.019	0	0.01	0	1.702	0.05604055	0.008
08/21/95	23:29:50	0.53446489	0.06	0.20949535	0.02	0	0.01	0	1.732	0.05297584	0.008
08/21/95	23:34:51	0.53636005	0.061	0.21010352	0.02	0	0.011	0	1.724	0.05293602	0.008
08/21/95	23:39:51	0.54029744	0.061	0.19358836	0.02	0	0.01	0	1.734	0.05468598	0.008
08/21/95	23:44:50	0.53864875	0.061	0.22206681	0.02	0	0.011	0	1.736	0.05524322	0.008
08/21/95	23:49:51	0.53843812	0.061	0.20583801	0.02	0	0.01	0	1.739	0.05217042	0.008
08/21/95	23:54:50	0.5365788	0.061	0.18954159	0.02	0	0.01	0	1.76	0.05326414	0.008
08/21/95	23:59:50	0.53017384	0.06	0.18400922	0.02	0	0.01	0	1.75	0.05605507	0.008
08/22/95	00:04:51	0.52654753	0.059	0.19424433	0.02	0	0.011	0	1.745	0.05268755	0.008
08/22/95	00:09:50	0.52785925	0.06	0.18735779	0.02	0	0.011	0	1.761	0.06033926	0.009
08/22/95	00:14:50	0.52335575	0.059	0.19191169	0.02	0	0.01	0	1.759	0.05467569	0.008
08/22/95	00:19:50	0.52294119	0.059	0.1810181	0.019	0	0.011	0	1.755	0.05935557	0.009
08/22/95	00:24:51	0.52236123	0.059	0.17368292	0.019	0	0.011	0	1.749	0.06234211	0.009
08/22/95	00:29:51	0.52080697	0.059	0.17571764	0.019	0	0.011	0	1.758	0.05722312	0.008
08/22/95	00:34:52	0.52451613	0.059	0.17378085	0.019	0	0.011	0	1.787	0.06161122	0.008
08/22/95	00:39:52	0.52347685	0.059	0.18291077	0.02	0	0.011	0	1.769	0.05969473	0.008
08/22/95	00:44:53	0.52415432	0.059	0.17847039	0.019	0	0.011	0	1.761	0.06338814	0.009
08/22/95	00:49:51	0.52636062	0.059	0.16911711	0.02	0	0.011	0	1.788	0.06063307	0.009
08/22/95	00:54:50	0.52715538	0.059	0.16803897	0.019	0	0.011	0	1.783	0.05961616	0.009
08/22/95	00:59:50	0.5252003	0.059	0.16691567	0.019	0	0.011	0	1.787	0.06451744	0.009
08/22/95	01:04:51	0.52530947	0.059	0.16658817	0.02	0	0.011	0	1.814	0.06124244	0.009
08/22/95	01:09:51	0.52775	0.059	0.1656991	0.02	0	0.011	0	1.783	0.05901462	0.009
08/22/95	01:14:51	0.52915871	0.059	0.16594854	0.02	0	0.011	0	1.798	0.05957127	0.009
08/22/95	01:19:51	0.53231392	0.06	0.17034482	0.02	0	0.011	0	1.834	0.05849124	0.009
08/22/95	01:24:52	0.53337905	0.059	0.16803897	0.02	0	0.011	0	1.814	0.05557624	0.009
08/22/95	01:29:52	0.5350337	0.06	0.16579278	0.02	0	0.011	0	1.806	0.05217179	0.009
08/22/95	01:34:52	0.52715538	0.059	0.18365272	0.02	0	0.011	0	1.809	0.05710486	0.009
08/22/95	01:39:52	0.52943878	0.059	0.17091	0.02	0	0.011	0	1.815	0.05919056	0.009
08/22/95	01:44:52	0.52522077	0.059	0.16903531	0.02	0	0.011	0	1.783	0.0557631	0.009
08/22/95	01:49:53	0.5254779	0.059	0.16094737	0.02	0	0.011	0	1.787	0.06237256	0.009
08/22/95	01:54:53	0.52671592	0.059	0.16180661	0.02	0	0.011	0	1.806	0.05469826	0.009
08/22/95	01:59:53	0.52834107	0.059	0.1597665	0.02	0	0.012	0	1.83	0.05993968	0.009
08/22/95	02:04:54	0.53181112	0.059	0.15895462	0.02	0	0.011	0	1.842	0.05592848	0.009
08/22/95	02:09:54	0.53473007	0.059	0.16340792	0.02	0	0.011	0	1.813	0.0574873	0.009
08/22/95	02:14:55	0.53185417	0.059	0.17296425	0.02	0	0.011	0	1.824	0.05631141	0.009
08/22/95	02:19:54	0.53123485	0.059	0.15737873	0.02	0	0.011	0	1.834	0.05202423	0.009

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/22/95	02:24:54	0.52755263	0.059	0.15786324	0.02	0	0.011	0	1.81	0.05711799	0.009
08/22/95	02:29:53	0.53105087	0.059	0.15671602	0.02	0	0.012	0	1.844	0.05655262	0.009
08/22/95	02:34:53	0.53322597	0.059	0.15606349	0.02	0	0.011	0	1.862	0.05796644	0.009
08/22/95	02:39:53	0.53201327	0.059	0.16232389	0.021	0	0.011	0	1.851	0.0539629	0.009
08/22/95	02:44:54	0.53289169	0.059	0.17317077	0.021	0	0.011	0	1.865	0.05514923	0.009
08/22/95	02:49:54	0.53224718	0.059	0.1640026	0.021	0	0.011	0	1.886	0.05350748	0.009
08/22/95	02:54:54	0.53224718	0.059	0.15878236	0.02	0	0.011	0	1.884	0.05579134	0.009
08/22/95	02:59:54	0.53311722	0.059	0.15780357	0.02	0	0.011	0	1.889	0.05100611	0.009
08/22/95	03:04:55	0.53487246	0.059	0.15774389	0.021	0	0.011	0	1.884	0.05511795	0.009
08/22/95	03:09:55	0.53312515	0.059	0.15820867	0.021	0	0.011	0	1.888	0.05719434	0.009
08/22/95	03:14:55	0.53224718	0.059	0.1606312	0.02	0	0.011	0	1.858	0.05720515	0.009
08/22/95	03:19:56	0.53168503	0.059	0.16112656	0.02	0	0.011	0	1.856	0.05515947	0.009
08/22/95	03:24:56	0.53081466	0.059	0.1602562	0.021	0	0.011	0	1.884	0.04841413	0.009
08/22/95	03:29:57	0.52931748	0.059	0.15809935	0.021	0	0.011	0	1.862	0.05219236	0.009
08/22/95	03:34:57	0.5291172	0.059	0.15793083	0.021	0	0.011	0	1.872	0.05293346	0.009
08/22/95	03:39:57	0.52891692	0.059	0.16710645	0.02	0	0.012	0	1.879	0.04606836	0.009
08/22/95	03:44:57	0.52839931	0.059	0.1739613	0.021	0	0.011	0	1.87	0.0514717	0.009
08/22/95	03:49:57	0.52717319	0.059	0.1647755	0.021	0	0.011	0	1.887	0.05257639	0.009
08/22/95	03:54:56	0.528157	0.059	0.16344362	0.02	0	0.011	0	1.89	0.05625148	0.009
08/22/95	03:59:57	0.52801564	0.059	0.16085604	0.021	0	0.012	0	1.893	0.05336559	0.009
08/22/95	04:04:59	0.52658831	0.059	0.16026601	0.021	0	0.012	0	1.861	0.05316882	0.009
08/22/95	04:09:59	0.53147116	0.059	0.14930672	0.021	0	0.012	0	1.885	0.05338583	0.009
08/22/95	04:14:59	0.53320728	0.059	0.15191091	0.021	0	0.012	0	1.946	0.04785194	0.009
08/22/95	04:19:59	0.53084355	0.059	0.15117383	0.021	0	0.012	0	1.888	0.04804161	0.009
08/22/95	04:24:59	0.52943375	0.059	0.15019782	0.021	0	0.011	0	1.852	0.05281324	0.009
08/22/95	04:29:58	0.5321449	0.059	0.15074005	0.021	0	0.011	0	1.884	0.04695715	0.009
08/22/95	04:34:58	0.53366314	0.059	0.17861069	0.021	0	0.011	0	1.892	0.04359532	0.009
08/22/95	04:39:58	0.5364693	0.06	0.17531535	0.021	0	0.012	0	1.93	0.04513068	0.009
08/22/95	04:44:59	0.53941689	0.06	0.15190413	0.021	0	0.012	0	1.901	0.04174382	0.009
08/22/95	04:49:59	0.53564222	0.059	0.1583195	0.021	0	0.011	0	1.916	0.04973898	0.009
08/22/95	04:54:59	0.54277548	0.06	0.1657818	0.021	0	0.012	0	1.904	0.04510479	0.009
08/22/95	04:59:58	0.55101578	0.061	0.15840891	0.021	0	0.011	0	1.885	0.04033409	0.009
08/22/95	05:04:58	0.54331761	0.06	0.15580671	0.021	0	0.012	0	1.906	0.04586377	0.009
08/22/95	05:09:57	0.54061278	0.061	0.18504632	0.021	0	0.012	0	1.891	0.05019124	0.009
08/22/95	05:14:58	0.53977176	0.06	0.17721585	0.022	0	0.011	0	1.911	0.05004506	0.009
08/22/95	05:19:58	0.5368722	0.06	0.19212664	0.021	0	0.012	0	1.912	0.0471928	0.009
08/22/95	05:24:57	0.53701086	0.06	0.15679938	0.021	0	0.011	0	1.898	0.04725609	0.009
08/22/95	05:29:57	0.53453965	0.06	0.15714126	0.021	0	0.012	0	1.897	0.05090339	0.009
08/22/95	05:34:58	0.53314446	0.06	0.20660158	0.021	0	0.012	0	1.893	0.04624763	0.009
08/22/95	05:39:58	0.53560196	0.06	0.1574473	0.021	0	0.011	0	1.918	0.04649886	0.009
08/22/95	05:44:58	0.53504857	0.06	0.18130639	0.021	0	0.012	0	1.893	0.04424482	0.009
08/22/95	05:49:58	0.53646099	0.06	0.16883379	0.022	0	0.012	0	1.905	0.04380377	0.009
08/22/95	05:54:59	0.54024651	0.059	0.16461565	0.022	0	0.012	0	1.947	0.04694034	0.009
08/22/95	06:00:00	0.54026562	0.06	0.17079225	0.022	0	0.012	0	1.931	0.04410332	0.01
08/22/95	06:04:59	0.54005473	0.06	0.18178348	0.022	0	0.012	0	1.912	0.04409492	0.009
08/22/95	06:09:59	0.54546694	0.06	0.18344283	0.022	0	0.012	0	1.927	0.04548259	0.009
08/22/95	06:14:59	0.539417	0.06	0.1699385	0.022	0	0.012	0	1.914	0.04548259	0.009
08/22/95	06:19:59	0.53993597	0.06	0.16898677	0.022	0	0.012	0	1.933	0.04832827	0.009
08/22/95	06:24:59	0.54265804	0.061	0.19186954	0.022	0	0.012	0	1.906	0.04202548	0.009
08/22/95	06:29:59	0.54018352	0.061	0.20723954	0.022	0	0.012	0	1.903	0.04298142	0.009
08/22/95	06:34:58	0.54083643	0.061	0.20687614	0.022	0	0.011	0	1.914	0.04437688	0.009
08/22/95	06:39:58	0.5387796	0.061	0.2178229	0.022	0	0.012	0	1.932	0.04460132	0.009
08/22/95	06:44:59	0.53835844	0.061	0.22087054	0.022	0	0.012	0	1.934	0.04274914	0.009
08/22/95	06:49:59	0.53112563	0.06	0.22831925	0.022	0	0.012	0	1.889	0.03983442	0.009
08/22/95	06:54:59	0.53477151	0.062	0.28207847	0.022	0	0.011	0	1.913	0.04040496	0.009
08/22/95	06:59:58	0.53682417	0.061	0.21974248	0.022	0	0.012	0	1.931	0.04580669	0.009
08/22/95	07:04:58	0.53877758	0.061	0.24562554	0.022	0	0.011	0	1.907	0.04136965	0.009
08/22/95	07:09:59	0.5340057	0.06	0.21031676	0.022	0	0.012	0	1.918	0.04668902	0.009
08/22/95	07:14:59	0.53916543	0.063	0.30301011	0.022	0	0.012	0	1.921	0.04262263	0.009
08/22/95	07:20:00	0.54056083	0.063	0.29998691	0.022	0	0.012	0	1.922	0.0435046	0.009
08/22/95	07:25:00	0.53697711	0.06	0.22529221	0.022	0	0.012	0	1.922	0.04482027	0.009
08/22/95	07:29:59	0.53967488	0.063	0.30552334	0.022	0	0.012	0	1.937	0.04559565	0.009

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/22/95	07:35:00	0.54149928	0.063	0.29681139	0.022	0	0.012	0	1.906	0.03814444	0.009
08/22/95	07:40:09	0.54309754	0.064	0.343734	0.022	0	0.011	0	1.939	0.03644513	0.009
08/22/95	07:45:01	0.53840973	0.063	0.32098338	0.022	0	0.011	0	1.903	0.03441046	0.009
08/22/95	07:50:01	0.53542757	0.062	0.28662657	0.022	0	0.011	0	1.864	0.03108654	0.009
08/22/95	07:55:02	0.53517209	0.061	0.26502932	0.022	0	0.011	0	1.899	0.03742614	0.009
08/22/95	08:00:02	0.53707032	0.061	0.24265685	0.022	0	0.011	0	1.892	0.03486762	0.009
08/22/95	08:05:02	0.53658717	0.06	0.21260589	0.021	0	0.011	0	1.898	0.0346889	0.009
08/22/95	08:10:02	0.53466456	0.06	0.19009324	0.021	0	0.011	0	1.915	0.03681691	0.009
08/22/95	08:15:01	0.53449412	0.06	0.18159235	0.021	0	0.011	0	1.892	0.03566211	0.009
08/22/95	08:20:01	0.53553436	0.06	0.17621161	0.021	0	0.011	0	1.896	0.04238278	0.009
08/22/95	08:25:01	0.5397972	0.073	0.56433343	0.022	0	0.011	0	1.949	0.03779019	0.009
08/22/95	08:30:02	0.53080516	0.06	0.1970936	0.021	0	0.011	0	1.87	0.04086488	0.009
08/22/95	08:35:02	0.53165182	0.06	0.18985999	0.02	0	0.011	0	1.874	0.04242253	0.009
08/22/95	08:40:02	0.53201988	0.06	0.18648685	0.021	0	0.011	0	1.901	0.04379532	0.009
08/22/95	08:45:02	0.5311993	0.061	0.17259857	0.02	0	0.011	0	1.889	0.04284751	0.008
08/22/95	08:50:02	0.53032037	0.06	0.17413669	0.02	0	0.01	0	1.899	0.0409798	0.008
08/22/95	08:55:03	0.53032037	0.06	0.17952009	0.02	0	0.011	0	1.893	0.03801343	0.009
08/22/95	09:00:03	0.52845266	0.06	0.1702914	0.02	0	0.011	0	1.848	0.04647307	0.008
08/22/95	09:05:03	0.53021051	0.06	0.17688332	0.019	0	0.011	0	1.855	0.04054034	0.009
08/22/95	09:10:03	0.52757374	0.06	0.18006942	0.019	0	0.011	0	1.846	0.04405603	0.009
08/22/95	09:15:03	0.52438764	0.06	0.18885865	0.019	0	0.011	0	1.824	0.04779146	0.009
08/22/95	09:20:04	0.52372845	0.06	0.17160978	0.019	0	0.011	0	1.806	0.05130715	0.008
08/22/95	09:25:04	0.5223002	0.06	0.17139005	0.019	0	0.01	0	1.742	0.05152688	0.008
08/22/95	21:17:30	0.5223002	0.06	0.17139005	0.019	0	0.01	0	1.742	0.05152688	0.008
08/22/95	21:19:19	0.48582488	0.054	0.15699768	0.017	0	0.011	0	1.503	0	0.009
08/22/95	21:35:17	0.48791232	0.055	0.14667033	0.018	0	0.011	0	1.404	0	0.009
08/22/95	21:51:21	0.48923071	0.055	0.14875778	0.018	0	0.011	0	1.591	0	0.008
08/22/95	22:06:25	0.4898899	0.055	0.15370172	0.018	0	0.01	0	1.558	0	0.008
Downwind Data											
Run 7											
08/22/95	22:15:08	0.50560575	0.056	0.17569524	0.019	0	0.011	0	1.549	0	0.009
08/22/95	22:20:09	0.50826458	0.056	0.16024376	0.019	0	0.011	0	1.687	0	0.009
08/22/95	22:25:09	0.50720906	0.056	0.15894312	0.019	0	0.011	0	1.618	0	0.009
08/22/95	22:30:09	0.50850875	0.056	0.1574453	0.019	0	0.011	0	1.573	0	0.009
08/22/95	22:35:09	0.50944643	0.056	0.1599642	0.019	0	0.012	0	1.648	0	0.009
08/22/95	22:40:09	0.51301692	0.056	0.15830738	0.019	0	0.012	0	1.691	0	0.009
08/22/95	22:45:08	0.50448419	0.056	0.16735662	0.019	0	0.012	0	1.647	0	0.009
08/22/95	22:50:08	0.50470368	0.056	0.16296694	0.019	0	0.012	0	1.683	0	0.009
08/22/95	22:55:09	0.50477866	0.056	0.16007316	0.019	0	0.012	0	1.586	0	0.009
08/22/95	23:00:09	0.51024716	0.056	0.15690648	0.019	0	0.012	0	1.679	0	0.009
08/22/95	23:05:09	0.50699065	0.056	0.15859876	0.019	0	0.012	0	1.882	0	0.01
08/22/95	23:10:08	0.50647177	0.056	0.15886736	0.02	0	0.012	0	2.222	0	0.009
08/22/95	23:15:09	0.51403396	0.056	0.15971262	0.02	0	0.012	0	3.911	0	0.01
08/22/95	23:20:09	0.51207794	0.057	0.15935446	0.019	0	0.014	0	3.026	0	0.011
08/22/95	23:25:09	0.5077161	0.057	0.16479177	0.02	0	0.012	0	2.003	0	0.01
08/22/95	23:30:09	0.51682821	0.056	0.16841452	0.02	0	0.012	0	2.075	0	0.01
08/22/95	23:35:09	0.50906869	0.057	0.18305926	0.02	0	0.012	0	2.454	0	0.009
08/22/95	23:40:09	0.51007863	0.057	0.16332567	0.02	0	0.012	0	2.159	0	0.009
08/22/95	23:45:10	0.51189732	0.057	0.16462041	0.02	0	0.012	0	1.667	0	0.009
08/22/95	23:50:10	0.50854916	0.057	0.16245169	0.02	0	0.012	0	1.609	0	0.009
08/22/95	23:55:10	0.50970717	0.058	0.17233996	0.021	0	0.012	0	1.687	0	0.009
08/23/95	00:00:09	0.51150387	0.057	0.16359399	0.021	0	0.012	0	1.67	0	0.009
08/23/95	00:05:10	0.51425434	0.058	0.1705096	0.02	0	0.012	0	1.912	0	0.01
08/23/95	00:10:10	0.5114446	0.058	0.16804764	0.021	0	0.012	0	2.414	0	0.01
08/23/95	00:15:08	0.51560894	0.058	0.15981371	0.021	0	0.012	0	2.012	0	0.01
08/23/95	00:20:09	0.51703636	0.058	0.15869433	0.021	0	0.012	0	1.762	0	0.01
08/23/95	00:25:09	0.51290941	0.058	0.16748507	0.021	0	0.012	0	2.554	0	0.01
08/23/95	00:30:10	0.5139129	0.059	0.17721885	0.021	0	0.013	0	4.749	0	0.011
08/23/95	00:35:08	0.51359804	0.059	0.16934913	0.021	0	0.014	0	3.228	0	0.011
08/23/95	00:40:08	0.51265395	0.058	0.16631612	0.021	0	0.013	0	2.517	0	0.01
08/23/95	00:45:09	0.51211008	0.059	0.17012323	0.021	0	0.012	0	2.35	0	0.01
08/23/95	00:50:10	0.51540683	0.058	0.17024406	0.021	0	0.012	0	2.399	0	0.01

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	00:55:09	0.51330097	0.059	0.16472976	0.022	0	0.012	0	2.299	0	0.01
08/23/95	01:00:08	0.51309508	0.059	0.16730417	0.021	0	0.012	0	2.17	0	0.01
08/23/95	01:05:09	0.51325554	0.059	0.1773519	0.021	0	0.012	0	2.195	0	0.01
08/23/95	01:10:09	0.52007123	0.058	0.17375576	0.021	0	0.012	0	2.198	0	0.01
08/23/95	01:15:10	0.51355871	0.058	0.16915693	0.021	0	0.012	0	2.013	0	0.01
08/23/95	01:20:10	0.51164888	0.058	0.16631304	0.021	0	0.012	0	2.015	0	0.01
08/23/95	01:25:10	0.51448438	0.058	0.16769345	0.021	0	0.012	0	2.503	0	0.009
08/23/95	01:30:10	0.51033338	0.058	0.16699647	0.021	0	0.012	0	2.558	0	0.009
08/23/95	01:35:09	0.51028523	0.058	0.1699501	0.021	0	0.012	0	2.39	0	0.009
08/23/95	01:40:09	0.51886465	0.058	0.17019978	0.021	0	0.012	0	2.285	0	0.009
08/23/95	01:45:11	0.51103437	0.058	0.16900349	0.021	0	0.012	0	2.219	0	0.009
08/23/95	01:50:10	0.51844023	0.058	0.1666881	0.021	0	0.012	0	2.51	0	0.01
08/23/95	01:55:10	0.51160188	0.058	0.16589555	0.021	0	0.014	0	2.748	0	0.011
08/23/95	02:00:11	0.51435346	0.058	0.16916949	0.021	0	0.013	0	2.679	0	0.01
08/23/95	02:05:11	0.51219203	0.058	0.16783387	0.021	0	0.013	0	2.842	0	0.01
08/23/95	02:10:11	0.51288924	0.058	0.16303908	0.021	0	0.015	0	3.292	0	0.012
08/23/95	02:15:10	0.51302022	0.058	0.16427932	0.021	0	0.016	0	3.39	0	0.013
08/23/95	02:20:10	0.51250015	0.058	0.168881	0.021	0	0.014	0	3.195	0	0.011
08/23/95	02:25:11	0.51236918	0.058	0.16894511	0.021	0	0.015	0	2.91	0	0.012
08/23/95	02:30:11	0.51293402	0.058	0.16747095	0.021	0	0.017	0	3.273	0	0.013
08/23/95	02:35:11	0.51291171	0.058	0.16579841	0.021	0	0.016	0	3.732	0	0.013
08/23/95	02:40:10	0.51427827	0.059	0.16766167	0.021	0	0.016	0	4.693	0	0.013
08/23/95	02:45:11	0.516135	0.059	0.16502423	0.021	0	0.016	0	5.566	0	0.013
08/23/95	02:50:11	0.51599996	0.059	0.16076217	0.022	0	0.017	0	5.638	0	0.014
08/23/95	02:55:11	0.51449295	0.059	0.16777651	0.022	0	0.016	0	4.601	0	0.013
08/23/95	03:00:11	0.51389691	0.059	0.21371689	0.022	0	0.015	0	4.174	0	0.012
08/23/95	03:05:12	0.51480752	0.059	0.20596637	0.022	0	0.017	0	4.697	0	0.014
08/23/95	03:10:12	0.51609799	0.059	0.17261092	0.022	0	0.015	0	4.117	0	0.012
08/23/95	03:15:12	0.51895612	0.059	0.16500421	0.022	0	0.017	0	4.531	0	0.014
08/23/95	03:20:11	0.52102389	0.059	0.16356467	0.022	0	0.017	0	5.254	0	0.014
08/23/95	03:25:11	0.51953586	0.059	0.1655283	0.022	0	0.017	0	4.443	0	0.014
08/23/95	03:30:12	0.5145971	0.059	0.16529417	0.022	0	0.016	0	3.387	0	0.013
08/23/95	03:35:12	0.51693624	0.058	0.16237308	0.022	0	0.014	0	2.638	0	0.011
08/23/95	03:40:12	0.51496189	0.059	0.17565346	0.022	0	0.014	0	3.405	0	0.011
08/23/95	03:45:12	0.51477559	0.059	0.16604619	0.022	0	0.014	0	2.728	0	0.011
08/23/95	03:50:12	0.51588481	0.059	0.16400775	0.022	0	0.016	0	3.108	0	0.013
08/23/95	03:55:11	0.51599278	0.059	0.16595122	0.022	0	0.017	0	4.187	0	0.014
08/23/95	04:00:12	0.51603304	0.059	0.16530788	0.022	0	0.018	0	5.478	0	0.014
08/23/95	04:05:12	0.51941538	0.058	0.16241882	0.022	0	0.017	0	4.843	0	0.013
08/23/95	04:10:12	0.51594031	0.059	0.16385762	0.022	0	0.017	0	5.039	0	0.013
08/23/95	04:15:12	0.51486001	0.059	0.16797389	0.022	0	0.017	0	4.889	0	0.013
08/23/95	04:20:12	0.514884	0.058	0.16530087	0.022	0	0.016	0	4.101	0	0.013
08/23/95	04:25:13	0.51584965	0.058	0.1627286	0.022	0	0.016	0	4.661	0	0.013
08/23/95	04:30:13	0.51610836	0.058	0.16444789	0.022	0	0.017	0	5.231	0	0.014
08/23/95	04:35:13	0.51635592	0.059	0.16489587	0.022	0	0.016	0	4.758	0	0.013
08/23/95	04:40:12	0.51622453	0.059	0.16940141	0.022	0	0.017	0	5.219	0	0.014
08/23/95	04:45:12	0.51908101	0.058	0.16797301	0.022	0	0.017	0	4.696	0	0.014
08/23/95	04:50:13	0.51515114	0.058	0.16720198	0.022	0	0.016	0	4.71	0	0.013
08/23/95	04:55:13	0.51481556	0.058	0.1695098	0.022	0	0.017	0	4.301	0	0.013
08/23/95	05:00:13	0.51499007	0.059	0.18156979	0.022	0	0.015	0	3.74	0	0.012
08/23/95	05:05:13	0.51593014	0.059	0.16703008	0.022	0	0.016	0	4.297	0	0.013
08/23/95	05:10:12	0.51920829	0.058	0.16996602	0.022	0	0.016	0	4.082	0	0.013
08/23/95	05:15:12	0.51455317	0.058	0.16401179	0.022	0	0.016	0	3.651	0	0.012
08/23/95	05:20:13	0.51756481	0.058	0.16179992	0.022	0	0.015	0	3.585	0	0.012
08/23/95	05:25:13	0.51405688	0.058	0.16539127	0.022	0	0.015	0	3.543	0	0.012
08/23/95	05:30:13	0.51760335	0.058	0.16646159	0.022	0	0.015	0	3.678	0	0.012
08/23/95	05:35:13	0.51428425	0.059	0.16893577	0.022	0	0.015	0	3.564	0	0.012
08/23/95	05:40:13	0.51363094	0.059	0.19002939	0.022	0	0.013	0	2.527	0	0.01
08/23/95	05:45:14	0.51364123	0.059	0.20480768	0.022	0	0.012	0	2.735	0	0.01
08/23/95	05:50:14	0.51403267	0.059	0.18245454	0.022	0	0.015	0	3.851	0	0.012
08/23/95	05:55:14	0.5151719	0.059	0.18327814	0.022	0	0.016	0	3.991	0	0.012
08/23/95	06:00:14	0.5145115	0.059	0.17962941	0.022	0	0.015	0	3.418	0	0.012

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	06:05:13	0.51380781	0.058	0.17459489	0.022	0	0.014	0	3.311	0	0.011
08/23/95	06:10:13	0.5136885	0.058	0.16855404	0.022	0	0.015	0	3.909	0	0.012
08/23/95	06:15:13	0.51457759	0.059	0.21001618	0.022	0	0.015	0	3.702	0	0.012
08/23/95	06:20:14	0.51400142	0.059	0.21027823	0.022	0	0.013	0	2.562	0	0.01
08/23/95	06:25:14	0.51629441	0.06	0.25415078	0.023	0	0.012	0	2.073	0	0.01
08/23/95	06:30:14	0.51635086	0.06	0.2293694	0.023	0	0.012	0	2.416	0	0.01
08/23/95	06:35:14	0.51625226	0.059	0.20268241	0.023	0	0.012	0	2.691	0	0.01
08/23/95	06:40:14	0.51527199	0.06	0.25094695	0.023	0	0.013	0	2.897	0	0.011
08/23/95	06:45:13	0.51394793	0.059	0.2038088	0.022	0	0.013	0	3.012	0	0.01
08/23/95	06:50:15	0.51418191	0.059	0.20772733	0.022	0	0.015	0	3.844	0	0.012
08/23/95	06:55:15	0.51407813	0.059	0.19371374	0.022	0	0.015	0	3.61	0	0.012
08/23/95	07:00:15	0.51360178	0.06	0.24080843	0.022	0	0.014	0	3.237	0	0.011
08/23/95	07:05:15	0.51298648	0.059	0.22019192	0.022	0	0.014	0	2.858	0	0.011
08/23/95	07:10:15	0.51403551	0.06	0.23245227	0.022	0	0.014	0	2.997	0	0.011
08/23/95	07:15:15	0.51386049	0.06	0.24849566	0.022	0	0.015	0	3.327	0	0.012
08/23/95	07:20:16	0.51408697	0.06	0.2366638	0.022	0	0.016	0	3.434	0	0.012
08/23/95	07:25:16	0.51373169	0.06	0.23128203	0.022	0	0.015	0	3.804	0	0.012
08/23/95	07:30:16	0.51386347	0.06	0.25152492	0.022	0	0.014	0	3.151	0	0.011
08/23/95	07:35:16	0.5174029	0.061	0.27428196	0.022	0	0.015	0	3.642	0	0.012
08/23/95	07:40:16	0.52355294	0.061	0.24581119	0.022	0	0.015	0	3.52	0	0.012
Run 8											
08/23/95	09:54:49	0.50057998	0.058	0.28848663	0.017	0	0.021	0	1.825	0	0.017
08/23/95	09:59:50	0.50297227	0.059	0.32708085	0.017	0.02944389	0.022	0	1.926	0	0.018
08/23/95	10:04:51	0.49933981	0.059	0.31861479	0.017	0.04117925	0.023	0	1.855	0	0.018
08/23/95	10:09:50	0.49861854	0.059	0.31931889	0.017	0.02791558	0.023	0	1.821	0	0.018
08/23/95	10:14:50	0.49772317	0.059	0.31708446	0.017	0	0.021	0	1.95	0	0.017
08/23/95	10:19:49	0.49693062	0.057	0.25117262	0.017	0	0.02	0	1.804	0	0.015
08/23/95	10:24:56	0.49571509	0.056	0.21459623	0.017	0	0.018	0	1.75	0	0.015
08/23/95	10:29:49	0.49811039	0.056	0.20572202	0.017	0	0.019	0	1.76	0	0.015
08/23/95	10:34:48	0.4948847	0.056	0.21407001	0.017	0	0.018	0	1.704	0	0.015
Run 9											
08/23/95	10:44:51	0.49741219	0.056	0.21433118	0.017	0.02269519	0.019	0	1.828	0	0.015
08/23/95	10:49:51	0.49589818	0.056	0.20607029	0.017	0.04132485	0.02	0	1.771	0	0.016
08/23/95	10:54:50	0.49532532	0.056	0.20067878	0.016	0	0.02	0	1.748	0	0.016
08/23/95	10:59:50	0.49545201	0.055	0.19920121	0.017	0	0.021	0	1.829	0	0.016
08/23/95	11:04:50	0.49487822	0.056	0.20755821	0.016	0	0.02	0	1.648	0	0.016
08/23/95	11:09:50	0.49763284	0.056	0.20326942	0.017	0	0.019	0	1.753	0	0.015
08/23/95	11:14:50	0.49637428	0.056	0.20500968	0.016	0	0.02	0	1.706	0	0.016
08/23/95	11:19:51	0.49439772	0.056	0.20086641	0.017	0	0.019	0	1.596	0	0.015
08/23/95	11:25:03	0.49751953	0.056	0.20171812	0.016	0	0.02	0	1.785	0	0.016
08/23/95	11:29:55	0.49675919	0.056	0.20201688	0.017	0	0.02	0	1.666	0	0.016
08/23/95	11:34:54	0.49575626	0.056	0.19890288	0.016	0	0.021	0	1.557	0	0.017
Run 10											
08/23/95	11:44:50	0.4941739	0.056	0.19882734	0.017	0	0.011	0	1.931	0.0497625	0.009
08/23/95	11:49:54	0.49659638	0.055	0.1977468	0.017	0	0.011	0	1.94	0.02708708	0.009
08/23/95	11:54:50	0.49934878	0.055	0.19370233	0.017	0	0.01	0	1.881	0.01871305	0.008
08/23/95	11:59:49	0.49467052	0.055	0.19960585	0.017	0	0.01	0	1.948	0.02517351	0.008
08/23/95	12:04:50	0.49834075	0.055	0.19804278	0.017	0	0.01	0	1.861	0.02787764	0.008
08/23/95	12:09:50	0.49339317	0.055	0.1967772	0.016	0	0.01	0	1.699	0.02420672	0.008
08/23/95	12:14:50	0.49410335	0.055	0.20897081	0.016	0	0.01	0	1.708	0.02575894	0.008
08/23/95	12:19:50	0.49877252	0.055	0.19073008	0.017	0	0.01	0	1.78	0.00902403	0.008
08/23/95	12:24:52	0.4949549	0.055	0.19510392	0.016	0	0.011	0	1.834	0.01584034	0.008
08/23/95	12:29:52	0.49197701	0.056	0.23632328	0.016	0	0.011	0	1.705	0.01541967	0.009
08/23/95	12:34:51	0.4976041	0.055	0.2384702	0.016	0	0.011	0	1.991	0	0.009
08/23/95	12:39:51	0.49229654	0.055	0.20313804	0.017	0	0.011	0	1.966	0.01420624	0.009
08/23/95	12:44:51	0.49176301	0.054	0.19511562	0.016	0	0.011	0	1.974	0.01242561	0.009
08/23/95	12:49:52	0.491492	0.055	0.19221108	0.017	0	0.011	0	1.788	0.00995738	0.009
08/23/95	12:54:52	0.49559712	0.054	0.19133813	0.017	0	0.011	0	1.858	0.01299486	0.008
08/23/95	12:59:51	0.4958631	0.055	0.19149185	0.016	0	0.011	0	1.81	0.00996653	0.008
08/23/95	13:04:51	0.4942741	0.055	0.1938791	0.016	0	0.011	0	2	0.01332849	0.009
08/23/95	13:09:52	0.49601682	0.055	0.19511562	0.016	0	0.01	0	1.814	0.01264949	0.008
08/23/95	13:14:52	0.49230503	0.054	0.1965634	0.016	0	0.011	0	1.729	0.0127755	0.008

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	13:19:53	0.49332471	0.055	0.19423117	0.016	0	0.011	0	1.839	0.01268678	0.009
08/23/95	13:24:51	0.49292188	0.055	0.19759562	0.016	0	0.011	0	1.911	0.01460343	0.009
08/23/95	13:29:52	0.4958588	0.054	0.19805177	0.016	0	0.011	0	1.958	0	0.009
08/23/95	13:34:52	0.49403752	0.055	0.19431843	0.016	0	0.01	0	1.724	0.01054007	0.008
08/23/95	13:39:52	0.49291947	0.054	0.19225206	0.016	0	0.01	0	1.659	0.01481452	0.008
08/23/95	13:44:51	0.4957679	0.054	0.19509852	0.016	0	0.01	0	1.739	0.00953616	0.008
08/23/95	13:49:52	0.49477964	0.054	0.20156858	0.016	0	0.011	0	1.814	0	0.008
08/23/95	13:54:52	0.49249603	0.054	0.19807761	0.016	0	0.01	0	1.622	0.01911078	0.008
08/23/95	13:59:52	0.49334921	0.054	0.19111524	0.016	0	0.011	0	1.703	0.0146061	0.008
08/23/95	14:04:52	0.49963201	0.054	0.19560109	0.015	0	0.011	0	1.944	0.01563459	0.009
08/23/95	14:09:53	0.49061184	0.054	0.18910285	0.016	0	0.011	0	1.713	0.00965727	0.008
08/23/95	14:14:53	0.49369046	0.055	0.18988095	0.016	0	0.01	0	1.679	0	0.008
08/23/95	14:19:53	0.49448215	0.054	0.1923674	0.015	0	0.011	0	1.712	0	0.008
08/23/95	14:24:54	0.49254608	0.054	0.19307806	0.015	0	0.011	0	1.665	0	0.008
08/23/95	14:29:53	0.49299426	0.054	0.19486028	0.015	0	0.011	0	1.425	0	0.009
08/23/95	14:34:56	0.49207344	0.054	0.1904619	0.015	0	0.011	0	1.603	0	0.009
08/23/95	14:39:53	0.49286536	0.054	0.1893386	0.015	0	0.011	0	1.844	0	0.009
08/23/95	14:44:52	0.4946897	0.054	0.18767586	0.015	0	0.011	0	1.656	0	0.009
08/23/95	14:49:53	0.49196203	0.054	0.19121202	0.015	0	0.011	0	1.764	0	0.009
08/23/95	14:54:53	0.49174035	0.054	0.18607608	0.016	0	0.011	0	1.61	0	0.009
08/23/95	14:59:54	0.4922576	0.054	0.18282245	0.015	0	0.011	0	1.628	0	0.009
08/23/95	15:04:54	0.48991515	0.054	0.17929768	0.016	0	0.011	0	1.844	0	0.009
08/23/95	15:09:54	0.4905955	0.054	0.17715948	0.016	0	0.011	0	1.66	0	0.009
08/23/95	15:14:55	0.49390734	0.054	0.18057677	0.015	0	0.011	0	1.779	0	0.009
08/23/95	15:19:55	0.49135312	0.054	0.17880735	0.015	0	0.011	0	1.539	0	0.009
08/23/95	15:24:55	0.49211221	0.054	0.17950551	0.015	0	0.011	0	1.38	0	0.009
08/23/95	15:29:58	0.4949411	0.054	0.17348451	0.016	0	0.011	0	1.36	0	0.009
08/23/95	15:34:56	0.49025157	0.054	0.17984957	0.015	0	0.012	0	1.586	0	0.01
08/23/95	15:39:56	0.49020513	0.054	0.17398385	0.015	0	0.012	0	1.589	0	0.01
08/23/95	15:44:57	0.49052052	0.055	0.21944042	0.015	0	0.011	0	1.563	0	0.009
08/23/95	15:49:57	0.49526648	0.054	0.17521167	0.016	0	0.012	0	1.457	0	0.01
08/23/95	15:54:57	0.49468427	0.054	0.16685018	0.016	0	0.013	0	1.372	0	0.01
08/23/95	15:59:58	0.4955874	0.054	0.17194541	0.016	0	0.012	0	2.017	0	0.01
08/23/95	16:05:04	0.49234958	0.054	0.17249213	0.016	0	0.011	0	1.847	0	0.009
Run 11											
08/23/95	16:59:50	0.48866608	0.054	0.17530825	0.015	0	0.011	0	1.557	0	0.009
08/23/95	17:04:50	0.49362888	0.054	0.16986175	0.015	0	0.013	0	1.383	0	0.01
08/23/95	17:09:51	0.48910225	0.054	0.17427521	0.015	0	0.013	0	1.466	0	0.011
08/23/95	17:14:51	0.48995977	0.054	0.16958404	0.016	0	0.013	0	1.481	0	0.01
08/23/95	17:19:51	0.48887591	0.054	0.16940908	0.015	0	0.013	0	1.346	0	0.01
08/23/95	17:24:52	0.49216321	0.054	0.17484299	0.015	0	0.013	0	1.509	0	0.011
08/23/95	17:29:51	0.4900422	0.054	0.17770388	0.015	0	0.014	0	1.295	0	0.011
08/23/95	17:34:51	0.49537636	0.054	0.17244759	0.015	0	0.014	0	1.525	0	0.011
08/23/95	17:39:52	0.48988183	0.054	0.17267995	0.015	0	0.013	0	1.301	0	0.011
08/23/95	17:44:52	0.489876	0.054	0.1718188	0.016	0	0.014	0	1.655	0	0.011
08/23/95	17:49:51	0.49320493	0.054	0.17243504	0.016	0	0.014	0	1.685	0	0.011
08/23/95	17:54:52	0.49444954	0.054	0.17707404	0.015	0	0.014	0	1.571	0	0.011
08/23/95	17:59:52	0.4900422	0.054	0.16673869	0.016	0	0.014	0	1.279	0	0.011
08/23/95	18:04:51	0.494315	0.054	0.17276151	0.015	0	0.014	0	1.594	0	0.011
08/23/95	18:09:51	0.49979796	0.054	0.18082858	0.015	0	0.015	0	1.976	0	0.012
08/23/95	18:14:52	0.49194236	0.054	0.17088405	0.015	0	0.014	0	1.707	0	0.011
08/23/95	18:19:52	0.49162789	0.054	0.17313705	0.016	0	0.014	0	1.382	0	0.011
08/23/95	18:24:52	0.49264949	0.054	0.16896003	0.016	0	0.014	0	1.489	0	0.011
08/23/95	18:29:53	0.4922665	0.054	0.16852875	0.016	0	0.015	0	1.823	0	0.012
08/23/95	18:34:53	0.49389188	0.054	0.16824144	0.015	0	0.015	0	1.849	0	0.012
08/23/95	18:39:54	0.49278617	0.054	0.17554379	0.015	0	0.015	0	1.74	0	0.012
08/23/95	18:44:54	0.4921142	0.054	0.17114563	0.016	0	0.013	0	1.566	0	0.01
Run 12											
08/23/95	19:24:51	0.49578749	0.056	0.16792621	0.016	0	0.019	1.54194974	1.207	0	0.015
08/23/95	19:29:52	0.49945163	0.055	0.16468405	0.016	0	0.019	0	1.33	0	0.015
08/23/95	19:34:52	0.49634456	0.056	0.1731696	0.016	0	0.019	0	1.296	0	0.015
08/23/95	19:39:51	0.49674534	0.056	0.17262463	0.016	0	0.019	1.64308075	1.252	0	0.015

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	19:44:52	0.49608527	0.056	0.16659664	0.016	0	0.019	1.82874611	1.211	0	0.015
08/23/95	19:49:52	0.5030118	0.055	0.16770799	0.016	0	0.019	1.52788151	1.258	0	0.015
08/23/95	19:54:51	0.49714857	0.056	0.17274091	0.016	0	0.019	1.90227986	1.207	0	0.015
08/23/95	19:59:52	0.50077523	0.055	0.17110847	0.016	0	0.019	2.20412815	1.232	0	0.015
08/23/95	20:04:52	0.49827849	0.056	0.16605551	0.016	0	0.019	0	1.315	0	0.015
08/23/95	20:09:51	0.49779891	0.056	0.16850644	0.016	0	0.019	0	1.246	0	0.015
08/23/95	20:14:52	0.49801013	0.056	0.16611516	0.017	0	0.019	0	1.241	0	0.015
08/23/95	20:19:52	0.50400917	0.055	0.16521045	0.017	0	0.019	0	1.291	0	0.015
08/23/95	20:24:51	0.49870566	0.056	0.16690507	0.017	0	0.019	0	1.239	0	0.015
08/23/95	20:29:51	0.49857892	0.056	0.16485451	0.017	0	0.019	0	1.282	0	0.015
08/23/95	20:34:52	0.50151904	0.056	0.16334491	0.017	0	0.019	0	1.312	0	0.015
08/23/95	20:39:51	0.49958743	0.056	0.16478363	0.017	0	0.019	0	1.242	0	0.015
08/23/95	20:44:51	0.50045988	0.056	0.17030774	0.017	0	0.019	0	1.247	0	0.015
08/23/95	20:49:52	0.50010419	0.056	0.1614746	0.017	0	0.019	0	1.263	0	0.015
08/23/95	20:54:52	0.49984375	0.056	0.16924456	0.017	0	0.019	0	1.323	0	0.015
08/23/95	20:59:53	0.5005466	0.056	0.16507151	0.018	0	0.019	0	1.458	0	0.015
08/23/95	21:04:53	0.50104452	0.056	0.16320307	0.017	0	0.019	0	1.328	0	0.015
08/23/95	21:09:52	0.501302	0.056	0.17124396	0.018	0	0.019	0	1.31	0	0.015
08/23/95	21:14:52	0.50135484	0.056	0.16249665	0.018	0	0.019	0	1.319	0	0.015
08/23/95	21:19:53	0.50504883	0.056	0.16276876	0.018	0	0.019	0	1.399	0	0.015
08/23/95	21:24:53	0.50508232	0.056	0.1693583	0.018	0	0.019	0	1.445	0	0.015
08/23/95	21:29:51	0.50186806	0.056	0.16991249	0.018	0	0.019	0	1.364	0	0.015
08/23/95	21:34:51	0.50291676	0.056	0.17092523	0.018	0	0.019	0	1.38	0	0.015
08/23/95	21:39:52	0.50187749	0.056	0.16902667	0.018	0	0.019	0	1.416	0	0.015
08/23/95	21:44:52	0.50246329	0.056	0.16033237	0.018	0	0.019	0	1.419	0	0.015
08/23/95	21:49:52	0.50308334	0.056	0.16474597	0.018	0	0.019	0	1.385	0	0.015
08/23/95	21:54:52	0.50324351	0.056	0.16785834	0.018	0	0.019	0	1.565	0	0.015
08/23/95	21:59:52	0.50364033	0.056	0.15779479	0.018	0	0.02	0	1.533	0	0.015
08/23/95	22:04:52	0.50647904	0.056	0.16746573	0.018	0	0.02	0	1.395	0	0.016
08/23/95	22:09:51	0.50387922	0.056	0.15888183	0.019	0	0.02	0	1.405	0	0.016
08/23/95	22:14:52	0.50556418	0.056	0.1580508	0.019	0	0.02	0	1.471	0	0.016
08/23/95	22:19:51	0.50411466	0.056	0.15787299	0.019	0	0.02	0	1.647	0	0.016
08/23/95	22:24:52	0.50534101	0.056	0.1574031	0.019	0	0.02	0	1.762	0	0.016
08/23/95	22:29:52	0.50516673	0.056	0.16281506	0.019	0	0.02	0	1.709	0	0.016
08/23/95	22:34:51	0.50540191	0.056	0.1608047	0.019	0	0.02	0	1.604	0	0.016
08/23/95	22:39:51	0.50645132	0.056	0.16815767	0.019	0	0.02	0	1.639	0	0.016
08/23/95	22:44:52	0.50733058	0.056	0.16387129	0.019	0	0.02	0	1.794	0	0.016
08/23/95	22:49:52	0.5056019	0.056	0.16622679	0.019	0	0.02	0	1.816	0	0.016
08/23/95	22:54:52	0.5056019	0.057	0.16985236	0.019	0	0.02	0	1.792	0	0.016
08/23/95	22:59:51	0.50594629	0.057	0.16905153	0.019	0	0.02	0	1.744	0	0.015
08/23/95	23:04:51	0.50988666	0.056	0.16413934	0.019	0	0.02	0	1.752	0	0.016
08/23/95	23:09:52	0.5097768	0.057	0.16293082	0.019	0	0.02	0	1.887	0	0.016
08/23/95	23:14:52	0.50674438	0.057	0.16020369	0.019	0	0.019	0	1.805	0	0.015
08/23/95	23:19:52	0.50774695	0.057	0.16895623	0.02	0	0.018	0	2.086	0	0.014
08/23/95	23:24:51	0.5090106	0.057	0.16400234	0.02	0	0.02	0	3.081	0	0.016
08/23/95	23:29:51	0.51268337	0.057	0.17001751	0.02	0	0.02	0	2.762	0	0.016
08/23/95	23:34:51	0.50903831	0.057	0.16719757	0.02	0	0.02	0	2.294	0	0.016
08/23/95	23:39:53	0.51202052	0.057	0.16549274	0.02	0	0.019	0	2.231	0	0.015
08/23/95	23:44:52	0.50995419	0.057	0.15648809	0.02	0	0.02	0	3.34	0	0.016
08/23/95	23:49:52	0.5146844	0.057	0.15905444	0.02	0	0.021	0	4.464	0	0.017
08/23/95	23:54:53	0.51129864	0.058	0.16173287	0.02	0	0.019	0	3.103	0	0.015
08/23/95	23:59:53	0.51134955	0.058	0.16089972	0.021	0	0.019	0	2.315	0	0.015
08/24/95	00:04:53	0.51162694	0.058	0.15454377	0.021	0	0.018	0	2.132	0	0.014
08/24/95	00:09:53	0.51168675	0.058	0.15814584	0.021	0	0.018	0	2.697	0	0.015
08/24/95	00:14:54	0.51570547	0.058	0.15806689	0.021	0	0.02	0	2.943	0	0.016
08/24/95	00:19:54	0.51253451	0.058	0.16158348	0.021	0	0.022	0	3.837	0	0.018
08/24/95	00:24:54	0.51194168	0.058	0.16126981	0.021	0	0.021	0	3.581	0	0.017
08/24/95	00:29:54	0.51212241	0.058	0.15956175	0.021	0	0.02	0	2.714	0	0.016
08/24/95	00:34:55	0.51204885	0.058	0.15620538	0.021	0	0.02	0	2.619	0	0.016
08/24/95	00:39:55	0.51186805	0.058	0.15742254	0.021	0	0.021	0	3.087	0	0.017
08/24/95	00:44:55	0.51271355	0.058	0.15889658	0.021	0	0.023	0	3.833	0	0.018
08/24/95	00:49:54	0.51313739	0.058	0.15674965	0.021	0	0.023	0	4.67	0	0.018

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	00:54:54	0.51625018	0.058	0.1513522	0.021	0	0.021	0	3.419	0	0.016
08/24/95	00:59:54	0.51276501	0.058	0.15000873	0.021	0	0.019	0	2.551	0	0.015
08/24/95	01:04:55	0.5128713	0.058	0.15098497	0.021	0	0.02	0	2.782	0	0.016
08/24/95	01:09:55	0.51274068	0.058	0.15386564	0.021	0	0.021	0	3.32	0	0.016
08/24/95	01:14:55	0.5162772	0.058	0.15531701	0.021	0	0.019	0	2.751	0	0.015
08/24/95	01:19:54	0.51284943	0.058	0.16365229	0.022	0	0.019	0	2.612	0	0.015
08/24/95	01:24:54	0.51535232	0.058	0.15787812	0.022	0	0.018	0	2.26	0	0.014
08/24/95	01:29:55	0.51629746	0.058	0.1580768	0.022	0	0.019	0	2.475	0	0.015
08/24/95	01:34:55	0.51520294	0.058	0.15463679	0.022	0	0.02	0	2.865	0	0.016
08/24/95	01:39:55	0.51338074	0.058	0.1539275	0.022	0	0.019	0	2.528	0	0.015
08/24/95	01:44:55	0.51340187	0.058	0.15386886	0.022	0	0.018	0	2.471	0	0.014
08/24/95	01:49:55	0.51645572	0.058	0.15337695	0.022	0	0.018	0	2.539	0	0.014
08/24/95	01:54:56	0.51655417	0.058	0.15503125	0.022	0	0.02	0	3.116	0	0.016
08/24/95	01:59:56	0.51331452	0.058	0.15781795	0.022	0	0.018	0	2.764	0	0.015
08/24/95	02:04:56	0.51292311	0.058	0.1567235	0.022	0	0.018	0	2.385	0	0.014
08/24/95	02:09:56	0.51257744	0.058	0.15570054	0.022	0	0.017	0	2.46	0	0.014
08/24/95	02:14:56	0.51511514	0.058	0.15869709	0.022	0	0.019	0	2.73	0	0.015
08/24/95	02:19:56	0.51710562	0.058	0.15402685	0.022	0	0.022	0	4.318	0	0.017
08/24/95	02:24:57	0.51416038	0.058	0.15592767	0.022	0	0.021	0	4.868	0	0.017
08/24/95	02:29:57	0.52245951	0.058	0.15640162	0.022	0	0.021	0	4.764	0	0.017
08/24/95	02:34:56	0.51987533	0.059	0.15677575	0.022	0.02677981	0.022	0	6.219	0	0.018
08/24/95	02:39:56	0.51641593	0.058	0.15782989	0.022	0	0.023	0	5.591	0	0.018
08/24/95	02:44:56	0.51857179	0.058	0.1556908	0.022	0.0274302	0.024	0	6.622	0	0.019
08/24/95	02:49:57	0.52038843	0.059	0.15542383	0.022	0.02575966	0.023	0	4.367	0	0.018
08/24/95	02:54:57	0.51570343	0.058	0.15767211	0.022	0	0.021	0	2.989	0	0.017
08/24/95	02:59:57	0.51419047	0.058	0.15637529	0.022	0	0.021	0	3.16	0	0.017
08/24/95	03:04:56	0.51416093	0.058	0.15797878	0.022	0	0.019	0	3.09	0	0.015
08/24/95	03:09:56	0.513492	0.058	0.15793097	0.022	0	0.018	0	2.679	0	0.014
08/24/95	03:14:56	0.51407258	0.058	0.15608091	0.022	0	0.018	0	2.485	0	0.014
08/24/95	03:19:56	0.51517267	0.058	0.16196389	0.022	0	0.019	0	2.812	0	0.015
08/24/95	03:24:57	0.51908865	0.058	0.15614774	0.022	0	0.017	0	2.604	0	0.014
08/24/95	03:29:57	0.5158115	0.058	0.16231906	0.022	0	0.018	0	2.734	0	0.014
08/24/95	03:34:57	0.51996448	0.058	0.16264446	0.022	0	0.019	0	2.799	0	0.015
08/24/95	03:39:57	0.52378455	0.058	0.15495113	0.022	0	0.02	0	2.935	0	0.016
08/24/95	03:44:58	0.51783737	0.058	0.15689748	0.022	0	0.02	0	3.216	0	0.016
08/24/95	03:49:58	0.51471137	0.058	0.15946214	0.022	0	0.02	0	3.261	0	0.016
08/24/95	03:54:58	0.51667605	0.058	0.15778018	0.022	0	0.022	0	3.458	0	0.017
08/24/95	03:59:57	0.51730601	0.058	0.16270544	0.022	0	0.021	0	3.707	0	0.017
08/24/95	04:04:57	0.51921607	0.058	0.15417439	0.022	0	0.021	0	4.64	0	0.017
08/24/95	04:09:57	0.51779082	0.058	0.15574854	0.022	0	0.021	0	4.167	0	0.017
08/24/95	04:14:58	0.52108129	0.058	0.15819505	0.022	0	0.02	0	3.253	0	0.016
08/24/95	04:19:58	0.51390532	0.058	0.15765954	0.022	0	0.019	0	3.14	0	0.015
08/24/95	04:24:58	0.51410193	0.058	0.15836803	0.022	0	0.02	0	3.673	0	0.016
08/24/95	04:29:57	0.51932426	0.058	0.16358714	0.022	0	0.021	0	4.443	0	0.016
08/24/95	04:34:57	0.51830388	0.058	0.166559	0.022	0	0.021	0	4.645	0	0.017
08/24/95	04:39:57	0.51637408	0.058	0.16303131	0.022	0	0.021	0	5.151	0	0.016
08/24/95	04:44:58	0.52179547	0.059	0.16072729	0.022	0	0.02	0	3.854	0	0.016
08/24/95	04:49:58	0.52429301	0.058	0.17011117	0.022	0	0.022	0	4.279	0	0.017
08/24/95	04:54:58	0.51498667	0.058	0.16145411	0.022	0	0.02	0	4.185	0	0.016
08/24/95	04:59:58	0.52147946	0.058	0.15950627	0.022	0	0.02	0	3.588	0	0.016
08/24/95	05:04:58	0.51433739	0.058	0.16426765	0.022	0	0.019	0	3.156	0	0.015
08/24/95	05:09:59	0.51842156	0.058	0.17356511	0.022	0	0.019	0	3.351	0	0.015
08/24/95	05:14:59	0.51376573	0.059	0.21167798	0.022	0	0.019	0	3.451	0	0.015
08/24/95	05:19:59	0.51418863	0.058	0.17608903	0.022	0	0.019	0	3.274	0	0.015
08/24/95	05:24:59	0.51498667	0.058	0.16091304	0.022	0	0.02	0	3.728	0	0.016
08/24/95	05:29:59	0.51556663	0.058	0.15960074	0.022	0	0.02	0	4.003	0	0.016
08/24/95	05:35:00	0.51957632	0.058	0.15697562	0.022	0	0.021	0	4.727	0	0.016
08/24/95	05:40:00	0.51625315	0.058	0.15775002	0.022	0	0.021	0	4.432	0	0.017
08/24/95	05:45:01	0.51680261	0.058	0.15966435	0.022	0	0.021	0	4.593	0	0.017
08/24/95	05:50:01	0.52090765	0.058	0.17208749	0.022	0	0.022	0	5.517	0	0.018
08/24/95	05:55:00	0.51679339	0.058	0.16660995	0.023	0.02603956	0.022	0	6.123	0	0.018
08/24/95	06:00:00	0.51745984	0.058	0.16298203	0.023	0.02397748	0.022	0	5.813	0	0.017

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	06:05:00	0.51651528	0.058	0.17249559	0.023	0	0.021	0	4.921	0	0.017
08/24/95	06:10:01	0.5171719	0.059	0.1950187	0.023	0	0.02	0	3.988	0	0.016
08/24/95	06:15:01	0.52515828	0.059	0.1977168	0.023	0	0.02	0	4.114	0	0.016
08/24/95	06:20:01	0.51854872	0.06	0.22245114	0.023	0	0.02	0	4.573	0	0.016
08/24/95	06:25:00	0.51994399	0.059	0.1852314	0.023	0	0.02	0	4.281	0	0.015
08/24/95	06:30:00	0.51660424	0.06	0.22765063	0.023	0	0.02	0	4.304	0	0.016
08/24/95	06:35:01	0.51662154	0.059	0.20731634	0.023	0	0.019	0	3.991	0	0.015
08/24/95	06:40:01	0.51704378	0.059	0.22125165	0.023	0	0.018	0	3.389	0	0.014
08/24/95	06:45:01	0.51671198	0.059	0.2120286	0.023	0	0.02	0	4.702	0	0.016
08/24/95	06:50:00	0.51828574	0.06	0.2198886	0.023	0	0.019	0	4.236	0	0.015
08/24/95	06:55:00	0.52178335	0.06	0.24031764	0.023	0.02369784	0.019	0	3.758	0	0.015
08/24/95	07:00:00	0.52297565	0.062	0.30208952	0.023	0.02757038	0.021	0	4.763	0	0.017
08/24/95	07:05:01	0.51762417	0.062	0.29895217	0.023	0	0.017	0	3.64	0	0.014
08/24/95	07:10:01	0.52048257	0.062	0.303973	0.023	0	0.016	0	2.856	0	0.013
08/24/95	07:15:01	0.51770467	0.062	0.30815243	0.024	0	0.015	0	2.739	0	0.012
08/24/95	07:20:00	0.51682931	0.06	0.23026304	0.024	0	0.015	0	2.648	0	0.012
08/24/95	07:25:01	0.51789589	0.06	0.23976463	0.024	0	0.015	0	2.644	0	0.012
08/24/95	07:30:01	0.51681304	0.061	0.26765068	0.023	0	0.017	0	3.191	0	0.013
08/24/95	07:35:01	0.52011478	0.061	0.27377293	0.023	0	0.018	0	3.487	0	0.014
08/24/95	07:40:02	0.51634128	0.061	0.26833823	0.023	0	0.019	0	3.573	0	0.015
08/24/95	07:45:03	0.51997599	0.061	0.2875478	0.023	0.1010885	0.019	0	3.313	0	0.015
08/24/95	07:50:02	0.51702657	0.062	0.31745733	0.023	0.20075458	0.019	0	3.077	0	0.015
08/24/95	07:55:02	0.51605575	0.06	0.24852329	0.023	0.15509754	0.018	0	3.186	0	0.014
08/24/95	08:00:02	0.51901781	0.059	0.2309029	0.022	0.1656877	0.018	0	3.402	0	0.014
08/24/95	08:05:02	0.51860046	0.06	0.25388234	0.022	0.11117511	0.017	0	3.274	0	0.014
08/24/95	08:10:03	0.51841696	0.059	0.20456688	0.022	0.09929904	0.017	0	3.232	0	0.014
08/24/95	08:15:03	0.51499959	0.059	0.21497241	0.021	0.08722731	0.017	0	3.241	0	0.013
08/24/95	08:20:03	0.51318312	0.06	0.26964412	0.021	0.08310129	0.016	0	2.974	0	0.013
08/24/95	08:25:03	0.51224311	0.059	0.22966002	0.021	0.02526369	0.015	0	2.657	0	0.012
08/24/95	08:30:03	0.51161456	0.058	0.2076117	0.021	0	0.016	0	2.57	0	0.013
08/24/95	08:35:04	0.51656241	0.058	0.20883007	0.021	0.03253077	0.016	0	2.797	0	0.013
08/24/95	08:40:04	0.51878798	0.058	0.20414913	0.02	0.03464415	0.016	0	2.689	0	0.013
08/24/95	08:45:04	0.51119681	0.058	0.2132721	0.02	0.02023351	0.016	0	2.409	0	0.012
08/24/95	08:50:03	0.50968184	0.058	0.21202064	0.02	0	0.016	0	2.358	0	0.013
08/24/95	08:55:03	0.50906598	0.058	0.2070684	0.02	0.02608908	0.016	0	2.28	0	0.012
08/24/95	09:00:03	0.50865344	0.058	0.20411983	0.02	0.02436269	0.017	0	2.15	0	0.013
08/24/95	09:05:04	0.51046384	0.058	0.20284568	0.019	0	0.017	0	2.044	0	0.013
08/24/95	09:10:04	0.50796093	0.058	0.20912158	0.019	0	0.017	0	2.036	0	0.013
08/24/95	09:15:04	0.50741095	0.058	0.21000106	0.019	0.01990062	0.017	0	2.067	0	0.014
08/24/95	09:20:03	0.50681653	0.058	0.20538886	0.019	0	0.017	0	1.963	0	0.013
08/24/95	09:25:03	0.51029379	0.057	0.20583464	0.019	0	0.017	0	1.978	0	0.014
08/24/95	09:30:03	0.50685137	0.058	0.20943543	0.019	0	0.017	0	1.931	0	0.013
08/24/95	09:35:04	0.50543695	0.058	0.20812758	0.019	0	0.017	0	2.036	0	0.013
08/24/95	09:40:04	0.50994745	0.057	0.21020566	0.018	0	0.017	0	2.074	0	0.013
08/24/95	09:45:04	0.50531056	0.057	0.20943284	0.018	0	0.016	0	1.92	0	0.013
08/24/95	09:50:04	0.50575053	0.058	0.21324432	0.018	0	0.016	0	1.824	0	0.013
08/24/95	09:55:07	0.50636555	0.057	0.21015608	0.018	0	0.015	0	1.82	0	0.012
08/24/95	10:00:05	0.50475094	0.057	0.20865253	0.018	0	0.016	0	1.84	0	0.012
08/24/95	10:05:06	0.50789663	0.057	0.2109128	0.018	0	0.017	0	1.96	0	0.013
08/24/95	10:10:05	0.50459984	0.057	0.20168471	0.018	0	0.017	0	1.854	0	0.013
08/24/95	10:15:05	0.50573523	0.056	0.20331511	0.017	0	0.017	0	1.81	0	0.014
08/24/95	10:20:04	0.50719463	0.057	0.20072524	0.018	0	0.017	0	1.847	0	0.013
08/24/95	10:25:04	0.50111352	0.057	0.20257781	0.017	0	0.017	0	1.733	0	0.013
08/24/95	10:30:04	0.50607718	0.056	0.1943203	0.017	0	0.017	0	1.772	0	0.013
08/24/95	10:35:05	0.50213484	0.056	0.19831936	0.017	0	0.017	0	1.836	0	0.013
08/24/95	10:40:05	0.50634193	0.056	0.19457584	0.017	0	0.017	0	1.873	0	0.013
08/24/95	10:45:04	0.49913278	0.056	0.19575798	0.017	0	0.017	0	1.725	0	0.013
08/24/95	10:50:04	0.50230553	0.056	0.18829498	0.017	0	0.017	0	1.711	0	0.013
08/24/95	10:55:04	0.50224888	0.056	0.19286446	0.017	0	0.018	0	1.639	0	0.014
08/24/95	11:00:05	0.50418056	0.056	0.18610243	0.017	0	0.018	0	1.782	0	0.014
08/24/95	11:05:06	0.50195312	0.056	0.18643655	0.017	0	0.018	0	1.654	0	0.014
08/24/95	11:10:05	0.49885089	0.056	0.1908453	0.017	0	0.017	0	1.574	0	0.014

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	11:15:05	0.49834713	0.056	0.18927822	0.017	0	0.017	0	1.608	0	0.014
08/24/95	11:20:06	0.49951974	0.056	0.19162563	0.017	0	0.017	0	1.59	0	0.013
08/24/95	11:25:07	0.49782293	0.056	0.18707427	0.017	0	0.017	0	1.594	0	0.013
08/24/95	11:30:07	0.49783616	0.056	0.18802923	0.017	0	0.017	0	1.419	0	0.013
08/24/95	11:35:07	0.49988591	0.056	0.18974668	0.016	0	0.017	0	1.406	0	0.013
08/24/95	11:40:07	0.49749304	0.056	0.19103375	0.017	0	0.017	0	1.404	0	0.013
08/24/95	11:45:07	0.49706578	0.056	0.19088668	0.016	0	0.017	0	1.412	0	0.013
08/24/95	11:50:07	0.49939443	0.056	0.19192852	0.016	0	0.017	0	1.495	0	0.014
08/24/95	11:55:09	0.49680175	0.056	0.19263513	0.016	0	0.017	0	1.425	0	0.014
08/24/95	12:00:08	0.5009018	0.056	0.19214665	0.016	0	0.018	0	1.664	0	0.014
Run 13											
08/24/95	18:39:54	0.49691037	0.055	0.16991789	0.017	0	0.017	0	1.79	0	0.014
08/24/95	18:44:54	0.49693343	0.055	0.16693236	0.017	0	0.017	0	1.931	0	0.014
08/24/95	18:49:55	0.49750161	0.055	0.16977328	0.017	0	0.017	0	2.272	0	0.014
08/24/95	18:54:56	0.49797898	0.055	0.17530951	0.017	0	0.017	0	1.955	0	0.013
08/24/95	18:59:54	0.49789444	0.055	0.16903192	0.017	0	0.017	0	2.167	0	0.014
08/24/95	19:04:55	0.49873527	0.055	0.1742391	0.017	0	0.018	0	2.337	0	0.014
08/24/95	19:09:55	0.49857602	0.055	0.16857754	0.017	0	0.018	0	2.248	0	0.014
08/24/95	19:14:54	0.50043807	0.055	0.16862958	0.017	0	0.019	0	2.077	0	0.015
08/24/95	19:19:54	0.49943845	0.055	0.16734992	0.017	0	0.019	0	2.233	0	0.015
08/24/95	19:24:55	0.49939187	0.056	0.1699816	0.017	0	0.019	0	2.26	0	0.015
08/24/95	19:29:55	0.50038767	0.056	0.17473315	0.017	0	0.019	0	3.283	0	0.015
08/24/95	19:34:54	0.50088482	0.056	0.1929183	0.017	0	0.02	0	4.676	0	0.016
08/24/95	19:39:55	0.50444076	0.056	0.17551185	0.017	0	0.02	0	3.981	0	0.016
08/24/95	19:44:55	0.50158074	0.056	0.18727191	0.017	0	0.02	0	4.166	0	0.015
08/24/95	19:49:54	0.50423792	0.056	0.17648327	0.017	0	0.02	0	4.041	0	0.016
08/24/95	19:54:54	0.50205149	0.056	0.18307723	0.017	0	0.019	0	2.649	0	0.015
08/24/95	19:59:55	0.50014538	0.056	0.18062058	0.017	0	0.018	0	1.304	0	0.014
08/24/95	20:04:54	0.4999157	0.056	0.1718953	0.017	0	0.018	0	1.137	0	0.014
08/24/95	20:09:54	0.49981366	0.056	0.17294318	0.017	0	0.017	0	1.149	0	0.014
08/24/95	20:14:55	0.49971062	0.056	0.18106923	0.017	0	0.017	0	1.121	0	0.014
08/24/95	20:19:55	0.49992345	0.056	0.17034678	0.017	0	0.017	0	1.158	0	0.013
08/24/95	20:24:56	0.49966641	0.056	0.17336281	0.018	0	0.017	0	1.188	0	0.013
08/24/95	20:29:56	0.50051089	0.056	0.17315456	0.018	0	0.017	0	1.22	0	0.013
08/24/95	20:34:55	0.50060841	0.056	0.16929707	0.018	0	0.017	0	1.215	0	0.013
08/24/95	20:39:55	0.50301803	0.056	0.17121874	0.018	0	0.017	0	1.197	0	0.013
08/24/95	20:44:56	0.50083599	0.056	0.17414543	0.018	0	0.017	0	1.227	0	0.013
08/24/95	20:49:56	0.50134063	0.056	0.16867953	0.018	0	0.017	0	1.221	0	0.013
08/24/95	20:54:57	0.50141599	0.056	0.16777205	0.018	0	0.017	0	1.222	0	0.013
08/24/95	20:59:57	0.50111823	0.056	0.16994444	0.018	0	0.017	0	1.227	0	0.013
08/24/95	21:04:57	0.50216084	0.056	0.16842939	0.018	0	0.017	0	1.269	0	0.013
08/24/95	21:09:58	0.50392344	0.056	0.16659825	0.018	0	0.017	0	1.303	0	0.013
08/24/95	21:14:58	0.5025455	0.056	0.16680898	0.018	0	0.017	0	1.27	0	0.013
08/24/95	21:19:57	0.50295178	0.056	0.17058467	0.018	0	0.017	0	1.22	0	0.014
08/24/95	21:24:57	0.50298742	0.056	0.16706845	0.018	0	0.017	0	1.24	0	0.014
08/24/95	21:29:58	0.50537822	0.056	0.16686387	0.018	0	0.017	0	1.327	0	0.014
08/24/95	21:34:58	0.50344455	0.056	0.16952044	0.018	0	0.017	0	1.293	0	0.014
08/24/95	21:39:59	0.50383015	0.056	0.17620715	0.019	0	0.017	0	1.295	0	0.014
08/24/95	21:44:59	0.50384737	0.056	0.16750452	0.019	0	0.017	0	1.316	0	0.014
08/24/95	21:49:58	0.50424903	0.056	0.16637997	0.019	0	0.018	0	1.305	0	0.014
08/24/95	21:54:58	0.5051711	0.056	0.16887148	0.019	0	0.018	0	1.333	0	0.014
08/24/95	21:59:59	0.50490481	0.056	0.16563896	0.019	0	0.018	0	1.401	0	0.014
08/24/95	22:04:59	0.50506536	0.056	0.16743111	0.019	0	0.018	0	1.357	0	0.014
08/24/95	22:09:58	0.50530353	0.056	0.16618034	0.019	0	0.018	0	1.322	0	0.014
08/24/95	22:14:58	0.50522541	0.056	0.16922114	0.019	0	0.018	0	1.329	0	0.014
08/24/95	22:19:59	0.50541568	0.057	0.1699481	0.019	0	0.018	0	1.475	0	0.014
08/24/95	22:24:59	0.50557454	0.057	0.17106987	0.019	0	0.018	0	1.459	0	0.014
08/24/95	22:29:57	0.50525861	0.056	0.17114847	0.019	0	0.018	0	1.4	0	0.014
08/24/95	22:34:58	0.50593827	0.056	0.17067397	0.019	0	0.018	0	1.418	0	0.014
08/24/95	22:39:59	0.50598562	0.057	0.17234686	0.019	0	0.018	0	1.445	0	0.014
08/24/95	22:44:59	0.50622238	0.057	0.17198297	0.019	0	0.018	0	1.45	0	0.014
08/24/95	22:49:59	0.50844815	0.057	0.175487	0.019	0	0.018	0	1.778	0	0.014

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	22:54:59	0.50992931	0.057	0.17571963	0.019	0	0.018	0	1.686	0	0.014
08/24/95	22:59:59	0.50708828	0.057	0.17278318	0.019	0	0.018	0	1.53	0	0.014
08/24/95	23:04:59	0.50702348	0.057	0.1705894	0.02	0	0.018	0	1.631	0	0.014
08/24/95	23:10:01	0.50759021	0.057	0.17099866	0.02	0	0.018	0	1.751	0	0.014
08/24/95	23:15:00	0.51128773	0.057	0.16976781	0.02	0	0.018	0	1.735	0	0.014
08/24/95	23:19:59	0.51166051	0.057	0.17275704	0.02	0	0.018	0	1.841	0	0.014
08/24/95	23:24:59	0.50828865	0.057	0.17287981	0.02	0	0.018	0	1.897	0	0.014
08/24/95	23:30:00	0.50866205	0.057	0.17575363	0.02	0	0.018	0	1.834	0	0.014
08/24/95	23:35:00	0.51097315	0.057	0.17256211	0.02	0	0.018	0	1.726	0	0.014
08/24/95	23:40:00	0.50869055	0.057	0.16963686	0.02	0	0.018	0	1.783	0	0.015
08/24/95	23:45:01	0.5092406	0.057	0.17128702	0.02	0	0.018	0	1.933	0	0.015
08/24/95	23:50:01	0.51115185	0.057	0.17163004	0.02	0	0.018	0	1.978	0	0.015
08/24/95	23:55:01	0.50997004	0.058	0.17486257	0.02	0	0.019	0	2.01	0	0.015
08/25/95	00:00:00	0.51329348	0.057	0.16963295	0.02	0	0.019	0	1.986	0	0.015
08/25/95	00:05:00	0.50981878	0.058	0.16920757	0.02	0	0.019	0	1.998	0	0.015
08/25/95	00:10:00	0.50946195	0.057	0.1687222	0.02	0	0.019	0	2.107	0	0.015
08/25/95	00:15:01	0.51035427	0.058	0.17209493	0.02	0	0.018	0	2.056	0	0.015
08/25/95	00:20:01	0.51034071	0.058	0.1743243	0.02	0	0.019	0	2.123	0	0.015
08/25/95	00:25:00	0.51079357	0.058	0.18088089	0.02	0	0.019	0	2.16	0	0.015
08/25/95	00:30:00	0.51105329	0.058	0.17155848	0.02	0	0.018	0	2.14	0	0.014
08/25/95	00:35:00	0.51133857	0.058	0.17019032	0.021	0	0.019	0	2.61	0	0.015
08/25/95	00:40:01	0.51171915	0.058	0.16863721	0.021	0	0.02	0	2.813	0	0.016
08/25/95	00:45:01	0.51258695	0.058	0.17046115	0.021	0	0.019	0	2.832	0	0.015
08/25/95	00:50:01	0.51211405	0.058	0.17201612	0.021	0	0.019	0	2.616	0	0.015
08/25/95	00:55:01	0.51298741	0.058	0.17212509	0.021	0	0.019	0	2.505	0	0.015
08/25/95	01:00:02	0.51302332	0.058	0.17169952	0.021	0	0.018	0	2.289	0	0.014
08/25/95	01:05:02	0.51316801	0.058	0.17094684	0.021	0	0.018	0	2.408	0	0.014
08/25/95	01:10:02	0.51298492	0.058	0.16790383	0.021	0	0.018	0	2.977	0	0.014
08/25/95	01:15:01	0.51314032	0.058	0.16734021	0.021	0	0.018	0	2.409	0	0.014
08/25/95	01:20:01	0.51404624	0.058	0.1646299	0.021	0	0.018	0	1.839	0	0.014
08/25/95	01:25:02	0.51247458	0.058	0.16562742	0.021	0	0.019	0	2.576	0	0.015
08/25/95	01:30:02	0.51392605	0.058	0.16466121	0.021	0	0.018	0	2.298	0	0.014
08/25/95	01:35:02	0.51434127	0.058	0.16158172	0.022	0	0.018	0	2.175	0	0.014
08/25/95	01:40:02	0.51436292	0.058	0.16641473	0.022	0	0.018	0	2.335	0	0.014
08/25/95	01:45:03	0.51391696	0.058	0.16361793	0.021	0	0.018	0	2.978	0	0.014
08/25/95	01:50:03	0.51389505	0.058	0.1631361	0.021	0	0.019	0	2.782	0	0.015
08/25/95	01:55:03	0.51459119	0.058	0.16366436	0.022	0	0.018	0	2.42	0	0.014
08/25/95	02:00:02	0.51460187	0.058	0.16461171	0.022	0	0.019	0	3.15	0	0.015
08/25/95	02:05:02	0.51414539	0.059	0.18142469	0.022	0	0.02	0	3.706	0	0.016
08/25/95	02:10:03	0.5136557	0.058	0.16723421	0.022	0	0.018	0	2.613	0	0.014
08/25/95	02:15:03	0.51385158	0.058	0.16316717	0.022	0	0.019	0	3.201	0	0.015
08/25/95	02:20:03	0.51419902	0.058	0.1606057	0.022	0	0.018	0	2.128	0	0.014
08/25/95	02:25:03	0.5133509	0.058	0.1642244	0.021	0	0.019	0	2.877	0	0.015
08/25/95	02:30:04	0.51405824	0.058	0.16298082	0.022	0	0.018	0	2.434	0	0.015
08/25/95	02:35:04	0.5130797	0.058	0.16983058	0.021	0	0.018	0	2.551	0	0.014
08/25/95	02:40:04	0.51317747	0.058	0.16714426	0.021	0	0.019	0	3.003	0	0.015
08/25/95	02:45:03	0.5131315	0.058	0.1732567	0.021	0	0.018	0	2.793	0	0.014
08/25/95	02:50:03	0.51300371	0.058	0.16560425	0.022	0	0.017	0	2.569	0	0.014
08/25/95	02:55:04	0.51321021	0.058	0.17617826	0.022	0	0.018	0	2.355	0	0.014
08/25/95	03:00:04	0.5147633	0.058	0.17575164	0.022	0	0.017	0	2.038	0	0.014
08/25/95	03:05:04	0.51440374	0.059	0.18780682	0.022	0	0.017	0	2.227	0	0.014
08/25/95	03:10:03	0.51395831	0.058	0.17164555	0.022	0	0.018	0	2.562	0	0.014
08/25/95	03:15:03	0.51428443	0.058	0.16697123	0.022	0	0.018	0	2.384	0	0.014
08/25/95	03:20:03	0.51496804	0.059	0.19229819	0.022	0	0.018	0	2.273	0	0.014
08/25/95	03:25:04	0.51508704	0.058	0.1781406	0.022	0	0.018	0	2.284	0	0.014
08/25/95	03:30:04	0.51434756	0.058	0.16417427	0.022	0	0.019	0	2.578	0	0.015
08/25/95	03:35:04	0.51410944	0.058	0.1649973	0.022	0	0.018	0	2.72	0	0.014
08/25/95	03:40:04	0.51443531	0.058	0.17281811	0.022	0.36475375	0.017	0	2.677	0	0.014
08/25/95	03:45:05	0.51480244	0.058	0.16910441	0.022	0.77811905	0.018	0	2.394	0	0.014
08/25/95	03:50:05	0.51491097	0.058	0.16443721	0.022	0.68824842	0.018	0	2.63	0	0.014
08/25/95	03:55:05	0.51524672	0.058	0.16462285	0.022	0.64015173	0.019	0	2.664	0	0.015
08/25/95	04:00:05	0.51539526	0.058	0.16677423	0.022	0.71762799	0.019	0	2.725	0	0.015

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/25/95	04:05:06	0.51521791	0.058	0.16155413	0.022	0.8242403	0.019	0	2.758	0	0.015
08/25/95	04:10:06	0.51596671	0.058	0.17870807	0.022	0.71873371	0.021	0	3.9	0	0.016
08/25/95	04:15:06	0.51800712	0.058	0.17032005	0.022	0.22420233	0.02	0	3.154	0	0.016
08/25/95	04:20:06	0.51705044	0.058	0.16386088	0.022	0.50382886	0.019	0	3.371	0	0.015
08/25/95	04:25:07	0.51510956	0.058	0.16328778	0.022	0.42170938	0.019	0	3.053	0	0.015
08/25/95	04:30:07	0.51488297	0.058	0.16472787	0.022	0.15594961	0.018	0	2.701	0	0.014
08/25/95	04:35:07	0.5186108	0.058	0.17004878	0.022	0	0.018	0	2.645	0	0.014
08/25/95	04:40:06	0.51755559	0.058	0.17096072	0.022	0	0.018	0	2.906	0	0.014
08/25/95	04:45:06	0.51325139	0.058	0.18040509	0.021	0	0.018	0	2.961	0	0.014
08/25/95	04:50:07	0.51384495	0.058	0.17764697	0.021	0	0.018	0	3.121	0	0.014
08/25/95	04:55:07	0.51367762	0.058	0.18152928	0.021	0	0.017	0	3.125	0	0.014
08/25/95	05:00:07	0.51453981	0.059	0.19423605	0.021	0	0.018	0	3.357	0	0.015
08/25/95	05:05:06	0.51489057	0.058	0.18324207	0.021	0	0.018	0	3.195	0	0.014
08/25/95	05:10:06	0.5151431	0.058	0.18750336	0.021	0	0.018	0	3.106	0	0.015
08/25/95	05:15:07	0.51459739	0.058	0.18139149	0.021	0	0.018	0	2.942	0	0.014
08/25/95	05:20:07	0.51526351	0.059	0.22053103	0.021	0	0.018	0	3.104	0	0.014
08/25/95	05:25:07	0.51465395	0.058	0.17478608	0.021	0	0.018	0	2.968	0	0.015
08/25/95	05:30:06	0.51487202	0.058	0.16987942	0.021	0	0.018	0	2.869	0	0.014
08/25/95	05:35:06	0.51496989	0.058	0.17274721	0.021	0	0.019	0	3.001	0	0.015
08/25/95	05:40:07	0.51528592	0.058	0.17517976	0.021	0	0.018	0	3.082	0	0.014
08/25/95	05:45:07	0.51574432	0.058	0.17304149	0.021	0	0.018	0	3.502	0	0.015
08/25/95	05:50:07	0.51577713	0.058	0.18133386	0.021	0	0.018	0	3.02	0	0.014
08/25/95	05:55:07	0.51907694	0.058	0.16881436	0.021	0	0.019	0	3.287	0	0.015
08/25/95	06:00:07	0.51629804	0.058	0.17485584	0.021	0	0.019	0	3.658	0	0.015
08/25/95	06:05:08	0.51556801	0.059	0.1833469	0.021	0	0.019	0	3.263	0	0.015
08/25/95	06:10:08	0.51644828	0.059	0.17831056	0.021	0	0.018	0	3.049	0	0.014
08/25/95	06:15:08	0.51721947	0.059	0.18979933	0.021	0	0.018	0	2.775	0	0.015
08/25/95	06:20:08	0.51924576	0.06	0.22976054	0.021	0	0.018	0	2.561	0	0.014
08/25/95	06:25:09	0.51933479	0.06	0.25281113	0.021	0	0.018	0	2.594	0	0.014
08/25/95	06:30:09	0.51882053	0.059	0.21884002	0.021	0	0.018	0	2.844	0	0.015
08/25/95	06:35:09	0.52121341	0.059	0.20393889	0.021	0	0.018	0	3.069	0	0.014
08/25/95	06:40:09	0.51638589	0.059	0.20452974	0.021	0	0.018	0	2.648	0	0.014
08/25/95	06:45:09	0.51882842	0.059	0.22034679	0.021	0	0.018	0	2.489	0	0.014
08/25/95	06:50:10	0.51639854	0.059	0.20291758	0.021	0	0.018	0	2.47	0	0.014
08/25/95	06:55:10	0.52000692	0.059	0.20266098	0.021	0	0.018	0	2.454	0	0.014
08/25/95	07:00:10	0.5164202	0.059	0.22245961	0.021	0	0.018	0	2.465	0	0.014
08/25/95	07:05:11	0.51600742	0.059	0.22411893	0.021	0	0.018	0	2.415	0	0.014
08/25/95	07:10:11	0.51806709	0.06	0.2470463	0.021	0	0.018	0	2.411	0	0.014
08/25/95	07:15:11	0.51986091	0.06	0.23472673	0.021	0	0.018	0	2.357	0	0.014
08/25/95	07:20:11	0.51885203	0.06	0.24360935	0.022	0	0.018	0	2.704	0	0.014
08/25/95	07:25:11	0.51727156	0.06	0.26640083	0.021	0	0.018	0	2.893	0	0.014
08/25/95	07:30:12	0.51661995	0.06	0.24457181	0.022	0	0.018	0	3.008	0	0.014
08/25/95	07:35:12	0.51614471	0.06	0.26280015	0.021	0	0.018	0	2.938	0	0.015
08/25/95	07:40:12	0.51648097	0.06	0.26970456	0.021	0	0.018	0	2.816	0	0.014
08/25/95	07:45:12	0.5161652	0.061	0.28714474	0.021	0	0.018	0	2.771	0	0.014
08/25/95	07:50:13	0.515177	0.06	0.25351359	0.021	0	0.017	0	2.981	0	0.014
08/25/95	07:55:13	0.5147765	0.059	0.22186204	0.021	0	0.017	0	2.965	0	0.014
08/25/95	08:00:13	0.5141552	0.059	0.22934874	0.021	0	0.018	0	2.828	0	0.014
08/25/95	08:05:13	0.51790642	0.059	0.24837256	0.021	0	0.017	0	2.66	0	0.013
08/25/95	08:10:14	0.51626692	0.059	0.24086628	0.021	0	0.017	0	2.409	0	0.014
08/25/95	08:15:14	0.51259931	0.06	0.28911651	0.021	0	0.017	0	2.539	0	0.014
08/25/95	08:20:14	0.51244016	0.059	0.25320959	0.02	0	0.017	0	2.388	0	0.014
08/25/95	08:25:14	0.51174568	0.059	0.22881779	0.02	0	0.017	0	2.235	0	0.013
08/25/95	08:30:15	0.51148787	0.059	0.2300435	0.02	0	0.017	0	2.229	0	0.013
08/25/95	08:35:15	0.51208068	0.059	0.22247207	0.02	0	0.017	0	2.231	0	0.013
08/25/95	08:40:15	0.51377173	0.058	0.22992905	0.02	0	0.016	0	2.229	0	0.013
08/25/95	08:45:15	0.51370655	0.058	0.22717831	0.02	0	0.016	0	2.142	0	0.013
08/25/95	08:50:15	0.51244377	0.058	0.21514059	0.02	0	0.016	0	2.185	0	0.013
08/25/95	08:55:16	0.50784713	0.058	0.20899693	0.02	0	0.016	0	2.155	0	0.013
08/25/95	09:00:16	0.51076292	0.057	0.21080679	0.019	0	0.016	0	2.15	0	0.013

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 6											
08/21/95	21:19:46	0.00877855	0.002	0.00922303	0.002	0	0.0006	0.00577828	0.001	0	0.052
08/21/95	21:24:46	0.0078852	0.002	0.00832943	0.002	0	0.0005	0.00621931	0.001	0	0.052
08/21/95	21:29:46	0.00665861	0.002	0.00710251	0.002	0	0.0005	0.0062147	0.001	0	0.051
08/21/95	21:34:47	0.00665243	0.002	0.0072068	0.002	0	0.0005	0.00598719	0.001	0	0.05
08/21/95	21:39:47	0.00718806	0.002	0.00718806	0.002	0	0.0005	0.0060822	0.001	0	0.051
08/21/95	21:44:48	0.00662896	0.002	0.00640799	0.002	0	0.0006	0.00596606	0.001	0	0.049
08/21/95	21:49:47	0.00707089	0.002	0.00673944	0.002	0	0.0005	0.00596606	0.001	0	0.048
08/21/95	21:54:47	0.00716799	0.002	0.00683716	0.002	0	0.0006	0.00584467	0.001	0	0.049
08/21/95	21:59:47	0.00693837	0.002	0.00660797	0.002	0	0.0006	0.00572691	0.001	0	0.048
08/21/95	22:04:48	0.00737476	0.002	0.00781505	0.002	0	0.0006	0.00561363	0.001	0	0.049
08/21/95	22:09:48	0.00846756	0.002	0.00703797	0.002	0	0.0006	0.00571835	0.001	0	0.049
08/21/95	22:14:49	0.00758214	0.002	0.00736236	0.002	0	0.0006	0.00560419	0.001	0	0.049
08/21/95	22:19:48	0.00846281	0.002	0.00692412	0.002	0	0.0006	0.00593496	0.001	0	0.048
08/21/95	22:24:48	0.0081407	0.002	0.00803069	0.002	0	0.0006	0.00539046	0.001	0	0.048
08/21/95	22:29:48	0.00802318	0.002	0.0083529	0.002	0	0.0006	0.00549533	0.001	0	0.048
08/21/95	22:34:49	0.00835134	0.002	0.00824145	0.002	0	0.0006	0.0054943	0.001	0	0.048
08/21/95	22:39:49	0.00834821	0.002	0.00724976	0.002	0	0.0006	0.00560209	0.001	0	0.048
08/21/95	22:44:50	0.00845331	0.002	0.00790439	0.002	0	0.0006	0.00515981	0.001	0	0.047
08/21/95	22:49:50	0.00811787	0.002	0.00745967	0.002	0	0.0006	0.00537535	0.001	0	0.048
08/21/95	22:54:49	0.00888578	0.002	0.00767907	0.002	0	0.0006	0.00526565	0.001	0	0.048
08/21/95	22:59:49	0.00898368	0.002	0.00788811	0.002	0	0.0006	0.00525874	0.001	0	0.047
08/21/95	23:04:50	0.00908642	0.002	0.00788219	0.002	0	0.0007	0.00514532	0.001	0	0.047
08/21/95	23:09:50	0.00897526	0.002	0.00799017	0.002	0	0.0007	0.00536326	0.001	0	0.048
08/21/95	23:14:49	0.00941837	0.002	0.00766611	0.002	0	0.0007	0.00514725	0.001	0	0.047
08/21/95	23:19:50	0.00964102	0.002	0.00744988	0.002	0	0.0007	0.00514918	0.001	0	0.048
08/21/95	23:24:50	0.0090847	0.002	0.00777125	0.002	0	0.0006	0.00536326	0.001	0	0.047
08/21/95	23:29:50	0.00897524	0.002	0.00733343	0.002	0	0.0007	0.00514435	0.001	0	0.048
08/21/95	23:34:51	0.01049971	0.002	0.00776541	0.002	0	0.0007	0.00514048	0.001	0	0.047
08/21/95	23:39:51	0.00929662	0.002	0.00776541	0.002	0	0.0007	0.00535923	0.001	0	0.049
08/21/95	23:44:50	0.0101735	0.002	0.00765748	0.002	0	0.0007	0.00514145	0.001	0	0.047
08/21/95	23:49:51	0.00995285	0.002	0.00710918	0.002	0	0.0007	0.00524985	0.001	0	0.047
08/21/95	23:54:50	0.01060908	0.002	0.00743729	0.002	0	0.0007	0.00535923	0.001	0	0.048
08/21/95	23:59:50	0.00972495	0.002	0.00753957	0.002	0	0.0007	0.00502638	0.001	0	0.046
08/22/95	00:04:51	0.01016585	0.002	0.00787034	0.002	0	0.0007	0.00459103	0.001	0	0.046
08/22/95	00:09:50	0.01016585	0.002	0.00819827	0.002	0	0.0007	0.00491896	0.001	0	0.046
08/22/95	00:14:50	0.00995098	0.002	0.00732654	0.002	0	0.0007	0.00470211	0.001	0	0.046
08/22/95	00:19:50	0.00983794	0.002	0.00819828	0.002	0	0.0007	0.00480966	0.001	0	0.045
08/22/95	00:24:51	0.01006223	0.002	0.00853103	0.002	0	0.0007	0.00481237	0.001	0	0.043
08/22/95	00:29:51	0.00984719	0.002	0.00776834	0.002	0	0.0007	0.00481418	0.001	0	0.044
08/22/95	00:34:52	0.00984904	0.002	0.00820753	0.002	0	0.0007	0.00470565	0.001	0	0.046
08/22/95	00:39:52	0.01038645	0.002	0.00852782	0.002	0	0.0007	0.00470123	0.001	0	0.044
08/22/95	00:44:53	0.01038254	0.002	0.00874319	0.003	0	0.0007	0.00426231	0.001	0	0.044
08/22/95	00:49:51	0.01048788	0.002	0.00863065	0.002	0	0.0007	0.00458845	0.001	0	0.043
08/22/95	00:54:50	0.01004521	0.002	0.00851659	0.002	0	0.0007	0.00458586	0.001	0	0.044
08/22/95	00:59:50	0.01037082	0.002	0.00873332	0.002	0	0.0007	0.00447583	0.001	0	0.044
08/22/95	01:04:51	0.00960666	0.002	0.00829666	0.002	0	0.0007	0.00480333	0.001	0	0.044
08/22/95	01:09:51	0.01025393	0.002	0.00861766	0.002	0	0.0007	0.00469063	0.001	0	0.044
08/22/95	01:14:51	0.01014675	0.002	0.00807376	0.002	0	0.0007	0.0044733	0.001	0	0.043
08/22/95	01:19:51	0.00982129	0.002	0.00774791	0.003	0	0.0007	0.00458327	0.001	0	0.044
08/22/95	01:24:52	0.0092809	0.002	0.00797066	0.002	0	0.0007	0.00480423	0.001	0	0.044
08/22/95	01:29:52	0.01036887	0.002	0.00753107	0.002	0	0.0007	0.00458413	0.001	0	0.045
08/22/95	01:34:52	0.0092809	0.002	0.00753391	0.002	0	0.0007	0.00480423	0.001	0	0.044
08/22/95	01:39:52	0.01026552	0.002	0.00829978	0.002	0	0.0007	0.00436831	0.001	0	0.044
08/22/95	01:44:52	0.01014867	0.002	0.00807528	0.002	0	0.0007	0.00447414	0.001	0	0.044
08/22/95	01:49:53	0.01035908	0.002	0.00883248	0.002	0	0.0007	0.00425267	0.001	0	0.043
08/22/95	01:54:53	0.01056919	0.002	0.00784517	0.002	0	0.0007	0.00457635	0.001	0	0.042
08/22/95	01:59:53	0.01002627	0.002	0.00817359	0.003	0	0.0007	0.00425027	0.001	0	0.043
08/22/95	02:04:54	0.00992104	0.002	0.00741352	0.003	0	0.0007	0.00501503	0.001	0	0.043
08/22/95	02:09:54	0.0095994	0.002	0.00774497	0.002	0	0.0007	0.00447245	0.001	0	0.044
08/22/95	02:14:55	0.01023844	0.002	0.00827789	0.003	0	0.0007	0.00424786	0.001	0	0.042
08/22/95	02:19:54	0.01055722	0.002	0.0072921	0.003	0	0.0007	0.00435349	0.001	0	0.042

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/22/95	02:24:54	0.00979166	0.002	0.00750694	0.002	0	0.0007	0.00413425	0.001	0	0.042
08/22/95	02:29:53	0.01033173	0.002	0.00717783	0.003	0	0.0008	0.00424145	0.001	0	0.044
08/22/95	02:34:53	0.01022297	0.002	0.00793912	0.003	0	0.0007	0.00445896	0.001	0	0.044
08/22/95	02:39:53	0.01000925	0.002	0.00761573	0.003	0	0.0007	0.00456944	0.001	0	0.042
08/22/95	02:44:54	0.01033368	0.002	0.00761429	0.003	0	0.0007	0.00413347	0.001	0	0.043
08/22/95	02:49:54	0.01011422	0.002	0.00739534	0.003	0	0.0007	0.0043502	0.001	0	0.042
08/22/95	02:54:54	0.01022297	0.002	0.00717783	0.003	0	0.0007	0.00424145	0.001	0	0.044
08/22/95	02:59:54	0.01022297	0.002	0.00739534	0.003	0	0.0007	0.00391518	0.001	0	0.043
08/22/95	03:04:55	0.01000168	0.002	0.00739255	0.003	0	0.0007	0.00434856	0.001	0	0.044
08/22/95	03:09:55	0.01032978	0.002	0.00815509	0.003	0	0.0007	0.00434938	0.001	0	0.043
08/22/95	03:14:55	0.00989671	0.002	0.00772161	0.003	0	0.0007	0.00445896	0.001	0	0.043
08/22/95	03:19:56	0.00957403	0.002	0.00728932	0.003	0	0.0007	0.00424304	0.001	0	0.043
08/22/95	03:24:56	0.01011801	0.002	0.00685413	0.003	0	0.0007	0.00402544	0.001	0	0.045
08/22/95	03:29:57	0.0095686	0.002	0.00739392	0.003	0	0.0007	0.00424063	0.001	0	0.044
08/22/95	03:34:57	0.00891282	0.002	0.00706504	0.003	0	0.0007	0.00423902	0.001	0	0.044
08/22/95	03:39:57	0.01010462	0.002	0.00641046	0.003	0	0.0008	0.00423742	0.001	0	0.042
08/22/95	03:44:57	0.00977311	0.002	0.00727554	0.003	0	0.0007	0.00401783	0.001	0	0.042
08/22/95	03:49:57	0.00953963	0.002	0.00715473	0.003	0	0.0007	0.00368577	0.001	0	0.044
08/22/95	03:54:56	0.00953782	0.002	0.00726175	0.003	0	0.0007	0.00411861	0.001	0	0.044
08/22/95	03:59:57	0.009762	0.002	0.00726727	0.003	0	0.0007	0.00412173	0.001	0	0.044
08/22/95	04:04:59	0.00987421	0.002	0.00716151	0.003	0	0.0008	0.00401479	0.001	0	0.044
08/22/95	04:09:59	0.0097657	0.002	0.00716151	0.003	0	0.0008	0.00390628	0.001	0	0.044
08/22/95	04:14:59	0.01052526	0.002	0.00705301	0.003	0	0.0008	0.00444882	0.001	0	0.046
08/22/95	04:19:59	0.00943481	0.002	0.00628987	0.003	0	0.0008	0.00433784	0.001	0	0.044
08/22/95	04:24:59	0.01008549	0.002	0.00715744	0.003	0	0.0007	0.0042294	0.001	0	0.044
08/22/95	04:29:58	0.00997704	0.002	0.0068321	0.003	0	0.0007	0.0040125	0.001	0	0.044
08/22/95	04:34:58	0.00997704	0.002	0.00650676	0.003	0	0.0007	0.00477163	0.001	0	0.044
08/22/95	04:39:58	0.00965536	0.002	0.00607528	0.003	0	0.0008	0.00433949	0.001	0	0.045
08/22/95	04:44:59	0.00964987	0.002	0.00563813	0.003	0	0.0007	0.00422859	0.001	0	0.045
08/22/95	04:49:59	0.00921092	0.002	0.00639346	0.003	0	0.0007	0.00444292	0.001	0	0.045
08/22/95	04:54:59	0.0091077	0.002	0.0056381	0.003	0	0.0008	0.00412015	0.001	0	0.045
08/22/95	04:59:58	0.00975825	0.002	0.00531282	0.003	0	0.0007	0.00422857	0.001	0	0.046
08/22/95	05:04:58	0.00932455	0.002	0.0060718	0.003	0	0.0008	0.00401172	0.001	0	0.045
08/22/95	05:09:57	0.00943118	0.002	0.00672107	0.003	0	0.0007	0.00390256	0.001	0	0.045
08/22/95	05:14:58	0.00953239	0.002	0.006716	0.003	0	0.0007	0.00400794	0.001	0	0.045
08/22/95	05:19:58	0.00941691	0.002	0.0067109	0.003	0	0.0008	0.00389665	0.001	0	0.045
08/22/95	05:24:57	0.01027306	0.002	0.00670453	0.003	0	0.0007	0.00378481	0.001	0	0.046
08/22/95	05:29:57	0.00907831	0.002	0.00670066	0.003	0	0.0008	0.00421493	0.001	0	0.047
08/22/95	05:34:58	0.00907664	0.002	0.00615915	0.003	0	0.0008	0.00432221	0.001	0	0.046
08/22/95	05:39:58	0.00951605	0.002	0.00638008	0.003	0	0.0007	0.0041092	0.001	0	0.046
08/22/95	05:44:58	0.00951967	0.002	0.00649068	0.003	0	0.0008	0.00400259	0.001	0	0.045
08/22/95	05:49:58	0.00951786	0.002	0.00562419	0.003	0	0.0008	0.00400183	0.001	0	0.047
08/22/95	05:54:59	0.01027496	0.002	0.00648945	0.003	0	0.0008	0.00400183	0.001	0	0.046
08/22/95	06:00:00	0.00972867	0.002	0.0060534	0.003	0	0.0008	0.00399957	0.002	0	0.046
08/22/95	06:04:59	0.0098349	0.002	0.00421496	0.003	0	0.0008	0.0031342	0.001	0	0.048
08/22/95	06:09:59	0.00983115	0.002	0.00637404	0.003	0	0.0008	0.00410532	0.001	0	0.047
08/22/95	06:14:59	0.00993919	0.002	0.00659011	0.003	0	0.0008	0.00367318	0.001	0	0.047
08/22/95	06:19:59	0.00951429	0.002	0.00681137	0.003	0	0.0008	0.00389221	0.001	0	0.048
08/22/95	06:24:59	0.01004722	0.002	0.00615798	0.003	0	0.0008	0.00388925	0.001	0	0.048
08/22/95	06:29:59	0.00950343	0.002	0.00626362	0.003	0	0.0008	0.00421175	0.001	0	0.048
08/22/95	06:34:58	0.00950162	0.002	0.00593851	0.003	0	0.0007	0.00410297	0.001	0	0.048
08/22/95	06:39:58	0.00928744	0.002	0.00604764	0.003	0	0.0008	0.00377977	0.001	0	0.05
08/22/95	06:44:59	0.00917595	0.002	0.00626124	0.003	0	0.0008	0.00367038	0.001	0	0.05
08/22/95	06:49:59	0.00949981	0.002	0.00604533	0.003	0	0.0008	0.00367038	0.001	0	0.05
08/22/95	06:54:59	0.00993919	0.002	0.00572584	0.003	0	0.0007	0.00356514	0.001	0	0.052
08/22/95	06:59:58	0.00929098	0.002	0.00637404	0.003	0	0.0008	0.00399728	0.001	0	0.05
08/22/95	07:04:58	0.00972133	0.002	0.00594081	0.003	0	0.0007	0.00388853	0.001	0	0.052
08/22/95	07:09:59	0.00864612	0.002	0.00670074	0.003	0	0.0008	0.00356652	0.001	0	0.049
08/22/95	07:14:59	0.0094116	0.002	0.00638258	0.003	0	0.0008	0.00378627	0.001	0	0.05
08/22/95	07:20:00	0.0100645	0.002	0.006385	0.003	0	0.0008	0.00367949	0.001	0	0.05
08/22/95	07:25:00	0.00941875	0.002	0.00638743	0.003	0	0.0008	0.00368089	0.001	0	0.05
08/22/95	07:29:59	0.00920577	0.002	0.00649819	0.003	0	0.0008	0.00368231	0.001	0	0.049

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/22/95	07:35:00	0.00899428	0.002	0.00563497	0.003	0	0.0008	0.00357604	0.001	0	0.048
08/22/95	07:40:09	0.00791814	0.002	0.00412177	0.003	0	0.0007	0	0.001	0	0.049
08/22/95	07:45:01	0.00857548	0.002	0.00531897	0.003	0	0.0007	0.00358216	0.001	0	0.05
08/22/95	07:50:01	0.00847815	0.002	0.00489124	0.003	0	0.0007	0.00402168	0.001	0	0.05
08/22/95	07:55:02	0.00794218	0.002	0.00543985	0.003	0	0.0007	0.0034815	0.001	0	0.05
08/22/95	08:00:02	0.00795418	0.002	0.00501222	0.003	0	0.0007	0.00348676	0.001	0	0.049
08/22/95	08:05:02	0.00796318	0.002	0.00501789	0.003	0	0.0007	0.00239986	0.001	0	0.05
08/22/95	08:10:02	0.00797518	0.002	0.0057902	0.003	0	0.0007	0.00284047	0.001	0	0.05
08/22/95	08:15:01	0.00787629	0.002	0.00579783	0.003	0	0.0007	0.003063	0.001	0	0.05
08/22/95	08:20:01	0.00832323	0.002	0.00689952	0.003	0	0.0007	0.00273791	0.001	0	0.05
08/22/95	08:25:01	0.00887248	0.002	0.00701035	0.002	0	0.0007	0.00284796	0.001	0	0.05
08/22/95	08:30:02	0.00832636	0.002	0.00734034	0.002	0	0.0007	0.00241026	0.001	0	0.05
08/22/95	08:35:02	0.00833104	0.002	0.00734447	0.002	0	0.0007	0.00241162	0.001	0	0.05
08/22/95	08:40:02	0.00878102	0.002	0.0073541	0.002	0	0.0007	0.00285383	0.001	0	0.051
08/22/95	08:45:02	0.00867937	0.002	0.00769058	0.002	0	0.0007	0.0025269	0.001	0	0.05
08/22/95	08:50:02	0.01043721	0.002	0.00780044	0.002	0	0.0007	0.00230717	0.001	0	0.051
08/22/95	08:55:03	0.00955829	0.002	0.00659193	0.002	0	0.0007	0.0025269	0.001	0	0.051
08/22/95	09:00:03	0.0088991	0.002	0.00780044	0.002	0	0.0007	0.00219731	0.001	0	0.051
08/22/95	09:05:03	0.01131614	0.002	0.00626233	0.002	0	0.0007	0.0025269	0.001	0	0.049
08/22/95	09:10:03	0.01098654	0.002	0.00626233	0.002	0	0.0007	0.00230717	0.001	0	0.048
08/22/95	09:15:03	0.01010762	0.002	0.00845964	0.002	0	0.0007	0.00241704	0.001	0	0.048
08/22/95	09:20:04	0.00999775	0.002	0.00714125	0.002	0	0.0007	0.00241704	0.001	0	0.046
08/22/95	09:25:04	0.0088991	0.002	0.00834977	0.002	0	0.0007	0.00274664	0.001	0	0.047
08/22/95	21:17:30	0.0088991	0.002	0.00834977	0.002	0	0.0007	0.00274664	0.001	0	0.047
08/22/95	21:19:19	0	0.002	0	0.002	0.00142825	0.0007	0.00823991	0.001	0	0.151
08/22/95	21:35:17	0	0.002	0	0.002	0.00153812	0.0007	0.00802018	0.001	0	0.123
08/22/95	21:51:21	0	0.002	0	0.002	0.00142825	0.0007	0.00791031	0.001	0	0.192
08/22/95	22:06:25	0	0.002	0	0.002	0.00120852	0.0007	0.00791031	0.001	0	0.17
Downwind Data											
Run 7											
08/22/95	22:15:08	0	0.002	0	0.002	0.00176246	0.0007	0.0073803	0.001	0	0.153
08/22/95	22:20:09	0	0.002	0	0.003	0.00220266	0.0007	0.00748906	0.001	0	0.182
08/22/95	22:25:09	0	0.002	0	0.003	0.00187121	0.0007	0.00715464	0.001	0	0.182
08/22/95	22:30:09	0	0.002	0	0.003	0.00197906	0.0007	0.00725656	0.001	0	0.142
08/22/95	22:35:09	0	0.002	0	0.003	0.00197758	0.0008	0.00725112	0.001	0	0.158
08/22/95	22:40:09	0	0.002	0	0.003	0.00230545	0.0008	0.00735547	0.001	0	0.142
08/22/95	22:45:08	0	0.002	0	0.003	0.00186561	0.0008	0.00713323	0.001	0	0.182
08/22/95	22:50:08	0	0.002	0	0.003	0.00186561	0.0008	0.00713323	0.001	0	0.203
08/22/95	22:55:09	0	0.002	0	0.003	0.00186387	0.0008	0.00712654	0.001	0	0.145
08/22/95	23:00:09	0	0.002	0	0.003	0.00208041	0.0008	0.00733617	0.001	0	0.168
08/22/95	23:05:09	0	0.002	0	0.003	0.00207962	0.0008	0.00722396	0.002	0	0.262
08/22/95	23:10:08	0	0.002	0	0.003	0.00186002	0.0008	0.00700242	0.001	0	0.374
08/22/95	23:15:09	0	0.002	0	0.003	0.00218784	0.0008	0.00711049	0.002	0	0.759
08/22/95	23:20:09	0	0.003	0	0.003	0.00164057	0.0009	0.00689041	0.002	0	0.8
08/22/95	23:25:09	0	0.002	0	0.003	0.00174961	0.0008	0.0066704	0.002	0	0.343
08/22/95	23:30:09	0	0.002	0	0.003	0.00251365	0.0008	0.00655735	0.002	0	0.906
08/22/95	23:35:09	0	0.002	0	0.003	0.00174863	0.0008	0.00666664	0.001	0	0.838
08/22/95	23:40:09	0	0.002	0	0.003	0.00174797	0.0008	0.00655488	0.001	0	0.884
08/22/95	23:45:10	0	0.002	0	0.003	0.00196757	0.0008	0.0067772	0.001	0	0.11
08/22/95	23:50:10	0	0.002	0	0.003	0.00174797	0.0008	0.00677337	0.001	0	0.075
08/22/95	23:55:10	0	0.002	0	0.003	0.00152803	0.0008	0.00643956	0.001	0	0.11
08/23/95	00:00:09	0	0.002	0	0.003	0.001745	0.0008	0.00665282	0.001	0	0.105
08/23/95	00:05:10	0	0.002	0	0.003	0.00174434	0.0008	0.00654129	0.002	0	0.177
08/23/95	00:10:10	0	0.002	0	0.003	0.00185267	0.0008	0.00653882	0.002	0	0.848
08/23/95	00:15:08	0	0.002	0	0.003	0.00152515	0.0008	0.00620953	0.002	0	0.114
08/23/95	00:20:09	0	0.002	0	0.003	0.00185162	0.0008	0.00609944	0.002	0	0.08
08/23/95	00:25:09	0	0.002	0	0.003	0.00152457	0.0008	0.00598939	0.002	0	0.174
08/23/95	00:30:10	0	0.003	0	0.003	0.00163285	0.0009	0.00642255	0.002	0.4922504	0.355
08/23/95	00:35:08	0	0.003	0	0.003	0.00141487	0.0009	0.00620366	0.002	0	0.777
08/23/95	00:40:08	0	0.002	0	0.003	0.00141407	0.0009	0.00609137	0.002	0	0.846
08/23/95	00:45:09	0	0.002	0	0.003	0.00130529	0.0008	0.0055475	0.002	0	0.869
08/23/95	00:50:10	0	0.002	0	0.003	0.00163069	0.0008	0.00587048	0.002	0	0.874

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	00:55:09	0	0.002	0	0.003	0.00141166	0.0008	0.00575523	0.002	0	0.145
08/23/95	01:00:08	0	0.002	0	0.003	0.00130282	0.0008	0.00542843	0.002	0	0.221
08/23/95	01:05:09	0	0.002	0	0.003	0.0015214	0.0008	0.00565092	0.002	0	0.335
08/23/95	01:10:09	0	0.002	0	0.003	0.00173973	0.0008	0.0055454	0.002	0	0.914
08/23/95	01:15:10	0	0.002	0	0.003	0.00141326	0.0008	0.00554435	0.002	0	0.226
08/23/95	01:20:10	0	0.002	0	0.003	0.00130356	0.0008	0.00543152	0.002	0	0.204
08/23/95	01:25:10	0	0.002	0	0.003	0.00130332	0.0008	0.00510466	0.001	0	0.875
08/23/95	01:30:10	0	0.002	0	0.003	0.00130381	0.0008	0.00543255	0.002	0	0.846
08/23/95	01:35:09	0	0.002	0	0.003	0.00119607	0.0008	0.00511046	0.001	0	0.877
08/23/95	01:40:09	0	0.002	0	0.003	0.00152255	0.0008	0.00522019	0.001	0	0.899
08/23/95	01:45:11	0	0.002	0	0.003	0.00130505	0.0008	0.00511143	0.001	0	0.361
08/23/95	01:50:10	0	0.002	0	0.003	0.00141353	0.0008	0.00467553	0.002	0	0.865
08/23/95	01:55:10	0	0.003	0	0.003	0.00130455	0.0009	0.00543563	0.002	0	0.331
08/23/95	02:00:11	0	0.002	0	0.003	0.00108651	0.0008	0.00488929	0.002	0	0.283
08/23/95	02:05:11	0	0.002	0	0.003	0.00119493	0.0008	0.00510563	0.002	0	0.332
08/23/95	02:10:11	0	0.003	0	0.003	0	0.001	0.0052103	0.002	0.3409492	0.301
08/23/95	02:15:10	0	0.003	0	0.004	0.00108507	0.001	0.00542534	0.002	0.3573129	0.301
08/23/95	02:20:10	0	0.003	0	0.003	0.00108466	0.0009	0.00520635	0.002	0	0.793
08/23/95	02:25:11	0	0.003	0	0.003	0	0.001	0.00499131	0.002	0	0.811
08/23/95	02:30:11	0	0.003	0	0.004	0.00119312	0.0011	0.00553175	0.002	0	0.786
08/23/95	02:35:11	0	0.003	0	0.004	0	0.001	0.00509982	0.002	0.3769527	0.315
08/23/95	02:40:10	0	0.003	0	0.004	0.00119448	0.0011	0.00542946	0.002	0.4915831	0.361
08/23/95	02:45:11	0	0.003	0	0.004	0	0.0011	0.00531986	0.002	0	0.716
08/23/95	02:50:11	0	0.003	0	0.004	0	0.0011	0.00520336	0.002	0.5648899	0.398
08/23/95	02:55:11	0	0.003	0	0.004	0.00119221	0.0011	0.00531076	0.002	0.4970433	0.361
08/23/95	03:00:11	0	0.003	0	0.003	0	0.001	0.00477337	0.002	0.4271083	0.327
08/23/95	03:05:12	0	0.003	0	0.004	0	0.0011	0.00520336	0.002	0.4998479	0.36
08/23/95	03:10:12	0	0.003	0	0.003	0	0.001	0.00466223	0.002	0.4231787	0.338
08/23/95	03:15:12	0	0.003	0	0.004	0	0.0011	0.00509205	0.002	0.4698774	0.349
08/23/95	03:20:11	0	0.003	0	0.004	0	0.0011	0.00422452	0.002	0	0.716
08/23/95	03:25:11	0	0.003	0	0.004	0	0.0011	0.00411385	0.002	0	0.733
08/23/95	03:30:12	0	0.003	0	0.004	0	0.0011	0.00454343	0.002	0	0.773
08/23/95	03:35:12	0	0.003	0	0.003	0.00118836	0.0009	0.00453737	0.002	0	0.853
08/23/95	03:40:12	0	0.003	0	0.003	0	0.0009	0.00421568	0.002	0	0.521
08/23/95	03:45:12	0	0.003	0	0.003	0	0.0009	0.00410524	0.002	0	0.841
08/23/95	03:50:12	0	0.003	0	0.004	0	0.0011	0.00442681	0.002	0	0.801
08/23/95	03:55:11	0	0.003	0	0.004	0	0.0011	0.00431883	0.002	0	0.723
08/23/95	04:00:12	0	0.003	0	0.004	0	0.0012	0.00454083	0.002	0.5175466	0.406
08/23/95	04:05:12	0	0.003	0	0.004	0	0.0011	0.00368149	0.002	0	0.892
08/23/95	04:10:12	0	0.003	0	0.004	0	0.0011	0.00422369	0.002	0.4977459	0.372
08/23/95	04:15:12	0	0.003	0	0.004	0	0.0011	0.00454862	0.002	0	0.686
08/23/95	04:20:12	0	0.003	0	0.004	0	0.0011	0.00412168	0.002	0	0.723
08/23/95	04:25:13	0	0.003	0	0.004	0	0.001	0.00412246	0.002	0	0.697
08/23/95	04:30:13	0	0.003	0	0.004	0	0.0011	0.00455294	0.002	0	0.873
08/23/95	04:35:13	0	0.003	0	0.004	0	0.0011	0.00411698	0.002	0	0.504
08/23/95	04:40:12	0	0.003	0	0.004	0	0.0011	0.00422691	0.002	0.5533996	0.418
08/23/95	04:45:12	0	0.003	0	0.004	0	0.0011	0.00314069	0.002	0	0.724
08/23/95	04:50:13	0	0.003	0	0.004	0	0.0011	0.00379266	0.002	0.5079993	0.436
08/23/95	04:55:13	0	0.003	0	0.004	0	0.0011	0.00411852	0.002	0	0.714
08/23/95	05:00:13	0	0.003	0	0.003	0	0.001	0.0036878	0.002	0	0.923
08/23/95	05:05:13	0	0.003	0	0.004	0	0.001	0.00400786	0.002	0	0.985
08/23/95	05:10:12	0	0.003	0	0.004	0	0.0011	0.00335602	0.002	0	0.738
08/23/95	05:15:12	0	0.003	0	0.004	0	0.001	0.00368079	0.002	0	0.751
08/23/95	05:20:13	0	0.003	0	0.003	0	0.001	0.00314069	0.002	0	0.759
08/23/95	05:25:13	0	0.003	0	0.003	0	0.001	0.00379338	0.002	0	0.753
08/23/95	05:30:13	0	0.003	0	0.003	0	0.001	0.00314488	0.002	0	0.757
08/23/95	05:35:13	0	0.003	0	0.003	0	0.001	0.0036843	0.002	0	0.763
08/23/95	05:40:13	0	0.002	0	0.003	0	0.0009	0.00313651	0.002	0	0.885
08/23/95	05:45:14	0	0.002	0	0.003	0	0.0008	0.00302778	0.002	0	0.872
08/23/95	05:50:14	0	0.003	0	0.003	0	0.001	0.00335474	0.002	0	0.754
08/23/95	05:55:14	0	0.003	0	0.004	0	0.001	0.00324961	0.002	0	0.73
08/23/95	06:00:14	0	0.003	0	0.003	0	0.001	0.00335857	0.002	0	0.764

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	06:05:13	0	0.003	0	0.003	0	0.0009	0.00314488	0.002	0	0.782
08/23/95	06:10:13	0	0.003	0	0.003	0	0.0009	0.0033624	0.002	0	0.743
08/23/95	06:15:13	0	0.003	0	0.003	0	0.001	0.0032527	0.002	0	0.759
08/23/95	06:20:14	0	0.002	0	0.003	0	0.0008	0.0025987	0.002	0	0.187
08/23/95	06:25:14	0	0.002	0	0.003	0	0.0008	0.0028083	0.002	0	0.071
08/23/95	06:30:14	0	0.002	0	0.003	0	0.0008	0.00258931	0.002	0	0.264
08/23/95	06:35:14	0	0.002	0	0.003	0	0.0008	0.00204948	0.002	0	0.867
08/23/95	06:40:14	0	0.003	0	0.003	0	0.0009	0.00258931	0.002	0	0.836
08/23/95	06:45:13	0	0.002	0	0.003	0	0.0009	0.00237489	0.002	0	0.821
08/23/95	06:50:15	0	0.003	0	0.003	0	0.001	0.00291964	0.002	0	0.744
08/23/95	06:55:15	0	0.003	0	0.003	0	0.001	0.00292521	0.002	0	0.752
08/23/95	07:00:15	0	0.003	0	0.003	0	0.0009	0.00260216	0.002	0	0.792
08/23/95	07:05:15	0	0.003	0	0.003	0	0.0009'	0.00270905	0.002	0	0.835
08/23/95	07:10:15	0	0.003	0	0.003	0	0.0009	0.00248901	0.002	0	0.82
08/23/95	07:15:15	0	0.003	0	0.003	0	0.001	0.00281153	0.002	0	0.78
08/23/95	07:20:16	0	0.003	0	0.004	0	0.001	0.00302722	0.002	0	0.772
08/23/95	07:25:16	0	0.003	0	0.003	0	0.0009	0.00270442	0.002	0	0.765
08/23/95	07:30:16	0	0.003	0	0.003	0	0.0009	0.00270341	0.002	0	0.799
08/23/95	07:35:16	0	0.003	0	0.003	0	0.001	0.00281315	0.002	0	0.758
08/23/95	07:40:16	0	0.003	0	0.003	0	0.001	0.00281422	0.002	0	0.769
Run 8											
08/23/95	09:54:49	0	0.004	0	0.005	0.00562202	0.0014	0.00992121	0.003	0	0.163
08/23/95	09:59:50	0	0.004	0	0.005	0.0061755	0.0015	0.00970435	0.003	0	0.186
08/23/95	10:04:51	0	0.004	0	0.005	0.00651361	0.0015	0.00971521	0.003	0	0.196
08/23/95	10:09:50	0	0.004	0	0.005	0.00650996	0.0015	0.0098201	0.003	0	0.177
08/23/95	10:14:50	0	0.004	0	0.005	0.0056346	0.0014	0.00972245	0.003	0	0.194
08/23/95	10:19:49	0	0.004	0	0.004	0.00508312	0.0013	0.00972424	0.002	0	0.141
08/23/95	10:24:56	0	0.003	0	0.004	0.00453061	0.0012	0.00961373	0.002	0	0.117
08/23/95	10:29:49	0	0.003	0	0.004	0.00475338	0.0012	0.00972785	0.002	0	0.124
08/23/95	10:34:48	0	0.003	0	0.004	0.00464888	0.0012	0.00974052	0.002	0	0.124
Run 9											
08/23/95	10:44:51	0	0.004	0	0.004	0.00487116	0.0012	0.00985303	0.002	0	0.171
08/23/95	10:49:51	0	0.004	0	0.004	0.00531794	0.0013	0.00974956	0.002	0	0.174
08/23/95	10:54:50	0	0.004	0	0.005	0.00554055	0.0013	0.00964056	0.003	0	0.187
08/23/95	10:59:50	0	0.004	0	0.005	0.00554569	0.0013	0.00953859	0.003	0	0.174
08/23/95	11:04:50	0	0.004	0	0.005	0.00565765	0.0013	0.00954036	0.003	0	0.16
08/23/95	11:09:50	0	0.004	0	0.004	0.00510393	0.0013	0.00920926	0.002	0	0.166
08/23/95	11:14:50	0	0.004	0	0.004	0.00543881	0.0013	0.00965666	0.002	0	0.15
08/23/95	11:19:51	0	0.003	0	0.004	0.00477196	0.0012	0.00954393	0.002	0	0.108
08/23/95	11:25:03	0	0.004	0	0.004	0.00544283	0.0013	0.00966381	0.002	0	0.18
08/23/95	11:29:55	0	0.004	0	0.004	0.00567026	0.0013	0.0096728	0.002	0	0.147
08/23/95	11:34:54	0	0.004	0	0.005	0.00655968	0.0014	0.00933921	0.003	0	0.118
Run 10											
08/23/95	11:44:50	0.01079857	0.002	0.00912869	0.002	0	0.0007	0.0061229	0.001	0	0.141
08/23/95	11:49:54	0.01003225	0.002	0.00434731	0.002	0	0.0007	0.00691111	0.001	0	0.129
08/23/95	11:54:50	0.00545797	0.002	0	0.002	0	0.0007	0.00712878	0.001	0	0.12
08/23/95	11:59:49	0.00423271	0.002	0	0.002	0	0.0007	0.00746294	0.001	0	0.162
08/23/95	12:04:50	0.00457193	0.002	0	0.002	0	0.0007	0.0073597	0.001	0	0.125
08/23/95	12:09:50	0.00412741	0.002	0	0.002	0	0.0007	0.00725086	0.001	0	0.104
08/23/95	12:14:50	0.00591006	0.002	0	0.002	0	0.0007	0.0073597	0.001	0	0.123
08/23/95	12:19:50	0.00612743	0.002	0	0.002	0	0.0007	0.00746432	0.001	0	0.087
08/23/95	12:24:52	0.00334655	0.002	0	0.002	0	0.0007	0.00792017	0.001	0	0.141
08/23/95	12:29:52	0.00312863	0.002	0	0.002	0	0.0007	0.00782157	0.001	0	0.139
08/23/95	12:34:51	0.00603156	0.002	0	0.003	0	0.0007	0.00815378	0.001	0	0.165
08/23/95	12:39:51	0.00246092	0.002	0	0.002	0	0.0007	0.00783021	0.001	0	0.162
08/23/95	12:44:51	0.00235079	0.002	0	0.002	0	0.0007	0.00794791	0.001	0	0.172
08/23/95	12:49:52	0	0.002	0	0.002	0	0.0007	0.00771977	0.001	0	0.141
08/23/95	12:54:52	0.00235252	0.002	0	0.002	0	0.0007	0.00806578	0.001	0	0.143
08/23/95	12:59:51	0	0.002	0	0.002	0	0.0007	0.00739091	0.001	0	0.119
08/23/95	13:04:51	0.00235209	0.002	0	0.002	0	0.0007	0.00784029	0.001	0	0.175
08/23/95	13:09:52	0	0.002	0	0.002	0	0.0007	0.00783597	0.001	0	0.15
08/23/95	13:14:52	0	0.002	0	0.002	0	0.0007	0.00773254	0.001	0	0.126

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	13:19:53	0	0.002	0	0.002	0	0.0007	0.00774679	0.001	0	0.158
08/23/95	13:24:51	0.00247135	0.002	0	0.003	0	0.0007	0.00775105	0.001	0	0.165
08/23/95	13:29:52	0.00370295	0.002	0	0.003	0	0.0007	0.00774253	0.001	0	0.147
08/23/95	13:34:52	0.00280321	0.002	0	0.002	0	0.0007	0.00773686	0.001	0	0.114
08/23/95	13:39:52	0	0.002	0	0.002	0	0.0007	0.00763172	0.001	0	0.096
08/23/95	13:44:51	0.00291694	0.002	0	0.002	0	0.0007	0.00751673	0.001	0	0.097
08/23/95	13:49:52	0.00426244	0.002	0	0.002	0	0.0007	0.0077397	0.001	0	0.119
08/23/95	13:54:52	0	0.002	0	0.002	0	0.0007	0.00764431	0.001	0	0.091
08/23/95	13:59:52	0	0.002	0	0.002	0	0.0007	0.00752776	0.001	0	0.132
08/23/95	14:04:52	0.0042742	0.002	0	0.002	0	0.0007	0.00764858	0.001	0	0.176
08/23/95	14:09:53	0	0.002	0	0.002	0	0.0007	0.00797286	0.001	0	0.144
08/23/95	14:14:53	0	0.002	0	0.002	0.00089884	0.0007	0.00797725	0.001	0	0.117
08/23/95	14:19:53	0	0.002	0	0.002	0	0.0007	0.00754161	0.001	0	0.103
08/23/95	14:24:54	0	0.002	0	0.002	0	0.0007	0.00776816	0.001	0	0.117
08/23/95	14:29:53	0	0.002	0	0.002	0.00168564	0.0007	0.00820346	0.001	0	0.063
08/23/95	14:34:56	0	0.002	0	0.003	0.00168749	0.0007	0.00854997	0.001	0	0.14
08/23/95	14:39:53	0	0.002	0	0.003	0.00180001	0.0007	0.00832505	0.001	0	0.161
08/23/95	14:44:52	0	0.002	0	0.003	0.00180133	0.0007	0.00844372	0.001	0	0.132
08/23/95	14:49:53	0	0.002	0	0.003	0.00135371	0.0007	0.00778385	0.001	0	0.152
08/23/95	14:54:53	0	0.002	0	0.002	0.00180001	0.0007	0.00753754	0.001	0	0.086
08/23/95	14:59:54	0	0.002	0	0.003	0.00191496	0.0007	0.00811042	0.001	0	0.113
08/23/95	15:04:54	0	0.002	0	0.002	0.00157674	0.0007	0.00765844	0.001	0	0.162
08/23/95	15:09:54	0	0.002	0	0.003	0.001802	0.0007	0.00799639	0.001	0	0.13
08/23/95	15:14:55	0	0.002	0	0.003	0.00180464	0.0007	0.00778251	0.001	0	0.144
08/23/95	15:19:55	0	0.002	0	0.002	0.00192023	0.0007	0.0082457	0.001	0	0.101
08/23/95	15:24:55	0	0.002	0	0.003	0.00215044	0.0007	0.00826223	0.001	0	0.093
08/23/95	15:29:58	0	0.002	0	0.003	0.00215438	0.0007	0.00827737	0.001	0	0.059
08/23/95	15:34:56	0	0.002	0	0.003	0.00226654	0.0008	0.00838618	0.002	0	0.12
08/23/95	15:39:56	0	0.002	0	0.003	0.00237251	0.0008	0.00836026	0.002	0	0.13
08/23/95	15:44:57	0	0.002	0	0.003	0.00203395	0.0007	0.0079098	0.001	0	0.124
08/23/95	15:49:57	0	0.002	0	0.003	0.00270946	0.0008	0.00869285	0.002	0	0.093
08/23/95	15:54:57	0	0.002	0	0.003	0.00293313	0.0008	0.0087994	0.002	0	0.063
08/23/95	15:59:58	0	0.002	0	0.003	0.00294117	0.0008	0.00814478	0.002	0	0.157
08/23/95	16:05:04	0	0.002	0	0.003	0.00226368	0.0007	0.00747013	0.001	0	0.152
Run 11											
08/23/95	16:59:50	0	0.002	0	0.003	0.00215172	0.0007	0.00792738	0.001	0	0.133
08/23/95	17:04:50	0	0.002	0	0.003	0.00328181	0.0008	0.00803477	0.002	0	0.045
08/23/95	17:09:51	0	0.002	0	0.003	0.00316864	0.0009	0.00837426	0.002	0	0.098
08/23/95	17:14:51	0	0.002	0	0.003	0.00294338	0.0008	0.00826411	0.002	0	0.089
08/23/95	17:19:51	0	0.002	0	0.003	0.00316864	0.0008	0.00848743	0.002	0	0.063
08/23/95	17:24:52	0	0.003	0	0.003	0.00328184	0.0009	0.00882702	0.002	0	0.119
08/23/95	17:29:51	0	0.003	0	0.003	0.00361738	0.0009	0.00859128	0.002	0	0.046
08/23/95	17:34:51	0	0.003	0	0.003	0.00373655	0.0009	0.00883185	0.002	0	0.116
08/23/95	17:39:52	0	0.003	0	0.003	0.00327945	0.0009	0.00859442	0.002	0	0.075
08/23/95	17:44:52	0	0.003	0	0.003	0.00350882	0.0009	0.00871545	0.002	0	0.161
08/23/95	17:49:51	0	0.003	0	0.003	0.00384698	0.0009	0.00882542	0.002	0	0.178
08/23/95	17:54:52	0	0.003	0	0.003	0.00396012	0.0009	0.00848598	0.002	0	0.104
08/23/95	17:59:52	0	0.003	0	0.003	0.0033913	0.0009	0.00893041	0.002	0	0.058
08/23/95	18:04:51	0	0.003	0	0.003	0.00384417	0.0009	0.00915817	0.002	0	0.137
08/23/95	18:09:51	0	0.003	0	0.003	0.00407629	0.001	0.00871872	0.002	0	0.207
08/23/95	18:14:52	0	0.003	0	0.003	0.00350822	0.0009	0.00894029	0.002	0	0.161
08/23/95	18:19:52	0	0.003	0	0.003	0.00350114	0.0009	0.0090352	0.002	0	0.093
08/23/95	18:24:52	0	0.003	0	0.003	0.00372706	0.0009	0.00914824	0.002	0	0.143
08/23/95	18:29:53	0	0.003	0	0.003	0.00372502	0.001	0.00948186	0.002	0	0.198
08/23/95	18:34:53	0	0.003	0	0.003	0.00383649	0.001	0.00959123	0.002	0	0.2
08/23/95	18:39:54	0	0.003	0	0.003	0.00372297	0.001	0.00947666	0.002	0	0.186
08/23/95	18:44:54	0	0.002	0	0.003	0.00293328	0.0008	0.00846139	0.002	0	0.149
Run 12											
08/23/95	19:24:51	0	0.004	0	0.004	0.0050648	0.0012	0.00967939	0.002	0	0.097
08/23/95	19:29:52	0	0.004	0	0.004	0.00584943	0.0013	0.00989904	0.002	0	0.121
08/23/95	19:34:52	0	0.004	0	0.004	0.00528505	0.0013	0.00978296	0.002	0	0.146
08/23/95	19:39:51	0	0.004	0	0.004	0.00561929	0.0013	0.00988995	0.002	0	0.105

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/23/95	19:44:52	0	0.004	0	0.004	0.00527631	0.0013	0.00987905	0.002	0	0.09
08/23/95	19:49:52	0	0.004	0	0.004	0.00560896	0.0013	0.0097596	0.002	0	0.092
08/23/95	19:54:51	0	0.004	0	0.004	0.00526854	0.0012	0.0098645	0.002	0	0.096
08/23/95	19:59:52	0	0.004	0	0.004	0.00549071	0.0013	0.01008498	0.002	0	0.077
08/23/95	20:04:52	0	0.004	0	0.004	0.00537469	0.0013	0.00996557	0.002	0	0.117
08/23/95	20:09:51	0	0.004	0	0.004	0.00514694	0.0012	0.00984633	0.002	0	0.119
08/23/95	20:14:52	0	0.004	0	0.004	0.00514219	0.0012	0.00972545	0.002	0	0.11
08/23/95	20:19:52	0	0.004	0	0.004	0.00502669	0.0012	0.00938315	0.002	0	0.099
08/23/95	20:24:51	0	0.004	0	0.004	0.00513554	0.0012	0.00960123	0.002	0	0.095
08/23/95	20:29:51	0	0.004	0	0.004	0.00513079	0.0012	0.00959235	0.002	0	0.116
08/23/95	20:34:52	0	0.004	0	0.004	0.00512892	0.0012	0.00970035	0.002	0	0.113
08/23/95	20:39:51	0	0.004	0	0.004	0.00512512	0.0012	0.00958174	0.002	0	0.086
08/23/95	20:44:51	0	0.004	0	0.004	0.00523168	0.0013	0.00957285	0.002	0	0.087
08/23/95	20:49:52	0	0.004	0	0.004	0.00511559	0.0013	0.00945271	0.002	0	0.094
08/23/95	20:54:52	0	0.004	0	0.004	0.00522291	0.0013	0.00955682	0.002	0	0.114
08/23/95	20:59:53	0	0.004	0	0.004	0.00510989	0.0013	0.00944218	0.002	0	0.17
08/23/95	21:04:53	0	0.004	0	0.004	0.00521806	0.0013	0.00943691	0.002	0	0.111
08/23/95	21:09:52	0	0.004	0	0.004	0.00510513	0.0013	0.00932242	0.002	0	0.105
08/23/95	21:14:52	0	0.004	0	0.004	0.00510228	0.0013	0.00942813	0.002	0	0.114
08/23/95	21:19:53	0	0.004	0	0.004	0.00487863	0.0013	0.00931374	0.002	0	0.124
08/23/95	21:24:53	0	0.004	0	0.004	0.00487681	0.0012	0.00931027	0.002	0	0.133
08/23/95	21:29:51	0	0.004	0	0.004	0.00498765	0.0012	0.00919944	0.002	0	0.123
08/23/95	21:34:51	0	0.004	0	0.004	0.00498486	0.0013	0.00919429	0.002	0	0.127
08/23/95	21:39:52	0	0.004	0	0.004	0.00498114	0.0013	0.00918744	0.002	0	0.144
08/23/95	21:44:52	0	0.004	0	0.004	0.00497927	0.0013	0.00918398	0.002	0	0.138
08/23/95	21:49:52	0	0.004	0	0.004	0.00497555	0.0013	0.00917712	0.002	0	0.128
08/23/95	21:54:52	0	0.004	0	0.004	0.00508327	0.0013	0.00917198	0.002	0	0.186
08/23/95	21:59:52	0	0.004	0	0.004	0.00507947	0.0013	0.00916513	0.002	0	0.16
08/23/95	22:04:52	0	0.004	0	0.004	0.00529536	0.0013	0.00926688	0.002	0	0.117
08/23/95	22:09:51	0	0.004	0	0.004	0.00507187	0.0013	0.00915142	0.002	0	0.118
08/23/95	22:14:52	0	0.004	0	0.004	0.00518019	0.0013	0.00914799	0.002	0	0.144
08/23/95	22:19:51	0	0.004	0	0.004	0.00506427	0.0013	0.00891751	0.002	0	0.182
08/23/95	22:24:52	0	0.004	0	0.004	0.00506332	0.0013	0.00891584	0.002	0	0.223
08/23/95	22:29:52	0	0.004	0	0.004	0.00506047	0.0013	0.00891082	0.002	0	0.211
08/23/95	22:34:51	0	0.004	0	0.004	0.00505952	0.0013	0.00890915	0.002	0	0.183
08/23/95	22:39:51	0	0.004	0	0.004	0.00505572	0.0013	0.00868265	0.002	0	0.187
08/23/95	22:44:52	0	0.004	0	0.004	0.00516563	0.0013	0.00890246	0.002	0	0.233
08/23/95	22:49:52	0	0.004	0	0.004	0.00494396	0.0013	0.00867939	0.002	0	0.245
08/23/95	22:54:52	0	0.004	0	0.004	0.00494396	0.0013	0.00867939	0.002	0	0.222
08/23/95	22:59:51	0	0.004	0	0.004	0.00494303	0.0013	0.00867776	0.002	0	0.226
08/23/95	23:04:51	0	0.004	0	0.004	0.00494396	0.0013	0.00834979	0.002	0	0.244
08/23/95	23:09:52	0	0.004	0	0.004	0.00505382	0.0013	0.00889912	0.002	0	0.296
08/23/95	23:14:52	0	0.004	0	0.004	0.00483137	0.0013	0.00856469	0.002	0	0.241
08/23/95	23:19:52	0	0.003	0	0.004	0.00428154	0.0012	0.0084533	0.002	0	0.273
08/23/95	23:24:51	0	0.004	0	0.005	0.00438802	0.0013	0.00877604	0.002	0.3301987	0.281
08/23/95	23:29:51	0	0.004	0	0.004	0.00460396	0.0013	0.00800211	0.002	0	0.805
08/23/95	23:34:51	0	0.004	0	0.004	0.00448926	0.0013	0.00875953	0.002	0	0.302
08/23/95	23:39:53	0	0.004	0	0.004	0.00404976	0.0013	0.00799006	0.002	0	0.283
08/23/95	23:44:52	0	0.004	0	0.005	0.00415842	0.0013	0.00864515	0.003	0.353685	0.296
08/23/95	23:49:52	0	0.004	0	0.005	0.00437564	0.0014	0.00809493	0.003	0.473991	0.37
08/23/95	23:54:53	0	0.004	0	0.004	0.00436821	0.0013	0.00829959	0.002	0	0.226
08/23/95	23:59:53	0	0.004	0	0.004	0.00435747	0.0012	0.00817026	0.002	0	0.174
08/24/95	00:04:53	0	0.003	0	0.004	0.00413568	0.0012	0.00794486	0.002	0	0.234
08/24/95	00:09:53	0	0.003	0	0.004	0.0041388	0.0012	0.00795086	0.002	0	0.269
08/24/95	00:14:54	0	0.004	0	0.004	0.00392171	0.0013	0.0080613	0.002	0.3307313	0.303
08/24/95	00:19:54	0	0.004	0	0.005	0.00414037	0.0014	0.00849866	0.003	0.3861442	0.315
08/24/95	00:24:54	0	0.004	0	0.005	0.00403447	0.0014	0.00828702	0.003	0.3492544	0.292
08/24/95	00:29:54	0	0.004	0	0.005	0.00402989	0.0013	0.00816869	0.002	0	0.268
08/24/95	00:34:55	0	0.004	0	0.005	0.0040276	0.0013	0.00816404	0.002	0	0.257
08/24/95	00:39:55	0	0.004	0	0.005	0.00391652	0.0014	0.00815943	0.003	0.3062505	0.271
08/24/95	00:44:55	0	0.004	0	0.005	0.003918	0.0015	0.00827133	0.003	0.366224	0.318
08/24/95	00:49:54	0	0.004	0	0.005	0.0040276	0.0015	0.0082729	0.003	0.4510907	0.378

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	00:54:54	0	0.004	0	0.005	0.00402301	0.0014	0.00717618	0.003	0.3915368	0.357
08/24/95	00:59:54	0	0.004	0	0.004	0.00390761	0.0012	0.00781522	0.002	0	0.307
08/24/95	01:04:55	0	0.004	0	0.004	0.00379905	0.0013	0.00781518	0.002	0	0.27
08/24/95	01:09:55	0	0.004	0	0.005	0.00390908	0.0014	0.00792674	0.003	0.3305342	0.279
08/24/95	01:14:55	0	0.004	0	0.004	0.00390462	0.0012	0.00726693	0.002	0	0.285
08/24/95	01:19:54	0	0.004	0	0.004	0.00379327	0.0012	0.00758653	0.002	0	0.25
08/24/95	01:24:54	0	0.003	0	0.004	0.0039009	0.0012	0.00736837	0.002	0	0.263
08/24/95	01:29:55	0	0.003	0	0.004	0.00368629	0.0012	0.0069389	0.002	0	0.275
08/24/95	01:34:55	0	0.004	0	0.004	0.00390387	0.0013	0.00791619	0.002	0	0.258
08/24/95	01:39:55	0	0.004	0	0.004	0.00368559	0.0012	0.00747958	0.002	0	0.263
08/24/95	01:44:55	0	0.003	0	0.004	0.00368418	0.0012	0.00726001	0.002	0	0.257
08/24/95	01:49:55	0	0.003	0	0.004	0.0037911	0.0012	0.00671566	0.002	0	0.29
08/24/95	01:54:56	0	0.004	0	0.005	0.00346681	0.0013	0.00704195	0.002	0	0.328
08/24/95	01:59:56	0	0.003	0	0.004	0.00368278	0.0012	0.00736556	0.002	0	0.258
08/24/95	02:04:56	0	0.003	0	0.004	0.00367997	0.0011	0.00703524	0.002	0	0.235
08/24/95	02:09:56	0	0.003	0	0.004	0.0035731	0.0011	0.00692965	0.002	0	0.254
08/24/95	02:14:56	0	0.004	0	0.004	0.00357719	0.0012	0.00715438	0.002	0	0.288
08/24/95	02:19:56	0	0.004	0	0.005	0.00389941	0.0014	0.00779883	0.003	0.3981735	0.335
08/24/95	02:24:57	0	0.004	0	0.005	0.00357583	0.0014	0.00747673	0.003	0.4495788	0.375
08/24/95	02:29:57	0	0.004	0	0.005	0.00347077	0.0014	0.00672462	0.003	0	0.744
08/24/95	02:34:56	0	0.004	0	0.005	0.00379471	0.0015	0.00758942	0.003	0	0.774
08/24/95	02:39:56	0	0.004	0	0.005	0.00368559	0.0015	0.00747958	0.003	0	0.759
08/24/95	02:44:56	0	0.005	0	0.005	0.00368627	0.0016	0.00715571	0.003	0	0.778
08/24/95	02:49:57	0	0.004	0	0.005	0.00357172	0.0015	0.00714344	0.003	0.4078252	0.329
08/24/95	02:54:57	0	0.004	0	0.005	0.00356626	0.0014	0.0072406	0.003	0	0.264
08/24/95	02:59:57	0	0.004	0	0.005	0.0034582	0.0014	0.00713253	0.003	0.2916772	0.266
08/24/95	03:04:56	0	0.003	0	0.004	0.00356831	0.0012	0.00692036	0.002	0	0.276
08/24/95	03:09:56	0	0.003	0	0.004	0.00356967	0.0012	0.006923	0.002	0	0.264
08/24/95	03:14:56	0	0.003	0	0.004	0.00356695	0.0012	0.00680962	0.002	0	0.244
08/24/95	03:19:56	0	0.004	0	0.004	0.00334949	0.0012	0.00680702	0.002	0	0.262
08/24/95	03:24:57	0	0.003	0	0.004	0.00377951	0.0011	0.0069111	0.002	0	0.333
08/24/95	03:29:57	0	0.003	0	0.004	0.0034582	0.0012	0.00691639	0.002	0	0.288
08/24/95	03:34:57	0	0.003	0	0.004	0.0032464	0.0012	0.00584351	0.002	0	0.316
08/24/95	03:39:57	0	0.004	0	0.004	0.00324392	0.0013	0.0063797	0.002	0	0.807
08/24/95	03:44:58	0	0.004	0	0.005	0.00346018	0.0013	0.00627157	0.003	0	0.308
08/24/95	03:49:58	0	0.004	0	0.005	0.00335141	0.0013	0.00670282	0.002	0	0.298
08/24/95	03:54:58	0	0.004	0	0.005	0.00335013	0.0014	0.00648412	0.003	0.3420372	0.295
08/24/95	03:59:57	0	0.004	0	0.005	0.0032433	0.0014	0.00681093	0.003	0.374709	0.308
08/24/95	04:04:57	0	0.004	0	0.005	0.00335397	0.0014	0.00595059	0.003	0	0.751
08/24/95	04:09:57	0	0.004	0	0.005	0.00367995	0.0014	0.00681873	0.003	0.4151851	0.336
08/24/95	04:14:58	0	0.004	0	0.005	0.00302766	0.0013	0.00605531	0.003	0	0.781
08/24/95	04:19:58	0	0.004	0	0.004	0.00323958	0.0012	0.00669513	0.002	0	0.26
08/24/95	04:24:58	0	0.004	0	0.005	0.00334885	0.0013	0.00702177	0.002	0.3407181	0.295
08/24/95	04:29:57	0	0.004	0	0.005	0.00346216	0.0013	0.00703252	0.003	0	0.72
08/24/95	04:34:57	0	0.004	0	0.005	0.00324888	0.0014	0.00649775	0.003	0.4426051	0.377
08/24/95	04:39:57	0	0.004	0	0.005	0.00335589	0.0013	0.00682004	0.003	0	0.745
08/24/95	04:44:58	0	0.004	0	0.005	0.00324702	0.0013	0.00660227	0.002	0.3479719	0.304
08/24/95	04:49:58	0	0.004	0	0.005	0.00346282	0.0014	0.00649279	0.003	0	0.372
08/24/95	04:54:58	0	0.004	0	0.005	0.0032464	0.0013	0.00660101	0.003	0.3848062	0.325
08/24/95	04:59:58	0	0.004	0	0.005	0.00313818	0.0013	0.00519423	0.002	0	0.76
08/24/95	05:04:58	0	0.004	0	0.004	0.00335461	0.0013	0.00703386	0.002	0	0.276
08/24/95	05:09:59	0	0.004	0	0.004	0.00292343	0.0012	0.00649651	0.002	0	0.771
08/24/95	05:14:59	0	0.004	0	0.004	0.00303171	0.0012	0.00660479	0.002	0	0.311
08/24/95	05:19:59	0	0.004	0	0.004	0.00314058	0.0012	0.00671434	0.002	0	0.377
08/24/95	05:24:59	0	0.004	0	0.004	0.00313818	0.0013	0.00670922	0.002	0.3439016	0.298
08/24/95	05:29:59	0	0.004	0	0.004	0.00313579	0.0013	0.00681223	0.002	0	0.397
08/24/95	05:35:00	0	0.004	0	0.005	0.00302708	0.0013	0.00627038	0.003	0	0.751
08/24/95	05:40:00	0	0.004	0	0.005	0.00313339	0.0014	0.00659093	0.003	0.4065845	0.342
08/24/95	05:45:01	0	0.004	0	0.005	0.00302476	0.0014	0.00669769	0.003	0.4029418	0.347
08/24/95	05:50:01	0	0.004	0	0.005	0.00313279	0.0014	0.0059415	0.003	0	0.743
08/24/95	05:55:00	0	0.004	0	0.005	0.00291729	0.0014	0.00626678	0.003	0	0.749
08/24/95	06:00:00	0	0.004	0	0.005	0.00302419	0.0014	0.00626439	0.003	0	0.748

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	06:05:00	0	0.004	0	0.005	0.00302245	0.0014	0.00582901	0.003	0.4437606	0.4
08/24/95	06:10:01	0	0.004	0	0.004	0.00280602	0.0013	0.00604375	0.002	0.3629485	0.309
08/24/95	06:15:01	0	0.004	0	0.005	0.00280602	0.0013	0.00604375	0.002	0	0.735
08/24/95	06:20:01	0	0.004	0	0.005	0.00280764	0.0013	0.00593923	0.003	0	0.733
08/24/95	06:25:00	0	0.004	0	0.004	0.00280817	0.0013	0.00550834	0.002	0.4635645	0.419
08/24/95	06:30:00	0	0.004	0	0.005	0.00280119	0.0013	0.00581786	0.003	0.3743899	0.335
08/24/95	06:35:01	0	0.004	0	0.004	0.00258472	0.0012	0.00538484	0.002	0	0.4
08/24/95	06:40:01	0	0.003	0	0.004	0.00258522	0.0012	0.00538587	0.002	0	0.302
08/24/95	06:45:01	0	0.004	0	0.004	0.00258571	0.0013	0.00538691	0.002	0.4221179	0.376
08/24/95	06:50:00	0	0.004	0	0.004	0.00269603	0.0013	0.00549991	0.002	0.3652588	0.329
08/24/95	06:55:00	0	0.004	0	0.004	0.00269294	0.0013	0.00570903	0.002	0	0.308
08/24/95	07:00:00	0	0.004	0	0.005	0.00269242	0.0014	0.00495405	0.003	0	0.736
08/24/95	07:05:01	0	0.003	0	0.004	0.00236751	0.0011	0.00484264	0.002	0	0.36
08/24/95	07:10:01	0	0.003	0	0.004	0.00193408	0.0011	0.0050501	0.002	0	0.336
08/24/95	07:15:01	0	0.003	0	0.003	0.00225556	0.0009	0.0041889	0.002	0	0.307
08/24/95	07:20:00	0	0.003	0	0.003	0.00236388	0.001	0.00440541	0.002	0	0.308
08/24/95	07:25:01	0	0.003	0	0.003	0.00214939	0.001	0.00429878	0.002	0	0.294
08/24/95	07:30:01	0	0.003	0	0.004	0.00225729	0.0011	0.00472957	0.002	0	0.303
08/24/95	07:35:01	0	0.003	0	0.004	0.00215146	0.0012	0.00527107	0.002	0	0.762
08/24/95	07:40:02	0	0.004	0	0.004	0.00268984	0.0012	0.00581005	0.002	0	0.756
08/24/95	07:45:03	0	0.004	0	0.004	0.0029067	0.0012	0.0058134	0.002	0	0.778
08/24/95	07:50:02	0	0.004	0	0.004	0.00269397	0.0012	0.00603449	0.002	0	0.3
08/24/95	07:55:02	0	0.003	0	0.004	0.00248415	0.0012	0.00594037	0.002	0	0.787
08/24/95	08:00:02	0	0.003	0	0.004	0.00227118	0.0012	0.00573202	0.002	0	0.772
08/24/95	08:05:02	0	0.003	0	0.004	0.00260059	0.0011	0.00530953	0.002	0	0.324
08/24/95	08:10:03	0	0.003	0	0.004	0.00249604	0.0011	0.0055347	0.002	0	0.782
08/24/95	08:15:03	0	0.003	0	0.004	0.00293292	0.0011	0.00673486	0.002	0	0.356
08/24/95	08:20:03	0	0.003	0	0.004	0.00261051	0.0011	0.00663505	0.002	0	0.277
08/24/95	08:25:03	0	0.003	0	0.003	0.00261349	0.001	0.00653371	0.002	0	0.846
08/24/95	08:30:03	0	0.003	0	0.004	0.00272599	0.001	0.00708758	0.002	0	0.254
08/24/95	08:35:04	0	0.003	0	0.004	0.0024016	0.001	0.00665898	0.002	0	0.274
08/24/95	08:40:04	0	0.003	0	0.004	0.00218575	0.001	0.00721298	0.002	0	0.289
08/24/95	08:45:04	0	0.003	0	0.004	0.002953	0.001	0.00743718	0.002	0	0.303
08/24/95	08:50:03	0	0.003	0	0.004	0.00306641	0.001	0.00788507	0.002	0	0.378
08/24/95	08:55:03	0	0.003	0	0.004	0.00295969	0.001	0.0078925	0.002	0	0.262
08/24/95	09:00:03	0	0.003	0	0.004	0.00351174	0.0011	0.00845012	0.002	0	0.204
08/24/95	09:05:04	0	0.003	0	0.004	0.0040635	0.0011	0.00867613	0.002	0	0.18
08/24/95	09:10:04	0	0.003	0	0.004	0.00351834	0.0011	0.00868591	0.002	0	0.192
08/24/95	09:15:04	0	0.003	0	0.004	0.00384819	0.0011	0.00901575	0.002	0	0.205
08/24/95	09:20:03	0	0.003	0	0.004	0.00374034	0.0011	0.00880081	0.002	0	0.174
08/24/95	09:25:03	0	0.003	0	0.004	0.00374245	0.0011	0.00847554	0.002	0	0.169
08/24/95	09:30:03	0	0.003	0	0.004	0.00363374	0.0011	0.00880906	0.002	0	0.166
08/24/95	09:35:04	0	0.003	0	0.004	0.00374806	0.0011	0.00881897	0.002	0	0.191
08/24/95	09:40:04	0	0.003	0	0.004	0.00397448	0.0011	0.00872177	0.002	0	0.245
08/24/95	09:45:04	0	0.003	0	0.004	0.00364327	0.0011	0.00883217	0.002	0	0.182
08/24/95	09:50:04	0	0.003	0	0.004	0.00364804	0.001	0.00873318	0.002	0	0.158
08/24/95	09:55:07	0	0.003	0	0.003	0.00309704	0.001	0.00862746	0.002	0	0.168
08/24/95	10:00:05	0	0.003	0	0.003	0.00276727	0.001	0.00929804	0.002	0	0.161
08/24/95	10:05:06	0	0.003	0	0.004	0.00409862	0.0011	0.00908343	0.002	0	0.187
08/24/95	10:10:05	0	0.003	0	0.004	0.00410244	0.0011	0.00887014	0.002	0	0.167
08/24/95	10:15:05	0	0.003	0	0.004	0.00443919	0.0011	0.01009917	0.002	0	0.162
08/24/95	10:20:04	0	0.003	0	0.004	0.00454933	0.0011	0.00965345	0.002	0	0.154
08/24/95	10:25:04	0	0.003	0	0.004	0.00433143	0.0011	0.00955137	0.002	0	0.164
08/24/95	10:30:04	0	0.003	0	0.004	0.00422194	0.0011	0.00955491	0.002	0	0.165
08/24/95	10:35:05	0	0.003	0	0.004	0.00444662	0.0011	0.00944907	0.002	0	0.212
08/24/95	10:40:05	0	0.003	0	0.004	0.00422508	0.0011	0.00922845	0.002	0	0.19
08/24/95	10:45:04	0	0.003	0	0.004	0.00400642	0.0011	0.0094596	0.002	0	0.179
08/24/95	10:50:04	0	0.003	0	0.004	0.00345189	0.0011	0.01024432	0.002	0	0.19
08/24/95	10:55:04	0	0.003	0	0.004	0.00456286	0.0012	0.01023862	0.002	0	0.21
08/24/95	11:00:05	0	0.003	0	0.004	0.00478899	0.0011	0.01013484	0.002	0	0.18
08/24/95	11:05:06	0	0.003	0	0.004	0.00456625	0.0011	0.01002347	0.002	0	0.151
08/24/95	11:10:05	0	0.003	0	0.004	0.00434753	0.0011	0.01003276	0.002	0	0.176

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	11:15:05	0	0.003	0	0.004	0.0042384	0.0011	0.01003833	0.002	0	0.18
08/24/95	11:20:06	0	0.003	0	0.004	0.00412458	0.0011	0.00980981	0.002	0	0.145
08/24/95	11:25:07	0	0.003	0	0.004	0.00424154	0.0011	0.00993413	0.002	0	0.145
08/24/95	11:30:07	0	0.003	0	0.004	0.00413374	0.0011	0.01005504	0.002	0	0.12
08/24/95	11:35:07	0	0.003	0	0.004	0.00413221	0.0011	0.01005133	0.002	0	0.104
08/24/95	11:40:07	0	0.003	0	0.004	0.00413832	0.0011	0.01006618	0.002	0	0.109
08/24/95	11:45:07	0	0.003	0	0.004	0.00413756	0.0011	0.01006432	0.002	0	0.128
08/24/95	11:50:07	0	0.003	0	0.004	0.00447386	0.0011	0.01040172	0.002	0	0.135
08/24/95	11:55:09	0	0.003	0	0.004	0.00436282	0.0011	0.01029177	0.002	0	0.124
08/24/95	12:00:08	0	0.003	0	0.004	0.00481206	0.0012	0.01040748	0.002	0	0.205
Run 13											
08/24/95	18:39:54	0	0.003	0	0.004	0.0045463	0.0011	0.01000186	0.002	0	0.204
08/24/95	18:44:54	0	0.003	0	0.004	0.00465911	0.0011	0.01011367	0.002	0.2357962	0.2
08/24/95	18:49:55	0	0.003	0	0.004	0.00454547	0.0011	0.01000003	0.002	0.28841	0.224
08/24/95	18:54:56	0	0.003	0	0.004	0.00431741	0.0011	0.01011183	0.002	0.252682	0.211
08/24/95	18:59:54	0	0.003	0	0.004	0.00454387	0.0011	0.01011011	0.002	0.278312	0.219
08/24/95	19:04:55	0	0.003	0	0.004	0.00466002	0.0011	0.0102293	0.002	0.2867614	0.232
08/24/95	19:09:55	0	0.003	0	0.004	0.00477106	0.0012	0.01022371	0.002	0.2873997	0.232
08/24/95	19:14:54	0	0.003	0	0.004	0.00510999	0.0012	0.00987931	0.002	0.2565214	0.221
08/24/95	19:19:54	0	0.004	0	0.004	0.00510905	0.0012	0.00999104	0.002	0.2851988	0.226
08/24/95	19:24:55	0	0.004	0	0.004	0.00510626	0.0012	0.01009904	0.002	0.2918509	0.229
08/24/95	19:29:55	0	0.004	0	0.004	0.00521591	0.0013	0.01020505	0.002	0.3820091	0.284
08/24/95	19:34:54	0	0.004	0	0.004	0.00510066	0.0013	0.01031467	0.002	0.4795754	0.361
08/24/95	19:39:55	0	0.004	0	0.004	0.00509879	0.0013	0.00985767	0.002	0.4916371	0.333
08/24/95	19:44:55	0	0.004	0	0.004	0.00509506	0.0013	0.01030335	0.002	0.4598012	0.337
08/24/95	19:49:54	0	0.004	0	0.004	0.0050876	0.0013	0.01040132	0.002	0.4295067	0.329
08/24/95	19:54:54	0	0.004	0	0.004	0.00496634	0.0012	0.00993267	0.002	0.3186356	0.247
08/24/95	19:59:55	0	0.003	0	0.004	0.00496086	0.0012	0.00992173	0.002	0	0.128
08/24/95	20:04:54	0	0.003	0	0.004	0.00484371	0.0011	0.0099127	0.002	0	0.102
08/24/95	20:09:54	0	0.003	0	0.004	0.00461332	0.0011	0.00978924	0.002	0	0.098
08/24/95	20:14:55	0	0.003	0	0.004	0.00449582	0.0011	0.00966602	0.002	0	0.087
08/24/95	20:19:55	0	0.003	0	0.004	0.00449168	0.0011	0.00954481	0.002	0	0.102
08/24/95	20:24:56	0	0.003	0	0.004	0.00448836	0.0011	0.00953776	0.002	0	0.12
08/24/95	20:29:56	0	0.003	0	0.004	0.00448587	0.0011	0.00953247	0.002	0	0.132
08/24/95	20:34:55	0	0.003	0	0.004	0.00448172	0.0011	0.00941162	0.002	0	0.124
08/24/95	20:39:55	0	0.003	0	0.004	0.00447923	0.0011	0.00907045	0.002	0	0.102
08/24/95	20:44:56	0	0.003	0	0.004	0.00436483	0.0011	0.00940117	0.002	0	0.115
08/24/95	20:49:56	0	0.003	0	0.004	0.00447426	0.0011	0.00928409	0.002	0	0.109
08/24/95	20:54:57	0	0.003	0	0.004	0.00435917	0.0011	0.0092772	0.002	0	0.108
08/24/95	20:59:57	0	0.003	0	0.004	0.00435755	0.0011	0.00927376	0.002	0	0.108
08/24/95	21:04:57	0	0.003	0	0.004	0.00435593	0.0011	0.00927032	0.002	0	0.13
08/24/95	21:09:58	0	0.003	0	0.004	0.00468662	0.0011	0.00926166	0.002	0	0.134
08/24/95	21:14:58	0	0.003	0	0.004	0.00434863	0.0011	0.00914327	0.002	0	0.126
08/24/95	21:19:57	0	0.003	0	0.004	0.00445682	0.0011	0.00924789	0.002	0	0.099
08/24/95	21:24:57	0	0.003	0	0.004	0.00445516	0.0011	0.00924445	0.002	0	0.106
08/24/95	21:29:58	0	0.003	0	0.004	0.00456399	0.0011	0.00923929	0.002	0	0.133
08/24/95	21:34:58	0	0.003	0	0.004	0.00456059	0.0011	0.00912118	0.002	0	0.126
08/24/95	21:39:59	0	0.003	0	0.004	0.00455804	0.0011	0.00922725	0.002	0	0.122
08/24/95	21:44:59	0	0.003	0	0.004	0.00455719	0.0011	0.00911438	0.002	0	0.126
08/24/95	21:49:58	0	0.003	0	0.004	0.00455379	0.0011	0.00910758	0.002	0	0.123
08/24/95	21:54:58	0	0.003	0	0.004	0.00466312	0.0012	0.00910418	0.002	0	0.125
08/24/95	21:59:59	0	0.003	0	0.004	0.00454869	0.0011	0.00909738	0.002	0	0.145
08/24/95	22:04:59	0	0.003	0	0.004	0.00454614	0.0011	0.00909229	0.002	0	0.126
08/24/95	22:09:58	0	0.003	0	0.004	0.00454529	0.0011	0.00909059	0.002	0	0.106
08/24/95	22:14:58	0	0.003	0	0.004	0.00443277	0.0011	0.00897637	0.002	0	0.108
08/24/95	22:19:59	0	0.003	0	0.004	0.00453933	0.0012	0.00896795	0.002	0	0.134
08/24/95	22:24:59	0	0.003	0	0.004	0.00453678	0.0012	0.00885226	0.002	0	0.153
08/24/95	22:29:57	0	0.003	0	0.004	0.0044253	0.0011	0.0088506	0.002	0	0.128
08/24/95	22:34:58	0	0.003	0	0.004	0.00453508	0.0012	0.00884894	0.002	0	0.132
08/24/95	22:39:59	0	0.003	0	0.004	0.00442198	0.0011	0.00873342	0.002	0	0.135
08/24/95	22:44:59	0	0.003	0	0.004	0.00453169	0.0012	0.00873178	0.002	0	0.137
08/24/95	22:49:59	0	0.003	0	0.004	0.00475185	0.0012	0.00884065	0.002	0	0.212

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/24/95	22:54:59	0	0.003	0	0.004	0.00463873	0.0012	0.00817301	0.002	0	0.212
08/24/95	22:59:59	0	0.003	0	0.004	0.00441618	0.0012	0.00861156	0.002	0	0.16
08/24/95	23:04:59	0	0.003	0	0.004	0.00463438	0.0012	0.00849637	0.002	0	0.192
08/24/95	23:10:01	0	0.003	0	0.004	0.00452319	0.0012	0.00849477	0.002	0	0.231
08/24/95	23:15:00	0	0.003	0	0.004	0.00440955	0.0012	0.00848839	0.002	0	0.225
08/24/95	23:19:59	0	0.003	0	0.004	0.00429689	0.0012	0.00826325	0.002	0	0.242
08/24/95	23:24:59	0	0.003	0	0.004	0.0045147	0.0012	0.00847882	0.002	0	0.259
08/24/95	23:30:00	0	0.003	0	0.004	0.00451215	0.0012	0.00847403	0.002	0	0.252
08/24/95	23:35:00	0	0.003	0	0.004	0.00440209	0.0012	0.00825393	0.002	0	0.211
08/24/95	23:40:00	0	0.003	0	0.004	0.00451045	0.0012	0.00847084	0.002	0	0.222
08/24/95	23:45:01	0	0.003	0	0.004	0.00440044	0.0012	0.00836083	0.002	0	0.275
08/24/95	23:50:01	0	0.003	0	0.004	0.00461785	0.0012	0.00846606	0.002	0	0.265
08/24/95	23:55:01	0	0.003	0	0.004	0.0045062	0.0012	0.00846286	0.002	0	0.268
08/25/95	00:00:00	0	0.004	0	0.004	0.00428477	0.0012	0.00813008	0.002	0	0.274
08/25/95	00:05:00	0	0.003	0	0.004	0.00450195	0.0012	0.00845489	0.002	0	0.271
08/25/95	00:10:00	0	0.004	0	0.004	0.00450365	0.0012	0.00845808	0.002	0	0.241
08/25/95	00:15:01	0	0.003	0	0.004	0.0045028	0.0012	0.00834666	0.002	0	0.326
08/25/95	00:20:01	0	0.003	0	0.004	0.00439381	0.0012	0.00834823	0.002	0	0.301
08/25/95	00:25:00	0	0.004	0	0.004	0.0045028	0.0013	0.00856631	0.002	0	0.27
08/25/95	00:30:00	0	0.003	0	0.004	0.00417097	0.0012	0.00812241	0.002	0	0.272
08/25/95	00:35:00	0	0.004	0	0.004	0.00427669	0.0012	0.0082244	0.002	0	0.255
08/25/95	00:40:01	0	0.004	0	0.004	0.00438303	0.0013	0.00843734	0.002	0.2936632	0.26
08/25/95	00:45:01	0	0.004	0	0.004	0.00415759	0.0012	0.00820577	0.002	0.29497	0.263
08/25/95	00:50:01	0	0.004	0	0.004	0.00426215	0.0012	0.00808716	0.002	0	0.24
08/25/95	00:55:01	0	0.003	0	0.004	0.00404357	0.0012	0.00797786	0.002	0	0.306
08/25/95	01:00:02	0	0.003	0	0.004	0.0041505	0.0012	0.0078641	0.002	0	0.27
08/25/95	01:05:02	0	0.003	0	0.004	0.00403897	0.0012	0.00775046	0.002	0	0.253
08/25/95	01:10:02	0	0.003	0	0.004	0.00414577	0.0012	0.00763695	0.002	0.2941317	0.258
08/25/95	01:15:01	0	0.003	0	0.004	0.00414262	0.0012	0.00763115	0.002	0	0.247
08/25/95	01:20:01	0	0.003	0	0.004	0.00414026	0.0012	0.00773575	0.002	0	0.096
08/25/95	01:25:02	0	0.004	0	0.004	0.00425245	0.0012	0.00795971	0.002	0	0.277
08/25/95	01:30:02	0	0.003	0	0.004	0.00403207	0.0012	0.00762825	0.002	0	0.253
08/25/95	01:35:02	0	0.003	0	0.004	0.00424356	0.0012	0.00772546	0.002	0	0.198
08/25/95	01:40:02	0	0.003	0	0.004	0.00424194	0.0012	0.00772251	0.002	0	0.237
08/25/95	01:45:03	0	0.003	0	0.004	0.00413396	0.0012	0.0076152	0.002	0	0.266
08/25/95	01:50:03	0	0.003	0	0.004	0.00413554	0.0012	0.00772693	0.002	0	0.259
08/25/95	01:55:03	0	0.003	0	0.004	0.00402364	0.0012	0.00750355	0.002	0	0.324
08/25/95	02:00:02	0	0.004	0	0.004	0.00402288	0.0012	0.00750212	0.002	0.3085654	0.277
08/25/95	02:05:02	0	0.004	0	0.005	0.00413318	0.0013	0.00794005	0.002	0.3600214	0.292
08/25/95	02:10:03	0	0.003	0	0.004	0.00391191	0.0012	0.00749783	0.002	0	0.277
08/25/95	02:15:03	0	0.004	0	0.004	0.00402211	0.0013	0.0077181	0.002	0	0.279
08/25/95	02:20:03	0	0.003	0	0.004	0.00402058	0.0012	0.00749783	0.002	0	0.155
08/25/95	02:25:03	0	0.004	0	0.004	0.00391788	0.0012	0.0076181	0.002	0.2717484	0.249
08/25/95	02:30:04	0	0.003	0	0.004	0.00402288	0.0012	0.00761085	0.002	0	0.24
08/25/95	02:35:04	0	0.003	0	0.004	0.00391415	0.0012	0.00750212	0.002	0	0.243
08/25/95	02:40:04	0	0.004	0	0.004	0.00391489	0.0012	0.0076123	0.002	0.2866573	0.251
08/25/95	02:45:03	0	0.003	0	0.004	0.00391787	0.0012	0.00729158	0.002	0	0.263
08/25/95	02:50:03	0	0.003	0	0.004	0.00380325	0.0011	0.00717184	0.002	0	0.239
08/25/95	02:55:04	0	0.003	0	0.004	0.00391266	0.0012	0.00739057	0.002	0	0.246
08/25/95	03:00:04	0	0.003	0	0.004	0.0038018	0.0011	0.0071691	0.002	0	0.183
08/25/95	03:05:04	0	0.003	0	0.004	0.00380396	0.0011	0.00706449	0.002	0	0.24
08/25/95	03:10:03	0	0.003	0	0.004	0.00380468	0.0012	0.00739196	0.002	0	0.237
08/25/95	03:15:03	0	0.003	0	0.004	0.00369598	0.0011	0.00717454	0.002	0	0.247
08/25/95	03:20:03	0	0.003	0	0.004	0.00391115	0.0012	0.00727908	0.002	0	0.26
08/25/95	03:25:04	0	0.003	0	0.004	0.00380178	0.0012	0.00716907	0.002	0	0.249
08/25/95	03:30:04	0	0.003	0	0.004	0.00380033	0.0012	0.0073835	0.002	0	0.253
08/25/95	03:35:04	0	0.003	0	0.004	0.00380178	0.0012	0.0072777	0.002	0	0.243
08/25/95	03:40:04	0	0.003	0	0.004	0.00358454	0.0011	0.00738632	0.002	0	0.243
08/25/95	03:45:05	0	0.003	0	0.004	0.00379888	0.0012	0.00748922	0.002	0	0.245
08/25/95	03:50:05	0	0.003	0	0.004	0.00369034	0.0012	0.00748922	0.002	0	0.243
08/25/95	03:55:05	0	0.004	0	0.004	0.00379815	0.0012	0.00759631	0.002	0	0.281
08/25/95	04:00:05	0	0.004	0	0.004	0.00368682	0.0012	0.0075905	0.002	0	0.253

Site: Beef Processir											
Upwind Data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/25/95	04:05:06	0	0.004	0	0.004	0.00379235	0.0013	0.0075847	0.002	0	0.253
08/25/95	04:10:06	0	0.004	0	0.005	0.00357633	0.0013	0.00758615	0.003	0.3425689	0.298
08/25/95	04:15:06	0	0.004	0	0.004	0.00401136	0.0013	0.00758905	0.002	0.2877335	0.263
08/25/95	04:20:06	0	0.004	0	0.004	0.0036847	0.0013	0.00747778	0.002	0	0.277
08/25/95	04:25:07	0	0.004	0	0.004	0.00379235	0.0012	0.00747635	0.002	0	0.267
08/25/95	04:30:07	0	0.003	0	0.004	0.00357633	0.0012	0.00715266	0.002	0	0.255
08/25/95	04:35:07	0	0.003	0	0.004	0.00401519	0.0012	0.0069452	0.002	0	0.256
08/25/95	04:40:06	0	0.003	0	0.004	0.00336922	0.0012	0.00706449	0.002	0	0.303
08/25/95	04:45:06	0	0.003	0	0.004	0.0036995	0.0012	0.007399	0.002	0.2815973	0.259
08/25/95	04:50:07	0	0.003	0	0.004	0.00371007	0.0012	0.00752926	0.002	0.2932048	0.255
08/25/95	04:55:07	0	0.003	0	0.004	0.00360437	0.0011	0.00742719	0.002	0.2892235	0.256
08/25/95	05:00:07	0	0.003	0	0.004	0.00382354	0.0012	0.00775633	0.002	0.3265307	0.28
08/25/95	05:05:06	0	0.003	0	0.004	0.00371289	0.0012	0.00753498	0.002	0.301727	0.255
08/25/95	05:10:06	0	0.003	0	0.004	0.00371078	0.0012	0.00753069	0.002	0.2938062	0.261
08/25/95	05:15:07	0	0.003	0	0.004	0.00381992	0.0012	0.00763983	0.002	0	0.252
08/25/95	05:20:07	0	0.003	0	0.004	0.00371007	0.0012	0.00742014	0.002	0.2912406	0.266
08/25/95	05:25:07	0	0.003	0	0.004	0.00392533	0.0012	0.00774162	0.002	0.2833868	0.248
08/25/95	05:30:06	0	0.003	0	0.004	0.00381629	0.0012	0.00763258	0.002	0	0.253
08/25/95	05:35:06	0	0.003	0	0.004	0.00392607	0.0012	0.00774309	0.002	0.2856218	0.25
08/25/95	05:40:07	0	0.003	0	0.004	0.00381774	0.0012	0.00763548	0.002	0.2875304	0.262
08/25/95	05:45:07	0	0.003	0	0.004	0.00392533	0.0012	0.00763258	0.002	0.3203503	0.273
08/25/95	05:50:07	0	0.003	0	0.004	0.00392309	0.0012	0.00762823	0.002	0.2782123	0.253
08/25/95	05:55:07	0	0.003	0	0.004	0.00381194	0.0012	0.00707931	0.002	0.3331633	0.265
08/25/95	06:00:07	0	0.004	0	0.004	0.00391712	0.0012	0.00772543	0.002	0.3367634	0.288
08/25/95	06:05:08	0	0.004	0	0.004	0.00391488	0.0012	0.00728603	0.002	0.3011196	0.263
08/25/95	06:10:08	0	0.003	0	0.004	0.00380541	0.0012	0.00750209	0.002	0	0.303
08/25/95	06:15:08	0	0.003	0	0.004	0.00391339	0.0012	0.00760937	0.002	0	0.255
08/25/95	06:20:08	0	0.003	0	0.004	0.00380758	0.0012	0.00739759	0.002	0	0.291
08/25/95	06:25:09	0	0.003	0	0.004	0.00391787	0.0012	0.00761807	0.002	0	0.236
08/25/95	06:30:09	0	0.003	0	0.004	0.00391563	0.0012	0.00739618	0.002	0	0.246
08/25/95	06:35:09	0	0.003	0	0.004	0.00358932	0.0012	0.00696111	0.002	0.3167307	0.274
08/25/95	06:40:09	0	0.003	0	0.004	0.00391861	0.0012	0.00751067	0.002	0	0.255
08/25/95	06:45:09	0	0.003	0	0.004	0.00381411	0.0012	0.00697438	0.002	0	0.273
08/25/95	06:50:10	0	0.003	0	0.004	0.00392533	0.0011	0.00752354	0.002	0	0.238
08/25/95	06:55:10	0	0.003	0	0.004	0.00370655	0.0012	0.00730408	0.002	0	0.228
08/25/95	07:00:10	0	0.003	0	0.004	0.00381484	0.0012	0.00752068	0.002	0	0.261
08/25/95	07:05:11	0	0.003	0	0.004	0.00392235	0.0012	0.00751784	0.002	0	0.268
08/25/95	07:10:11	0	0.003	0	0.004	0.00403207	0.0012	0.00762825	0.002	0	0.268
08/25/95	07:15:11	0	0.003	0	0.004	0.0038105	0.0012	0.00740325	0.002	0	0.307
08/25/95	07:20:11	0	0.003	0	0.004	0.0038047	0.0012	0.00739198	0.002	0	0.262
08/25/95	07:25:11	0	0.003	0	0.004	0.00380107	0.0012	0.00738494	0.002	0	0.253
08/25/95	07:30:12	0	0.003	0	0.004	0.00358387	0.0012	0.00705913	0.002	0.274003	0.251
08/25/95	07:35:12	0	0.003	0	0.004	0.00380397	0.0012	0.00717321	0.002	0	0.265
08/25/95	07:40:12	0	0.003	0	0.004	0.00347725	0.0011	0.00717184	0.002	0	0.27
08/25/95	07:45:12	0	0.003	0	0.004	0.00358524	0.0012	0.00706183	0.002	0	0.251
08/25/95	07:50:13	0	0.003	0	0.004	0.00347725	0.0011	0.00706317	0.002	0.2690526	0.246
08/25/95	07:55:13	0	0.003	0	0.004	0.0034819	0.0011	0.0070726	0.002	0.2683236	0.245
08/25/95	08:00:13	0	0.003	0	0.004	0.00370445	0.0011	0.00751784	0.002	0	0.242
08/25/95	08:05:13	0	0.003	0	0.004	0.00338144	0.0011	0.00676289	0.002	0	0.253
08/25/95	08:10:14	0	0.003	0	0.004	0.00371572	0.0011	0.00721287	0.002	0	0.307
08/25/95	08:15:14	0	0.003	0	0.004	0.00360985	0.0011	0.00787605	0.002	0	0.236
08/25/95	08:20:14	0	0.003	0	0.004	0.00372206	0.0011	0.00799148	0.002	0	0.245
08/25/95	08:25:14	0	0.003	0	0.004	0.00383371	0.0011	0.00810556	0.002	0	0.225
08/25/95	08:30:15	0	0.003	0	0.004	0.00372629	0.0011	0.00811016	0.002	0	0.249
08/25/95	08:35:15	0	0.003	0	0.004	0.00362011	0.0011	0.00800812	0.002	0	0.249
08/25/95	08:40:15	0	0.003	0	0.004	0.00318431	0.0011	0.00779607	0.002	0	0.244
08/25/95	08:45:15	0	0.003	0	0.004	0.0030774	0.0011	0.00835295	0.002	0	0.24
08/25/95	08:50:15	0	0.003	0	0.004	0.00340969	0.0011	0.0078093	0.002	0	0.232
08/25/95	08:55:16	0	0.003	0	0.004	0.00352366	0.001	0.00814846	0.002	0	0.225
08/25/95	09:00:16	0	0.003	0	0.004	0.0035263	0.001	0.00771379	0.002	0	0.203

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 14											
08/28/95	21:04:51	16219.2357	279.7	461.53	13.17	0.00021884	0.0002	2.5844	0.161	0.14968471	0.005
08/28/95	21:09:51	16178.8471	281.1	457.82	13.63	0	0.0002	2.6040	0.159	0.15577711	0.005
08/28/95	21:14:52	16251.6662	280.2	465.32	12.93	0.00021872	0.0002	2.5665	0.165	0.14446168	0.005
08/28/95	21:19:52	16323.4314	284.3	470.57	12.56	0.00021892	0.0001	2.5392	0.162	0.14437668	0.004
08/28/95	21:24:52	16358.787	298.9	475.75	12.37	0.00021904	0.0001	2.5494	0.168	0.16657996	0.004
08/28/95	21:29:53	16315.1341	295.2	471.83	12.39	0.000219	0.0001	2.5225	0.164	0.15253315	0.004
08/28/95	21:34:53	16220.7718	304.8	474.73	12.11	0.00032868	0.0001	2.5085	0.165	0.15349437	0.004
08/28/95	21:39:52	16086.7051	313.6	470.08	12.1	0.0002192	0.0001	2.4929	0.159	0.14861913	0.004
08/28/95	21:44:51	15922.1795	319.3	474.11	11.8	0.00032886	0.0001	2.4823	0.161	0.14426176	0.004
08/28/95	21:49:52	15778.8624	330.3	475.52	11.68	0.00032893	0.0001	2.4739	0.159	0.15755509	0.004
08/28/95	21:54:52	15630.7042	337.5	478.43	11.58	0.00032905	0.0001	2.4771	0.154	0.16375556	0.004
08/28/95	21:59:51	15499.949	341	478.46	11.55	0.00032899	0.0001	2.4744	0.156	0.16734414	0.004
08/28/95	22:04:51	15384.7006	341.6	475.74	11.47	0.00032893	0.0001	2.4695	0.157	0.16819033	0.004
08/28/95	22:09:52	15256.8706	340.9	472.10	11.46	0.00032868	0.0001	2.4798	0.151	0.17748828	0.004
08/28/95	22:14:52	15190.7549	339	476.46	11.56	0.00032874	0.0001	2.4836	0.152	0.1831096	0.004
08/28/95	22:19:53	15115.5802	341.9	476.87	11.65	0.0003285	0.0001	2.5005	0.154	0.18691627	0.004
08/28/95	22:24:53	15067.405	349.1	474.51	11.68	0.00032838	0.0001	2.5094	0.156	0.20315651	0.004
08/28/95	22:29:53	14999.8507	337.7	477.85	11.9	0.00043759	0.0001	2.4827	0.156	0.19177562	0.004
08/28/95	22:34:54	14955.6174	331	477.76	11.87	0.00043751	0.0001	2.4592	0.153	0.18594304	0.004
08/28/95	22:39:53	14865.5784	322.6	474.94	11.72	0.00032807	0.0001	2.4576	0.155	0.17442599	0.004
Run 15											
08/29/95	09:44:50	17637.5177	388.2	514.30	20.6	0.00065432	0.0002	3.1217	0.162	0.35289867	0.007
08/29/95	09:49:53	17829.2458	389.5	521.02	21.65	0.0007638	0.0003	3.1125	0.165	0.35342277	0.008
08/29/95	09:54:51	17844.0938	391.6	512.25	19.79	0.00065505	0.0002	3.1384	0.162	0.35438394	0.007
08/29/95	09:59:51	17932.5611	388.6	515.57	20.2	0.00065566	0.0002	3.1590	0.163	0.3499047	0.007
08/29/95	10:04:51	18076.6166	386.8	512.98	19.12	0.00065627	0.0002	3.1630	0.161	0.3466197	0.007
08/29/95	10:09:52	18244.7747	393.5	516.85	19.12	0.00065688	0.0002	3.1417	0.159	0.34956835	0.007
08/29/95	10:14:52	18378.2583	387.6	515.89	18.99	0.00065761	0.0002	3.1617	0.16	0.34195575	0.007
08/29/95	10:19:52	18577.6863	395.3	506.94	17.27	0.00054851	0.0002	3.1248	0.159	0.3456727	0.006
08/29/95	10:24:54	18709.8718	402.8	513.13	18.26	0.0006587	0.0002	3.0784	0.158	0.34867275	0.006
08/29/95	10:29:53	19104.6896	422.9	515.39	18.25	0.00065907	0.0002	3.1266	0.162	0.37281194	0.006
08/29/95	10:34:53	19202.0463	413.2	516.62	18.14	0.0006598	0.0002	3.0869	0.164	0.35123146	0.006
08/29/95	10:39:52	19257.6282	417.7	517.41	18.16	0.00055044	0.0002	3.0581	0.16	0.35899574	0.006
08/29/95	10:44:53	19515.6999	432	514.60	17.4	0.00055084	0.0002	3.1403	0.162	0.36752233	0.006
08/29/95	10:49:54	19668.419	447.9	520.71	18.16	0.00055125	0.0002	3.1582	0.166	0.38455062	0.006
08/29/95	10:54:53	19572.2611	426.7	524.53	18.6	0.00066186	0.0002	3.0498	0.161	0.35630254	0.006
08/29/95	10:59:53	19726.127	431.5	524.00	18.17	0.00055216	0.0002	3.0576	0.16	0.36011857	0.006
08/29/95	11:04:54	19571.127	451.7	533.43	19.53	0.0006632	0.0002	3.0694	0.16	0.38974022	0.007
08/29/95	11:09:55	19709.655	443.3	529.94	18.42	0.00066381	0.0002	3.0097	0.159	0.35768149	0.006
08/29/95	11:14:54	19779.194	459.7	535.08	18.94	0.00066442	0.0002	3.0560	0.166	0.36941478	0.007
08/29/95	11:19:54	20220.8683	482.4	542.23	20.19	0.0006649	0.0002	3.1275	0.162	0.41367944	0.007
08/29/95	11:24:55	20004.7663	477.7	532.86	18.61	0.00066539	0.0002	3.0772	0.16	0.40189409	0.006
08/29/95	11:29:55	19706.7104	481.4	542.70	19.49	0.00066575	0.0002	3.0610	0.158	0.39922943	0.007
08/29/95	11:34:55	19957.7515	485.6	547.10	20.05	0.00066612	0.0002	3.0784	0.158	0.4118823	0.007
08/29/95	11:39:56	20144.4095	489.6	544.80	19.39	0.00066697	0.0002	3.1272	0.159	0.42797296	0.007
Downwind											
Run 16											
08/29/95	22:14:58	18166.7162	889.4	493.77	22.95	0.01825104	0.0003	49.2794	0.251	1.04778588	0.008
08/29/95	22:19:58	18239.9291	931.6	486.45	24.25	0.01837117	0.0003	47.7197	0.242	1.09764975	0.008
08/29/95	22:24:59	18174.8566	931.1	485.84	23.31	0.01651019	0.0003	45.9434	0.233	1.08427916	0.008
08/29/95	22:29:59	18203.8559	927.5	486.29	23.18	0.01652542	0.0003	44.3619	0.227	1.07591525	0.008
08/29/95	22:34:59	18186.5197	879.8	484.81	22.62	0.0167365	0.0003	44.8207	0.228	1.01795358	0.008
08/29/95	22:40:00	18130.0748	859.1	486.77	22.26	0.01740036	0.0003	44.7244	0.229	0.99677637	0.008
08/29/95	22:44:59	17969.3856	782.4	483.71	21.58	0.01827802	0.0003	48.7159	0.242	0.90145873	0.008
08/29/95	22:49:59	17969.8137	740	484.94	20.69	0.01750403	0.0002	44.4858	0.229	0.84778954	0.007
08/29/95	22:55:00	17908.2721	746.8	482.65	20.77	0.01739073	0.0002	42.8501	0.222	0.84422101	0.007
08/29/95	23:00:00	17943.9128	767.7	482.58	21.02	0.0169442	0.0003	43.6531	0.225	0.87779783	0.007
08/29/95	23:04:59	17956.2168	806.5	481.19	21.8	0.0184607	0.0003	46.5358	0.235	0.93215543	0.008
08/29/95	23:10:00	17984.7434	814.7	479.93	22.2	0.01975007	0.0003	49.2454	0.247	0.94152975	0.008
08/29/95	23:15:00	17977.9352	798.7	476.81	22.28	0.02050673	0.0003	54.9285	0.268	0.91633297	0.008
08/29/95	23:19:59	17924.3403	798.6	477.56	21.97	0.01952339	0.0003	53.8900	0.264	0.9152962	0.008

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/29/95	23:24:59	17852.7332	802	477.86	21.92	0.01952701	0.0003	49.8055	0.248	0.92138963	0.008
08/29/95	23:30:00	17701.1246	780.8	475.34	21.2	0.01645535	0.0003	44.8769	0.23	0.88683341	0.007
08/29/95	23:35:00	17610.6337	770.7	474.95	20.97	0.01723283	0.0003	45.7508	0.233	0.87580089	0.007
08/29/95	23:39:59	17580.9642	778.7	474.33	21.16	0.01766534	0.0003	45.0286	0.231	0.88348649	0.007
08/29/95	23:45:00	17524.4398	784.9	474.26	21.13	0.01711039	0.0003	45.4948	0.232	0.89193393	0.007
08/29/95	23:50:00	17482.4251	779.8	473.65	21.07	0.01699441	0.0003	43.1630	0.226	0.89105536	0.007
08/29/95	23:54:59	17422.959	777.8	472.84	20.97	0.01643706	0.0003	43.0354	0.225	0.88858767	0.007
08/29/95	23:59:59	17344.4225	761.8	472.23	20.77	0.01566419	0.0002	43.0065	0.226	0.86788384	0.007
08/30/95	00:05:00	17278.9699	765.5	471.17	20.8	0.01653438	0.0002	43.0035	0.226	0.87358442	0.007
08/30/95	00:10:00	17192.1072	761.1	470.45	20.64	0.01565257	0.0002	42.9229	0.227	0.86964818	0.007
08/30/95	00:14:59	17127.6314	769.7	469.93	20.79	0.0163063	0.0002	41.5482	0.222	0.88393265	0.007
08/30/95	00:20:00	17066.222	784.3	470.32	21.03	0.01685974	0.0003	42.1304	0.223	0.90112052	0.007
08/30/95	00:25:00	17023.8839	798.5	469.16	21.07	0.0163063	0.0003	41.0213	0.22	0.9155603	0.007
08/30/95	00:29:59	16987.3316	794.6	470.37	21.01	0.01663461	0.0003	41.3296	0.222	0.9141376	0.007
08/30/95	00:34:59	16925.0612	787.7	469.71	20.81	0.01564967	0.0002	41.8056	0.223	0.9081185	0.007
08/30/95	00:40:00	16932.3145	802.3	469.73	20.97	0.01564676	0.0003	44.2798	0.232	0.92447205	0.007
08/30/95	00:45:00	16938.989	813.1	468.53	21.25	0.01641269	0.0003	44.5526	0.233	0.93771162	0.007
08/30/95	00:50:01	16917.028	801.4	468.55	20.95	0.01520627	0.0003	41.3785	0.223	0.92626958	0.007
08/30/95	00:55:01	16927.8284	799.8	467.98	21.1	0.01641269	0.0003	42.5970	0.227	0.92140835	0.007
08/30/95	01:00:00	16947.5499	811.3	467.13	21.39	0.01640964	0.0003	42.0734	0.225	0.93633417	0.007
08/30/95	01:05:00	16985.4524	836.5	467.85	21.86	0.01716586	0.0003	46.0425	0.238	0.97320574	0.008
08/30/95	01:10:01	17018.4806	847.1	467.33	22.13	0.0173813	0.0003	46.8832	0.242	0.99565343	0.008
08/30/95	01:15:01	17070.8323	838.8	466.19	22.13	0.01737161	0.0003	45.0708	0.236	0.99182074	0.008
08/30/95	01:20:00	17138.5706	844.3	464.12	21.91	0.01562353	0.0003	42.0573	0.227	0.99258553	0.008
08/30/95	01:25:00	17174.4064	858.6	464.77	22.06	0.01562353	0.0003	42.6111	0.228	0.99946862	0.008
08/30/95	01:30:01	17161.5359	857	464.64	22.02	0.01573571	0.0003	43.5748	0.231	0.990366	0.008
08/30/95	01:35:00	17154.1243	849.3	462.76	21.88	0.01508285	0.0003	41.2246	0.224	0.9794019	0.008
08/30/95	01:40:00	17160.8803	852.2	462.89	21.76	0.01562643	0.0003	43.3679	0.233	0.98391873	0.008
08/30/95	01:45:01	17146.874	854.4	461.82	22.06	0.01551427	0.0003	42.6885	0.23	0.9879968	0.008
08/30/95	01:50:01	17170.8599	854.7	461.00	22.11	0.01539929	0.0003	41.8231	0.228	0.98610042	0.008
08/30/95	01:55:00	17184.4823	852.6	461.13	21.99	0.01495964	0.0003	42.3426	0.231	0.98133085	0.008
08/30/95	02:00:00	17216.0395	856.3	461.67	22.27	0.01692515	0.0003	42.5745	0.231	0.9901756	0.008
08/30/95	02:05:01	17245.1094	868.4	461.07	22.64	0.01713716	0.0003	48.1885	0.25	1.01032814	0.008
08/30/95	02:10:00	17298.376	882.4	458.49	23.28	0.01822191	0.0003	47.0051	0.246	1.02457329	0.008
08/30/95	02:15:00	17323.6755	881.9	458.43	23.24	0.01766976	0.0003	47.6939	0.249	1.03291762	0.008
08/30/95	02:20:01	17360.872	886.3	458.39	23.47	0.01809594	0.0003	48.5586	0.252	1.04073444	0.008
08/30/95	02:25:01	17395.2145	893.4	459.33	23.72	0.01875695	0.0003	48.7210	0.253	1.0536606	0.008
08/30/95	02:30:00	17369.0008	893.1	458.39	23.68	0.01831391	0.0003	48.6635	0.254	1.0549031	0.008
08/30/95	02:35:01	17368.1128	900.2	457.92	24.04	0.01917527	0.0003	52.0144	0.267	1.06248447	0.008
08/30/95	02:40:01	17382.7862	922.8	457.55	24.57	0.02025344	0.0003	56.3652	0.285	1.09107236	0.009
08/30/95	02:45:00	17349.7654	918	458.17	24.77	0.02165687	0.0003	57.6398	0.291	1.0926381	0.009
08/30/95	02:50:00	17352.0982	911.1	460.06	24.5	0.02099606	0.0003	55.4540	0.284	1.08515886	0.009
08/30/95	02:55:01	17326.5331	870.2	460.93	23.67	0.01947303	0.0003	56.0306	0.286	1.0355516	0.008
08/30/95	03:00:01	17369.0353	875	461.17	23.87	0.02003186	0.0003	55.6696	0.284	1.0398058	0.008
08/30/95	03:05:00	17396.3429	863.7	459.62	23.46	0.01807559	0.0003	48.8188	0.258	1.02388436	0.008
08/30/95	03:10:00	17444.6897	889.2	460.49	23.89	0.01927337	0.0003	51.8393	0.27	1.05731332	0.008
08/30/95	03:15:01	17424.0008	868.3	462.23	23.38	0.01883782	0.0003	50.0946	0.264	1.03161548	0.008
08/30/95	03:20:00	17430.1941	865.5	461.23	23.28	0.01873242	0.0003	49.1169	0.262	1.02668932	0.008
08/30/95	03:25:00	17427.1446	853.7	461.45	23	0.0173166	0.0003	47.7795	0.256	1.00512525	0.008
08/30/95	03:30:01	17424.8575	857.3	461.88	22.99	0.01764333	0.0003	48.2640	0.257	1.00871927	0.008
08/30/95	03:35:01	17388.1089	831.4	462.71	22.29	0.01623356	0.0003	43.6126	0.243	0.97684659	0.008
08/30/95	03:40:00	17384.2701	840.9	461.16	22.37	0.01558277	0.0003	43.4530	0.242	0.98116972	0.008
08/30/95	03:45:00	17386.6926	851.5	459.66	22.68	0.01634251	0.0003	45.8667	0.249	0.99220855	0.008
08/30/95	03:50:01	17334.4627	839	458.94	22.49	0.01622751	0.0003	44.3067	0.245	0.9780068	0.008
08/30/95	03:55:00	17301.2451	846.9	460.54	22.6	0.01643612	0.0003	44.8770	0.248	0.98333699	0.008
08/30/95	04:00:00	17264.0713	835.6	460.86	22.31	0.01567413	0.0003	43.5331	0.245	0.96613578	0.008
08/30/95	04:05:01	17236.8385	825.9	459.93	22.24	0.01577708	0.0003	42.8218	0.242	0.95881111	0.008
08/30/95	04:10:01	17207.9897	836.6	459.32	22.49	0.01631501	0.0003	44.1970	0.247	0.96845926	0.008
08/30/95	04:15:00	17176.5969	828	459.61	22.47	0.01608845	0.0003	45.0770	0.249	0.95921961	0.008
08/30/95	04:20:00	17132.1378	823.1	450.09	23.15	0.01597377	0.0003	42.3680	0.24	0.96179469	0.008
08/30/95	04:25:01	17003.7068	802.8	459.18	22.34	0.01563899	0.0003	41.4486	0.239	0.9445297	0.008
08/30/95	04:30:01	16953.371	791	453.04	22.73	0.01552457	0.0003	41.7525	0.242	0.93364534	0.008

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	04:35:00	16938.9892	805.6	454.71	22.93	0.01541023	0.0003	41.1624	0.241	0.95706206	0.008
08/30/95	04:40:00	16931.5011	800.8	458.73	22.25	0.01519318	0.0003	39.8771	0.237	0.94989956	0.008
08/30/95	04:45:00	16915.6568	804.3	458.94	22.15	0.01465057	0.0003	40.3473	0.238	0.94620978	0.008
08/30/95	04:50:01	16906.8867	815.5	456.97	22.39	0.01508749	0.0003	40.2022	0.237	0.95344239	0.008
08/30/95	04:55:01	16880.4954	818.2	450.37	22.92	0.01541023	0.0003	40.7036	0.24	0.95510865	0.008
08/30/95	05:00:00	16860.4059	833.6	448.33	23.18	0.01616686	0.0003	43.6391	0.248	0.98172977	0.008
08/30/95	05:05:00	16822.9576	823	446.65	23.07	0.01551003	0.0003	41.6240	0.242	0.96693638	0.008
08/30/95	05:10:01	16803.3672	820	448.44	23.16	0.01605828	0.0003	40.9888	0.24	0.96132703	0.008
08/30/95	05:15:01	16777.9762	820.2	448.09	23.05	0.01541016	0.0003	42.5045	0.244	0.96389476	0.008
08/30/95	05:20:01	16767.2024	842.6	451.48	22.84	0.01573285	0.0003	42.5864	0.243	0.99095248	0.008
08/30/95	05:25:02	16750.3845	830.3	453.97	22.69	0.01616686	0.0003	42.9968	0.245	0.9784747	0.008
08/30/95	05:30:02	16728.3789	841.8	451.85	22.86	0.01637772	0.0003	43.0320	0.245	0.98830334	0.008
08/30/95	05:35:02	16694.9874	841.8	449.16	23.11	0.0170253	0.0003	44.8124	0.25	0.99147973	0.008
08/30/95	05:40:03	16657.033	845.9	453.61	22.83	0.01626621	0.0003	45.8208	0.256	0.99538362	0.008
08/30/95	05:45:03	16608.2343	835.7	453.07	22.77	0.01669998	0.0003	42.3064	0.244	0.9830213	0.008
08/30/95	05:50:03	16587.9894	836.1	453.63	22.75	0.01626316	0.0003	42.7338	0.245	0.98739065	0.008
08/30/95	05:55:04	16609.9459	847.1	445.99	23.67	0.01669058	0.0003	43.1921	0.247	0.99807506	0.008
08/30/95	06:00:04	16542.3206	836.3	448.01	23.71	0.01754774	0.0003	45.0458	0.254	0.98722292	0.008
08/30/95	06:05:03	16489.5496	819.4	448.06	23.37	0.01689148	0.0003	43.5492	0.251	0.96757864	0.008
08/30/95	06:10:04	16482.2308	826.3	447.54	23.35	0.01656353	0.0003	46.2481	0.259	0.97475849	0.008
08/30/95	06:15:05	16428.69	827.9	447.18	23.57	0.01709519	0.0003	49.2922	0.271	0.97550757	0.008
08/30/95	06:20:04	16343.2528	808.2	453.01	22.79	0.01675799	0.0003	45.8900	0.26	0.95217795	0.008
08/30/95	06:25:04	16343.3733	817.3	447.11	23.44	0.01696783	0.0003	46.7523	0.265	0.95700738	0.008
08/30/95	06:30:05	16326.5869	819.8	445.78	23.65	0.01749833	0.0003	49.5092	0.274	0.96608046	0.008
08/30/95	06:35:04	16314.1177	816.9	445.26	23.62	0.01706306	0.0003	48.3785	0.269	0.96103885	0.008
08/30/95	06:40:04	16289.1899	821.5	446.39	23.77	0.01727254	0.0003	49.8602	0.276	0.969745	0.008
08/30/95	06:45:04	16268.764	839.2	445.70	24.41	0.01952852	0.0003	50.4992	0.279	0.99627797	0.008
08/30/95	06:50:04	16220.5692	836.9	444.56	24.31	0.01876619	0.0003	50.1138	0.277	0.99050984	0.008
08/30/95	06:55:04	16157.6838	816.7	444.88	23.88	0.01756657	0.0003	48.0446	0.271	0.96185029	0.008
08/30/95	07:00:03	16147.8157	808.7	450.31	24	0.01723675	0.0003	47.4950	0.272	0.95771676	0.008
08/30/95	07:05:03	16149.8625	807.5	453.65	24.35	0.01712902	0.0003	46.3833	0.269	0.95513125	0.008
08/30/95	07:10:04	16084.2349	802.2	453.67	24.31	0.01658724	0.0003	44.3689	0.263	0.9496732	0.008
08/30/95	07:15:04	16050.3065	790.3	453.13	24.13	0.01637182	0.0003	43.0522	0.26	0.93653266	0.008
08/30/95	07:20:03	16027.6875	788.9	453.67	24.22	0.01647953	0.0003	41.5890	0.257	0.93491702	0.008
08/30/95	07:25:03	15989.0165	783.2	454.02	24.09	0.01518415	0.0003	41.5177	0.256	0.92537157	0.008
08/30/95	07:30:04	15926.4492	768.4	454.12	23.95	0.01496877	0.0003	41.0107	0.254	0.91471036	0.008
08/30/95	07:35:04	15933.9874	777.6	452.08	24.23	0.01593797	0.0003	43.0058	0.259	0.93150984	0.008
08/30/95	07:40:03	15953.6977	783.2	452.02	24.23	0.01571666	0.0003	41.9208	0.256	0.93847813	0.008
08/30/95	07:45:03	15953.6967	775.3	454.58	24.44	0.01582729	0.0003	39.6136	0.25	0.92541217	0.009
08/30/95	07:50:04	15969.2017	782.9	454.56	24.55	0.01583028	0.0003	38.6901	0.248	0.92440237	0.009
08/30/95	07:55:04	15977.3873	774.9	456.15	24.41	0.01551014	0.0003	38.9614	0.248	0.91628331	0.008
08/30/95	08:00:04	16022.6412	788.1	463.33	24.24	0.01540825	0.0003	42.4566	0.257	0.93289954	0.008
08/30/95	08:05:04	16067.579	792.5	457.08	24.39	0.01616262	0.0003	44.7965	0.264	0.93570767	0.008
08/30/95	08:10:05	16074.1929	780.1	461.54	23.71	0.01681863	0.0003	44.6677	0.263	0.92038891	0.008
08/30/95	08:15:05	16200.6507	803.1	455.76	24.15	0.01725964	0.0003	48.1942	0.275	0.9447494	0.008
08/30/95	08:20:04	16268.7145	815.3	459.97	23.66	0.01824767	0.0003	48.9689	0.275	0.96043204	0.008
08/30/95	08:25:04	16321.5404	826.1	461.10	23.63	0.01869023	0.0003	53.0285	0.288	0.9762134	0.008
08/30/95	08:30:05	16374.4243	820.9	461.29	23.53	0.01890986	0.0003	54.0316	0.289	0.96980558	0.008
08/30/95	08:35:05	16465.4779	818.9	461.70	23.64	0.01869726	0.0003	52.1373	0.281	0.96642142	0.008
08/30/95	08:40:05	16551.9492	810.8	466.16	23.8	0.01881948	0.0003	49.9547	0.274	0.96357902	0.008
08/30/95	08:45:04	16571.7984	801.3	464.74	23.25	0.01797446	0.0003	48.3760	0.266	0.94647419	0.008
08/30/95	08:50:04	16577.2685	805.7	466.37	23.09	0.01777456	0.0003	47.2356	0.261	0.9531065	0.008
08/30/95	08:55:05	16751.6354	814.3	463.79	23.08	0.0183302	0.0003	46.5041	0.257	0.95588208	0.008
08/30/95	09:00:05	16920.6008	831.2	467.17	23.4	0.01823539	0.0003	48.7819	0.265	0.97483379	0.008
08/30/95	09:05:05	17012.4263	810.9	467.65	23.15	0.01846285	0.0003	47.5677	0.261	0.95637541	0.008
08/30/95	09:10:05	17203.1417	825	471.57	23.37	0.01717564	0.0003	49.6819	0.267	0.97422833	0.008
08/30/95	09:15:06	17235.6952	814.4	470.83	23.05	0.01718848	0.0003	48.3672	0.261	0.96255495	0.008
08/30/95	09:20:06	17272.8506	815.8	472.49	23.09	0.01654811	0.0003	46.3788	0.254	0.96174995	0.008
08/30/95	09:25:05	17444.7193	799.8	472.65	22.84	0.01677523	0.0003	49.1656	0.263	0.94289892	0.008
08/30/95	09:30:05	17565.99	790.8	473.83	22.64	0.01701211	0.0003	50.3940	0.265	0.93337622	0.008
08/30/95	09:35:06	17585.5589	801.7	472.72	22.6	0.01690625	0.0003	49.0589	0.26	0.94544139	0.008
08/30/95	09:40:06	17660.7786	781.1	473.82	22.3	0.01659447	0.0003	47.4894	0.253	0.9185915	0.008

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	09:45:05	17756.1915	799.8	475.81	22.58	0.01737161	0.0003	47.8001	0.253	0.93981516	0.008
08/30/95	09:50:05	17929.127	833.6	475.35	22.88	0.01717224	0.0003	49.6976	0.259	0.98253628	0.008
08/30/95	09:55:05	18089.521	759.2	478.42	21.75	0.01587444	0.0003	58.2694	0.292	0.88513661	0.008
08/30/95	10:00:07	17774.1054	630.5	477.15	19.96	0.01718182	0.0002	56.5412	0.285	0.70456426	0.007
08/30/95	10:05:06	18103.6243	697.7	475.18	20.95	0.01586856	0.0002	54.6555	0.277	0.80338711	0.007
08/30/95	10:10:05	18084.7241	751	475.47	21.28	0.01445123	0.0003	51.8670	0.264	0.8721096	0.007
08/30/95	10:15:05	17978.1724	712.7	477.79	20.81	0.01544799	0.0002	50.7749	0.261	0.81918166	0.007
08/30/95	10:20:41	18021.4323	692.8	476.17	20.34	0.01524016	0.0002	52.5313	0.267	0.79073397	0.007
08/30/95	10:25:34	17940.9882	736.5	476.15	20.64	0.01447535	0.0002	50.1316	0.256	0.84549195	0.007
08/30/95	10:30:33	18222.5177	768.4	472.47	21.23	0.01492228	0.0003	48.4132	0.248	0.88206036	0.007
08/30/95	10:35:33	18616.5868	821.7	471.50	22.22	0.0141647	0.0003	51.3405	0.259	0.95199953	0.008
08/30/95	10:40:33	18568.429	794.5	478.84	21.66	0.01429034	0.0003	47.6449	0.251	0.92381556	0.008
08/30/95	10:45:34	18750.5194	832.1	475.23	22.49	0.01615609	0.0003	52.0289	0.262	0.96529906	0.008
08/30/95	10:50:34	19118.1169	862.3	472.54	23.2	0.0157368	0.0003	47.2758	0.243	1.0014325	0.008
08/30/95	10:55:33	18969.4567	834.9	474.32	22.32	0.01255468	0.0003	47.1789	0.243	0.96505822	0.008
08/30/95	11:00:33	18609.7762	801.7	477.19	21.62	0.01387622	0.0003	48.3145	0.245	0.91880415	0.008
08/30/95	11:05:34	18735.9002	831.7	478.66	22.33	0.01563252	0.0003	50.8595	0.255	0.95611548	0.008
08/30/95	11:10:34	18686.1855	832	478.29	22.13	0.01420659	0.0003	52.8586	0.261	0.94974931	0.008
08/30/95	11:15:33	18889.4243	792.8	478.49	21.81	0.01499406	0.0003	52.7156	0.261	0.90063565	0.008
08/30/95	11:20:33	18730.171	742.5	482.08	21.27	0.01621278	0.0003	52.9635	0.262	0.8319251	0.007
08/30/95	11:25:34	18858.6505	752.5	488.66	21.07	0.01577742	0.0003	52.0027	0.261	0.84480911	0.007
08/30/95	11:30:34	19150.3496	801.6	495.13	22.04	0.0158936	0.0003	50.0297	0.255	0.92083528	0.008
08/30/95	11:35:33	19458.9856	870.1	496.56	22.81	0.01447471	0.0003	48.1033	0.251	1.00416936	0.008
08/30/95	11:40:33	19165.2926	871.9	496.01	22.94	0.01668459	0.0003	50.9533	0.267	1.01046751	0.008
08/30/95	11:45:34	19457.5492	883.3	500.21	23.23	0.01690558	0.0003	50.7661	0.256	1.0162132	0.008
08/30/95	11:50:34	19593.8721	878.9	499.76	23.02	0.01614986	0.0003	54.2675	0.271	1.00726451	0.008
08/30/95	11:55:33	19643.3393	897.8	499.91	23.49	0.01737937	0.0003	50.3372	0.254	1.02671129	0.008
08/30/95	12:00:33	19788.9619	898	496.88	23.55	0.01749648	0.0003	51.6023	0.257	1.02000049	0.008
08/30/95	12:05:34	19883.0669	887.6	493.84	23.25	0.01585863	0.0003	50.3625	0.251	1.0046389	0.008
08/30/95	12:10:34	20528.4515	903.1	498.78	24.11	0.0177699	0.0003	56.4627	0.282	1.02465669	0.008
08/30/95	12:15:34	19766.0061	906.8	493.93	23.5	0.01887362	0.0003	49.5741	0.253	1.01462345	0.008
08/30/95	12:20:35	20168.5692	947.6	506.70	24.26	0.015654	0.0003	53.3683	0.268	1.06935694	0.008
08/30/95	12:25:35	20147.3983	921	505.33	23.89	0.01677034	0.0003	57.2429	0.284	1.03276421	0.008
08/30/95	12:30:35	20178.4887	865.4	515.56	23.42	0.01578807	0.0003	59.2596	0.303	0.96151575	0.008
08/30/95	12:35:36	20642.8403	923.5	522.98	25.09	0.01870952	0.0003	63.5580	0.315	1.04517186	0.009
08/30/95	12:40:36	20862.0709	922.1	526.56	25.3	0.01884146	0.0003	66.2581	0.328	1.03817578	0.009
08/30/95	12:45:36	21051.0829	875	521.41	23.94	0.01025876	0.0003	58.2444	0.294	0.97781575	0.008
08/30/95	12:50:36	20891.4272	971.4	524.82	25.68	0.0166238	0.0003	51.4086	0.263	1.09951357	0.009
08/30/95	12:55:37	20363.9691	913.2	523.09	24.02	0.01728378	0.0003	58.4789	0.293	1.01450196	0.008
08/30/95	13:00:37	20771.456	942.7	529.36	25.13	0.01562536	0.0003	57.8422	0.288	1.05783663	0.009
08/30/95	13:05:37	21528.5931	889.4	534.08	24.98	0.01610978	0.0003	68.6906	0.343	0.98952076	0.009
08/30/95	13:10:36	21313.6695	948.2	531.88	25.71	0.01979442	0.0003	64.5279	0.32	1.06565552	0.009
08/30/95	13:15:36	21096.7451	958	533.11	25.33	0.01522859	0.0003	60.9904	0.298	1.07574297	0.009
08/30/95	13:20:37	21574.8675	944.2	535.79	25.61	0.01455938	0.0003	61.3226	0.304	1.06048256	0.009
08/30/95	13:25:36	21560.3725	991.7	534.51	26.14	0.01579991	0.0003	59.0437	0.295	1.12056071	0.009
08/30/95	13:30:36	21751.3709	916.8	532.76	24.99	0.01457784	0.0003	56.2236	0.279	1.0213459	0.009
08/30/95	13:35:37	21726.5815	948.6	535.47	25.62	0.0139025	0.0003	57.6899	0.288	1.0588324	0.009
08/30/95	13:40:37	21843.2568	994.8	540.06	26.45	0.01392263	0.0003	56.9573	0.283	1.11818917	0.009
08/30/95	13:45:36	21146.0715	912.7	533.17	24.38	0.01572775	0.0003	52.3633	0.258	1.00567724	0.008
08/30/95	13:50:37	21519.5364	999.2	535.21	26.21	0.01617419	0.0003	54.7882	0.272	1.12152289	0.009
08/30/95	13:55:37	21901.1158	1019	531.37	26.6	0.01426732	0.0003	52.1862	0.263	1.14587889	0.009
08/30/95	14:00:37	22473.1323	1021	541.56	27.43	0.01519345	0.0003	60.9220	0.298	1.15245101	0.01
08/30/95	14:05:36	22290.6984	956.8	541.45	26.14	0.01136695	0.0003	60.8099	0.301	1.0647792	0.009
08/30/95	14:10:36	22451.7353	962.1	542.19	26.69	0.01508906	0.0003	56.6102	0.282	1.07413849	0.009
08/30/95	14:15:36	22439.9021	959.2	539.81	26.45	0.01678116	0.0003	55.7361	0.279	1.06948922	0.009
08/30/95	14:20:37	21984.8031	952.6	540.47	25.79	0.01419334	0.0003	57.4759	0.284	1.05909329	0.009
08/30/95	14:25:37	21573.6119	974.8	542.19	25.76	0.01409605	0.0003	58.6238	0.285	1.09610895	0.009
08/30/95	14:30:36	21836.6365	945.2	537.63	25.4	0.01464933	0.0003	54.9807	0.27	1.0503573	0.009
08/30/95	14:35:37	22374.2028	957.8	539.45	26.21	0.01353708	0.0003	51.9799	0.256	1.07315222	0.009
08/30/95	14:40:37	22008.8001	902.9	536.29	25.19	0.01690003	0.0003	52.3512	0.257	0.99946794	0.009
08/30/95	14:45:36	21830.6265	973	539.84	26.1	0.01713771	0.0003	53.8412	0.261	1.09004869	0.009
08/30/95	14:50:36	21340.985	947.7	545.32	25.95	0.01669574	0.0003	51.4613	0.254	1.06220974	0.009

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	14:56:11	21812.7597	950.9	548.09	26.37	0.01535323	0.0003	55.2460	0.271	1.07100053	0.009
08/30/95	15:01:11	22119.6703	1047	547.18	27.97	0.01605365	0.0003	51.7234	0.255	1.18932684	0.01
08/30/95	15:06:12	21824.4864	982.6	544.65	26.44	0.01560985	0.0003	53.1496	0.259	1.10513179	0.009
Run 17											
08/30/95	17:24:51	20828.2338	1009	608.77	33.23	0.01866482	0.0004	85.1656	0.445	1.15858466	0.012
08/30/95	17:29:52	20170.1062	916.9	607.33	31.09	0.02136567	0.0004	84.9835	0.433	1.03168934	0.011
08/30/95	17:34:52	20976.8646	1102	614.73	34.9	0.02600658	0.0004	109.2478	0.615	1.27648033	0.012
08/30/95	17:39:51	20879.781	1091	623.93	36.24	0.02849482	0.0004	118.9140	0.689	1.26580593	0.013
08/30/95	17:44:52	20116.3804	994.8	617.13	33.86	0.03086779	0.0004	115.5490	0.659	1.13598009	0.012
08/30/95	17:49:52	20578.3571	1162	623.15	36.38	0.03230832	0.0004	139.0855	0.827	1.33767766	0.013
08/30/95	17:54:51	21252.2981	1275	618.41	39.85	0.0405401	0.0005	111.3352	0.608	1.48118578	0.014
08/30/95	17:59:51	21586.4681	1311	627.69	41.59	0.04401891	0.0005	136.7984	0.81	1.52199073	0.014
08/30/95	18:04:52	21841.8467	1471	641.73	45.12	0.04278232	0.0005	149.0925	0.904	1.69771119	0.016
08/30/95	18:09:51	22698.4391	1152	641.83	42.57	0.05618006	0.0005	143.2126	0.847	1.35532978	0.015
08/30/95	18:14:51	22018.4722	1074	631.76	42.05	0.06204802	0.0005	122.3324	0.688	1.26577955	0.015
08/30/95	18:19:52	21496.8576	1026	627.70	41.46	0.07018332	0.0005	127.2185	0.725	1.20394859	0.014
08/30/95	18:24:51	22146.8378	1033	635.14	43.3	0.0805897	0.0005	151.2511	0.925	1.21955318	0.015
08/30/95	18:29:51	21754.993	1238	642.48	45.74	0.06201505	0.0005	162.0278	1.038	1.45115221	0.016
08/30/95	18:34:52	22415.872	1428	641.57	47	0.05883668	0.0006	148.9967	0.902	1.66591202	0.016
08/30/95	18:39:51	23143.5094	1926	662.35	55.37	0.07020651	0.0007	195.0728	1.321	2.14219872	0.019
08/30/95	18:44:51	22685.7916	1835	668.80	58.98	0.06946916	0.0007	200.3104	1.383	2.06493431	0.02
08/30/95	18:49:52	22730.5473	1544	656.74	49.4	0.06517889	0.0006	165.8567	1.051	1.77750379	0.017
08/30/95	18:54:51	22538.2033	1390	641.89	46.72	0.05878356	0.0006	166.2740	1.07	1.61711102	0.016
08/30/95	18:59:51	23179.3942	1113	619.93	44.95	0.03287682	0.0005	120.3756	0.772	1.3049394	0.016
08/30/95	19:04:52	21097.5326	793.2	555.64	29.37	0.01724826	0.0004	47.9679	0.254	0.89455742	0.01
08/30/95	19:09:51	20682.5637	866.4	553.07	30.54	0.01687834	0.0004	47.8182	0.255	0.98732711	0.011
08/30/95	19:14:52	20559.3161	878.4	550.92	30.89	0.01652194	0.0004	49.1093	0.257	1.00906605	0.011
08/30/95	19:19:52	19999.1276	855.7	551.47	31.73	0.01593467	0.0004	44.0915	0.24	0.98014947	0.011
08/30/95	19:24:52	19837.8199	866.2	550.58	32.72	0.01434839	0.0004	39.8707	0.225	0.98892677	0.011
08/30/95	19:29:51	19647.2386	850.6	561.20	33.67	0.01333025	0.0004	38.5789	0.222	0.9831062	0.012
08/30/95	19:34:51	19609.0065	874.3	547.83	33.1	0.01586776	0.0004	42.1664	0.233	1.01132034	0.012
08/30/95	19:39:52	19453.8269	868.1	555.95	32.95	0.01619174	0.0004	44.7227	0.245	1.00388818	0.011
08/30/95	19:44:51	19379.8405	890.1	551.65	34.1	0.01840304	0.0004	43.0414	0.237	1.04143459	0.012
08/30/95	19:49:51	19342.1724	937.8	555.57	35.4	0.01905065	0.0004	46.7607	0.252	1.11756448	0.012
08/30/95	19:54:52	19526.1091	1046	569.91	38.26	0.01780611	0.0005	51.2419	0.269	1.25638112	0.013
08/30/95	19:59:51	20192.6326	1070	556.84	38.66	0.02151886	0.0005	57.5865	0.299	1.29333844	0.013
08/30/95	20:04:51	19935.575	1039	564.31	39.61	0.01878078	0.0005	48.0421	0.262	1.25499788	0.014
08/30/95	20:09:52	19668.1988	1055	572.57	39.57	0.01780288	0.0005	46.8024	0.256	1.25947065	0.014
08/30/95	20:14:52	19468.47	992	569.24	38.14	0.0182519	0.0005	48.5289	0.262	1.18360794	0.013
08/30/95	20:19:53	19460.2037	1065	563.17	39.07	0.01747115	0.0005	46.6043	0.254	1.26168219	0.014
08/30/95	20:24:53	19403.8401	1119	565.04	40.1	0.01802735	0.0005	46.9431	0.257	1.33601443	0.014
08/30/95	20:29:52	19426.5867	1118	570.48	39.78	0.01978234	0.0005	49.5348	0.264	1.33724179	0.014
08/30/95	20:34:52	19580.8034	1137	563.11	39.88	0.02230361	0.0005	57.0180	0.299	1.35698699	0.014
08/30/95	20:39:53	19710.5526	1164	570.18	39.42	0.0258321	0.0005	74.2439	0.382	1.4008945	0.014
08/30/95	20:44:52	19847.8533	1206	565.67	40.39	0.03067811	0.0005	90.8468	0.479	1.44010544	0.014
08/30/95	20:49:52	19904.0342	1126	573.97	39.1	0.0268963	0.0005	91.3601	0.482	1.35583811	0.014
08/30/95	20:54:53	20001.2635	1134	575.74	39.47	0.03261627	0.0005	105.5969	0.582	1.36525516	0.014
08/30/95	20:59:52	19722.0392	981.4	567.37	38.03	0.03646619	0.0005	111.8905	0.626	1.17220622	0.013
08/30/95	21:04:52	19190.4326	461.6	547.53	31.95	0.00747634	0.0004	34.7826	0.302	0.47397765	0.011
08/30/95	21:09:53	18992.4401	333.4	538.73	30.55	0.00109743	0.0004	5.3913	0.174	0.16626053	0.011
08/30/95	21:14:53	18952.8613	512.8	561.84	32.61	0.00769338	0.0004	59.7537	0.357	0.52128144	0.011
08/30/95	21:19:52	19782.3662	948.5	565.91	38.27	0.03361863	0.0005	103.5409	0.57	1.13270611	0.013
08/30/95	21:24:53	19922.7208	1091	565.03	40.65	0.0331853	0.0005	83.7203	0.446	1.31092942	0.014
08/30/95	21:29:53	19915.5976	1010	560.79	38.37	0.03643465	0.0005	92.2408	0.494	1.21046448	0.013
08/30/95	21:34:53	19820.088	1011	559.29	39.13	0.04164828	0.0005	100.7490	0.551	1.20999215	0.014
08/30/95	21:39:54	19682.8735	996.7	560.23	39.03	0.03041004	0.0005	80.5521	0.427	1.1867602	0.014
08/30/95	21:44:54	19727.0329	962.3	561.21	38.73	0.0340392	0.0005	93.4318	0.503	1.15184254	0.013
08/30/95	21:49:53	19890.5252	1004	558.01	37.95	0.03733922	0.0005	96.1642	0.518	1.20339594	0.013
08/30/95	21:54:53	19745.7746	1068	557.93	39.71	0.0452822	0.0005	102.4685	0.568	1.27862064	0.014
08/30/95	21:59:54	19450.6774	921.6	551.14	36.84	0.03588908	0.0004	80.0089	0.421	1.10840358	0.013
08/30/95	22:04:54	19455.7077	953.5	554.73	38.06	0.03087304	0.0005	84.6245	0.45	1.14733848	0.013
08/30/95	22:09:53	19368.3954	936.8	556.00	38.01	0.02904958	0.0005	79.5784	0.422	1.12361577	0.013

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	22:14:53	19253.6158	845.2	546.54	35.91	0.02658856	0.0004	72.0427	0.379	1.01233464	0.012
08/30/95	22:19:54	19224.7706	871.5	545.89	36.66	0.03074073	0.0004	77.2430	0.407	1.03238527	0.013
08/30/95	22:24:54	19134.9702	781.6	540.71	32.87	0.01398212	0.0004	85.7832	0.456	0.91866908	0.011
08/30/95	22:29:54	19102.2965	726.6	533.99	31.23	0.00108911	0.0004	67.0937	0.36	0.8672565	0.011
08/30/95	22:34:55	18846.8227	569.9	519.30	27.06	0.00098002	0.0003	36.2156	0.237	0.65192932	0.009
08/30/95	22:39:55	19096.6514	627.7	515.63	25.07	0.00098257	0.0003	31.1408	0.222	0.71760648	0.009
08/30/95	22:44:55	19440.0404	819.6	522.23	29.41	0.00885138	0.0004	45.1835	0.262	0.96403578	0.01
08/30/95	22:49:56	19467.5859	808.9	522.33	29.45	0.01071107	0.0004	44.6719	0.261	0.94760169	0.01
08/30/95	22:54:55	19471.9819	810.5	522.69	29.73	0.01400555	0.0004	41.7208	0.25	0.94953253	0.01
08/30/95	22:59:55	19441.9874	833.6	522.34	30.1	0.01521479	0.0004	41.9165	0.251	0.97473186	0.01
08/30/95	23:04:56	19431.0934	840	524.56	30.93	0.01739432	0.0004	43.4682	0.256	0.98819414	0.011
08/30/95	23:09:56	19462.8199	845.4	526.65	32.02	0.01695358	0.0004	42.4525	0.252	0.9990581	0.011
08/30/95	23:14:56	19467.5156	864.1	528.88	32.83	0.01563234	0.0004	41.1683	0.249	1.03195334	0.011
08/30/95	23:19:56	19476.1164	859.6	529.14	33.12	0.01594845	0.0004	42.6680	0.254	1.02343172	0.012
08/30/95	23:24:56	19545.7148	854.1	526.14	32.66	0.01746157	0.0004	46.0356	0.265	1.02259305	0.011
08/30/95	23:29:56	19490.8644	823.8	522.46	31.46	0.01581573	0.0004	47.0797	0.269	0.98024779	0.011
08/30/95	23:34:55	19502.5388	864.6	524.89	32.87	0.01929886	0.0004	48.1876	0.275	1.02959989	0.011
08/30/95	23:39:55	19572.9677	900.4	526.92	34.1	0.01992708	0.0004	49.0167	0.279	1.08401147	0.012
08/30/95	23:44:56	19544.9067	903.7	526.22	34.75	0.0197998	0.0004	48.7482	0.278	1.09225281	0.012
08/30/95	23:49:56	19529.6588	875.3	525.33	34.24	0.01860651	0.0004	48.8358	0.279	1.05795989	0.012
08/30/95	23:54:55	19489.0453	830.9	524.88	33.59	0.01567449	0.0004	43.5857	0.263	0.99413245	0.012
08/30/95	23:59:55	19394.9663	845.5	525.81	34.24	0.01525044	0.0004	40.0274	0.252	1.00772736	0.012
08/31/95	00:04:56	19214.9935	833.6	528.20	34.71	0.01601594	0.0004	42.3514	0.257	1.00235844	0.012
08/31/95	00:09:56	19124.5275	817	527.21	34.81	0.01580098	0.0004	43.2345	0.258	0.98925042	0.012
08/31/95	00:14:55	19042.1446	800.2	527.09	34.82	0.01471404	0.0004	39.2730	0.247	0.96883764	0.012
08/31/95	00:19:55	19052.172	794.9	527.09	35.36	0.01427807	0.0004	36.8920	0.241	0.96524087	0.012
08/31/95	00:24:56	19232.6642	808.4	527.85	35.69	0.01427807	0.0004	35.9603	0.239	0.96698476	0.012
08/31/95	00:29:56	19373.4555	800.4	526.03	35.7	0.01328971	0.0004	34.7994	0.237	0.96110745	0.012
08/31/95	00:34:55	19505.227	805.9	523.97	35.15	0.014812	0.0004	37.4828	0.245	0.97062171	0.012
08/31/95	00:39:55	19613.8552	810.3	524.13	35.5	0.01490985	0.0004	37.9350	0.246	0.97164346	0.012
08/31/95	00:44:55	19716.2652	812.1	524.78	36.01	0.01534518	0.0004	40.2069	0.254	0.97904397	0.013
08/31/95	00:49:56	19809.5438	811.7	527.30	37.54	0.01447183	0.0004	38.8394	0.251	0.98332288	0.013
08/31/95	00:54:56	19869.5905	821.2	526.47	37.87	0.01511343	0.0005	39.9531	0.256	0.99444178	0.013
08/31/95	00:59:56	19868.235	822.5	523.48	37.32	0.01662014	0.0004	42.7257	0.265	0.99851185	0.013
08/31/95	01:04:57	19845.3746	806.7	522.76	36.51	0.01660773	0.0004	42.9247	0.266	0.96997855	0.013
08/31/95	01:09:57	19843.1541	816.7	522.69	37.2	0.01648995	0.0004	46.7351	0.28	0.99232586	0.013
08/31/95	01:14:56	19810.9496	827.8	522.20	37.23	0.01723332	0.0004	49.3387	0.289	1.00625257	0.013
08/31/95	01:19:56	19776.9414	812.8	524.79	37.88	0.01756168	0.0005	46.8950	0.283	0.98865736	0.013
08/31/95	01:24:57	19732.2824	795.6	526.18	38.43	0.0174598	0.0005	44.8530	0.275	0.96874765	0.013
08/31/95	01:29:57	19711.3484	816.2	526.06	38.99	0.01778846	0.0005	46.2201	0.278	1.00016697	0.014
08/31/95	01:34:57	19692.272	812.1	525.65	38.64	0.01702283	0.0005	47.5152	0.284	0.98775795	0.013
08/31/95	01:39:57	19612.6876	797.5	527.17	38.79	0.0164807	0.0005	44.7930	0.276	0.97084354	0.013
08/31/95	01:44:58	19566.2517	798.6	527.37	39.01	0.01583311	0.0005	45.2664	0.278	0.97243481	0.014
08/31/95	01:49:58	19576.4164	798.5	527.80	39.47	0.01681226	0.0005	41.3705	0.266	0.96849484	0.014
08/31/95	01:54:58	19541.8513	796.6	526.94	38.81	0.01724291	0.0005	43.3594	0.271	0.97221792	0.013
08/31/95	01:59:59	19479.6493	784.5	527.06	38.96	0.01669755	0.0005	44.6769	0.273	0.95826616	0.014
08/31/95	02:04:59	19456.6034	792.2	526.31	38.29	0.01712806	0.0005	45.0815	0.275	0.96675947	0.013
08/31/95	02:09:58	19462.3011	770.5	522.72	38.04	0.01420376	0.0005	40.6163	0.261	0.93278613	0.013
08/31/95	02:14:58	19475.9162	775.5	524.55	38.51	0.01377264	0.0005	39.2911	0.257	0.93263515	0.013
08/31/95	02:19:59	19480.1914	788.6	527.60	39.56	0.01496274	0.0005	39.2964	0.258	0.95392913	0.014
08/31/95	02:24:59	19459.8556	787.7	528.69	40.43	0.01528516	0.0005	39.4790	0.259	0.95396763	0.014
08/31/95	02:29:59	19486.4149	801	528.15	40.09	0.01550197	0.0005	40.1766	0.262	0.96361571	0.014
08/31/95	02:34:58	19408.0883	798	531.29	41.12	0.01550487	0.0005	39.9937	0.261	0.97789121	0.014
08/31/95	02:39:58	19549.3985	817.3	528.26	40.71	0.01712806	0.0005	40.7105	0.265	0.99711298	0.014
08/31/95	02:44:59	19534.7197	834	530.66	41.43	0.01712165	0.0005	43.1731	0.272	1.01245305	0.014
08/31/95	02:49:59	19552.8433	841.7	528.61	41.01	0.01733514	0.0005	42.5117	0.27	1.02504835	0.014
08/31/95	02:54:58	19527.7182	836.3	530.02	41.65	0.0182018	0.0005	45.8832	0.28	1.02417648	0.014
Run 18											
08/31/95	10:19:55	20603.8839	544.7	558.85	39.59	0.00119739	0.0005	79.5674	0.437	0.62568945	0.014
08/31/95	10:24:55	20726.9312	505.6	556.76	38.62	0.00119828	0.0005	64.3130	0.356	0.57027111	0.013
08/31/95	10:29:55	20472.7448	522.2	548.68	35.37	0.00108995	0.0004	66.2431	0.359	0.58279615	0.012
08/31/95	10:34:55	20431.3284	507.5	555.63	37.91	0.00119983	0.0005	63.0195	0.345	0.55977736	0.013

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	10:39:56	21246.8281	428.8	552.65	38.17	0.00120117	0.0005	34.8967	0.249	0.45000169	0.013
08/31/95	10:44:56	21417.7423	380	545.19	35.58	0.00120206	0.0004	22.1039	0.219	0.35285898	0.012
08/31/95	10:49:55	20884.5198	361.9	539.00	33.9	0.0010942	0.0004	18.5660	0.201	0.29685592	0.012
08/31/95	10:54:55	21207.2124	423.4	535.68	31.51	0.00109501	0.0004	31.5192	0.237	0.41106549	0.011
08/31/95	10:59:55	21123.1823	499.3	537.53	31.14	0.00109521	0.0004	47.4957	0.285	0.51551477	0.011
08/31/95	11:04:56	21336.962	476.4	538.72	30.64	0.00098587	0.0004	46.5734	0.269	0.47354615	0.011
08/31/95	11:09:56	22056.2127	486.8	534.94	30.66	0.00098496	0.0004	38.9365	0.259	0.50090696	0.011
08/31/95	11:14:55	22095.2292	358.4	538.27	31.6	0.00109561	0.0004	11.8078	0.191	0.28354467	0.011
08/31/95	11:19:55	22190.4436	325.1	543.72	32.56	0.00109622	0.0004	3.8757	0.182	0.19666179	0.011
08/31/95	11:24:56	21967.686	333.2	546.35	33.13	0.00109642	0.0004	6.5739	0.185	0.20327658	0.012
08/31/95	11:29:56	22054.2155	320.6	544.46	32.78	0.00109703	0.0004	3.1471	0.18	0.16565125	0.011
08/31/95	11:34:56	22410.3	375.7	554.85	34.32	0.00109763	0.0004	15.1211	0.203	0.3065694	0.012
08/31/95	11:39:56	22074.2816	494.7	542.28	32.77	0.00109662	0.0004	20.3046	0.205	0.49172638	0.011
08/31/95	11:44:57	22325.8473	572.8	543.71	32.7	0.00109662	0.0004	32.3255	0.234	0.60742026	0.011
08/31/95	11:49:57	21918.389	620.5	542.58	31.88	0.00098751	0.0004	47.4387	0.284	0.6645926	0.011
08/31/95	11:54:57	22120.771	632.1	539.46	31.13	0.00098842	0.0004	39.6879	0.26	0.67223334	0.011
08/31/95	11:59:56	22315.6103	604.1	534.04	29.45	0.00098896	0.0004	31.8541	0.23	0.62645283	0.01
08/31/95	12:04:58	21969.0896	638.9	538.63	29.47	0.00098933	0.0004	47.8293	0.277	0.67142278	0.01
08/31/95	12:09:58	22050.9343	569	536.19	28.62	0.00088134	0.0003	26.0975	0.22	0.57099887	0.01
08/31/95	12:14:57	21971.7887	748.7	551.23	32.23	0.00099024	0.0004	59.8879	0.321	0.83212802	0.011
08/31/95	12:19:58	21963.7899	647.3	533.27	28.01	0.00088053	0.0003	35.3136	0.232	0.67349752	0.01
08/31/95	12:24:58	21590.9702	636.2	533.85	27.44	0.00088166	0.0003	28.9992	0.214	0.65452564	0.01
08/31/95	12:29:58	21596.0596	708.1	538.20	28.44	0.00088086	0.0003	47.4992	0.266	0.75995862	0.01
08/31/95	12:34:58	22700.2895	779.4	542.58	30.73	0.00088134	0.0004	48.6361	0.272	0.86768136	0.011
08/31/95	12:39:57	22866.3211	809.5	541.57	30.81	0.0008815	0.0004	58.6469	0.312	0.90254979	0.011
08/31/95	12:44:58	22383.313	835.1	541.88	30.09	0.00088183	0.0004	59.8057	0.312	0.9282335	0.01
08/31/95	12:49:57	22654.845	773.7	538.88	29.62	0.00088215	0.0004	52.6438	0.284	0.84476964	0.01
08/31/95	12:54:57	22893.2567	799.3	544.60	30.63	0.00088247	0.0004	56.6373	0.303	0.87486289	0.011
08/31/95	12:59:58	22764.2384	765.9	539.27	29.08	0.00088296	0.0003	48.6988	0.27	0.81684781	0.01
08/31/95	13:04:58	22698.9619	660.3	534.47	27.73	0.00088361	0.0003	34.2210	0.23	0.65453136	0.01
08/31/95	13:09:57	23049.0687	812.5	545.31	31.06	0.00088344	0.0004	49.9095	0.277	0.88697834	0.011
08/31/95	13:14:57	22777.4924	810	544.63	30.12	0.00088361	0.0004	53.5522	0.286	0.87388662	0.01
08/31/95	13:19:58	22722.6359	826.5	548.29	30.49	0.00088344	0.0004	64.6798	0.339	0.89956743	0.011
08/31/95	13:24:58	23437.133	859.8	551.39	31.59	0.00088523	0.0004	53.7450	0.286	0.94564268	0.011
08/31/95	13:29:58	22950.62	825.8	543.35	29.62	0.00077401	0.0004	54.0976	0.285	0.88468944	0.01
08/31/95	13:34:58	23452.9564	836.3	544.86	30.41	0.00088523	0.0004	52.7330	0.28	0.90691404	0.011
08/31/95	13:39:59	23653.12	811.3	541.33	30	0.00088506	0.0004	47.1832	0.26	0.86282698	0.01
08/31/95	13:44:59	23160.9939	832.8	544.99	29.85	0.0008849	0.0004	56.0303	0.296	0.89242411	0.01
08/31/95	13:49:58	23888.2663	830.9	541.43	30.01	0.00077457	0.0004	48.8371	0.269	0.87880811	0.01
08/31/95	13:54:59	24167.6306	814.9	541.83	29.47	0.000775	0.0004	48.5579	0.274	0.84541148	0.01
08/31/95	13:59:59	24097.3499	874.7	546.67	31.02	0.00077542	0.0004	52.8718	0.284	0.9332759	0.011
08/31/95	14:04:59	24183.9203	879.1	549.08	31.34	0.00077585	0.0004	43.9212	0.249	0.94431638	0.011
08/31/95	14:10:00	23810.3693	944.4	560.90	33.97	0.00088733	0.0004	50.5174	0.27	1.03662231	0.012
08/31/95	14:15:00	23569.3485	896.9	554.91	31.52	0.00088733	0.0004	60.1236	0.318	0.96430498	0.011
08/31/95	14:19:59	23851.9321	908.1	552.98	31.7	0.00077712	0.0004	52.7581	0.28	0.98494909	0.011
08/31/95	14:24:59	23425.4991	951.6	561.62	33.11	0.00088847	0.0004	52.5476	0.277	1.05083237	0.012
08/31/95	14:30:00	22673.2571	885.8	553.76	31.13	0.00088814	0.0004	45.9696	0.248	0.95652856	0.011
08/31/95	14:35:00	22793.1339	909.8	556.73	31.44	0.00088847	0.0004	49.4167	0.262	0.98919509	0.011
08/31/95	14:39:59	22817.9916	893.6	554.60	31.33	0.00088879	0.0004	45.1050	0.246	0.96655806	0.011
08/31/95	14:44:59	23387.7762	933.6	563.70	32.76	0.00088911	0.0004	59.2359	0.309	1.01658924	0.011
08/31/95	14:50:00	22816.4505	896	561.24	32.2	0.00088927	0.0004	49.7295	0.27	0.96886462	0.011
08/31/95	14:55:00	22904.6547	908.4	562.68	31.64	0.00077826	0.0004	61.1951	0.322	0.98382782	0.011
08/31/95	14:59:59	22969.8059	891.5	560.34	31.57	0.00088944	0.0004	53.5393	0.28	0.95825653	0.011
08/31/95	15:04:59	22861.4661	947.7	567.10	34.06	0.00089009	0.0004	43.3933	0.239	1.03928904	0.012
08/31/95	15:10:00	23180.5626	932.3	566.99	33.08	0.00089009	0.0004	50.9031	0.267	1.01659179	0.011
08/31/95	15:14:59	22789.5827	960.5	570.85	34.47	0.00089074	0.0004	44.1484	0.239	1.05774857	0.012
08/31/95	15:19:59	22321.0242	909.2	564.58	32	0.00089139	0.0004	42.9706	0.234	0.99055492	0.011
08/31/95	15:25:00	21466.0715	920.2	564.69	31.91	0.00089155	0.0004	43.3331	0.232	1.01112911	0.011
08/31/95	15:30:00	21702.4009	907	562.91	30.99	0.00089139	0.0004	47.7869	0.253	0.98877215	0.011
08/31/95	15:35:00	21705.6059	946.9	565.01	32.34	0.00078025	0.0004	40.2284	0.222	1.05266593	0.011
08/31/95	15:40:01	21601.8747	974.2	574.25	33.75	0.00089204	0.0004	50.1796	0.257	1.08661117	0.012
08/31/95	15:45:01	21447.2524	959.9	574.09	33.26	0.00089301	0.0004	45.1734	0.239	1.06859525	0.012

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	15:50:01	21483.7639	968.1	575.77	33.65	0.00089285	0.0004	48.6944	0.251	1.07621384	0.012
08/31/95	15:55:02	21681.948	949.7	575.67	33.06	0.00089268	0.0004	54.6069	0.275	1.04745273	0.011
08/31/95	16:00:01	21242.3607	931.1	572.54	31.79	0.00089285	0.0004	56.6019	0.285	1.01817887	0.011
08/31/95	16:05:01	21459.308	907.6	571.86	31.51	0.00089301	0.0004	55.1048	0.282	0.98532228	0.011
08/31/95	16:10:02	22056.0902	950.3	576.29	33.4	0.00089382	0.0004	49.0160	0.255	1.04890139	0.012
08/31/95	16:15:01	21438.9921	941.6	575.10	32.34	0.00089301	0.0004	57.6301	0.286	1.03164706	0.011
08/31/95	16:20:01	21788.4374	929.6	570.82	31.95	0.00089366	0.0004	50.4189	0.258	1.02580477	0.011
08/31/95	16:25:02	21632.7634	895.1	568.35	30.95	0.00089399	0.0004	48.5688	0.249	0.96919161	0.011
08/31/95	16:30:02	21650.152	915	563.91	30.18	0.0008935	0.0004	52.2754	0.261	0.9965865	0.01
08/31/95	16:35:03	21335.3098	947.6	576.05	31.64	0.00089431	0.0004	65.4753	0.326	1.04198195	0.011
08/31/95	16:40:03	21278.6899	946.8	573.48	32.23	0.00089415	0.0004	54.0001	0.272	1.04816397	0.011
08/31/95	16:45:02	21063.6634	895.1	566.32	29.84	0.00089431	0.0004	56.6671	0.284	0.98128072	0.01
08/31/95	16:50:02	21069.73	888.3	569.88	29.98	0.00089463	0.0004	59.0904	0.29	0.96743397	0.01
08/31/95	16:55:03	21091.7773	877.9	569.43	29.91	0.0008948	0.0004	57.5522	0.287	0.95832568	0.01
08/31/95	17:00:02	20536.5568	908.9	571.55	30.47	0.00078295	0.0004	62.0809	0.306	1.00642092	0.011
08/31/95	17:05:02	20508.4826	911.1	574.23	31.05	0.0008948	0.0004	59.8644	0.293	1.01480962	0.011
08/31/95	17:10:03	20336.2426	842	562.95	28.2	0.00089463	0.0003	56.5364	0.278	0.91453878	0.01
08/31/95	17:15:02	20498.0806	890.6	571.44	29.76	0.0008948	0.0004	60.6991	0.3	0.97588603	0.01
08/31/95	17:20:02	20926.365	899.3	584.31	33.26	0.00089463	0.0004	56.2202	0.283	0.98991163	0.012
08/31/95	17:25:03	20856.608	835.1	573.92	30.09	0.00089447	0.0004	54.5659	0.275	0.8960365	0.01
08/31/95	17:30:03	21571.4022	913.7	590.24	34.19	0.00100628	0.0004	64.2606	0.321	1.01701372	0.012
08/31/95	17:35:02	21485.7436	870.5	589.90	33.94	0.00100665	0.0004	62.4312	0.316	0.95475292	0.012
08/31/95	17:40:03	21562.8995	901.5	597.05	35.4	0.00100702	0.0004	60.8748	0.305	0.99772915	0.012
08/31/95	17:45:03	21548.1148	945.6	605.55	37.5	0.00111911	0.0004	65.3067	0.328	1.05610349	0.013
08/31/95	17:50:02	22019.3807	869.9	594.71	35.28	0.00100665	0.0004	61.0619	0.309	0.96985269	0.012
08/31/95	17:55:03	22149.6112	856	584.55	34.47	0.0010061	0.0004	51.7944	0.269	0.94909179	0.012
08/31/95	18:00:03	22510.268	842	572.19	32.51	0.00100483	0.0004	50.4460	0.263	0.92343691	0.011
08/31/95	18:05:02	22497.4109	811.2	567.19	31.24	0.00089286	0.0004	46.2003	0.249	0.87142771	0.011
08/31/95	18:10:02	22415.6765	864.7	570.98	32.58	0.00100465	0.0004	47.7143	0.254	0.94515397	0.011
08/31/95	18:15:03	22272.0696	830.3	576.24	33.21	0.00100429	0.0004	45.5685	0.246	0.9115577	0.012
08/31/95	18:20:02	21708.0036	866.6	596.80	38.55	0.00111344	0.0005	48.4732	0.258	0.96846708	0.013
08/31/95	18:25:02	21716.3355	873.1	600.15	40.41	0.00122344	0.0005	52.8552	0.276	0.99310204	0.014
08/31/95	18:30:04	21444.538	881.8	599.39	40	0.00122256	0.0005	54.4440	0.282	1.00338583	0.014
08/31/95	18:35:02	21336.8265	864.8	597.28	39.33	0.00122167	0.0005	59.6216	0.305	0.99188106	0.014
08/31/95	18:40:02	21415.9675	879.7	600.51	39.94	0.00122122	0.0005	70.4097	0.359	1.00839407	0.014
08/31/95	18:45:03	21602.3154	912	603.73	40.97	0.0012201	0.0005	79.7890	0.409	1.05982329	0.014
08/31/95	18:50:03	21709.0071	902.7	603.62	40.98	0.00121921	0.0005	81.2079	0.417	1.05450462	0.014
08/31/95	18:55:04	21703.6189	918.1	605.17	40.93	0.00121876	0.0005	87.6793	0.459	1.07650003	0.014
08/31/95	19:00:04	21804.5548	930.3	605.73	41.59	0.00121832	0.0005	87.0369	0.453	1.09604243	0.014
08/31/95	19:05:03	22062.5211	971.5	607.61	42.34	0.00121743	0.0005	103.2661	0.552	1.15434094	0.015
08/31/95	19:10:03	22111.3486	1004	603.40	41.37	0.00110533	0.0005	119.6655	0.676	1.19817749	0.014
08/31/95	19:15:04	22235.014	1001	599.31	40.59	0.00110472	0.0005	101.3349	0.546	1.19531207	0.014
08/31/95	19:20:03	22262.308	968.9	594.01	39.8	0.00110412	0.0005	92.4718	0.487	1.15932269	0.014
08/31/95	19:25:03	22198.5256	946.2	584.20	39.65	0.00110331	0.0005	87.5332	0.459	1.12757918	0.014
08/31/95	19:30:04	22058.2453	955.7	586.41	39.96	0.0011029	0.0005	86.5819	0.454	1.13819408	0.014
08/31/95	19:35:04	21967.1457	987.4	594.68	40.36	0.0011029	0.0005	116.6706	0.659	1.17789852	0.014
08/31/95	19:40:05	21839.167	1022	594.80	40.92	0.0011027	0.0005	112.4178	0.628	1.22068739	0.014
08/31/95	19:45:05	21830.4805	1037	593.59	41.07	0.00110229	0.0005	101.6495	0.554	1.24008011	0.014
08/31/95	19:50:04	21767.6164	978.4	589.62	39.96	0.00110209	0.0005	97.8065	0.528	1.17152255	0.014
08/31/95	19:55:04	21922.5525	1013	593.04	40.49	0.00110169	0.0005	107.1769	0.592	1.21846431	0.014
Run 19											
08/31/95	20:49:52	21432.2543	945	491.60	29.9	0.03465961	0.0004	82.7038	0.421	1.09408114	0.01
08/31/95	20:54:52	21445.7919	956.2	492.55	30.8	0.03814125	0.0004	89.7078	0.464	1.11245298	0.011
08/31/95	20:59:52	21381.9767	972.3	485.81	31.43	0.03658653	0.0004	86.8326	0.444	1.13374416	0.011
08/31/95	21:04:53	21218.1393	943.5	480.49	31.53	0.03416399	0.0004	78.9996	0.397	1.11251978	0.011
08/31/95	21:09:53	21038.0195	880.8	478.14	30.45	0.03176674	0.0004	75.2237	0.377	1.04063474	0.011
08/31/95	21:14:53	21014.0302	869.2	478.14	30.22	0.03067134	0.0004	77.9479	0.394	1.02409412	0.011
08/31/95	21:19:54	21000.1254	888.3	477.68	30.47	0.03075811	0.0004	75.0682	0.377	1.04829323	0.011
08/31/95	21:24:54	20890.0057	923.5	475.34	30.53	0.02975644	0.0004	71.3519	0.36	1.07965555	0.011
08/31/95	21:29:55	20695.276	916.6	472.16	29.93	0.02767787	0.0004	70.2668	0.353	1.06215176	0.01
08/31/95	21:34:55	20463.7884	888	470.85	29.43	0.02778726	0.0004	67.5199	0.34	1.02101786	0.01
08/31/95	21:39:54	20304.9484	875	468.71	29.1	0.02550405	0.0003	66.4558	0.333	1.00045945	0.01

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	21:44:54	20193.7111	857.7	468.34	29.24	0.02691211	0.0003	70.5625	0.354	0.98973121	0.01
08/31/95	21:49:55	20072.9392	834.9	468.95	29.13	0.02799055	0.0003	70.4811	0.356	0.97857574	0.01
08/31/95	21:54:55	20090.634	839.4	468.25	29.48	0.02775644	0.0004	70.7233	0.354	0.98688342	0.01
08/31/95	21:59:54	20119.9851	853.4	468.48	29.94	0.03043194	0.0004	72.5650	0.365	1.00152718	0.01
08/31/95	22:04:54	20073.1977	856.5	467.50	29.97	0.02953191	0.0004	69.1260	0.349	1.00288617	0.01
08/31/95	22:09:55	20037.1321	849.9	467.61	29.88	0.02830688	0.0004	71.1493	0.358	0.99945052	0.01
08/31/95	22:14:55	20044.9337	855.6	468.04	30.19	0.02915073	0.0004	72.7154	0.367	0.99841249	0.01
08/31/95	22:19:54	20117.2911	878.4	467.19	31.1	0.03270362	0.0004	71.8742	0.363	1.02261294	0.011
08/31/95	22:24:55	20159.3628	861.2	467.91	30.96	0.03062215	0.0004	66.8540	0.338	1.00216948	0.011
08/31/95	22:29:55	20113.404	853.7	466.48	30.03	0.02539092	0.0004	60.2129	0.31	0.99111383	0.01
08/31/95	22:34:54	19962.3198	837.7	463.18	28.96	0.02019005	0.0003	56.0012	0.293	0.97140216	0.01
08/31/95	22:39:55	19823.4996	817.5	461.16	28.22	0.01900665	0.0003	54.3881	0.286	0.95196155	0.01
08/31/95	22:44:56	19791.5838	837.9	462.06	28.3	0.02042991	0.0003	58.4732	0.303	0.9672693	0.01
08/31/95	22:49:56	19724.3354	867.8	461.54	28.37	0.02162125	0.0003	58.6380	0.307	1.01261316	0.01
08/31/95	22:54:55	19609.8188	875.9	459.59	28.72	0.02227314	0.0003	58.4083	0.303	1.02510785	0.01
08/31/95	22:59:55	19482.5903	873	456.33	29.22	0.02390289	0.0003	66.3650	0.336	1.02815003	0.01
08/31/95	23:04:55	19433.2952	877.3	456.42	29.18	0.02529656	0.0003	73.5952	0.373	1.02825631	0.01
08/31/95	23:09:56	19338.33	875	455.08	29.82	0.02788661	0.0004	77.1278	0.393	1.0225812	0.01
08/31/95	23:14:55	19329.8611	904.3	454.85	30.33	0.02992591	0.0004	80.2171	0.409	1.0503344	0.011
08/31/95	23:19:56	19276.8257	903.6	454.32	30.19	0.02783978	0.0004	75.5073	0.386	1.04794558	0.01
08/31/95	23:24:56	19265.1807	884.2	452.63	30.07	0.02750452	0.0004	74.6020	0.38	1.0271962	0.01
08/31/95	23:29:55	19257.0162	902	455.02	30.85	0.03158981	0.0004	83.7831	0.431	1.05328204	0.011
08/31/95	23:34:55	19223.283	926.4	456.93	31.39	0.03319392	0.0004	85.4621	0.443	1.08231657	0.011
08/31/95	23:39:56	19209.6752	963.1	456.89	31.95	0.03479622	0.0004	90.7255	0.476	1.12709498	0.011
08/31/95	23:44:56	19199.4092	962.2	459.92	31.68	0.03555266	0.0004	93.9211	0.497	1.13249812	0.011
08/31/95	23:49:55	19181.3539	914.5	458.64	29.97	0.02973954	0.0004	77.5939	0.401	1.07019083	0.01
08/31/95	23:54:55	19232.2835	928.8	460.30	29.08	0.02685982	0.0003	65.3148	0.34	1.09388798	0.01
08/31/95	23:59:56	19230.2045	940.8	461.30	29.17	0.02512223	0.0003	65.2063	0.338	1.11100918	0.01
09/01/95	00:04:56	19214.1155	942	459.52	29.68	0.02651507	0.0004	69.2067	0.356	1.11038603	0.01
09/01/95	00:09:56	19197.1193	964.5	461.91	29.98	0.02778791	0.0004	70.2696	0.362	1.13962859	0.01
09/01/95	00:14:57	19156.8386	966.4	460.35	29.56	0.02507072	0.0004	66.2410	0.344	1.13898868	0.01
09/01/95	00:19:57	19146.5219	980.4	462.44	29.33	0.0222526	0.0003	67.6090	0.352	1.15799913	0.01
09/01/95	00:24:57	19131.6287	1010	463.93	29.75	0.02331533	0.0004	70.0673	0.365	1.19383107	0.01
09/01/95	00:29:56	19046.8577	1013	462.05	29.95	0.02427313	0.0004	65.5109	0.345	1.19423814	0.01
09/01/95	00:34:56	18982.4334	1010	461.71	30.16	0.02479391	0.0004	64.3939	0.34	1.1901077	0.01
09/01/95	00:39:57	18941.9978	1023	462.54	30.23	0.02380582	0.0004	69.0353	0.362	1.20644865	0.011
09/01/95	00:44:57	18965.7931	1022	463.21	30.08	0.02520142	0.0004	71.9283	0.377	1.20191397	0.01
09/01/95	00:49:56	18990.6052	1023	464.66	30.04	0.02500012	0.0004	70.9087	0.372	1.21444528	0.01
09/01/95	00:54:56	19043.4925	997	462.31	29.83	0.02370255	0.0004	70.8397	0.37	1.18405023	0.01
09/01/95	00:59:57	19065.092	1015	461.94	30.08	0.02433544	0.0004	70.5082	0.368	1.20708075	0.01
09/01/95	01:04:57	19058.2284	1003	461.17	29.68	0.02412461	0.0004	70.9389	0.371	1.19761469	0.01
09/01/95	01:09:57	19059.142	992.6	458.97	29.97	0.02607299	0.0004	68.2187	0.358	1.18513602	0.01
09/01/95	01:14:57	19083.4895	977.4	457.37	29.34	0.02361271	0.0004	66.1059	0.347	1.16122774	0.01
09/01/95	01:19:58	19101.1986	1012	456.38	29.75	0.02426419	0.0004	70.1411	0.366	1.20350363	0.01
09/01/95	01:24:58	19067.4876	1060	454.94	30.95	0.02726837	0.0004	74.7887	0.389	1.24809371	0.011
09/01/95	01:29:58	19068.6557	1093	457.59	31.67	0.02927215	0.0004	82.2660	0.432	1.29034236	0.011
09/01/95	01:34:58	18984.1136	1074	459.59	31.55	0.02947075	0.0004	88.2099	0.468	1.27132963	0.011
09/01/95	01:39:59	18873.8671	1043	460.13	31.21	0.02904052	0.0004	91.0940	0.486	1.23583566	0.011
09/01/95	01:44:59	18828.2064	1053	461.68	31.31	0.03032004	0.0004	88.2357	0.466	1.24290655	0.011
09/01/95	01:49:58	18815.501	1093	461.53	31.65	0.03065412	0.0004	88.9698	0.471	1.28854877	0.011
09/01/95	01:54:58	18678.5073	1055	458.33	31.11	0.02968052	0.0004	89.7136	0.477	1.24314041	0.011
09/01/95	01:59:59	18616.1955	1051	458.41	31.22	0.03076168	0.0004	84.8852	0.448	1.23799636	0.011
09/01/95	02:04:59	18594.3611	1061	457.45	31.23	0.03086924	0.0004	90.4046	0.481	1.25413011	0.011
09/01/95	02:09:59	18525.5436	1041	456.52	30.74	0.030105	0.0004	85.5911	0.451	1.22785405	0.011
09/01/95	02:14:58	18487.32	1044	457.14	30.73	0.02976003	0.0004	91.0506	0.486	1.22907867	0.011
09/01/95	02:19:58	18464.6475	1058	456.47	31.33	0.03094742	0.0004	90.4508	0.481	1.24649319	0.011
09/01/95	02:24:59	18412.5454	1073	456.22	31.84	0.03329263	0.0004	94.4056	0.507	1.26404617	0.011
09/01/95	02:29:59	18409.2162	1046	449.88	30.79	0.02803025	0.0004	88.8644	0.473	1.23290145	0.011
09/01/95	02:34:59	18491.9196	1039	449.39	30.84	0.02705349	0.0004	91.4804	0.487	1.22599548	0.011
09/01/95	02:39:59	18427.7887	1035	452.10	30.56	0.02809523	0.0004	92.5671	0.495	1.21388542	0.011
09/01/95	02:45:00	18426.6794	1035	450.02	30.61	0.02743628	0.0004	98.0099	0.53	1.21426988	0.011
09/01/95	02:50:00	18467.3579	966.8	446.31	30.14	0.02723736	0.0004	90.2634	0.48	1.1377495	0.01

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/01/95	02:55:00	18522.4005	949.2	446.00	28.73	0.02210682	0.0003	80.4762	0.423	1.11929175	0.01
09/01/95	02:59:59	18490.4207	952.5	442.89	29.48	0.02393117	0.0004	77.5927	0.406	1.12358434	0.01
09/01/95	03:04:59	18375.4587	893.2	443.09	28.52	0.02294801	0.0003	77.7746	0.409	1.05185531	0.01
09/01/95	03:09:59	18411.3381	960.9	443.22	29.79	0.02423024	0.0004	78.6521	0.413	1.13753478	0.01
09/01/95	03:15:00	18511.0634	1055	447.03	30.17	0.02284509	0.0004	79.8041	0.421	1.24950831	0.01
09/01/95	03:20:00	18468.9664	1053	445.34	29.81	0.01705016	0.0004	82.4733	0.435	1.2482002	0.01
09/01/95	03:24:59	18491.9145	1088	446.74	29.42	0.01125954	0.0004	85.1194	0.451	1.28144265	0.01
09/01/95	03:29:59	18486.7723	1122	445.40	29.48	0.00568553	0.0004	85.2093	0.452	1.31947229	0.01
09/01/95	03:34:59	18473.6796	1117	452.01	28.71	0.00139509	0.0003	93.0054	0.503	1.31245811	0.01
09/01/95	03:40:00	18411.0079	1118	450.94	29.22	0	0.0003	103.6277	0.57	1.31245811	0.01
09/01/95	03:45:00	18319.6391	1091	451.20	28.9	0	0.0003	104.4672	0.577	1.2862173	0.01
09/01/95	03:49:59	18135.4697	1018	454.13	28.15	0	0.0003	126.7537	0.747	1.20101738	0.01
09/01/95	03:54:59	18065.9164	1035	455.14	28.3	0	0.0003	128.1757	0.753	1.2187869	0.01
09/01/95	04:00:00	18023.0391	1032	454.61	28.22	0	0.0003	129.7467	0.766	1.2155711	0.01
09/01/95	04:05:00	17852.7231	942.8	452.98	27.54	0	0.0003	139.1301	0.839	1.11182534	0.01
09/01/95	04:10:00	17837.3557	879.5	454.93	26.23	0	0.0003	144.8663	0.891	1.03643667	0.009
09/01/95	04:14:59	18017.4845	1066	452.46	28.5	0	0.0003	139.4313	0.848	1.25726044	0.01
09/01/95	04:19:59	18092.4305	1158	457.35	29.18	0	0.0003	130.5406	0.774	1.3595115	0.01
09/01/95	04:25:00	18098.5531	1237	457.28	30.5	0	0.0004	126.7935	0.742	1.44038781	0.011
09/01/95	04:30:00	17879.1534	1092	456.92	29.04	0	0.0003	123.4034	0.716	1.28223518	0.01
09/01/95	04:35:00	17935.0124	1129	463.29	29.01	0	0.0003	131.8387	0.786	1.32322637	0.01
09/01/95	04:39:59	17990.1676	1168	459.83	29.42	0	0.0004	116.7710	0.67	1.36867171	0.01
09/01/95	04:44:59	17917.3622	1160	461.15	29.25	0	0.0003	112.5107	0.639	1.35424785	0.01
09/01/95	04:50:00	17963.0134	1193	461.88	29.65	0	0.0004	116.9982	0.672	1.39195085	0.01
09/01/95	04:55:00	17953.081	1162	456.90	29.34	0	0.0004	117.7045	0.676	1.36169578	0.01
09/01/95	05:00:00	17921.929	1155	460.96	28.91	0	0.0003	119.9909	0.693	1.35313165	0.01
09/01/95	05:04:59	17912.5846	1145	460.68	28.85	0	0.0003	123.3168	0.721	1.34512927	0.01
09/01/95	05:09:59	17834.0894	1114	456.21	28.48	0	0.0003	104.1308	0.582	1.31063781	0.01
09/01/95	05:15:00	17758.7875	1106	458.50	28.47	0	0.0003	107.6591	0.607	1.29944695	0.01
09/01/95	05:20:00	17779.3219	1144	456.25	28.9	0	0.0003	108.0100	0.609	1.33901859	0.01
09/01/95	05:25:00	17778.0865	1122	452.70	28.67	0	0.0003	101.4136	0.564	1.31573843	0.01
09/01/95	05:29:59	17734.0819	1106	451.65	28.59	0	0.0003	99.6711	0.551	1.30051645	0.01
09/01/95	05:34:59	17685.4947	1111	455.31	28.72	0	0.0003	103.9962	0.58	1.30454757	0.01
09/01/95	05:40:00	17660.0172	1101	454.69	28.65	0	0.0003	109.8495	0.622	1.29360968	0.01
09/01/95	05:45:00	17696.1878	1134	452.74	29.05	0	0.0003	102.6234	0.572	1.3302108	0.01
09/01/95	05:50:00	17639.0629	1128	461.10	28.24	0	0.0003	104.7477	0.585	1.32782084	0.01
09/01/95	05:54:59	17599.6828	1121	462.00	28.06	0	0.0003	107.2274	0.603	1.31342511	0.01
09/01/95	05:59:59	17621.1635	1153	460.82	28.54	0	0.0003	104.1486	0.582	1.35082941	0.01
09/01/95	06:05:00	17553.1829	1152	463.83	28.41	0	0.0003	99.2632	0.548	1.34950511	0.01
09/01/95	06:10:00	17479.9873	1132	465.08	28.13	0	0.0003	99.4865	0.552	1.32285833	0.01
09/01/95	06:15:00	17375.9432	1097	465.26	27.86	0	0.0003	99.9633	0.554	1.28664854	0.01
09/01/95	06:19:59	17347.687	1089	463.25	27.64	0	0.0003	95.0464	0.522	1.28000446	0.01
09/01/95	06:24:59	17353.1852	1068	465.76	27.44	0	0.0003	93.5097	0.512	1.25618563	0.01
09/01/95	06:29:59	17353.9138	1051	465.63	27.2	0	0.0003	96.1532	0.53	1.23400675	0.009
09/01/95	06:35:00	17343.7932	1092	466.40	27.7	0	0.0003	99.5084	0.553	1.27432935	0.01
09/01/95	06:40:00	17287.233	1097	471.59	27.81	0	0.0003	114.8698	0.66	1.27762867	0.01
09/01/95	06:44:59	17251.4619	1041	461.93	27.26	0	0.0003	98.7994	0.547	1.21637816	0.009
09/01/95	06:49:59	17311.1614	1081	460.65	27.78	0	0.0003	107.0545	0.604	1.26541707	0.01
09/01/95	06:55:00	17353.3874	1135	465.04	28.46	0	0.0003	111.2005	0.632	1.32060162	0.01
09/01/95	07:00:00	17322.3986	1126	468.37	28.37	0	0.0003	114.5135	0.656	1.30944557	0.01
09/01/95	07:05:00	17409.1267	1198	470.40	29.16	0	0.0003	113.7262	0.65	1.38722386	0.01
09/01/95	07:09:59	17386.3189	1153	466.62	28.56	0	0.0003	112.0661	0.639	1.34323969	0.01
09/01/95	07:14:59	17398.4694	1160	466.06	28.65	0	0.0003	118.9988	0.689	1.35415734	0.01
09/01/95	07:20:00	17260.8146	1105	468.30	28	0	0.0003	120.3754	0.701	1.29231394	0.01
09/01/95	07:25:00	17094.4828	1108	471.61	28.05	0	0.0003	127.2431	0.755	1.28766182	0.01
09/01/95	07:30:00	17190.9068	1165	471.20	28.73	0	0.0003	125.1417	0.738	1.35237377	0.01
09/01/95	07:35:00	17243.9112	1132	469.05	28.24	0	0.0003	127.4021	0.756	1.32067879	0.01
09/01/95	07:40:01	17294.4249	1157	467.17	28.43	0	0.0003	127.7695	0.759	1.35152664	0.01
09/01/95	07:45:01	17124.2584	1049	465.80	27.24	0	0.0003	124.0035	0.732	1.23084936	0.009
09/01/95	07:50:02	17210.8604	1107	472.93	27.74	0	0.0003	142.3737	0.88	1.29503539	0.01
09/01/95	07:55:01	17269.1081	1067	472.57	27.15	0	0.0003	149.2101	0.937	1.25394217	0.009
09/01/95	08:00:01	17463.4052	1192	471.97	28.52	0	0.0003	140.7306	0.864	1.39254797	0.01

Midwest Beef

Site: Beef processing plant in Midwest U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/01/95	08:05:01	17475.5804	1134	470.73	27.7	0	0.0003	125.0226	0.738	1.33380182	0.01
09/01/95	08:10:02	17347.889	998.7	467.04	26.14	0	0.0003	123.3842	0.725	1.17748996	0.009
09/01/95	08:15:02	17449.3611	1033	469.08	26.35	0	0.0003	118.0772	0.683	1.22344806	0.009
09/01/95	08:20:01	17451.6904	929.8	470.75	25.25	0	0.0003	118.2156	0.683	1.10098558	0.009
09/01/95	08:25:01	17457.2488	779.8	477.38	23.79	0.00619972	0.0003	112.4125	0.638	0.91071817	0.008
09/01/95	08:30:01	17704.9742	842.2	489.49	27.89	0.03413074	0.0003	114.4825	0.657	0.9925733	0.01
09/01/95	08:35:02	17885.7269	839.3	494.63	26.94	0.03128917	0.0003	109.6252	0.622	0.99225253	0.009
09/01/95	08:40:02	18089.4103	790	493.82	24.68	0.01919534	0.0003	103.6430	0.577	0.93210001	0.009
09/01/95	08:45:02	18426.1804	722.1	502.64	24.09	0.02007969	0.0003	80.6950	0.446	0.84635377	0.008
09/01/95	08:50:02	18692.8453	800.6	514.60	25.97	0.02762733	0.0003	92.7817	0.508	0.95061667	0.009
09/01/95	08:55:03	18508.7852	692.5	507.88	23.28	0.01740194	0.0003	81.9133	0.448	0.80757874	0.008
09/01/95	09:00:06	18582.6307	729.1	506.92	24.55	0.02276862	0.0003	84.3701	0.458	0.85607863	0.009
09/01/95	09:05:02	18923.2586	846.1	510.63	24.8	0.01999504	0.0003	92.4580	0.505	1.00437428	0.009
09/01/95	09:10:02	18634.2215	754.3	497.10	22.6	0.00990117	0.0003	84.6025	0.461	0.88658541	0.008
09/01/95	09:15:03	18851.5872	714.6	497.70	22.4	0.01184734	0.0003	94.8986	0.525	0.81832774	0.008
09/01/95	09:20:03	19237.5711	741.4	498.36	22.52	0.01035113	0.0003	100.5911	0.563	0.83520663	0.008
09/01/95	09:25:03	19535.9936	756.5	497.33	23.1	0.017049	0.0003	93.2059	0.513	0.83993291	0.008
09/01/95	09:30:02	19753.6116	779.1	492.65	23.44	0.01878602	0.0003	91.9268	0.498	0.86653232	0.008
09/01/95	09:35:04	20171.9379	845.3	497.00	25.56	0.02874573	0.0003	99.9114	0.56	0.94439449	0.009
09/01/95	09:40:03	20525.4642	779	487.97	23	0.01548242	0.0003	84.9804	0.457	0.8747025	0.008
09/01/95	09:45:03	20631.9528	709.7	475.05	22.25	0.00921486	0.0003	82.7556	0.432	0.79410371	0.008
09/01/95	09:50:02	21107.0013	813.7	477.70	24.13	0.01433413	0.0003	89.7952	0.475	0.92954639	0.008
09/01/95	09:55:02	21459.7072	845.2	474.29	24.69	0.01283053	0.0003	82.4080	0.427	0.96522525	0.009
09/01/95	10:00:03	22028.6737	915.4	472.78	26.08	0.01775645	0.0003	83.4618	0.431	1.04447143	0.009
09/01/95	10:05:03	22238.3081	901.5	469.12	25.63	0.01625544	0.0003	83.6585	0.43	1.0176557	0.009
09/01/95	10:10:03	21909.1357	893.8	472.61	25.52	0.01834524	0.0003	78.5228	0.401	1.01488512	0.009
09/01/95	10:15:03	21739.4421	917.8	471.08	26.01	0.01932803	0.0003	75.9009	0.385	1.05583433	0.009
09/01/95	10:20:04	21856.6112	904.3	472.19	25.98	0.01923305	0.0003	79.9216	0.407	1.03519698	0.009
09/01/95	10:25:04	22052.0647	908.4	474.34	26.02	0.01880288	0.0003	80.4571	0.41	1.03776608	0.009
09/01/95	10:30:04	22073.0361	922.9	474.18	26.09	0.0177326	0.0003	74.9547	0.379	1.05541804	0.009
09/01/95	10:35:04	22061.7257	898.7	475.74	25.87	0.01906018	0.0003	74.6391	0.378	1.02596374	0.009

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 14											
08/28/95	21:04:51	0.47958194	0.058	0.25779034	0.015	0	0.007	0	1.503	0.02308733	0.005
08/28/95	21:09:51	0.48012146	0.058	0.27012298	0.015	0	0.007	0	1.49	0.02109823	0.006
08/28/95	21:14:52	0.47920598	0.058	0.26289621	0.015	0	0.007	0	1.541	0.0272301	0.005
08/28/95	21:19:52	0.47811778	0.058	0.26521964	0.015	0	0.007	0	1.519	0.03207155	0.005
08/28/95	21:24:52	0.47772635	0.058	0.25397694	0.015	0	0.006	0	1.573	0.03745585	0.005
08/28/95	21:29:53	0.47796641	0.057	0.25699591	0.015	0	0.006	0	1.531	0.03263093	0.005
08/28/95	21:34:53	0.47779367	0.058	0.26217846	0.015	0	0.006	0	1.548	0.03626455	0.005
08/28/95	21:39:52	0.47818971	0.058	0.2631523	0.014	0	0.006	0	1.49	0.03266114	0.005
08/28/95	21:44:51	0.47805893	0.058	0.25782953	0.014	0	0.006	0	1.503	0.03683279	0.005
08/28/95	21:49:52	0.47705093	0.057	0.24307559	0.014	0	0.006	0	1.488	0.03990957	0.005
08/28/95	21:54:52	0.47733704	0.057	0.22813903	0.014	0	0.006	0	1.445	0.04354384	0.005
08/28/95	21:59:51	0.47702948	0.057	0.22447801	0.014	0	0.006	0	1.458	0.04320681	0.005
08/28/95	22:04:51	0.47705093	0.057	0.22498472	0.014	0	0.006	0	1.466	0.04144455	0.005
08/28/95	22:09:52	0.47669846	0.056	0.22503761	0.014	0	0.006	0	1.41	0.03834623	0.005
08/28/95	22:14:52	0.4772246	0.056	0.22518865	0.014	0	0.006	0	1.419	0.04361318	0.005
08/28/95	22:19:53	0.47687191	0.057	0.22436522	0.014	0	0.006	0	1.441	0.04401895	0.005
08/28/95	22:24:53	0.47669538	0.057	0.22362541	0.014	0	0.006	0	1.463	0.04323643	0.005
08/28/95	22:29:53	0.47653998	0.057	0.22612675	0.014	0	0.006	0	1.462	0.04682257	0.005
08/28/95	22:34:54	0.47688921	0.056	0.22750678	0.014	0	0.006	0	1.434	0.04670452	0.005
08/28/95	22:39:53	0.4769102	0.057	0.22746462	0.014	0	0.006	0	1.448	0.04472742	0.005
Run 15											
08/29/95	09:44:50	0.47427574	0.057	0.30295195	0.015	0	0.011	0	1.516	0.09324115	0.008
08/29/95	09:49:53	0.4747584	0.058	0.30999509	0.015	0	0.011	0	1.547	0.0952572	0.009
08/29/95	09:54:51	0.47458625	0.058	0.32305055	0.015	0	0.01	0	1.519	0.08963315	0.008
08/29/95	09:59:51	0.47382473	0.058	0.32127414	0.015	0	0.01	0	1.529	0.09212044	0.008
08/29/95	10:04:51	0.47349848	0.058	0.33130674	0.015	0	0.01	0	1.503	0.08706509	0.008
08/29/95	10:09:52	0.47349925	0.058	0.31858562	0.015	0	0.01	0	1.491	0.08725524	0.008
08/29/95	10:14:52	0.47325799	0.058	0.32715959	0.015	0	0.01	0	1.499	0.08790016	0.008
08/29/95	10:19:52	0.47259854	0.058	0.32746208	0.015	0	0.009	0	1.485	0.07909553	0.007
08/29/95	10:24:54	0.47217931	0.058	0.31892139	0.015	0	0.009	0	1.479	0.08332576	0.007
08/29/95	10:29:53	0.47200144	0.058	0.32557884	0.015	0	0.009	0	1.52	0.08271284	0.007
08/29/95	10:34:53	0.47087449	0.059	0.33968503	0.015	0	0.009	0	1.537	0.08203465	0.007
08/29/95	10:39:52	0.47040442	0.058	0.32982252	0.015	0	0.009	0	1.5	0.08223546	0.007
08/29/95	10:44:53	0.47086044	0.058	0.32070069	0.015	0	0.009	0	1.515	0.07755867	0.007
08/29/95	10:49:54	0.47120681	0.058	0.31255763	0.015	0	0.009	0	1.556	0.08081296	0.007
08/29/95	10:54:53	0.46837789	0.057	0.29993393	0.015	0	0.01	0	1.503	0.08383589	0.008
08/29/95	10:59:53	0.46845231	0.057	0.28303707	0.015	0	0.009	0	1.494	0.08293439	0.007
08/29/95	11:04:54	0.46744509	0.056	0.26583246	0.015	0	0.01	0	1.497	0.0877634	0.008
08/29/95	11:09:55	0.46743096	0.056	0.25589771	0.015	0	0.01	0	1.487	0.08308654	0.008
08/29/95	11:14:54	0.47118103	0.056	0.25159184	0.015	0	0.01	0	1.558	0.08260894	0.008
08/29/95	11:19:54	0.46642828	0.056	0.25055698	0.016	0	0.01	0	1.512	0.08843188	0.008
08/29/95	11:24:55	0.46599309	0.056	0.24142479	0.015	0	0.01	0	1.494	0.08284075	0.008
08/29/95	11:29:55	0.46979917	0.056	0.23578726	0.015	0	0.01	0	1.479	0.08554916	0.008
08/29/95	11:34:55	0.46628185	0.056	0.23214175	0.015	0	0.01	0	1.479	0.0871503	0.008
08/29/95	11:39:56	0.4683247	0.056	0.23166121	0.015	0	0.01	0	1.487	0.08014766	0.008
Downwind											
Run 16											
08/29/95	22:14:58	0.48134382	0.06	0.36051311	0.013	0	0.012	0	2.354	0.04221928	0.009
08/29/95	22:19:58	0.48183062	0.06	0.34828213	0.013	0	0.013	0	2.266	0.0441128	0.01
08/29/95	22:24:59	0.48132705	0.057	0.25612807	0.013	0	0.012	0	2.183	0.03841371	0.01
08/29/95	22:29:59	0.481	0.057	0.24402542	0.013	0	0.012	0	2.123	0.03922034	0.009
08/29/95	22:34:59	0.48106427	0.056	0.2355222	0.012	0	0.012	0	2.137	0.04096038	0.009
08/29/95	22:40:00	0.48115302	0.057	0.24019106	0.013	0	0.011	0	2.141	0.04295026	0.009
08/29/95	22:44:59	0.48117438	0.056	0.23056731	0.013	0	0.011	0	2.264	0.03974919	0.009
08/29/95	22:49:59	0.48295711	0.056	0.2265616	0.013	0	0.011	0	2.143	0.04194362	0.008
08/29/95	22:55:00	0.48077671	0.056	0.2240983	0.013	0	0.011	0	2.074	0.04226608	0.009
08/29/95	23:00:00	0.48158951	0.056	0.22170502	0.012	0	0.011	0	2.101	0.04379087	0.009
08/29/95	23:04:59	0.48173634	0.056	0.22064931	0.013	0	0.011	0	2.202	0.04307497	0.009
08/29/95	23:10:00	0.48201144	0.056	0.22372441	0.013	0	0.011	0	2.308	0.04301126	0.009
08/29/95	23:15:00	0.48207273	0.056	0.23138614	0.013	0	0.012	0	2.506	0.04024584	0.009
08/29/95	23:19:59	0.48150393	0.056	0.22364158	0.013	0	0.011	0	2.469	0.04266629	0.009

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/29/95	23:24:59	0.48192221	0.056	0.21413889	0.013	0	0.011	0	2.325	0.04344211	0.009
08/29/95	23:30:00	0.48115429	0.056	0.20305896	0.013	0	0.011	0	2.153	0.04333241	0.009
08/29/95	23:35:00	0.48109228	0.056	0.19658596	0.013	0	0.011	0	2.183	0.04588103	0.009
08/29/95	23:39:59	0.481792	0.056	0.19782987	0.013	0	0.011	0	2.157	0.04542516	0.009
08/29/95	23:45:00	0.48128457	0.056	0.19995027	0.013	0	0.011	0	2.176	0.04716326	0.009
08/29/95	23:50:00	0.48187379	0.056	0.20371365	0.013	0	0.011	0	2.112	0.04791328	0.009
08/29/95	23:54:59	0.48193471	0.056	0.20776449	0.013	0	0.011	0	2.109	0.04799623	0.009
08/29/95	23:59:59	0.48208466	0.056	0.20713976	0.013	0	0.011	0	2.115	0.04754027	0.009
08/30/95	00:05:00	0.48190587	0.056	0.20640595	0.013	0	0.011	0	2.119	0.04938413	0.009
08/30/95	00:10:00	0.48216491	0.056	0.20687666	0.013	0	0.011	0	2.122	0.04761447	0.008
08/30/95	00:14:59	0.48218488	0.056	0.20629108	0.013	0	0.011	0	2.075	0.04826226	0.009
08/30/95	00:20:00	0.48247335	0.056	0.20582026	0.013	0	0.011	0	2.091	0.04784226	0.009
08/30/95	00:25:00	0.48251319	0.056	0.20727602	0.013	0	0.011	0	2.06	0.04782451	0.009
08/30/95	00:29:59	0.48273207	0.056	0.21044973	0.013	0	0.011	0	2.077	0.05077934	0.009
08/30/95	00:34:59	0.48262263	0.056	0.21460838	0.013	0	0.011	0	2.091	0.04859058	0.009
08/30/95	00:40:00	0.4828613	0.056	0.2185076	0.013	0	0.011	0	2.175	0.04869098	0.009
08/30/95	00:45:00	0.48297072	0.057	0.22354082	0.013	0	0.011	0	2.183	0.04781563	0.009
08/30/95	00:50:01	0.48277166	0.057	0.22853161	0.013	0	0.011	0	2.088	0.04977591	0.009
08/30/95	00:55:01	0.48318956	0.057	0.23787457	0.013	0	0.011	0	2.121	0.04934748	0.009
08/30/95	01:00:00	0.48309986	0.057	0.23947137	0.013	0	0.011	0	2.101	0.04715037	0.009
08/30/95	01:05:00	0.4832681	0.057	0.23922864	0.013	0	0.011	0	2.231	0.04756145	0.009
08/30/95	01:10:01	0.48339695	0.057	0.24618045	0.013	0	0.011	0	2.264	0.0474433	0.009
08/30/95	01:15:01	0.48312749	0.057	0.24899311	0.013	0	0.011	0	2.212	0.04555951	0.009
08/30/95	01:20:00	0.48258121	0.057	0.24134523	0.013	0	0.011	0	2.121	0.04523175	0.009
08/30/95	01:25:00	0.48269046	0.057	0.23599172	0.013	0	0.011	0	2.138	0.04555951	0.009
08/30/95	01:30:01	0.48310803	0.057	0.22915122	0.013	0	0.011	0	2.165	0.04600509	0.009
08/30/95	01:35:00	0.48308854	0.057	0.22646141	0.013	0	0.011	0	2.1	0.04492068	0.009
08/30/95	01:40:00	0.48518427	0.056	0.21997206	0.013	0	0.011	0	2.183	0.0441474	0.009
08/30/95	01:45:01	0.483346	0.057	0.23227703	0.013	0	0.011	0	2.152	0.04392068	0.009
08/30/95	01:50:01	0.48327549	0.057	0.24103706	0.013	0	0.011	0	2.132	0.0420477	0.009
08/30/95	01:55:00	0.48296721	0.057	0.23990029	0.013	0	0.011	0	2.16	0.04335021	0.009
08/30/95	02:00:00	0.48307641	0.057	0.24415887	0.013	0	0.012	0	2.164	0.04476974	0.009
08/30/95	02:05:01	0.48344245	0.057	0.25683904	0.014	0	0.012	0	2.339	0.04213339	0.009
08/30/95	02:10:00	0.48337164	0.058	0.27005526	0.014	0	0.012	0	2.302	0.03775318	0.01
08/30/95	02:15:00	0.48308259	0.058	0.27333596	0.014	0	0.012	0	2.331	0.03893892	0.01
08/30/95	02:20:01	0.48292171	0.058	0.28223122	0.014	0	0.012	0	2.356	0.03804507	0.01
08/30/95	02:25:01	0.48353665	0.058	0.2838624	0.014	0	0.012	0	2.363	0.03860441	0.01
08/30/95	02:30:00	0.48335645	0.058	0.29400369	0.014	0	0.012	0	2.373	0.03684585	0.01
08/30/95	02:35:01	0.4836309	0.059	0.29939575	0.014	0	0.012	0	2.498	0.03617154	0.01
08/30/95	02:40:01	0.48401364	0.059	0.29922823	0.014	0	0.013	0	2.669	0.03571574	0.01
08/30/95	02:45:00	0.48450447	0.059	0.30156376	0.014	0	0.013	0	2.722	0.03613106	0.01
08/30/95	02:50:00	0.4846499	0.059	0.31091569	0.014	0	0.013	0	2.655	0.03916363	0.01
08/30/95	02:55:01	0.4846499	0.059	0.30928387	0.014	0	0.012	0	2.681	0.04188332	0.01
08/30/95	03:00:01	0.48479271	0.059	0.30668338	0.014	0	0.012	0	2.654	0.04126127	0.01
08/30/95	03:05:00	0.48488323	0.059	0.2941095	0.014	0	0.012	0	2.416	0.04061564	0.01
08/30/95	03:10:00	0.48542768	0.059	0.29530728	0.014	0	0.012	0	2.525	0.04257564	0.01
08/30/95	03:15:01	0.48510101	0.059	0.29585173	0.014	0	0.012	0	2.473	0.04529787	0.01
08/30/95	03:20:00	0.48486484	0.059	0.29928315	0.014	0	0.012	0	2.449	0.04574197	0.01
08/30/95	03:25:00	0.48519157	0.059	0.29111494	0.014	0	0.012	0	2.393	0.04813797	0.009
08/30/95	03:30:01	0.48530048	0.058	0.28697638	0.014	0	0.012	0	2.405	0.04868252	0.009
08/30/95	03:35:01	0.48482794	0.058	0.2759706	0.014	0	0.012	0	2.272	0.05273185	0.009
08/30/95	03:40:00	0.48480943	0.058	0.27209915	0.014	0	0.012	0	2.266	0.05099816	0.009
08/30/95	03:45:00	0.48482794	0.058	0.27390055	0.014	0	0.012	0	2.334	0.04826489	0.009
08/30/95	03:50:01	0.48519157	0.058	0.27162015	0.014	0	0.012	0	2.294	0.04966271	0.009
08/30/95	03:55:00	0.48502874	0.058	0.25710006	0.014	0	0.012	0	2.326	0.05137647	0.009
08/30/95	04:00:00	0.485136	0.057	0.24153394	0.014	0	0.012	0	2.289	0.05246479	0.009
08/30/95	04:05:01	0.48517235	0.057	0.24133489	0.014	0	0.011	0	2.266	0.05375087	0.009
08/30/95	04:10:01	0.4853173	0.057	0.24222358	0.014	0	0.012	0	2.309	0.05340448	0.009
08/30/95	04:15:00	0.48558862	0.057	0.24817525	0.014	0	0.012	0	2.334	0.05424417	0.009
08/30/95	04:20:00	0.48638493	0.058	0.26014422	0.014	0	0.012	0	2.245	0.05161592	0.009
08/30/95	04:25:01	0.48589466	0.058	0.25521959	0.014	0	0.012	0	2.239	0.05756016	0.009
08/30/95	04:30:01	0.48614696	0.058	0.26207208	0.015	0	0.012	0	2.268	0.05797286	0.009

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	04:35:00	0.48596484	0.058	0.26664038	0.015	0	0.012	0	2.258	0.05914489	0.009
08/30/95	04:40:00	0.48585631	0.058	0.27456254	0.015	0	0.011	0	2.215	0.05914489	0.009
08/30/95	04:45:00	0.48596484	0.059	0.2882364	0.015	0	0.011	0	2.225	0.05903637	0.009
08/30/95	04:50:01	0.48638153	0.059	0.30326936	0.015	0	0.012	0	2.219	0.05665949	0.009
08/30/95	04:55:01	0.48639893	0.06	0.30527447	0.015	0	0.012	0	2.244	0.0553466	0.009
08/30/95	05:00:00	0.48609078	0.06	0.30879785	0.015	0	0.012	0	2.325	0.05229816	0.009
08/30/95	05:05:00	0.48601704	0.06	0.31150211	0.015	0	0.012	0	2.264	0.05032625	0.009
08/30/95	05:10:01	0.48663112	0.06	0.30847096	0.015	0	0.012	0	2.248	0.05403396	0.009
08/30/95	05:15:01	0.48650531	0.059	0.30353677	0.015	0	0.012	0	2.281	0.05382704	0.009
08/30/95	05:20:01	0.48587378	0.059	0.29849012	0.015	0	0.012	0	2.275	0.04860908	0.009
08/30/95	05:25:02	0.48598228	0.059	0.30152819	0.015	0	0.012	0	2.29	0.05056212	0.009
08/30/95	05:30:02	0.48580012	0.059	0.29696823	0.015	0	0.012	0	2.292	0.04663855	0.009
08/30/95	05:35:02	0.48560059	0.059	0.29918983	0.015	0	0.012	0	2.338	0.04359344	0.009
08/30/95	05:40:03	0.48603436	0.059	0.29832229	0.015	0	0.012	0	2.394	0.05053369	0.009
08/30/95	05:45:03	0.48603436	0.059	0.29669567	0.015	0	0.012	0	2.284	0.04988304	0.009
08/30/95	05:50:03	0.4863769	0.059	0.29642319	0.015	0	0.012	0	2.297	0.05150001	0.009
08/30/95	05:55:04	0.48684474	0.059	0.29338573	0.015	0	0.012	0	2.312	0.05093879	0.01
08/30/95	06:00:04	0.48700398	0.059	0.29722841	0.015	0	0.012	0	2.377	0.05405138	0.01
08/30/95	06:05:03	0.48736252	0.059	0.30079828	0.015	0	0.012	0	2.348	0.05565526	0.01
08/30/95	06:10:04	0.48737925	0.059	0.29684449	0.015	0	0.012	0	2.427	0.05347964	0.01
08/30/95	06:15:05	0.48807838	0.059	0.28953619	0.015	0	0.012	0	2.534	0.05604624	0.01
08/30/95	06:20:04	0.48792768	0.058	0.26596545	0.015	0	0.012	0	2.435	0.05622034	0.009
08/30/95	06:25:04	0.48828451	0.059	0.25938088	0.015	0	0.012	0	2.48	0.05760417	0.01
08/30/95	06:30:05	0.48833293	0.059	0.26517526	0.015	0	0.012	0	2.562	0.05541137	0.01
08/30/95	06:35:04	0.48856498	0.059	0.27376486	0.015	0	0.012	0	2.52	0.05734483	0.01
08/30/95	06:40:04	0.48892075	0.059	0.28283779	0.015	0	0.012	0	2.583	0.05861867	0.01
08/30/95	06:45:04	0.48918392	0.06	0.30155912	0.016	0	0.013	0	2.61	0.05847765	0.01
08/30/95	06:50:04	0.48921522	0.06	0.29971982	0.016	0	0.013	0	2.596	0.05694569	0.01
08/30/95	06:55:04	0.4890618	0.059	0.26543835	0.016	0	0.012	0	2.535	0.05916592	0.01
08/30/95	07:00:03	0.48920043	0.059	0.26447634	0.016	0	0.012	0	2.543	0.06797742	0.01
08/30/95	07:05:03	0.48952362	0.059	0.26641547	0.016	0	0.013	0	2.519	0.07476439	0.01
08/30/95	07:10:04	0.48932351	0.059	0.26787312	0.016	0	0.013	0	2.465	0.07582737	0.01
08/30/95	07:15:04	0.48964663	0.059	0.27131981	0.016	0	0.012	0	2.43	0.07539653	0.01
08/30/95	07:20:03	0.48932351	0.059	0.27756696	0.016	0	0.013	0	2.403	0.07755072	0.01
08/30/95	07:25:03	0.4894465	0.059	0.27288392	0.016	0	0.012	0	2.399	0.07785915	0.01
08/30/95	07:30:04	0.48966188	0.059	0.27676073	0.016	0	0.012	0	2.382	0.07742839	0.01
08/30/95	07:35:04	0.48998495	0.059	0.28214518	0.016	0	0.013	0	2.425	0.07678226	0.01
08/30/95	07:40:03	0.49023049	0.059	0.27633326	0.016	0	0.013	0	2.394	0.07621502	0.01
08/30/95	07:45:03	0.49000009	0.059	0.27272473	0.016	0	0.013	0	2.344	0.08032082	0.01
08/30/95	07:50:04	0.49030801	0.059	0.27471464	0.016	0	0.013	0	2.318	0.08152057	0.01
08/30/95	07:55:04	0.49018518	0.059	0.2792903	0.016	0	0.013	0	2.318	0.08175138	0.01
08/30/95	08:00:04	0.49004702	0.059	0.28230501	0.016	0	0.013	0	2.404	0.08264425	0.01
08/30/95	08:05:04	0.49015824	0.059	0.28090625	0.016	0	0.013	0	2.474	0.07984332	0.01
08/30/95	08:10:05	0.48924972	0.059	0.27944806	0.016	0	0.012	0	2.459	0.07784008	0.01
08/30/95	08:15:05	0.48985008	0.06	0.28726509	0.016	0	0.012	0	2.57	0.0763739	0.01
08/30/95	08:20:04	0.48977175	0.06	0.30114052	0.016	0	0.012	0	2.578	0.07169498	0.01
08/30/95	08:25:04	0.48951117	0.06	0.30584995	0.015	0	0.012	0	2.693	0.0710877	0.01
08/30/95	08:30:05	0.48884684	0.06	0.3105539	0.015	0	0.012	0	2.708	0.07023662	0.01
08/30/95	08:35:05	0.48872262	0.06	0.31871805	0.015	0	0.012	0	2.631	0.07111444	0.01
08/30/95	08:40:05	0.48844122	0.06	0.32815117	0.015	0	0.012	0	2.562	0.07581871	0.01
08/30/95	08:45:04	0.48823386	0.06	0.31823449	0.015	0	0.012	0	2.492	0.07341374	0.01
08/30/95	08:50:04	0.48815007	0.06	0.31094639	0.015	0	0.012	0	2.438	0.07239881	0.009
08/30/95	08:55:05	0.48764845	0.06	0.3163858	0.015	0	0.012	0	2.404	0.06909076	0.009
08/30/95	09:00:05	0.48757971	0.06	0.33333867	0.015	0	0.012	0	2.48	0.07261595	0.01
08/30/95	09:05:05	0.48752773	0.062	0.37077738	0.015	0	0.012	0	2.444	0.07319975	0.009
08/30/95	09:10:05	0.48744028	0.062	0.38297327	0.015	0	0.012	0	2.502	0.07555107	0.01
08/30/95	09:15:06	0.48693444	0.061	0.35584508	0.015	0	0.012	0	2.445	0.0734318	0.009
08/30/95	09:20:06	0.48708052	0.062	0.36710673	0.015	0	0.012	0	2.375	0.07468423	0.009
08/30/95	09:25:05	0.48648181	0.061	0.36241043	0.014	0	0.012	0	2.457	0.07439926	0.009
08/30/95	09:30:05	0.486372	0.061	0.35289233	0.014	0	0.012	0	2.479	0.07361011	0.009
08/30/95	09:35:06	0.48559126	0.06	0.32372751	0.014	0	0.012	0	2.429	0.072097	0.009
08/30/95	09:40:06	0.48549755	0.059	0.31038218	0.014	0	0.012	0	2.365	0.07194578	0.009

Midwest Beef

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	09:45:05	0.48476632	0.058	0.28657698	0.014	0	0.012	0	2.364	0.07090677	0.009
08/30/95	09:50:05	0.48410393	0.058	0.28722479	0.014	0	0.012	0	2.425	0.06967334	0.009
08/30/95	09:55:05	0.48433449	0.058	0.26307771	0.013	0	0.011	0	2.735	0.06711054	0.009
08/30/95	10:00:07	0.48426481	0.057	0.25127051	0.013	0	0.01	0	2.668	0.0644592	0.008
08/30/95	10:05:06	0.4833893	0.057	0.25258377	0.014	0	0.011	0	2.589	0.06675741	0.009
08/30/95	10:10:05	0.48367816	0.058	0.26428227	0.013	0	0.011	0	2.475	0.06579687	0.009
08/30/95	10:15:05	0.48337963	0.057	0.25921945	0.013	0	0.011	0	2.441	0.065517	0.009
08/30/95	10:20:41	0.4827512	0.057	0.25447775	0.013	0	0.011	0	2.495	0.06128956	0.008
08/30/95	10:25:34	0.48273094	0.057	0.25266063	0.013	0	0.011	0	2.394	0.05746275	0.008
08/30/95	10:30:33	0.48223103	0.057	0.25115514	0.013	0	0.011	0	2.324	0.04882658	0.009
08/30/95	10:35:33	0.48181937	0.057	0.26221163	0.013	0	0.011	0	2.427	0.04644704	0.009
08/30/95	10:40:33	0.48444255	0.057	0.25601695	0.013	0	0.011	0	2.348	0.05551248	0.009
08/30/95	10:45:34	0.48182524	0.057	0.25772815	0.013	0	0.012	0	2.45	0.04813856	0.009
08/30/95	10:50:34	0.48222827	0.057	0.27533892	0.013	0	0.012	0	2.278	0.04500944	0.01
08/30/95	10:55:33	0.48126263	0.057	0.25671011	0.013	0	0.012	0	2.276	0.0463642	0.009
08/30/95	11:00:33	0.48126263	0.056	0.23545526	0.013	0	0.011	0	2.297	0.04691485	0.009
08/30/95	11:05:34	0.48130534	0.056	0.2440654	0.013	0	0.012	0	2.384	0.04656728	0.009
08/30/95	11:10:34	0.48071147	0.056	0.22950807	0.013	0	0.011	0	2.446	0.04350081	0.009
08/30/95	11:15:33	0.48058156	0.056	0.22921062	0.013	0	0.011	0	2.439	0.04156441	0.009
08/30/95	11:20:33	0.48042765	0.056	0.23260374	0.013	0	0.011	0	2.449	0.04455757	0.009
08/30/95	11:25:34	0.48005282	0.056	0.23699229	0.013	0	0.011	0	2.447	0.05604846	0.009
08/30/95	11:30:34	0.47989833	0.056	0.24083214	0.013	0	0.011	0	2.385	0.06423662	0.009
08/30/95	11:35:33	0.48208527	0.056	0.24540715	0.013	0	0.012	0	2.347	0.06320256	0.009
08/30/95	11:40:33	0.48462663	0.056	0.23270034	0.013	0	0.012	0	2.5	0.05966675	0.009
08/30/95	11:45:34	0.47899143	0.056	0.24142936	0.013	0	0.012	0	2.401	0.06364454	0.01
08/30/95	11:50:34	0.47852254	0.056	0.22676172	0.013	0	0.012	0	2.532	0.06061728	0.009
08/30/95	11:55:33	0.47854155	0.056	0.22803507	0.013	0	0.012	0	2.373	0.06110454	0.01
08/30/95	12:00:33	0.47772035	0.056	0.23265889	0.013	0	0.012	0	2.407	0.05337534	0.01
08/30/95	12:05:34	0.4769789	0.055	0.22013558	0.013	0	0.012	0	2.354	0.05001569	0.01
08/30/95	12:10:34	0.48012041	0.055	0.22645513	0.013	0	0.012	0	2.636	0.04931146	0.01
08/30/95	12:15:34	0.47972294	0.055	0.20772081	0.013	0	0.012	0	2.364	0.04629587	0.01
08/30/95	12:20:35	0.47761353	0.056	0.21304983	0.013	0	0.013	0	2.511	0.0605066	0.01
08/30/95	12:25:35	0.4763443	0.055	0.20646399	0.013	0	0.012	0	2.66	0.05697473	0.01
08/30/95	12:30:35	0.47686645	0.055	0.19679497	0.013	0	0.012	0	2.836	0.07193579	0.01
08/30/95	12:35:36	0.47642464	0.055	0.20725251	0.013	0	0.013	0	2.948	0.07684268	0.01
08/30/95	12:40:36	0.47672247	0.055	0.19532689	0.013	0	0.013	0	3.074	0.07982537	0.01
08/30/95	12:45:36	0.47558264	0.055	0.19971126	0.013	0	0.012	0	2.748	0.07571409	0.01
08/30/95	12:50:36	0.47561911	0.055	0.19201044	0.013	0	0.013	0	2.462	0.07899093	0.011
08/30/95	12:55:37	0.47558264	0.055	0.18722233	0.013	0	0.012	0	2.741	0.0744875	0.01
08/30/95	13:00:37	0.47534567	0.055	0.18995969	0.013	0	0.013	0	2.694	0.07935449	0.01
08/30/95	13:05:37	0.47792342	0.055	0.18928989	0.013	0	0.013	0	3.21	0.08099639	0.01
08/30/95	13:10:36	0.47450691	0.055	0.19156972	0.013	0	0.013	0	2.998	0.07738835	0.011
08/30/95	13:15:36	0.47466165	0.055	0.17591258	0.013	0	0.013	0	2.789	0.07647886	0.01
08/30/95	13:20:37	0.47441167	0.055	0.17896833	0.013	0	0.013	0	2.844	0.08007657	0.01
08/30/95	13:25:36	0.47691064	0.054	0.17099756	0.013	0	0.013	0	2.761	0.07496551	0.011
08/30/95	13:30:36	0.47434049	0.054	0.17179424	0.014	0	0.013	0	2.608	0.07535622	0.01
08/30/95	13:35:37	0.47414255	0.055	0.17299644	0.013	0	0.013	0	2.693	0.07859398	0.01
08/30/95	13:40:37	0.47359393	0.054	0.17088904	0.013	0	0.014	0	2.652	0.07780953	0.011
08/30/95	13:45:36	0.47385462	0.054	0.16424264	0.013	0	0.013	0	2.415	0.07133658	0.01
08/30/95	13:50:37	0.47343205	0.054	0.17589433	0.013	0	0.014	0	2.545	0.07424403	0.011
08/30/95	13:55:37	0.47475335	0.054	0.17592611	0.013	0	0.014	0	2.457	0.06908976	0.011
08/30/95	14:00:37	0.47313516	0.054	0.17714432	0.014	0	0.014	0	2.793	0.07709267	0.011
08/30/95	14:05:36	0.47302262	0.054	0.17601888	0.014	0	0.013	0	2.817	0.07709267	0.011
08/30/95	14:10:36	0.4722651	0.054	0.173299	0.014	0	0.014	0	2.643	0.07769741	0.011
08/30/95	14:15:36	0.47449011	0.054	0.16814947	0.014	0	0.014	0	2.612	0.0700529	0.011
08/30/95	14:20:37	0.47423769	0.054	0.16175898	0.014	0	0.013	0	2.657	0.06826319	0.011
08/30/95	14:25:37	0.47272518	0.054	0.15889069	0.013	0	0.013	0	2.666	0.06799935	0.011
08/30/95	14:30:36	0.47441307	0.054	0.15798744	0.013	0	0.013	0	2.527	0.06456976	0.01
08/30/95	14:35:37	0.47199294	0.054	0.16142971	0.014	0	0.014	0	2.398	0.06824946	0.011
08/30/95	14:40:37	0.47229958	0.054	0.16415565	0.014	0	0.013	0	2.407	0.06658613	0.01
08/30/95	14:45:36	0.47218907	0.054	0.15671987	0.013	0	0.013	0	2.44	0.06787436	0.011
08/30/95	14:50:36	0.4726698	0.054	0.15296903	0.013	0	0.013	0	2.375	0.07648452	0.011

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	14:56:11	0.4727891	0.054	0.15816082	0.013	0	0.014	0	2.532	0.07891108	0.011
08/30/95	15:01:11	0.47245217	0.054	0.15725795	0.014	0	0.014	0	2.383	0.0757461	0.011
08/30/95	15:06:12	0.4724806	0.054	0.15847386	0.013	0	0.014	0	2.422	0.07103611	0.011
Run 17											
08/30/95	17:24:51	0.47583914	0.054	0.14977381	0.013	0	0.017	0	4.163	0.11631371	0.014
08/30/95	17:29:52	0.47163591	0.054	0.15080984	0.012	0	0.016	0	4.05	0.11717027	0.013
08/30/95	17:34:52	0.47186617	0.054	0.14752206	0.013	0	0.018	0	5.753	0.12094765	0.014
08/30/95	17:39:51	0.47374064	0.054	0.14406347	0.013	0	0.019	0	6.447	0.12771584	0.015
08/30/95	17:44:52	0.47220911	0.054	0.14162869	0.012	0	0.017	0	6.17	0.12120147	0.014
08/30/95	17:49:52	0.47181478	0.054	0.14374367	0.013	0	0.019	0	7.742	0.12322505	0.015
08/30/95	17:54:51	0.47164669	0.055	0.18526146	0.013	0	0.021	0	5.687	0.12954714	0.016
08/30/95	17:59:51	0.47221318	0.055	0.21024972	0.013	0	0.021	0	7.58	0.13318833	0.017
08/30/95	18:04:52	0.47411414	0.056	0.22862511	0.013	0	0.023	0	8.461	0.14057049	0.018
08/30/95	18:09:51	0.47894348	0.055	0.15463646	0.014	0	0.022	0	7.933	0.14231528	0.017
08/30/95	18:14:51	0.47776973	0.055	0.15387908	0.014	0	0.022	0	6.439	0.14440266	0.017
08/30/95	18:19:52	0.4766147	0.055	0.15616353	0.013	0	0.021	0	6.787	0.14183349	0.017
08/30/95	18:24:51	0.4792551	0.055	0.15937599	0.014	0	0.022	0	8.663	0.14325805	0.018
08/30/95	18:29:51	0.47943273	0.055	0.15988608	0.013	0	0.024	0	9.721	0.14567899	0.019
08/30/95	18:34:52	0.48241566	0.056	0.17684817	0.014	0	0.024	0	8.439	0.14765526	0.019
08/30/95	18:39:51	0.48458245	0.058	0.26023664	0.015	0	0.029	0	12.37	0.15042645	0.023
08/30/95	18:44:51	0.48133011	0.058	0.29037435	0.015	0	0.03	0	12.95	0.15470119	0.024
08/30/95	18:49:52	0.48552083	0.057	0.19891382	0.015	0	0.025	0	9.841	0.14870694	0.02
08/30/95	18:54:51	0.48434502	0.057	0.18130562	0.014	0	0.024	0	10.01	0.14650646	0.019
08/30/95	18:59:51	0.48617156	0.057	0.18217359	0.015	0.02916129	0.023	0	7.223	0.13567316	0.018
08/30/95	19:04:52	0.47891919	0.056	0.17909069	0.013	0	0.015	0	2.382	0.11860978	0.012
08/30/95	19:09:51	0.47773532	0.056	0.17236029	0.013	0	0.016	0	2.385	0.12094282	0.012
08/30/95	19:14:52	0.47846632	0.056	0.17158253	0.013	0	0.016	0	2.409	0.12212836	0.013
08/30/95	19:19:52	0.47904304	0.056	0.16436113	0.013	0	0.016	0	2.246	0.12848026	0.013
08/30/95	19:24:52	0.47872465	0.056	0.16306002	0.013	0	0.017	0	2.103	0.13202745	0.013
08/30/95	19:29:51	0.47755633	0.055	0.15962979	0.013	0	0.017	0	2.078	0.13574642	0.014
08/30/95	19:34:51	0.47925088	0.056	0.15978728	0.013	0	0.017	0	2.181	0.13249029	0.014
08/30/95	19:39:52	0.4789873	0.056	0.16258286	0.013	0	0.017	0	2.291	0.13263922	0.013
08/30/95	19:44:51	0.47947675	0.056	0.16119288	0.013	0	0.018	0	2.219	0.13890968	0.014
08/30/95	19:49:51	0.4788138	0.056	0.16835461	0.013	0	0.018	0	2.357	0.14487357	0.014
08/30/95	19:54:52	0.47988008	0.056	0.17960941	0.013	0	0.02	0	2.518	0.1514072	0.016
08/30/95	19:59:51	0.47992567	0.057	0.22754811	0.014	0	0.02	0	2.797	0.14754211	0.016
08/30/95	20:04:51	0.47946222	0.057	0.21376944	0.014	0	0.02	0	2.448	0.1503567	0.016
08/30/95	20:09:52	0.47946135	0.056	0.17968743	0.014	0	0.02	0	2.4	0.14961052	0.016
08/30/95	20:14:52	0.47963776	0.056	0.17422266	0.013	0	0.02	0	2.451	0.14690013	0.016
08/30/95	20:19:53	0.47990365	0.056	0.17327397	0.013	0	0.02	0	2.374	0.14773071	0.016
08/30/95	20:24:53	0.48010254	0.056	0.18558214	0.013	0	0.021	0	2.406	0.14875326	0.016
08/30/95	20:29:52	0.4804124	0.056	0.17870413	0.013	0	0.021	0	2.474	0.14654402	0.016
08/30/95	20:34:52	0.48085259	0.057	0.20548029	0.013	0	0.021	0	2.796	0.14530471	0.016
08/30/95	20:39:53	0.47999128	0.057	0.24937909	0.013	0	0.02	0	3.574	0.14240772	0.016
08/30/95	20:44:52	0.47970409	0.057	0.24498345	0.014	0	0.021	0	4.481	0.14323807	0.016
08/30/95	20:49:52	0.47950372	0.057	0.24471224	0.014	0	0.02	0	4.507	0.14263858	0.016
08/30/95	20:54:53	0.47998801	0.058	0.26159126	0.014	0	0.02	0	5.444	0.14247578	0.016
08/30/95	20:59:52	0.48045031	0.058	0.25394129	0.014	0	0.02	0	5.858	0.14112746	0.016
08/30/95	21:04:52	0.48255345	0.057	0.21274571	0.014	0	0.016	0	2.83	0.13798236	0.013
08/30/95	21:09:53	0.48199093	0.057	0.21915662	0.014	0	0.016	0	1.626	0.13684943	0.012
08/30/95	21:14:53	0.47973719	0.056	0.21244719	0.013	0	0.017	0	3.345	0.13914027	0.013
08/30/95	21:19:52	0.48142756	0.057	0.22840892	0.014	0	0.02	0	5.34	0.14348343	0.016
08/30/95	21:24:53	0.48096715	0.058	0.27306451	0.014	0	0.021	0	4.173	0.14680651	0.017
08/30/95	21:29:53	0.48583194	0.058	0.23989804	0.015	0	0.02	0	4.621	0.13948326	0.016
08/30/95	21:34:53	0.48465447	0.058	0.2219415	0.015	0	0.02	0	5.162	0.13974094	0.016
08/30/95	21:39:54	0.48140088	0.057	0.21232139	0.014	0	0.02	0	3.995	0.14436537	0.016
08/30/95	21:44:54	0.48445465	0.057	0.20665087	0.014	0	0.02	0	4.708	0.14318424	0.016
08/30/95	21:49:53	0.48606684	0.057	0.20114999	0.015	0	0.02	0	4.848	0.13731197	0.016
08/30/95	21:54:53	0.48465082	0.057	0.19655101	0.015	0	0.02	0	5.317	0.13792478	0.016
08/30/95	21:59:54	0.48395548	0.057	0.1855728	0.014	0	0.019	0	3.938	0.13633473	0.015
08/30/95	22:04:54	0.48334918	0.056	0.17998325	0.014	0	0.02	0	4.208	0.14133721	0.016
08/30/95	22:09:53	0.48288073	0.056	0.17944966	0.014	0	0.02	0	3.949	0.14316509	0.016

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	22:14:53	0.48483083	0.057	0.18765174	0.015	0	0.019	0	3.547	0.13841368	0.015
08/30/95	22:19:54	0.48299046	0.057	0.18892968	0.014	0	0.019	0	3.805	0.13937256	0.015
08/30/95	22:24:54	0.48555102	0.057	0.18788476	0.015	0	0.017	0	4.269	0.13304862	0.013
08/30/95	22:29:54	0.48813809	0.059	0.27042545	0.015	0	0.016	0	3.369	0.12786125	0.013
08/30/95	22:34:55	0.48750419	0.062	0.36826874	0.015	0	0.014	0	2.221	0.11781986	0.011
08/30/95	22:39:55	0.48615573	0.058	0.23658196	0.014	0	0.013	0	2.082	0.1099391	0.01
08/30/95	22:44:55	0.48485907	0.057	0.18795529	0.014	0	0.015	0	2.455	0.12020396	0.012
08/30/95	22:49:56	0.48276317	0.057	0.19553165	0.014	0	0.015	0	2.438	0.12011698	0.012
08/30/95	22:54:55	0.48209729	0.056	0.17233392	0.014	0	0.015	0	2.341	0.12101671	0.012
08/30/95	22:59:55	0.48238555	0.056	0.17020865	0.014	0	0.016	0	2.349	0.12106159	0.012
08/30/95	23:04:56	0.48157097	0.056	0.16902025	0.014	0	0.016	0	2.392	0.1231824	0.013
08/30/95	23:09:56	0.48180982	0.056	0.16898892	0.014	0	0.017	0	2.355	0.12797219	0.013
08/30/95	23:14:56	0.4816511	0.056	0.16987876	0.014	0	0.017	0	2.33	0.13008734	0.013
08/30/95	23:19:56	0.48227677	0.056	0.17171893	0.014	0	0.017	0	2.377	0.13130163	0.014
08/30/95	23:24:56	0.4820484	0.056	0.17516135	0.014	0	0.017	0	2.482	0.12823339	0.013
08/30/95	23:29:56	0.48254325	0.056	0.1722278	0.014	0	0.016	0	2.52	0.12576229	0.013
08/30/95	23:34:55	0.48356195	0.056	0.1655123	0.014	0	0.017	0	2.573	0.12920427	0.013
08/30/95	23:39:55	0.48402119	0.056	0.17324583	0.015	0	0.018	0	2.608	0.13208497	0.014
08/30/95	23:44:56	0.48357209	0.056	0.17101807	0.015	0	0.018	0	2.605	0.13370306	0.014
08/30/95	23:49:56	0.48333414	0.056	0.16626172	0.015	0	0.018	0	2.614	0.13274823	0.014
08/30/95	23:54:55	0.48297008	0.056	0.17655566	0.015	0	0.017	0	2.458	0.13247117	0.014
08/30/95	23:59:55	0.48289432	0.056	0.17657832	0.015	0	0.018	0	2.358	0.13431281	0.014
08/31/95	00:04:56	0.48265738	0.056	0.1709457	0.014	0	0.018	0	2.404	0.13564525	0.014
08/31/95	00:09:56	0.48231134	0.056	0.17272108	0.014	0	0.018	0	2.416	0.13676022	0.014
08/31/95	00:14:55	0.48174849	0.056	0.16436125	0.014	0	0.018	0	2.313	0.13711303	0.014
08/31/95	00:19:55	0.48087655	0.056	0.16795802	0.014	0	0.018	0	2.252	0.1390749	0.014
08/31/95	00:24:56	0.48131252	0.056	0.16937492	0.014	0	0.018	0	2.237	0.13983785	0.015
08/31/95	00:29:56	0.48147965	0.056	0.16851788	0.014	0	0.018	0	2.218	0.14008661	0.015
08/31/95	00:34:55	0.48106329	0.055	0.1656548	0.015	0	0.018	0	2.29	0.13820904	0.014
08/31/95	00:39:55	0.48168615	0.056	0.16825278	0.015	0	0.018	0	2.305	0.13930372	0.015
08/31/95	00:44:55	0.48146849	0.056	0.16999407	0.015	0	0.019	0	2.375	0.14093619	0.015
08/31/95	00:49:56	0.48159644	0.056	0.16920074	0.015	0	0.019	0	2.351	0.1455888	0.015
08/31/95	00:54:56	0.48178128	0.056	0.17114054	0.015	0	0.02	0	2.393	0.14613271	0.015
08/31/95	00:59:56	0.48220127	0.056	0.17228457	0.015	0	0.019	0	2.478	0.14338943	0.015
08/31/95	01:04:57	0.48238414	0.056	0.17269873	0.015	0	0.019	0	2.491	0.14100292	0.015
08/31/95	01:09:57	0.48265636	0.056	0.18095545	0.016	0	0.019	0	2.617	0.1428767	0.015
08/31/95	01:14:56	0.48274978	0.057	0.20582439	0.016	0	0.019	0	2.707	0.14231039	0.015
08/31/95	01:19:56	0.4827293	0.057	0.20369377	0.016	0	0.02	0	2.65	0.14461282	0.015
08/31/95	01:24:57	0.48258447	0.056	0.19184088	0.016	0	0.02	0	2.573	0.14661892	0.016
08/31/95	01:29:57	0.48278312	0.056	0.18992434	0.016	0	0.02	0	2.606	0.14783945	0.016
08/31/95	01:34:57	0.48336168	0.057	0.19267243	0.016	0	0.02	0	2.661	0.14713365	0.016
08/31/95	01:39:57	0.48314483	0.057	0.19722631	0.016	0	0.02	0	2.581	0.1477842	0.016
08/31/95	01:44:58	0.48225913	0.057	0.20702331	0.016	0	0.02	0	2.604	0.14878784	0.016
08/31/95	01:49:58	0.48289159	0.057	0.21096679	0.016	0	0.02	0	2.49	0.14968338	0.016
08/31/95	01:54:58	0.48301825	0.057	0.20789088	0.015	0	0.02	0	2.533	0.14792027	0.016
08/31/95	01:59:59	0.48292798	0.056	0.20134649	0.015	0	0.02	0	2.56	0.14832633	0.016
08/31/95	02:04:59	0.4827293	0.056	0.19187758	0.015	0	0.02	0	2.572	0.1462389	0.016
08/31/95	02:09:58	0.48292798	0.056	0.18616689	0.015	0	0.02	0	2.447	0.14724207	0.016
08/31/95	02:14:58	0.48280136	0.056	0.18121318	0.015	0	0.02	0	2.409	0.14813716	0.016
08/31/95	02:19:59	0.48336168	0.056	0.17803497	0.015	0	0.02	0	2.415	0.15082012	0.016
08/31/95	02:24:59	0.48359654	0.056	0.18493963	0.015	0	0.021	0	2.421	0.15317685	0.017
08/31/95	02:29:59	0.48283771	0.056	0.19274482	0.016	0	0.021	0	2.449	0.15165917	0.016
08/31/95	02:34:58	0.482169	0.056	0.19321456	0.016	0	0.021	0	2.447	0.15407289	0.017
08/31/95	02:39:58	0.48337973	0.057	0.18862542	0.016	0	0.021	0	2.478	0.15306844	0.017
08/31/95	02:44:59	0.48287389	0.056	0.18812143	0.016	0	0.021	0	2.544	0.15409486	0.017
08/31/95	02:49:59	0.48300027	0.056	0.18656942	0.016	0	0.021	0	2.526	0.1527659	0.017
08/31/95	02:54:58	0.48267282	0.056	0.1890604	0.016	0	0.021	0	2.624	0.15428195	0.017
Run 18											
08/31/95	10:19:55	0.48472427	0.058	0.25645865	0.015	0	0.02	0	4.094	0.15631351	0.016
08/31/95	10:24:55	0.48421301	0.058	0.25839218	0.015	0	0.02	0	3.328	0.15468672	0.016
08/31/95	10:29:55	0.4817578	0.056	0.24033393	0.016	0	0.018	0	3.357	0.14420036	0.014
08/31/95	10:34:55	0.48255165	0.057	0.23985784	0.015	0	0.02	0	3.225	0.15270622	0.015

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	10:39:56	0.48134129	0.057	0.26360206	0.016	0	0.02	0	2.332	0.15495084	0.016
08/31/95	10:44:56	0.48224425	0.058	0.26532722	0.015	0	0.018	0	2.051	0.14927388	0.015
08/31/95	10:49:55	0.4835261	0.057	0.25341626	0.015	0	0.017	0	1.88	0.14454356	0.014
08/31/95	10:54:55	0.48059841	0.057	0.24517198	0.015	0	0.016	0	2.221	0.13643783	0.013
08/31/95	10:59:55	0.48013953	0.056	0.22911768	0.015	0	0.016	0	2.663	0.13383451	0.013
08/31/95	11:04:56	0.47924229	0.056	0.23704693	0.015	0	0.016	0	2.52	0.13298289	0.013
08/31/95	11:09:56	0.47945671	0.057	0.2548858	0.016	0	0.016	0	2.428	0.13198466	0.013
08/31/95	11:14:55	0.47681082	0.056	0.26086548	0.016	0	0.016	0	1.783	0.13673251	0.013
08/31/95	11:19:55	0.47828059	0.057	0.26429853	0.016	0	0.017	0	1.704	0.14152194	0.013
08/31/95	11:24:56	0.4776013	0.057	0.25864588	0.016	0	0.017	0	1.729	0.14253482	0.014
08/31/95	11:29:56	0.47786547	0.057	0.26043449	0.016	0	0.017	0	1.681	0.14184574	0.013
08/31/95	11:34:56	0.47812972	0.057	0.25421222	0.016	0	0.018	0	1.902	0.14532685	0.014
08/31/95	11:39:56	0.47900554	0.057	0.25924201	0.016	0	0.017	0	1.916	0.13949062	0.013
08/31/95	11:44:57	0.47725094	0.056	0.2455342	0.016	0	0.017	0	2.186	0.13674906	0.013
08/31/95	11:49:57	0.47795367	0.056	0.24128102	0.016	0	0.016	0	2.654	0.13364269	0.013
08/31/95	11:54:57	0.47762503	0.056	0.24095408	0.016	0	0.016	0	2.438	0.12992191	0.013
08/31/95	11:59:56	0.47689972	0.056	0.24009813	0.016	0	0.015	0	2.156	0.12471917	0.012
08/31/95	12:04:58	0.47718505	0.056	0.23688868	0.015	0	0.015	0	2.589	0.12410549	0.012
08/31/95	12:09:58	0.47603437	0.056	0.23994512	0.016	0	0.015	0	2.059	0.12272675	0.012
08/31/95	12:14:57	0.47685348	0.056	0.22643389	0.015	0	0.017	0	3.003	0.13060108	0.013
08/31/95	12:19:58	0.47735884	0.056	0.22673719	0.015	0	0.014	0	2.169	0.11865179	0.011
08/31/95	12:24:58	0.47676005	0.056	0.21600779	0.015	0	0.014	0	1.998	0.11671033	0.011
08/31/95	12:29:58	0.47676338	0.056	0.21636028	0.015	0	0.015	0	2.487	0.11836504	0.012
08/31/95	12:34:58	0.4758146	0.056	0.22408125	0.016	0	0.016	0	2.55	0.12250656	0.013
08/31/95	12:39:57	0.47568154	0.056	0.22555481	0.016	0	0.016	0	2.916	0.12164754	0.013
08/31/95	12:44:58	0.47629699	0.056	0.22255117	0.015	0	0.016	0	2.924	0.11981829	0.012
08/31/95	12:49:57	0.47592035	0.056	0.22660248	0.016	0	0.015	0	2.659	0.1196417	0.012
08/31/95	12:54:57	0.47488144	0.055	0.22458969	0.016	0	0.016	0	2.839	0.12200206	0.013
08/31/95	12:59:58	0.47580474	0.056	0.22449243	0.016	0	0.015	0	2.528	0.11809582	0.012
08/31/95	13:04:58	0.47582199	0.056	0.22785997	0.015	0	0.014	0	2.155	0.11674648	0.011
08/31/95	13:09:57	0.47540361	0.056	0.23057903	0.016	0	0.016	0	2.596	0.12357181	0.013
08/31/95	13:14:57	0.47538018	0.055	0.22852268	0.015	0	0.016	0	2.676	0.12149586	0.012
08/31/95	13:19:58	0.47496188	0.056	0.22726611	0.015	0	0.016	0	3.171	0.12202578	0.012
08/31/95	13:24:58	0.47470244	0.056	0.22473675	0.016	0	0.016	0	2.681	0.12371033	0.013
08/31/95	13:29:58	0.47479771	0.055	0.22335617	0.015	0	0.015	0	2.665	0.11775956	0.012
08/31/95	13:34:58	0.47437048	0.055	0.22307695	0.016	0	0.016	0	2.617	0.11950551	0.012
08/31/95	13:39:59	0.47450506	0.056	0.22535948	0.016	0	0.015	0	2.437	0.1189305	0.012
08/31/95	13:44:59	0.47430771	0.055	0.22023009	0.016	0	0.015	0	2.767	0.11824509	0.012
08/31/95	13:49:58	0.47381722	0.055	0.22761374	0.017	0	0.015	0	2.522	0.11629657	0.012
08/31/95	13:54:59	0.47363414	0.055	0.22795996	0.017	0	0.015	0	2.567	0.11436748	0.012
08/31/95	13:59:59	0.47400446	0.055	0.22742023	0.017	0	0.016	0	2.655	0.1198581	0.013
08/31/95	14:04:59	0.47237986	0.055	0.22122717	0.017	0	0.016	0	2.33	0.11992375	0.013
08/31/95	14:10:00	0.47339012	0.055	0.22183229	0.016	0	0.018	0	2.527	0.13054831	0.014
08/31/95	14:15:00	0.47350103	0.055	0.2170629	0.016	0	0.016	0	2.977	0.12211868	0.013
08/31/95	14:19:59	0.47293543	0.055	0.21093364	0.017	0	0.016	0	2.62	0.12123134	0.013
08/31/95	14:24:59	0.47266356	0.055	0.20567972	0.016	0	0.017	0	2.593	0.12671737	0.014
08/31/95	14:30:00	0.47326848	0.055	0.2024963	0.015	0	0.016	0	2.32	0.12300762	0.013
08/31/95	14:35:00	0.47310779	0.055	0.20045999	0.015	0	0.016	0	2.449	0.12249716	0.013
08/31/95	14:39:59	0.47339125	0.055	0.20553246	0.015	0	0.016	0	2.299	0.12354167	0.013
08/31/95	14:44:59	0.47323024	0.055	0.1970496	0.015	0	0.017	0	2.889	0.126254	0.013
08/31/95	14:50:00	0.47342754	0.055	0.19419533	0.015	0	0.017	0	2.526	0.12727742	0.013
08/31/95	14:55:00	0.47573729	0.055	0.19211826	0.015	0	0.016	0	3.018	0.12118571	0.013
08/31/95	14:59:59	0.47306898	0.055	0.19990083	0.015	0	0.016	0	2.617	0.12463227	0.013
08/31/95	15:04:59	0.47452818	0.054	0.18758605	0.015	0	0.018	0	2.237	0.1329569	0.014
08/31/95	15:10:00	0.47274801	0.054	0.18880992	0.015	0	0.017	0	2.503	0.12828394	0.014
08/31/95	15:14:59	0.47286928	0.055	0.18360288	0.015	0	0.018	0	2.24	0.133499	0.014
08/31/95	15:19:59	0.47265849	0.054	0.17883472	0.014	0	0.017	0	2.186	0.12635425	0.013
08/31/95	15:25:00	0.47296726	0.054	0.17117759	0.013	0	0.016	0	2.172	0.12648865	0.013
08/31/95	15:30:00	0.47243564	0.054	0.17248358	0.014	0	0.016	0	2.371	0.12245443	0.013
08/31/95	15:35:00	0.47416782	0.054	0.17009405	0.013	0	0.017	0	2.08	0.12651163	0.013
08/31/95	15:40:01	0.4726675	0.054	0.17104787	0.013	0	0.017	0	2.402	0.13068325	0.014
08/31/95	15:45:01	0.47340567	0.054	0.17045283	0.013	0	0.017	0	2.233	0.13004423	0.014

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	15:50:01	0.47265017	0.054	0.17142637	0.013	0	0.017	0	2.353	0.13091349	0.014
08/31/95	15:55:02	0.47267602	0.054	0.17217637	0.014	0	0.017	0	2.578	0.13010865	0.014
08/31/95	16:00:01	0.47276178	0.054	0.17064513	0.013	0	0.016	0	2.663	0.12566803	0.013
08/31/95	16:05:01	0.47262428	0.054	0.17045283	0.013	0	0.016	0	2.636	0.12546757	0.013
08/31/95	16:10:02	0.47104477	0.054	0.17004984	0.014	0	0.017	0	2.384	0.12949262	0.014
08/31/95	16:15:01	0.47251266	0.054	0.16889007	0.013	0	0.017	0	2.674	0.12714196	0.013
08/31/95	16:20:01	0.47430764	0.054	0.16644333	0.014	0	0.016	0	2.419	0.12298933	0.013
08/31/95	16:25:02	0.47247113	0.054	0.16695172	0.013	0	0.016	0	2.331	0.1230347	0.013
08/31/95	16:30:02	0.4717675	0.054	0.16563239	0.014	0	0.016	0	2.447	0.11727175	0.012
08/31/95	16:35:03	0.47241881	0.054	0.16578256	0.013	0	0.016	0	3.052	0.12363824	0.013
08/31/95	16:40:03	0.47501566	0.054	0.16161709	0.013	0	0.017	0	2.543	0.12361584	0.013
08/31/95	16:45:02	0.4725306	0.054	0.15907524	0.013	0	0.015	0	2.662	0.11793702	0.012
08/31/95	16:50:02	0.47247816	0.054	0.15991568	0.013	0	0.015	0	2.714	0.11965719	0.012
08/31/95	16:55:03	0.47234002	0.054	0.1593854	0.013	0	0.015	0	2.685	0.11945516	0.012
08/31/95	17:00:02	0.47491256	0.054	0.15558252	0.012	0	0.016	0	2.864	0.11788927	0.012
08/31/95	17:05:02	0.47234002	0.054	0.15535882	0.012	0	0.016	0	2.738	0.12213955	0.013
08/31/95	17:10:03	0.47270181	0.054	0.15331776	0.012	0	0.015	0	2.604	0.1139539	0.012
08/31/95	17:15:02	0.47256372	0.054	0.15781951	0.012	0	0.015	0	2.804	0.11811297	0.012
08/31/95	17:20:02	0.47695132	0.055	0.15935654	0.012	0	0.017	0	2.648	0.13173474	0.014
08/31/95	17:25:03	0.47272801	0.054	0.16134024	0.013	0	0.016	0	2.57	0.12153627	0.012
08/31/95	17:30:03	0.47406972	0.055	0.16301737	0.013	0	0.018	0	3.004	0.13417068	0.014
08/31/95	17:35:02	0.4736854	0.055	0.16475528	0.013	0	0.018	0	2.958	0.13500314	0.014
08/31/95	17:40:03	0.47430457	0.055	0.16593387	0.013	0	0.018	0	2.859	0.139192	0.014
08/31/95	17:45:03	0.47472619	0.055	0.16719494	0.013	0	0.019	0	3.07	0.14526039	0.015
08/31/95	17:50:02	0.47458021	0.055	0.16509083	0.013	0	0.018	0	2.892	0.14070749	0.014
08/31/95	17:55:03	0.473428	0.055	0.1662308	0.014	0	0.018	0	2.519	0.13772451	0.014
08/31/95	18:00:03	0.47316233	0.055	0.17015087	0.014	0	0.017	0	2.463	0.1300694	0.013
08/31/95	18:05:02	0.47276739	0.055	0.17198644	0.014	0	0.016	0	2.326	0.12656238	0.013
08/31/95	18:10:02	0.47330257	0.055	0.17090241	0.014	0	0.017	0	2.38	0.13049309	0.013
08/31/95	18:15:03	0.47357705	0.055	0.17084035	0.014	0	0.017	0	2.298	0.1349092	0.014
08/31/95	18:20:02	0.4744353	0.055	0.16879697	0.014	0	0.02	0	2.413	0.15098199	0.016
08/31/95	18:25:02	0.47536321	0.055	0.17484113	0.014	0	0.021	0	2.581	0.15582215	0.017
08/31/95	18:30:04	0.47601922	0.055	0.17893788	0.013	0	0.021	0	2.639	0.15448674	0.016
08/31/95	18:35:02	0.47611624	0.055	0.17691933	0.013	0	0.02	0	2.854	0.15193072	0.016
08/31/95	18:40:02	0.47716368	0.055	0.17474538	0.014	0	0.021	0	3.359	0.15398465	0.016
08/31/95	18:45:03	0.47728096	0.055	0.17791277	0.014	0	0.021	0	3.825	0.1555073	0.017
08/31/95	18:50:03	0.47759727	0.055	0.17756111	0.014	0	0.021	0	3.903	0.15616954	0.017
08/31/95	18:55:04	0.47709028	0.055	0.17672062	0.015	0	0.021	0	4.298	0.15422891	0.017
08/31/95	19:00:04	0.47746958	0.055	0.17632372	0.014	0	0.021	0	4.239	0.15671989	0.017
08/31/95	19:05:03	0.47922304	0.056	0.17287445	0.014	0	0.022	0	5.171	0.1589294	0.017
08/31/95	19:10:03	0.4782762	0.056	0.17972662	0.015	0	0.021	0	6.33	0.15397244	0.017
08/31/95	19:15:04	0.47934003	0.056	0.18183768	0.015	0	0.021	0	5.109	0.15167869	0.017
08/31/95	19:20:03	0.47973877	0.056	0.18217928	0.015	0	0.021	0	4.562	0.15093277	0.016
08/31/95	19:25:03	0.48026929	0.056	0.18502449	0.015	0	0.02	0	4.294	0.15115298	0.016
08/31/95	19:30:04	0.48053407	0.056	0.19256656	0.015	0	0.021	0	4.254	0.1518695	0.016
08/31/95	19:35:04	0.48097523	0.057	0.19929425	0.015	0	0.021	0	6.168	0.15209008	0.016
08/31/95	19:40:05	0.48121768	0.057	0.20576357	0.015	0	0.021	0	5.878	0.15327511	0.017
08/31/95	19:45:05	0.48170223	0.057	0.21153011	0.015	0	0.021	0	5.185	0.15354948	0.017
08/31/95	19:50:04	0.48183411	0.057	0.21446688	0.015	0	0.021	0	4.944	0.15219874	0.016
08/31/95	19:55:04	0.4822078	0.057	0.21229482	0.015	0	0.021	0	5.544	0.15214279	0.017
Run 19											
08/31/95	20:49:52	0.48567331	0.059	0.29691004	0.015	0	0.015	0	3.937	0.0149168	0.012
08/31/95	20:54:52	0.48553367	0.059	0.29274502	0.015	0	0.016	0	4.348	0.01391936	0.013
08/31/95	20:59:52	0.48559303	0.059	0.27330354	0.015	0	0.016	0	4.158	0	0.013
08/31/95	21:04:53	0.4845374	0.058	0.26104795	0.015	0	0.016	0	3.717	0	0.013
08/31/95	21:09:53	0.484169	0.058	0.2715509	0.015	0	0.016	0	3.53	0	0.012
08/31/95	21:14:53	0.48449763	0.059	0.28710565	0.015	0	0.016	0	3.686	0	0.012
08/31/95	21:19:54	0.48446756	0.059	0.28875405	0.015	0	0.016	0	3.528	0	0.012
08/31/95	21:24:54	0.48397975	0.059	0.30434712	0.015	0	0.016	0	3.367	0	0.012
08/31/95	21:29:55	0.48299516	0.06	0.31911594	0.015	0	0.015	0	3.303	0	0.012
08/31/95	21:34:55	0.48288576	0.06	0.31561518	0.015	0	0.015	0	3.178	0	0.012
08/31/95	21:39:54	0.48326351	0.059	0.30648648	0.015	0	0.015	0	3.12	0	0.012

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	21:44:54	0.48332403	0.059	0.30369115	0.015	0	0.015	0	3.311	0	0.012
08/31/95	21:49:55	0.48349295	0.059	0.29499412	0.015	0	0.015	0	3.329	0	0.012
08/31/95	21:54:55	0.4840985	0.059	0.30269816	0.015	0	0.015	0	3.313	0	0.012
08/31/95	21:59:54	0.48418418	0.06	0.31784472	0.015	0	0.015	0	3.415	0	0.012
08/31/95	22:04:54	0.48449766	0.06	0.3143895	0.015	0	0.015	0	3.265	0	0.012
08/31/95	22:09:55	0.48502746	0.061	0.34610601	0.015	0	0.015	0	3.348	0	0.012
08/31/95	22:14:55	0.48512035	0.061	0.36003327	0.016	0	0.016	0	3.44	0	0.012
08/31/95	22:19:54	0.48512184	0.06	0.33246872	0.016	0	0.016	0	3.397	0	0.013
08/31/95	22:24:55	0.48550219	0.061	0.35269763	0.016	0	0.016	0	3.159	0	0.013
08/31/95	22:29:55	0.48524864	0.061	0.33865407	0.016	0	0.015	0	2.898	0	0.012
08/31/95	22:34:54	0.48488696	0.061	0.34572755	0.016	0	0.015	0	2.742	0	0.012
08/31/95	22:39:55	0.48461522	0.059	0.31094876	0.015	0	0.015	0	2.675	0	0.012
08/31/95	22:44:56	0.48499302	0.06	0.31318617	0.015	0	0.015	0	2.84	0	0.012
08/31/95	22:49:56	0.48457668	0.06	0.31953812	0.016	0	0.015	0	2.871	0	0.012
08/31/95	22:54:55	0.48490263	0.06	0.31606134	0.015	0	0.015	0	2.836	0	0.012
08/31/95	22:59:55	0.48522858	0.059	0.30975967	0.015	0	0.015	0	3.149	0	0.012
08/31/95	23:04:55	0.48552024	0.059	0.30323302	0.015	0	0.015	0	3.496	0	0.012
08/31/95	23:09:56	0.48546565	0.059	0.29991664	0.015	0	0.015	0	3.677	0	0.012
08/31/95	23:14:55	0.48597076	0.059	0.29990967	0.015	0	0.016	0	3.831	0	0.012
08/31/95	23:19:56	0.48638367	0.06	0.30634589	0.016	0	0.016	0	3.612	0	0.012
08/31/95	23:24:56	0.48663501	0.06	0.32951276	0.016	0	0.016	0	3.559	0	0.012
08/31/95	23:29:55	0.48704558	0.06	0.33364029	0.016	0	0.016	0	4.038	0	0.013
08/31/95	23:34:55	0.48709652	0.06	0.33107426	0.016	0	0.016	0	4.143	0	0.013
08/31/95	23:39:56	0.48703903	0.06	0.3314286	0.016	0	0.016	0	4.451	0	0.013
08/31/95	23:44:56	0.48714709	0.061	0.34590902	0.016	0	0.016	0	4.648	0	0.013
08/31/95	23:49:55	0.48643072	0.061	0.34908812	0.016	0	0.015	0	3.757	0	0.012
08/31/95	23:54:55	0.48618447	0.061	0.33628932	0.016	0	0.015	0	3.183	0	0.012
08/31/95	23:59:56	0.48717644	0.061	0.34358988	0.016	0	0.015	0	3.161	0.0134274	0.012
09/01/95	00:04:56	0.48766077	0.061	0.35681703	0.016	0	0.015	0	3.335	0	0.012
09/01/95	00:09:56	0.48720744	0.062	0.37021711	0.016	0	0.015	0	3.39	0	0.012
09/01/95	00:14:57	0.48747419	0.062	0.38286877	0.016	0	0.015	0	3.219	0.01458856	0.012
09/01/95	00:19:57	0.4876127	0.063	0.39071669	0.016	0	0.015	0	3.29	0.01350279	0.012
09/01/95	00:24:57	0.4878948	0.063	0.39215084	0.016	0	0.015	0	3.419	0.01414031	0.012
09/01/95	00:29:56	0.48880696	0.063	0.39549025	0.017	0	0.015	0	3.224	0.01370084	0.012
09/01/95	00:34:56	0.48887123	0.063	0.40306274	0.017	0	0.016	0	3.181	0.01347495	0.012
09/01/95	00:39:57	0.48882714	0.064	0.4099771	0.017	0	0.016	0	3.388	0.01335711	0.012
09/01/95	00:44:57	0.48884297	0.064	0.41571576	0.017	0	0.016	0	3.525	0.01615476	0.012
09/01/95	00:49:56	0.4892264	0.065	0.43513133	0.017	0	0.016	0	3.482	0.01745698	0.012
09/01/95	00:54:56	0.48838032	0.063	0.3999267	0.017	0	0.015	0	3.467	0.01508344	0.012
09/01/95	00:59:57	0.48821624	0.063	0.39367415	0.017	0	0.016	0	3.449	0.01647488	0.012
09/01/95	01:04:57	0.4880926	0.064	0.41334939	0.017	0	0.015	0	3.472	0.01733957	0.012
09/01/95	01:09:57	0.4881683	0.066	0.45789346	0.017	0	0.015	0	3.354	0.01842348	0.012
09/01/95	01:14:57	0.48767252	0.064	0.42459748	0.017	0	0.015	0	3.244	0.01725129	0.012
09/01/95	01:19:58	0.48744054	0.063	0.39782481	0.016	0	0.015	0	3.426	0.01671533	0.012
09/01/95	01:24:58	0.48727389	0.063	0.40439099	0.017	0	0.016	0	3.64	0.01444254	0.013
09/01/95	01:29:58	0.48794097	0.064	0.41433011	0.017	0	0.016	0	4.043	0.01560464	0.013
09/01/95	01:34:58	0.48884883	0.065	0.43291893	0.017	0	0.016	0	4.382	0.01548828	0.013
09/01/95	01:39:59	0.48938662	0.065	0.43367183	0.017	0	0.016	0	4.545	0.01591851	0.013
09/01/95	01:44:59	0.48963637	0.065	0.43845786	0.017	0	0.016	0	4.363	0.01612768	0.013
09/01/95	01:49:58	0.49025086	0.066	0.46164034	0.017	0	0.016	0	4.411	0.01710177	0.013
09/01/95	01:54:58	0.48994357	0.066	0.45800476	0.017	0	0.016	0	4.463	0.01623825	0.013
09/01/95	01:59:59	0.49046598	0.066	0.46325372	0.017	0	0.016	0	4.197	0.01710177	0.013
09/01/95	02:04:59	0.49057354	0.066	0.45615487	0.017	0	0.016	0	4.498	0.01699422	0.013
09/01/95	02:09:59	0.49028148	0.064	0.41512649	0.017	0	0.016	0	4.219	0.01784797	0.013
09/01/95	02:14:58	0.48991248	0.064	0.41212813	0.017	0	0.016	0	4.547	0.01826428	0.013
09/01/95	02:19:58	0.4904306	0.064	0.42348532	0.017	0	0.016	0	4.504	0.01687064	0.013
09/01/95	02:24:59	0.49101267	0.065	0.44440298	0.017	0	0.016	0	4.748	0.01664632	0.013
09/01/95	02:29:59	0.48854257	0.064	0.41035857	0.017	0	0.016	0	4.431	0.0146058	0.013
09/01/95	02:34:59	0.48707018	0.06	0.32517866	0.016	0	0.016	0	4.558	0	0.013
09/01/95	02:39:59	0.48684097	0.059	0.29296245	0.016	0	0.016	0	4.636	0.01640676	0.012
09/01/95	02:45:00	0.48677968	0.06	0.3304143	0.016	0	0.016	0	4.965	0.01382531	0.013
09/01/95	02:50:00	0.4863048	0.061	0.35891118	0.016	0	0.016	0	4.497	0.01329698	0.012

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/01/95	02:55:00	0.4858134	0.061	0.35370907	0.016	0	0.015	0	3.961	0.01727766	0.012
09/01/95	02:59:59	0.48549146	0.06	0.33750456	0.016	0	0.015	0	3.802	0	0.012
09/01/95	03:04:59	0.4859831	0.06	0.33478359	0.016	0	0.015	0	3.825	0.01554889	0.012
09/01/95	03:09:59	0.48642745	0.062	0.36634838	0.017	0	0.015	0	3.866	0	0.012
09/01/95	03:15:00	0.48661109	0.062	0.37807011	0.017	0	0.016	0	3.937	0.01791141	0.012
09/01/95	03:20:00	0.48684097	0.062	0.39075958	0.017	0	0.015	0	4.072	0.01458378	0.012
09/01/95	03:24:59	0.48694821	0.063	0.40941825	0.017	0	0.015	0	4.223	0.01554889	0.012
09/01/95	03:29:59	0.48734655	0.065	0.43639132	0.017	0	0.015	0	4.23	0.0128729	0.012
09/01/95	03:34:59	0.48785238	0.066	0.46499436	0.017	0	0.015	0	4.707	0.01878006	0.012
09/01/95	03:40:00	0.4894621	0.071	0.56318726	0.018	0	0.015	0	5.334	0.01534599	0.012
09/01/95	03:45:00	0.49024296	0.072	0.57134223	0.018	0	0.015	0	5.403	0.01780751	0.012
09/01/95	03:49:59	0.49166649	0.066	0.46303509	0.018	0	0.015	0	6.988	0.01576335	0.012
09/01/95	03:54:59	0.49190968	0.065	0.43906343	0.017	0	0.015	0	7.052	0.01532863	0.012
09/01/95	04:00:00	0.4915881	0.065	0.43563324	0.017	0	0.015	0	7.173	0.0158646	0.012
09/01/95	04:05:00	0.4923951	0.065	0.43755362	0.017	0	0.014	0	7.855	0.01360326	0.011
09/01/95	04:10:00	0.49058859	0.064	0.42644046	0.017	0	0.014	0	8.34	0.01831274	0.011
09/01/95	04:14:59	0.49080278	0.069	0.51425593	0.018	0	0.015	0	7.939	0.01627799	0.012
09/01/95	04:19:59	0.4920596	0.073	0.59212136	0.018	0	0.015	0	7.243	0.02228356	0.012
09/01/95	04:25:00	0.4931588	0.072	0.56480337	0.018	0	0.016	0	6.945	0.01852692	0.012
09/01/95	04:30:00	0.49405656	0.067	0.48346046	0.018	0	0.015	0	6.7	0.0157336	0.012
09/01/95	04:35:00	0.49302751	0.069	0.50671975	0.018	0	0.015	0	7.361	0.021822	0.012
09/01/95	04:39:59	0.49342809	0.073	0.58374544	0.019	0	0.015	0	6.271	0.0222583	0.012
09/01/95	04:44:59	0.49441813	0.074	0.60812788	0.019	0	0.015	0	5.978	0.02139412	0.012
09/01/95	04:50:00	0.49408371	0.076	0.64322894	0.019	0	0.015	0	6.292	0.02086321	0.012
09/01/95	04:55:00	0.49265126	0.074	0.60516244	0.019	0	0.015	0	6.324	0.01991159	0.012
09/01/95	05:00:00	0.49382882	0.073	0.59306561	0.019	0	0.015	0	6.488	0.02569237	0.012
09/01/95	05:04:59	0.49396314	0.077	0.65116242	0.019	0	0.015	0	6.745	0.02589668	0.012
09/01/95	05:09:59	0.49483264	0.079	0.69051889	0.02	0	0.015	0	5.447	0.02535683	0.012
09/01/95	05:15:00	0.4958219	0.079	0.68576575	0.02	0	0.015	0	5.68	0.02363603	0.012
09/01/95	05:20:00	0.4953941	0.081	0.71175469	0.02	0	0.015	0	5.699	0.02299433	0.012
09/01/95	05:25:00	0.49409722	0.08	0.6935974	0.02	0	0.015	0	5.279	0.02246383	0.012
09/01/95	05:29:59	0.49421764	0.079	0.68351979	0.019	0	0.015	0	5.159	0.02256653	0.012
09/01/95	05:34:59	0.49551422	0.078	0.66392917	0.019	0	0.015	0	5.432	0.0223484	0.012
09/01/95	05:40:00	0.49531352	0.078	0.67150102	0.019	0	0.015	0	5.823	0.02191653	0.012
09/01/95	05:45:00	0.49540729	0.079	0.68948547	0.02	0	0.015	0	5.351	0.02202761	0.012
09/01/95	05:50:00	0.4961688	0.078	0.6723563	0.019	0	0.015	0	5.479	0.02277181	0.012
09/01/95	05:54:59	0.49779774	0.08	0.69486494	0.02	0	0.014	0	5.645	0.02233571	0.011
09/01/95	05:59:59	0.49715652	0.079	0.68001009	0.02	0	0.015	0	5.445	0.02233571	0.012
09/01/95	06:05:00	0.49823771	0.078	0.67026489	0.02	0	0.015	0	5.131	0.02350682	0.012
09/01/95	06:10:00	0.49946176	0.074	0.59042829	0.019	0	0.015	0	5.164	0.02477023	0.012
09/01/95	06:15:00	0.50153688	0.073	0.57397754	0.019	0	0.014	0	5.186	0.02421801	0.011
09/01/95	06:19:59	0.49952174	0.072	0.55765527	0.019	0	0.014	0	4.887	0.02506675	0.011
09/01/95	06:24:59	0.50140697	0.077	0.64516926	0.019	0	0.014	0	4.795	0.02476084	0.011
09/01/95	06:29:59	0.50086156	0.085	0.77445666	0.021	0	0.014	0	4.965	0.02519253	0.011
09/01/95	06:35:00	0.5003397	0.087	0.78989209	0.021	0	0.014	0	5.181	0.02465411	0.011
09/01/95	06:40:00	0.50081337	0.083	0.7349031	0.021	0	0.014	0	6.182	0.02420882	0.011
09/01/95	06:44:59	0.5006233	0.085	0.76831178	0.021	0	0.014	0	5.119	0.02345339	0.011
09/01/95	06:49:59	0.5006233	0.086	0.7837697	0.021	0	0.014	0	5.652	0.02174769	0.011
09/01/95	06:55:00	0.49988875	0.085	0.77200303	0.021	0	0.015	0	5.917	0.02153039	0.012
09/01/95	07:00:00	0.49884655	0.086	0.77948769	0.021	0	0.015	0	6.138	0.02248112	0.012
09/01/95	07:05:00	0.49948583	0.086	0.7769306	0.021	0	0.015	0	6.088	0.02301385	0.012
09/01/95	07:09:59	0.49923742	0.086	0.78611504	0.021	0	0.015	0	5.984	0.02377321	0.012
09/01/95	07:14:59	0.49901231	0.086	0.78445162	0.021	0	0.015	0	6.452	0.02356447	0.012
09/01/95	07:20:00	0.5001852	0.084	0.74915823	0.021	0	0.014	0	6.562	0.02463074	0.011
09/01/95	07:25:00	0.5028165	0.077	0.636908	0.02	0	0.014	0	7.063	0.02407044	0.011
09/01/95	07:30:00	0.50208207	0.077	0.63859728	0.02	0	0.015	0	6.907	0.02395938	0.012
09/01/95	07:35:00	0.50057986	0.08	0.69537998	0.02	0	0.015	0	7.077	0.02470947	0.012
09/01/95	07:40:01	0.50021408	0.082	0.7178653	0.021	0	0.015	0	7.104	0.02579412	0.012
09/01/95	07:45:01	0.50118481	0.077	0.64110734	0.02	0	0.014	0	6.849	0.02610893	0.011
09/01/95	07:50:02	0.5017063	0.076	0.63398111	0.02	0	0.014	0	8.233	0.02771269	0.011
09/01/95	07:55:01	0.49944431	0.08	0.68828203	0.02	0	0.014	0	8.767	0.02846961	0.011
09/01/95	08:00:01	0.49982335	0.084	0.75208261	0.021	0	0.015	0	8.085	0.02977172	0.012

Midwest Beef

Site: Beef processin											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/01/95	08:05:01	0.49988201	0.085	0.77230223	0.021	0	0.014	0	6.912	0.03214366	0.011
09/01/95	08:10:02	0.4988839	0.083	0.73363394	0.021	0	0.013	0	6.785	0.03205508	0.011
09/01/95	08:15:02	0.49749993	0.083	0.73674012	0.021	0	0.014	0	6.392	0.03291022	0.011
09/01/95	08:20:01	0.49768824	0.077	0.65503298	0.02	0	0.013	0	6.394	0.03270889	0.01
09/01/95	08:25:01	0.49939851	0.074	0.60415248	0.019	0	0.012	0	5.971	0.032602	0.01
09/01/95	08:30:01	0.50136882	0.074	0.59295475	0.019	0.0166909	0.014	0	6.148	0.04022934	0.011
09/01/95	08:35:02	0.50116254	0.073	0.58077848	0.019	0.01575174	0.014	0	5.825	0.04339765	0.011
09/01/95	08:40:02	0.50047293	0.071	0.55441291	0.019	0	0.013	0	5.405	0.04289462	0.01
09/01/95	08:45:02	0.50510634	0.071	0.53989682	0.019	0.01524768	0.012	0	4.179	0.04585043	0.01
09/01/95	08:50:02	0.50621439	0.071	0.53620671	0.019	0	0.013	0	4.751	0.05880214	0.011
09/01/95	08:55:03	0.50315228	0.071	0.54708679	0.019	0	0.012	0	4.193	0.06122903	0.01
09/01/95	09:00:06	0.50005045	0.071	0.53506257	0.019	0	0.013	0	4.288	0.0634729	0.01
09/01/95	09:05:02	0.49675838	0.069	0.51664592	0.018	0.01462003	0.013	0	4.728	0.06686512	0.01
09/01/95	09:10:02	0.49107662	0.067	0.47278098	0.018	0	0.012	0	4.311	0.06866248	0.009
09/01/95	09:15:03	0.49026426	0.067	0.47238556	0.018	0	0.012	0	4.911	0.06979157	0.009
09/01/95	09:20:03	0.49081598	0.067	0.47992573	0.017	0	0.012	0	5.274	0.06900752	0.009
09/01/95	09:25:03	0.48978102	0.067	0.48255139	0.018	0	0.012	0	4.8	0.06992247	0.009
09/01/95	09:30:02	0.48811271	0.067	0.4749409	0.018	0	0.012	0	4.665	0.06769446	0.01
09/01/95	09:35:04	0.48629995	0.066	0.46349788	0.018	0	0.013	0	5.242	0.06905459	0.01
09/01/95	09:40:03	0.48547667	0.063	0.4128284	0.017	0	0.012	0	4.277	0.05965603	0.009
09/01/95	09:45:03	0.48383411	0.061	0.37195493	0.017	0	0.011	0	4.041	0.04596587	0.009
09/01/95	09:50:02	0.48269085	0.06	0.35162047	0.017	0	0.012	0	4.444	0.04169928	0.01
09/01/95	09:55:02	0.48190586	0.059	0.32272035	0.016	0	0.013	0	3.994	0.04088371	0.01
09/01/95	10:00:03	0.48105818	0.058	0.29565034	0.017	0	0.013	0	4.038	0.04281156	0.011
09/01/95	10:05:03	0.48002627	0.056	0.23161268	0.016	0	0.013	0	4.026	0.04276598	0.01
09/01/95	10:10:03	0.4795971	0.056	0.20791277	0.016	0	0.013	0	3.753	0.04171359	0.01
09/01/95	10:15:03	0.47872352	0.056	0.21413705	0.016	0	0.013	0	3.6	0.03974803	0.011
09/01/95	10:20:04	0.47918703	0.056	0.21899448	0.016	0	0.013	0	3.809	0.03824754	0.011
09/01/95	10:25:04	0.47903624	0.056	0.22235502	0.016	0	0.013	0	3.837	0.03858964	0.011
09/01/95	10:30:04	0.4789991	0.056	0.21103982	0.016	0	0.013	0	3.548	0.03765441	0.011
09/01/95	10:35:04	0.47869544	0.056	0.21251011	0.016	0	0.013	0	3.534	0.03790129	0.011

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 14											
08/28/95	21:04:51	0	0.001	0	0.002	0	0.0004	0.0065651	0.0008	0	0.043
08/28/95	21:09:51	0	0.001	0	0.002	0	0.0005	0.0066684	0.0009	0	0.042
08/28/95	21:14:52	0.0019684	0.001	0	0.002	0	0.0004	0.0064521	0.0008	0	0.044
08/28/95	21:19:52	0.0028459	0.001	0	0.001	0	0.0004	0.0063486	0.0008	0	0.043
08/28/95	21:24:52	0.0039427	0.001	0	0.001	0	0.0004	0.0062426	0.0008	0	0.044
08/28/95	21:29:53	0.0029565	0.001	0	0.001	0	0.0004	0.006351	0.0008	0	0.043
08/28/95	21:34:53	0.0037251	0.001	0	0.001	0	0.0004	0.006245	0.0008	0	0.044
08/28/95	21:39:52	0.0029592	0.001	0	0.001	0	0.0004	0.0063569	0.0008	0	0.042
08/28/95	21:44:51	0.0041656	0.001	0	0.001	0	0.0004	0.0062484	0.0007	0	0.042
08/28/95	21:49:52	0.004605	0.001	0.00197355	0.001	0	0.0004	0.0061399	0.0007	0	0.042
08/28/95	21:54:52	0.0053744	0.001	0.002851738	0.001	0	0.0004	0.0059228	0.0007	0	0.041
08/28/95	21:59:51	0.0053734	0.001	0.002741549	0.001	0	0.0004	0.0059217	0.0007	0	0.042
08/28/95	22:04:51	0.0050435	0.001	0.002412117	0.001	0	0.0004	0.0060303	0.0007	0	0.043
08/28/95	22:09:52	0.004492	0.001	0.001752971	0.001	0	0.0004	0.0060258	0.0007	0	0.041
08/28/95	22:14:52	0.0055886	0.001	0.002849102	0.001	0	0.0004	0.0059174	0.0007	0	0.041
08/28/95	22:19:53	0.0058035	0.001	0.002956496	0.001	0	0.0004	0.0058035	0.0007	0	0.042
08/28/95	22:24:53	0.0056919	0.001	0.002845943	0.001	0	0.0004	0.0059108	0.0007	0	0.043
08/28/95	22:29:53	0.0064545	0.001	0.00371955	0.001	0	0.0004	0.0056887	0.0007	0	0.043
08/28/95	22:34:54	0.0066721	0.001	0.003718861	0.001	0	0.0004	0.0056877	0.0007	0	0.042
08/28/95	22:39:53	0.0063428	0.001	0.00328074	0.001	0	0.0004	0.005796	0.0007	0	0.042
Run 15											
08/29/95	09:44:50	0.0170124	0.002	0.013740801	0.002	0	0.0007	0.0028354	0.0013	0	0.042
08/29/95	09:49:53	0.0181131	0.002	0.01462138	0.003	0	0.0007	0.0021823	0.0014	0	0.042
08/29/95	09:54:51	0.0159396	0.002	0.012882719	0.002	0	0.0007	0.0031661	0.0012	0	0.042
08/29/95	09:59:51	0.0165008	0.002	0.013550338	0.002	0	0.0007	0.0029505	0.0013	0	0.042
08/29/95	10:04:51	0.015313	0.002	0.012359743	0.002	0	0.0006	0.0032813	0.0012	0	0.042
08/29/95	10:09:52	0.0153271	0.002	0.012480674	0.002	0	0.0006	0.0031749	0.0012	0	0.041
08/29/95	10:14:52	0.015125	0.002	0.012604138	0.002	0	0.0006	0.003288	0.0012	0	0.042
08/29/95	10:19:52	0.0126158	0.002	0.010312039	0.002	0	0.0006	0.004059	0.0011	0	0.042
08/29/95	10:24:54	0.0136132	0.002	0.011527279	0.002	0	0.0006	0.0036229	0.0011	0	0.042
08/29/95	10:29:53	0.0132912	0.002	0.011423819	0.002	0	0.0006	0.003515	0.0011	0	0.043
08/29/95	10:34:53	0.0131959	0.002	0.011436466	0.002	0	0.0006	0.0036289	0.0011	0	0.043
08/29/95	10:39:52	0.0131004	0.002	0.011449113	0.002	0	0.0006	0.0035228	0.0011	0	0.043
08/29/95	10:44:53	0.011788	0.002	0.010355845	0.002	0	0.0006	0.0038559	0.0011	0	0.043
08/29/95	10:49:54	0.0126787	0.002	0.011355709	0.002	0	0.0006	0.0036382	0.0011	0	0.044
08/29/95	10:54:53	0.0132372	0.002	0.012023832	0.002	0	0.0006	0.0033093	0.0012	0	0.043
08/29/95	10:59:53	0.0125892	0.002	0.011816218	0.002	0	0.0006	0.0034234	0.0011	0	0.043
08/29/95	11:04:54	0.0141483	0.002	0.013042923	0.002	0	0.0007	0.0029844	0.0012	0	0.043
08/29/95	11:09:55	0.012723	0.002	0.011837896	0.002	0	0.0006	0.0034297	0.0012	0	0.043
08/29/95	11:14:54	0.0128454	0.002	0.012734622	0.002	0	0.0006	0.0031006	0.0012	0	0.043
08/29/95	11:19:54	0.0137413	0.002	0.01351966	0.002	0	0.0007	0.0028812	0.0013	0	0.044
08/29/95	11:24:55	0.0121988	0.002	0.011976976	0.002	0	0.0006	0.0034378	0.0012	0	0.044
08/29/95	11:29:55	0.0138698	0.002	0.013204086	0.002	0	0.0007	0.0029959	0.0012	0	0.043
08/29/95	11:34:55	0.0135444	0.002	0.013433358	0.002	0	0.0007	0.0026645	0.0013	0	0.043
08/29/95	11:39:56	0.0134506	0.002	0.012227799	0.002	0	0.0007	0.0028902	0.0012	0	0.044
Downwind											
Run 16											
08/29/95	22:14:58	0.0032984	0.002	0	0.003	0	0.0008	0.0084658	0.0014	0.2335254	0.18
08/29/95	22:19:58	0.0036302	0.002	0	0.003	0	0.0008	0.0083605	0.0015	0.235525	0.184
08/29/95	22:24:59	0	0.002	0	0.003	0	0.0008	0.0084752	0.0015	0.2173842	0.173
08/29/95	22:29:59	0	0.002	0	0.003	0	0.0008	0.0084831	0.0014	0.2130678	0.167
08/29/95	22:34:59	0.0024224	0.002	0	0.003	0	0.0008	0.0084784	0.0014	0.2163633	0.174
08/29/95	22:40:00	0.0028634	0.002	0	0.003	0	0.0007	0.0083698	0.0014	0.2158526	0.172
08/29/95	22:44:59	0.0025325	0.002	0	0.003	0	0.0007	0.0085885	0.0013	0.2328796	0.179
08/29/95	22:49:59	0.0035228	0.002	0	0.002	0	0.0007	0.0083667	0.0013	0.2218278	0.169
08/29/95	22:55:00	0.0029718	0.002	0	0.002	0	0.0007	0.0083652	0.0013	0.2063774	0.163
08/29/95	23:00:00	0.0034108	0.002	0	0.002	0	0.0007	0.0083621	0.0013	0.2111424	0.169
08/29/95	23:04:59	0.0032966	0.002	0	0.003	0	0.0007	0.0083513	0.0014	0.2222976	0.175
08/29/95	23:10:00	0.0034014	0.002	0	0.003	0	0.0007	0.0083389	0.0014	0.2351356	0.182
08/29/95	23:15:00	0.0027415	0.002	0	0.003	0	0.0007	0.0085536	0.0014	0.2540861	0.198
08/29/95	23:19:59	0.0032905	0.002	0	0.003	0	0.0007	0.0084455	0.0014	0.2475522	0.195

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/29/95	23:24:59	0.0036202	0.002	0	0.003	0	0.0007	0.0083374	0.0014	0.2298263	0.183
08/29/95	23:30:00	0.0036202	0.002	0	0.002	0	0.0007	0.0083374	0.0013	0.210409	0.17
08/29/95	23:35:00	0.004171	0.002	0	0.002	0	0.0007	0.0082322	0.0013	0.2144774	0.171
08/29/95	23:39:59	0.0040597	0.002	0	0.002	0	0.0007	0.0083389	0.0013	0.2105577	0.171
08/29/95	23:45:00	0.004497	0.002	0	0.002	0	0.0007	0.0081165	0.0013	0.2114669	0.171
08/29/95	23:50:00	0.0047146	0.002	0	0.002	0	0.0007	0.0082231	0.0013	0.1997666	0.166
08/29/95	23:54:59	0.0049311	0.002	0	0.002	0	0.0007	0.008109	0.0013	0.2014088	0.165
08/29/95	23:59:59	0.0049293	0.002	0	0.002	0	0.0007	0.0081059	0.0013	0.2029773	0.166
08/30/95	00:05:00	0.005256	0.002	0	0.002	0	0.0007	0.0081029	0.0013	0.2056395	0.166
08/30/95	00:10:00	0.0050351	0.002	0	0.002	0	0.0007	0.0080999	0.0013	0.2012943	0.166
08/30/95	00:14:59	0.0050342	0.002	0	0.002	0	0.0007	0.0080984	0.0013	0.1955661	0.162
08/30/95	00:20:00	0.005036	0.002	0	0.002	0	0.0007	0.0081014	0.0013	0.1979378	0.163
08/30/95	00:25:00	0.0050342	0.002	0	0.002	0	0.0007	0.0080984	0.0013	0.1930491	0.159
08/30/95	00:29:59	0.0056908	0.002	0	0.002	0	0.0007	0.0078796	0.0013	0.1935962	0.159
08/30/95	00:34:59	0.005253	0.002	0	0.002	0	0.0007	0.0080984	0.0013	0.1974266	0.163
08/30/95	00:40:00	0.0052521	0.002	0	0.002	0	0.0007	0.0080969	0.0013	0.2057057	0.166
08/30/95	00:45:00	0.0050332	0.002	0	0.002	0	0.0007	0.0080969	0.0013	0.2087694	0.168
08/30/95	00:50:01	0.0054699	0.002	0	0.002	0	0.0007	0.007986	0.0013	0.1953841	0.16
08/30/95	00:55:01	0.0053615	0.002	0	0.002	0	0.0007	0.0080969	0.0013	0.2007819	0.163
08/30/95	01:00:00	0.0049229	0.002	0	0.002	0	0.0007	0.0082048	0.0013	0.1994318	0.164
08/30/95	01:05:00	0.0051388	0.002	0	0.003	0	0.0007	0.0082003	0.0014	0.2158306	0.172
08/30/95	01:10:01	0.0050286	0.002	0	0.003	0	0.0007	0.0081987	0.0014	0.2197259	0.175
08/30/95	01:15:01	0.0044795	0.002	0	0.003	0	0.0007	0.0081942	0.0014	0.2133758	0.17
08/30/95	01:20:00	0.0043702	0.002	0	0.003	0	0.0007	0.0081942	0.0014	0.200593	0.165
08/30/95	01:25:00	0.0048072	0.002	0	0.003	0	0.0007	0.0081942	0.0014	0.2026688	0.163
08/30/95	01:30:01	0.0045896	0.002	0	0.003	0	0.0007	0.0080864	0.0014	0.2070775	0.168
08/30/95	01:35:00	0.0044811	0.002	0	0.003	0	0.0007	0.0081972	0.0014	0.1969515	0.162
08/30/95	01:40:00	0.0040432	0.002	0	0.003	0	0.0007	0.0076493	0.0014	0.2247802	0.171
08/30/95	01:45:01	0.004261	0.002	0	0.003	0	0.0007	0.0081942	0.0014	0.2007022	0.164
08/30/95	01:50:01	0.0040409	0.002	0	0.003	0	0.0007	0.0083003	0.0014	0.1978972	0.163
08/30/95	01:55:00	0.0042586	0.002	0	0.003	0	0.0007	0.0082988	0.0014	0.2003719	0.164
08/30/95	02:00:00	0.0045862	0.002	0	0.003	0	0.0007	0.0081896	0.0014	0.201027	0.163
08/30/95	02:05:01	0.0039295	0.002	0	0.003	0	0.0008	0.0084048	0.0014	0.2200542	0.178
08/30/95	02:10:00	0.0029461	0.002	0	0.003	0	0.0008	0.0085108	0.0015	0.2176809	0.176
08/30/95	02:15:00	0.0032722	0.002	0	0.003	0	0.0008	0.0085077	0.0015	0.2201085	0.179
08/30/95	02:20:01	0.0031613	0.002	0	0.003	0	0.0008	0.0086119	0.0015	0.2255452	0.181
08/30/95	02:25:01	0.0031625	0.002	0	0.003	0	0.0008	0.0085061	0.0015	0.226392	0.182
08/30/95	02:30:00	0.0028343	0.002	0	0.003	0	0.0008	0.0086119	0.0015	0.2266347	0.182
08/30/95	02:35:01	0.0027238	0.002	0	0.003	0	0.0008	0.0086071	0.0015	0.2382746	0.192
08/30/95	02:40:01	0.0027222	0.002	0	0.003	0	0.0008	0.0087112	0.0015	0.2549102	0.205
08/30/95	02:45:00	0.0028295	0.002	0	0.003	0	0.0008	0.0087063	0.0015	0.2562911	0.208
08/30/95	02:50:00	0.0034812	0.002	0	0.003	0	0.0008	0.0084855	0.0015	0.2508648	0.202
08/30/95	02:55:01	0.0041339	0.002	0	0.003	0	0.0008	0.0083767	0.0015	0.2531493	0.202
08/30/95	03:00:01	0.0039193	0.002	0	0.003	0	0.0008	0.0083829	0.0015	0.2509426	0.204
08/30/95	03:05:00	0.0038111	0.002	0	0.003	0	0.0008	0.0084934	0.0015	0.2282316	0.183
08/30/95	03:10:00	0.0041378	0.002	0	0.003	0	0.0008	0.0083845	0.0015	0.2380316	0.191
08/30/95	03:15:01	0.0047911	0.002	0	0.003	0	0.0008	0.0082756	0.0015	0.2344383	0.186
08/30/95	03:20:00	0.0049009	0.002	0	0.003	0	0.0008	0.0082771	0.0015	0.2305613	0.183
08/30/95	03:25:00	0.0054455	0.002	0	0.003	0	0.0008	0.0081682	0.0014	0.2235911	0.18
08/30/95	03:30:01	0.0055544	0.002	0	0.003	0	0.0008	0.0081682	0.0014	0.2233733	0.181
08/30/95	03:35:01	0.006537	0.002	0	0.003	0	0.0008	0.0078444	0.0014	0.2072231	0.168
08/30/95	03:40:00	0.0061023	0.002	0	0.003	0	0.0008	0.0079548	0.0014	0.2082425	0.168
08/30/95	03:45:00	0.0054475	0.002	0	0.003	0	0.0008	0.0081713	0.0014	0.2184449	0.175
08/30/95	03:50:01	0.0057722	0.002	0	0.003	0	0.0008	0.0080593	0.0014	0.2101952	0.17
08/30/95	03:55:00	0.0063132	0.002	0	0.003	0	0.0008	0.0079459	0.0014	0.2153023	0.172
08/30/95	04:00:00	0.0066397	0.002	0	0.003	0	0.0008	0.0079459	0.0014	0.2110565	0.17
08/30/95	04:05:01	0.0067461	0.002	0	0.003	0	0.0007	0.0078341	0.0014	0.2069517	0.168
08/30/95	04:10:01	0.0068523	0.002	0	0.003	0	0.0008	0.0078312	0.0014	0.21079	0.17
08/30/95	04:15:00	0.0071746	0.002	0	0.003	0	0.0008	0.0077181	0.0014	0.2121936	0.173
08/30/95	04:20:00	0.0067372	0.002	0	0.003	0	0.0008	0.0080412	0.0014	0.2118969	0.179
08/30/95	04:25:01	0.0079281	0.002	0.003583935	0.003	0	0.0008	0.0074937	0.0014	0.1983111	0.163
08/30/95	04:30:01	0.0082508	0.002	0.004342536	0.003	0	0.0008	0.0075994	0.0014	0.2096359	0.167

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	04:35:00	0.0086818	0.002	0.004775001	0.003	0	0.0008	0.0074881	0.0014	0.2106426	0.173
08/30/95	04:40:00	0.0082477	0.002	0.003906819	0.003	0	0.0007	0.0073795	0.0014	0.1905659	0.163
08/30/95	04:45:00	0.0083563	0.002	0.004015341	0.003	0	0.0007	0.0073795	0.0014	0.1924108	0.163
08/30/95	04:50:01	0.0078151	0.002	0.003364835	0.003	0	0.0008	0.0074895	0.0014	0.1958117	0.163
08/30/95	04:55:01	0.0077051	0.002	0.003798296	0.003	0	0.0008	0.0077051	0.0014	0.2093404	0.17
08/30/95	05:00:00	0.0069442	0.002	0.002929565	0.003	0	0.0008	0.0078122	0.0014	0.2202599	0.173
08/30/95	05:05:00	0.0067246	0.002	0	0.003	0	0.0008	0.0079177	0.0014	0.2087888	0.171
08/30/95	05:10:01	0.0074866	0.002	0.003472062	0.003	0	0.0008	0.0077036	0.0014	0.2058281	0.174
08/30/95	05:15:01	0.0073795	0.002	0.00336419	0.003	0	0.0008	0.0077051	0.0014	0.2129207	0.177
08/30/95	05:20:01	0.0060761	0.002	0	0.003	0	0.0008	0.0079207	0.0014	0.2028995	0.168
08/30/95	05:25:02	0.0066186	0.002	0	0.003	0	0.0008	0.0078122	0.0014	0.2024655	0.167
08/30/95	05:30:02	0.0057485	0.002	0	0.003	0	0.0008	0.0080262	0.0014	0.2040165	0.17
08/30/95	05:35:02	0.0048799	0.002	0	0.003	0	0.0008'	0.0082415	0.0014	0.2095088	0.172
08/30/95	05:40:03	0.0065065	0.002	0	0.003	0	0.0008	0.0079162	0.0014	0.2188347	0.175
08/30/95	05:45:03	0.0065065	0.002	0	0.003	0	0.0008	0.0079162	0.0014	0.2015926	0.166
08/30/95	05:50:03	0.0068305	0.002	0	0.003	0	0.0008	0.0078063	0.0014	0.2014463	0.168
08/30/95	05:55:04	0.0069363	0.002	0	0.003	0	0.0008	0.0079118	0.0015	0.2121004	0.173
08/30/95	06:00:04	0.0076907	0.002	0.00346622	0.003	0	0.0008	0.007799	0.0015	0.217397	0.172
08/30/95	06:05:03	0.0082292	0.002	0.003898034	0.003	0	0.0008	0.0076878	0.0015	0.2168823	0.178
08/30/95	06:10:04	0.0076863	0.002	0.00335601	0.003	0	0.0008	0.0077946	0.0015	0.2244196	0.176
08/30/95	06:15:05	0.0083312	0.002	0.004003303	0.003	0	0.0008	0.007682	0.0015	0.2383588	0.184
08/30/95	06:20:04	0.0083249	0.002	0.003459713	0.003	0	0.0008	0.00746	0.0014	0.2169889	0.176
08/30/95	06:25:04	0.0088622	0.002	0.00443109	0.003	0	0.0008	0.0074572	0.0015	0.2289036	0.18
08/30/95	06:30:05	0.0085331	0.002	0.003888517	0.003	0	0.0008	0.007669	0.0015	0.2381717	0.184
08/30/95	06:35:04	0.0088555	0.002	0.004427755	0.003	0	0.0008	0.0074516	0.0015	0.2340231	0.182
08/30/95	06:40:04	0.009176	0.002	0.004749948	0.003	0	0.0008	0.0074488	0.0015	0.2399803	0.186
08/30/95	06:45:04	0.0091708	0.002	0.004639371	0.003	0	0.0008	0.0073367	0.0015	0.2380105	0.186
08/30/95	06:50:04	0.0089517	0.002	0.004314067	0.003	0	0.0008	0.0074418	0.0015	0.2389993	0.185
08/30/95	06:55:04	0.0095916	0.002	0.004957436	0.003	0	0.0008	0.0073284	0.0015	0.2311674	0.181
08/30/95	07:00:03	0.0117425	0.002	0.007325618	0.003	0	0.0008	0.0066792	0.0015	0.2282792	0.183
08/30/95	07:05:03	0.013143	0.002	0.008941563	0.003	0	0.0008	0.0061406	0.0015	0.2265555	0.181
08/30/95	07:10:04	0.0134637	0.002	0.009370712	0.003	0	0.0008	0.0060317	0.0015	0.2191885	0.178
08/30/95	07:15:04	0.0134637	0.002	0.009155293	0.003	0	0.0008	0.0060317	0.0015	0.2168189	0.183
08/30/95	07:20:03	0.0138945	0.002	0.009909259	0.003	0	0.0008	0.005924	0.0015	0.211218	0.183
08/30/95	07:25:03	0.0139996	0.002	0.009907388	0.003	0	0.0008	0.0058152	0.0015	0.2078398	0.173
08/30/95	07:30:04	0.0139996	0.002	0.009907388	0.003	0	0.0008	0.0058152	0.0015	0.2093474	0.19
08/30/95	07:35:04	0.0137842	0.002	0.009799699	0.003	0	0.0008	0.0058152	0.0015	0.2228085	0.196
08/30/95	07:40:03	0.013779	0.002	0.00968835	0.003	0	0.0008	0.0059207	0.0015	0.2190643	0.203
08/30/95	07:45:03	0.0147506	0.002	0.010874535	0.003	0	0.0008	0.0054911	0.0015	0	0.21
08/30/95	07:50:04	0.0149688	0.002	0.010984278	0.003	0	0.0008	0.0054921	0.0015	0	0.187
08/30/95	07:55:04	0.0150793	0.002	0.011201771	0.003	0	0.0008	0.0053855	0.0015	0	0.204
08/30/95	08:00:04	0.0148695	0.002	0.010775	0.003	0	0.0008	0.0052798	0.0015	0.2016003	0.168
08/30/95	08:05:04	0.0145464	0.002	0.010667326	0.003	0	0.0008	0.005603	0.0015	0.2247681	0.197
08/30/95	08:10:05	0.0137999	0.002	0.009487434	0.003	0	0.0008	0.005714	0.0015	0.2116345	0.174
08/30/95	08:15:05	0.0134841	0.002	0.009600673	0.003	0	0.0008	0.005933	0.0015	0.2375358	0.202
08/30/95	08:20:04	0.0120931	0.002	0.00766618	0.003	0	0.0008	0.0061545	0.0015	0.2277179	0.188
08/30/95	08:25:04	0.011884	0.002	0.007454485	0.003	0	0.0008	0.0062661	0.0015	0.2402721	0.195
08/30/95	08:30:05	0.011454	0.002	0.007239774	0.003	0	0.0008	0.0063753	0.0015	0.245504	0.197
08/30/95	08:35:05	0.0116723	0.002	0.007457289	0.003	0	0.0008	0.0062684	0.0015	0.2346344	0.192
08/30/95	08:40:05	0.0128708	0.002	0.008652635	0.003	0	0.0008	0.0059487	0.0015	0.2334048	0.19
08/30/95	08:45:04	0.0120191	0.002	0.008012709	0.003	0	0.0008	0.006172	0.0015	0.2272794	0.186
08/30/95	08:50:04	0.0118136	0.002	0.007803465	0.003	0	0.0008	0.0062861	0.0014	0.2170881	0.178
08/30/95	08:55:05	0.0109547	0.002	0.006941615	0.003	0	0.0008	0.0065078	0.0014	0.2126954	0.176
08/30/95	09:00:05	0.0115057	0.002	0.007815169	0.003	0	0.0008	0.006187	0.0015	0.2230579	0.181
08/30/95	09:05:05	0.0118379	0.002	0.008036768	0.003	0	0.0008	0.0060819	0.0014	0.2189476	0.179
08/30/95	09:10:05	0.0121751	0.002	0.008587819	0.003	0	0.0008	0.0059789	0.0015	0.2268706	0.184
08/30/95	09:15:06	0.0115315	0.002	0.008159089	0.003	0	0.0008	0.0060921	0.0014	0.2260612	0.182
08/30/95	09:20:06	0.0119756	0.002	0.008491793	0.003	0	0.0008	0.0060967	0.0014	0.218827	0.175
08/30/95	09:25:05	0.0116555	0.002	0.008387617	0.003	0	0.0008	0.0061001	0.0014	0.227555	0.183
08/30/95	09:30:05	0.0112324	0.002	0.008069849	0.003	0	0.0008	0.0061069	0.0014	0.2324989	0.187
08/30/95	09:35:06	0.0109073	0.002	0.007744155	0.003	0	0.0008	0.0062171	0.0014	0.2287253	0.183
08/30/95	09:40:06	0.0108082	0.002	0.007860541	0.003	0	0.0008	0.0063321	0.0014	0.21813	0.179

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	09:45:05	0.0104885	0.002	0.007538624	0.003	0	0.0008	0.0064461	0.0014	0.2237551	0.178
08/30/95	09:50:05	0.009844	0.002	0.007328279	0.003	0	0.0008	0.0065626	0.0014	0.2289267	0.182
08/30/95	09:55:05	0.0093057	0.002	0.006678211	0.003	0	0.0007	0.0066782	0.0014	0.2670189	0.208
08/30/95	10:00:07	0.0089739	0.002	0.006128549	0.002	0	0.0007	0.0067852	0.0012	0.2555386	0.198
08/30/95	10:05:06	0.0093023	0.002	0.006675741	0.002	0	0.0007	0.0066757	0.0013	0.2464552	0.196
08/30/95	10:10:05	0.0090868	0.002	0.006349781	0.002	0	0.0007	0.0066782	0.0013	0.2338471	0.188
08/30/95	10:15:05	0.0090935	0.002	0.006464052	0.002	0	0.0007	0.0066832	0.0013	0.233911	0.185
08/30/95	10:20:41	0.0080038	0.002	0.005482071	0.002	0	0.0007	0.0070171	0.0013	0.2400051	0.189
08/30/95	10:25:34	0.007128	0.002	0.004496131	0.002	0	0.0007	0.0072377	0.0013	0.2271094	0.18
08/30/95	10:30:33	0.0050472	0.002	0	0.002	0	0.0007	0.0076806	0.0013	0.2239439	0.178
08/30/95	10:35:33	0.0042824	0.002	0	0.003	0	0.0007	0.0080157	0.0014	0.2361881	0.186
08/30/95	10:40:33	0.0064856	0.002	0.004946656	0.003	0	0.0007	0.0071452	0.0014	0.2412869	0.178
08/30/95	10:45:34	0.0043962	0.002	0	0.003	0	0.0008	0.0079132	0.0014	0.2403631	0.188
08/30/95	10:50:34	0.0034115	0.002	0	0.003	0	0.0008	0.0082536	0.0015	0.2156932	0.174
08/30/95	10:55:33	0.0038545	0.002	0	0.003	0	0.0008	0.0081495	0.0014	0.2197069	0.174
08/30/95	11:00:33	0.0040748	0.002	0	0.003	0	0.0007	0.0080394	0.0014	0.2226803	0.177
08/30/95	11:05:34	0.0040733	0.002	0	0.003	0	0.0008	0.0080364	0.0014	0.2354785	0.185
08/30/95	11:10:34	0.0031937	0.002	0	0.003	0	0.0007	0.0082596	0.0014	0.237988	0.19
08/30/95	11:15:33	0.0025358	0.002	0	0.003	0	0.0007	0.008379	0.0014	0.2357154	0.188
08/30/95	11:20:33	0.0031984	0.002	0	0.002	0	0.0007	0.0082718	0.0013	0.2410962	0.189
08/30/95	11:25:34	0.0059579	0.002	0.003751275	0.002	0	0.0007	0.0077232	0.0013	0.235889	0.188
08/30/95	11:30:34	0.0077261	0.002	0.006180843	0.003	0	0.0007	0.0073949	0.0014	0.2270356	0.182
08/30/95	11:35:33	0.0071821	0.002	0.006629639	0.003	0	0.0008	0.0071821	0.0014	0.2422028	0.178
08/30/95	11:40:33	0.0072926	0.002	0.007845073	0.003	0	0.0008	0.0066296	0.0014	0.2807652	0.19
08/30/95	11:45:34	0.0074031	0.002	0.005856181	0.003	0	0.0008	0.0074031	0.0015	0.2339158	0.185
08/30/95	11:50:34	0.0066369	0.002	0.005088312	0.003	0	0.0008	0.0076325	0.0014	0.2492167	0.193
08/30/95	11:55:33	0.0066418	0.002	0.005092045	0.003	0	0.0008	0.0076381	0.0015	0.2336806	0.184
08/30/95	12:00:33	0.0044295	0.002	0	0.003	0	0.0008	0.0081946	0.0015	0.2362025	0.184
08/30/95	12:05:34	0.0035488	0.002	0	0.003	0	0.0008	0.0080957	0.0015	0.2369923	0.183
08/30/95	12:10:34	0.0028876	0.002	0	0.003	0	0.0008	0.0076633	0.0015	0.2792095	0.204
08/30/95	12:15:34	0.0028866	0.002	0	0.003	0	0.0008	0.0075494	0.0015	0.2519073	0.18
08/30/95	12:20:35	0.0061062	0.002	0.005106979	0.003	0	0.0008	0.0076605	0.0015	0.2418043	0.192
08/30/95	12:25:35	0.0048867	0.002	0.004109289	0.003	0	0.0008	0.0078854	0.0015	0.2624392	0.202
08/30/95	12:30:35	0.0083388	0.002	0.008116403	0.003	0	0.0008	0.006671	0.0015	0.2676189	0.203
08/30/95	12:35:36	0.0092434	0.002	0.009243395	0.003	0	0.0008	0.0063479	0.0016	0.2883271	0.221
08/30/95	12:40:36	0.0098109	0.002	0.010033915	0.003	0	0.0009	0.0061318	0.0016	0.300683	0.229
08/30/95	12:45:36	0.0086976	0.002	0.008920659	0.003	0	0.0008	0.006356	0.0015	0.2659471	0.201
08/30/95	12:50:36	0.0094834	0.002	0.009706512	0.003	0	0.0009	0.0061363	0.0016	0.2403199	0.182
08/30/95	12:55:37	0.0084746	0.002	0.008697643	0.003	0	0.0008	0.0064675	0.0015	0.2665047	0.2
08/30/95	13:00:37	0.0094868	0.002	0.009933262	0.003	0	0.0008	0.0061385	0.0016	0.2619479	0.199
08/30/95	13:05:37	0.0089499	0.002	0.010851726	0.003	0	0.0008	0.0058174	0.0016	0.3380816	0.232
08/30/95	13:10:36	0.0084993	0.002	0.009058463	0.003	0	0.0009	0.0063745	0.0016	0.2919957	0.219
08/30/95	13:15:36	0.0081742	0.002	0.008734043	0.003	0	0.0009	0.0063826	0.0016	0.2792654	0.21
08/30/95	13:20:37	0.0088476	0.002	0.009743582	0.003	0	0.0009	0.0061597	0.0016	0.279764	0.211
08/30/95	13:25:36	0.0075078	0.003	0.009748878	0.003	0	0.0009	0.006051	0.0016	0.297733	0.206
08/30/95	13:30:36	0.0076253	0.002	0.00852243	0.003	0	0.0008	0.006504	0.0016	0.2629618	0.197
08/30/95	13:35:37	0.0081845	0.002	0.009081472	0.003	0	0.0009	0.0063907	0.0016	0.268408	0.199
08/30/95	13:40:37	0.0078595	0.003	0.008870062	0.003	0	0.0009	0.0063999	0.0017	0.2630703	0.197
08/30/95	13:45:36	0.0064034	0.002	0.007189828	0.003	0	0.0008	0.0068528	0.0015	0.246701	0.184
08/30/95	13:50:37	0.0070762	0.003	0.007862454	0.003	0	0.0009	0.0067392	0.0016	0.2521601	0.19
08/30/95	13:55:37	0.0062911	0.003	0.007751534	0.003	0	0.0009	0.0066281	0.0017	0.2726518	0.188
08/30/95	14:00:37	0.0074279	0.003	0.008553347	0.003	0	0.0009	0.0066401	0.0017	0.284849	0.21
08/30/95	14:05:36	0.0074279	0.003	0.008553347	0.003	0	0.0009	0.0066401	0.0016	0.2859744	0.209
08/30/95	14:10:36	0.0073193	0.003	0.008557975	0.003	0	0.0009	0.0066437	0.0017	0.2612435	0.196
08/30/95	14:15:36	0.005406	0.003	0.007996392	0.003	0	0.0009	0.0067575	0.0017	0.2887711	0.198
08/30/95	14:20:37	0.0049564	0.003	0.006984023	0.003	0	0.0009	0.0068714	0.0016	0.2985107	0.204
08/30/95	14:25:37	0.0053001	0.003	0.005976726	0.003	0	0.0009	0.0072172	0.0016	0.266359	0.2
08/30/95	14:30:36	0.0039441	0.002	0.005747047	0.003	0	0.0009	0.0069866	0.0016	0.2811545	0.196
08/30/95	14:35:37	0.0049636	0.003	0.005978878	0.003	0	0.0009	0.0073326	0.0016	0.245698	0.185
08/30/95	14:40:37	0.00507	0.002	0.005633344	0.003	0	0.0008	0.0073233	0.0016	0.2449378	0.186
08/30/95	14:45:36	0.0051864	0.003	0.005862902	0.003	0	0.0009	0.0073286	0.0016	0.2493988	0.19
08/30/95	14:50:36	0.0072198	0.003	0.008460677	0.003	0	0.0009	0.0067685	0.0016	0.2420882	0.182

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	14:56:11	0.0075637	0.003	0.008918419	0.003	0	0.0009	0.0065477	0.0016	0.2526509	0.192
08/30/95	15:01:11	0.0067832	0.003	0.008139879	0.003	0	0.0009	0.0068963	0.0017	0.2425006	0.185
08/30/95	15:06:12	0.0055426	0.003	0.006673774	0.003	0	0.0009	0.0071262	0.0017	0.2480608	0.186
Run 17											
08/30/95	17:24:51	0.0169577	0.003	0.021054829	0.004	0	0.0011	0.0028452	0.0021	0.4344123	0.272
08/30/95	17:29:52	0.0171607	0.003	0.019206378	0.004	0	0.001	0.0031821	0.0019	0.3517381	0.266
08/30/95	17:34:52	0.0177163	0.003	0.019987592	0.004	0	0.0012	0.0031798	0.0022	0.4500615	0.337
08/30/95	17:39:51	0.0195263	0.004	0.021910363	0.004	0	0.0012	0	0.0023	0.504506	0.374
08/30/95	17:44:52	0.018271	0.003	0.020200245	0.004	0	0.0011	0.0030641	0.0021	0.4654	0.354
08/30/95	17:49:52	0.0185915	0.004	0.020631978	0.004	0	0.0012	0.0027207	0.0023	0.558197	0.445
08/30/95	17:54:51	0.0199303	0.004	0.022195139	0.005	0	0.0013	0	0.0025	0.4508104	0.357
08/30/95	17:59:51	0.0208213	0.004	0.023197628	0.005	0	0.0014	0	0.0026	0.555951	0.436
08/30/95	18:04:52	0.0230889	0.004	0.025126126	0.005	0	0.0015'	0	0.0028	0	0.708
08/30/95	18:09:51	0.0232859	0.004	0.025885781	0.005	0	0.0014	0	0.0027	0.6377624	0.506
08/30/95	18:14:51	0.0241423	0.004	0.026285796	0.005	0	0.0014	0	0.0026	0.4742725	0.399
08/30/95	18:19:52	0.0233568	0.004	0.025500692	0.005	0	0.0014	0	0.0026	0.5172353	0.417
08/30/95	18:24:51	0.0237824	0.004	0.026036671	0.005	0	0.0015	0	0.0027	0.6079732	0.512
08/30/95	18:29:51	0.0245805	0.004	0.026948359	0.005	0	0.0015	0	0.0029	0	0.69
08/30/95	18:34:52	0.0247971	0.005	0.027502201	0.005	0	0.0016	0	0.0029	0	0.599
08/30/95	18:39:51	0.0259899	0.005	0.028577651	0.006	0	0.0019	0	0.0035	0.7445941	0.623
08/30/95	18:44:51	0.0273598	0.006	0.029836837	0.007	0	0.002	0	0.0037	0	0.769
08/30/95	18:49:52	0.0256663	0.005	0.0280303	0.006	0	0.0017	0	0.0031	0.6753164	0.562
08/30/95	18:54:51	0.0251125	0.004	0.028153047	0.005	0	0.0016	0	0.0029	0.8173393	0.623
08/30/95	18:59:51	0.0227436	0.004	0.025333164	0.005	0	0.0015	0	0.0028	0.5126306	0.333
08/30/95	19:04:52	0.0190403	0.003	0.020608309	0.003	0	0.001	0.003136	0.0018	0	0.521
08/30/95	19:09:51	0.0201199	0.003	0.021461203	0.004	0	0.001	0.0029062	0.0019	0	0.517
08/30/95	19:14:52	0.0205408	0.003	0.021768766	0.004	0	0.001	0.0027909	0.0019	0	0.514
08/30/95	19:19:52	0.0223977	0.003	0.023511999	0.004	0	0.0011	0	0.002	0	0.521
08/30/95	19:24:52	0.0235803	0.003	0.024692582	0.004	0	0.0011	0	0.002	0	0.538
08/30/95	19:29:51	0.0248831	0.003	0.025216396	0.004	0	0.0011	0	0.0021	0	0.183
08/30/95	19:34:51	0.02419	0.003	0.025077726	0.004	0	0.0011	0	0.0021	0	0.528
08/30/95	19:39:52	0.0241767	0.003	0.024287617	0.004	0	0.0011	0	0.0021	0.2088291	0.178
08/30/95	19:44:51	0.0260525	0.003	0.026274217	0.004	0	0.0011	0	0.0021	0	0.524
08/30/95	19:49:51	0.0279114	0.003	0.027800662	0.004	0	0.0012	0	0.0022	0	0.284
08/30/95	19:54:52	0.0298612	0.004	0.029308186	0.004	0	0.0013	0	0.0024	0.2347973	0.192
08/30/95	19:59:51	0.0289125	0.004	0.029243574	0.004	0	0.0013	0	0.0024	0.2676063	0.212
08/30/95	20:04:51	0.0296073	0.004	0.030049245	0.005	0	0.0013	0	0.0025	0	0.266
08/30/95	20:09:52	0.0291923	0.004	0.029192296	0.005	0	0.0013	0	0.0025	0.214298	0.177
08/30/95	20:14:52	0.0285393	0.004	0.028428714	0.004	0	0.0013	0	0.0024	0.2124963	0.183
08/30/95	20:19:53	0.02875	0.004	0.02941345	0.005	0	0.0013	0	0.0024	0.2198268	0.192
08/30/95	20:24:53	0.0289765	0.004	0.029750653	0.005	0	0.0013	0	0.0025	0	0.514
08/30/95	20:29:52	0.0284026	0.004	0.028402574	0.005	0	0.0013	0	0.0025	0.2273311	0.185
08/30/95	20:34:52	0.0283764	0.004	0.028818031	0.005	0	0.0013	0	0.0025	0.2639997	0.205
08/30/95	20:39:53	0.0271568	0.004	0.02715682	0.005	0	0.0013	0	0.0025	0.3064526	0.252
08/30/95	20:44:52	0.0275882	0.004	0.027919286	0.005	0	0.0014	0	0.0025	0.419341	0.305
08/30/95	20:49:52	0.0273372	0.004	0.027116762	0.005	0	0.0013	0	0.0024	0.3788631	0.312
08/30/95	20:54:53	0.027217	0.004	0.026996571	0.005	0	0.0013	0	0.0025	0.4311738	0.363
08/30/95	20:59:52	0.0271018	0.004	0.027542439	0.004	0	0.0013	0	0.0024	0.6040608	0.529
08/30/95	21:04:52	0.0267169	0.003	0.027046741	0.004	0	0.0011	0	0.002	0	0.108
08/30/95	21:09:53	0.0267773	0.003	0.026777274	0.004	0	0.001	0	0.0019	0	0.043
08/30/95	21:14:53	0.026707	0.003	0.026377303	0.004	0	0.0011	0	0.002	0.2513537	0.199
08/30/95	21:19:52	0.0277958	0.004	0.028235254	0.004	0	0.0013	0	0.0024	0.4848334	0.361
08/30/95	21:24:53	0.0287899	0.004	0.029119555	0.005	0	0.0014	0	0.0025	0.3909712	0.28
08/30/95	21:29:53	0.0271065	0.004	0.027106503	0.004	0	0.0013	0	0.0024	0.4395204	0.324
08/30/95	21:34:53	0.027181	0.004	0.027180983	0.005	0	0.0013	0	0.0024	0	0.539
08/30/95	21:39:54	0.0283242	0.004	0.028543724	0.005	0	0.0013	0	0.0024	0.3655792	0.269
08/30/95	21:44:54	0.0281098	0.004	0.028109789	0.004	0	0.0013	0	0.0024	0.4317488	0.324
08/30/95	21:49:53	0.0268273	0.004	0.026389301	0.004	0	0.0013	0	0.0024	0.4356972	0.329
08/30/95	21:54:53	0.0271256	0.004	0.026578684	0.005	0	0.0013	0	0.0025	0.4613535	0.347
08/30/95	21:59:54	0.0263697	0.004	0.026041466	0.004	0	0.0012	0	0.0023	0.3737716	0.272
08/30/95	22:04:54	0.0279171	0.004	0.027698152	0.004	0	0.0013	0	0.0024	0.3796727	0.285
08/30/95	22:09:53	0.0281726	0.004	0.028062989	0.004	0	0.0013	0	0.0024	0.3557203	0.264

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/30/95	22:14:53	0.0271356	0.003	0.026697974	0.004	0	0.0012	0	0.0022	0.3227829	0.243
08/30/95	22:19:54	0.0273494	0.004	0.027130608	0.004	0	0.0012	0	0.0023	0.3438367	0.26
08/30/95	22:24:54	0.0262165	0.003	0.02523336	0.004	0	0.0011	0	0.0021	0.3968519	0.295
08/30/95	22:29:54	0.0252673	0.003	0.02385146	0.004	0	0.0011	0	0.002	0.3254254	0.25
08/30/95	22:34:55	0.0225404	0.003	0.020689255	0.003	0	0.0009	0.0025045	0.0017	0	0.288
08/30/95	22:39:55	0.019979	0.002	0.01790468	0.003	0	0.0008	0.0034936	0.0016	0	0.19
08/30/95	22:44:55	0.0224016	0.003	0.020981055	0.003	0	0.001	0.0025134	0.0018	0	0.209
08/30/95	22:49:56	0.0224058	0.003	0.020984951	0.003	0	0.001	0.0026231	0.0018	0	0.523
08/30/95	22:54:55	0.0225402	0.003	0.021227162	0.003	0	0.001	0.002626	0.0019	0	0.264
08/30/95	22:59:55	0.0224391	0.003	0.021125575	0.003	0	0.001	0.002627	0.0019	0	0.251
08/30/95	23:04:56	0.0231924	0.003	0.021989043	0.004	0	0.001	0.0022974	0.0019	0	0.211
08/30/95	23:09:56	0.0242819	0.003	0.023297501	0.004	0	0.0011	0	0.002	0	0.192
08/30/95	23:14:56	0.0249243	0.003	0.02404976	0.004	0	0.0011	0	0.0021	0	0.184
08/30/95	23:19:56	0.0253427	0.003	0.024250383	0.004	0	0.0011	0	0.0021	0	0.183
08/30/95	23:24:56	0.0245553	0.003	0.023463981	0.004	0	0.0011	0	0.002	0.2197975	0.199
08/30/95	23:29:56	0.0238872	0.003	0.022578312	0.004	0	0.0011	0	0.002	0	0.21
08/30/95	23:34:55	0.0247505	0.003	0.023551157	0.004	0	0.0011	0	0.0021	0.2373651	0.204
08/30/95	23:39:55	0.0256983	0.003	0.024391619	0.004	0	0.0011	0	0.0021	0	0.269
08/30/95	23:44:56	0.0261096	0.003	0.024912938	0.004	0	0.0012	0	0.0022	0.2336812	0.207
08/30/95	23:49:56	0.0258968	0.003	0.024699876	0.004	0	0.0012	0	0.0021	0	0.233
08/30/95	23:54:55	0.0259064	0.003	0.024817935	0.004	0	0.0011	0	0.0021	0	0.203
08/30/95	23:59:55	0.0264704	0.003	0.025381091	0.004	0	0.0012	0	0.0021	0.2021773	0.186
08/31/95	00:04:56	0.0270201	0.003	0.026039529	0.004	0	0.0012	0	0.0022	0.2054835	0.174
08/31/95	00:09:56	0.0270251	0.003	0.026262321	0.004	0	0.0012	0	0.0022	0.2140216	0.188
08/31/95	00:14:55	0.0272482	0.003	0.026485268	0.004	0	0.0012	0	0.0022	0	0.182
08/31/95	00:19:55	0.0279022	0.003	0.027139225	0.004	0	0.0012	0	0.0022	0.1813641	0.164
08/31/95	00:24:56	0.0281202	0.003	0.027248218	0.004	0	0.0012	0	0.0022	0.1794023	0.162
08/31/95	00:29:56	0.0283223	0.003	0.027341944	0.004	0	0.0012	0	0.0022	0	0.161
08/31/95	00:34:55	0.0275547	0.003	0.026683384	0.004	0	0.0012	0	0.0022	0	0.181
08/31/95	00:39:55	0.0278607	0.003	0.026881265	0.004	0	0.0012	0	0.0022	0	0.186
08/31/95	00:44:55	0.0280784	0.003	0.02742542	0.004	0	0.0012	0	0.0023	0	0.24
08/31/95	00:49:56	0.0292701	0.004	0.028834853	0.004	0	0.0013	0	0.0023	0	0.533
08/31/95	00:54:56	0.0295745	0.004	0.029139558	0.004	0	0.0013	0	0.0024	0	0.235
08/31/95	00:59:56	0.0288951	0.004	0.028243373	0.004	0	0.0013	0	0.0023	0.2046558	0.177
08/31/95	01:04:57	0.0286565	0.004	0.027679558	0.004	0	0.0012	0	0.0023	0.2020065	0.182
08/31/95	01:09:57	0.0289659	0.004	0.028097999	0.004	0	0.0013	0	0.0023	0.2310762	0.204
08/31/95	01:14:56	0.0288306	0.004	0.027963503	0.004	0	0.0013	0	0.0023	0.2314034	0.19
08/31/95	01:19:56	0.0294863	0.004	0.028619029	0.004	0	0.0013	0	0.0024	0.2284102	0.19
08/31/95	01:24:57	0.030148	0.004	0.029388852	0.004	0	0.0013	0	0.0024	0.211578	0.188
08/31/95	01:29:57	0.0303705	0.004	0.029828209	0.005	0	0.0013	0	0.0024	0.2228981	0.194
08/31/95	01:34:57	0.0301423	0.004	0.029600211	0.004	0	0.0013	0	0.0024	0.2341995	0.21
08/31/95	01:39:57	0.0304676	0.004	0.029817062	0.004	0	0.0013	0	0.0024	0.2133817	0.191
08/31/95	01:44:58	0.0306902	0.004	0.030147973	0.005	0	0.0013	0	0.0024	0.2161328	0.188
08/31/95	01:49:58	0.0310213	0.004	0.030479006	0.005	0	0.0013	0	0.0025	0.2051096	0.182
08/31/95	01:54:58	0.0305818	0.004	0.029822636	0.004	0	0.0013	0	0.0024	0.2078909	0.186
08/31/95	01:59:59	0.0307929	0.004	0.030033913	0.005	0	0.0013	0	0.0024	0.2049245	0.181
08/31/95	02:04:59	0.0299199	0.004	0.029269461	0.004	0	0.0013	0	0.0024	0.2201714	0.182
08/31/95	02:09:58	0.0301423	0.004	0.029600211	0.004	0	0.0013	0	0.0024	0	0.21
08/31/95	02:14:58	0.0304733	0.004	0.029931082	0.004	0	0.0013	0	0.0024	0	0.188
08/31/95	02:19:59	0.0312266	0.004	0.030792893	0.005	0	0.0013	0	0.0025	0	0.227
08/31/95	02:24:59	0.0319796	0.004	0.031545975	0.005	0	0.0014	0	0.0025	0	0.207
08/31/95	02:29:59	0.0316544	0.004	0.031112353	0.005	0	0.0013	0	0.0025	0.1967558	0.169
08/31/95	02:34:58	0.0327446	0.004	0.031985576	0.005	0	0.0014	0	0.0026	0.1923472	0.163
08/31/95	02:39:58	0.0317628	0.004	0.03143757	0.005	0	0.0014	0	0.0025	0	0.523
08/31/95	02:44:59	0.0321844	0.004	0.031967639	0.005	0	0.0014	0	0.0026	0.2145625	0.181
08/31/95	02:49:59	0.0319617	0.004	0.031419937	0.005	0	0.0014	0	0.0026	0.2059631	0.185
08/31/95	02:54:58	0.0326116	0.004	0.0319615	0.005	0	0.0014	0	0.0026	0.2112709	0.184
Run 18											
08/31/95	10:19:55	0.0320029	0.004	0.032002905	0.005	0	0.0013	0	0.0025	0.3369013	0.275
08/31/95	10:24:55	0.0311552	0.004	0.031264147	0.004	0	0.0013	0	0.0024	0.2863883	0.23
08/31/95	10:29:55	0.0288837	0.003	0.028229699	0.004	0	0.0012	0	0.0022	0.2995182	0.241
08/31/95	10:34:55	0.0309775	0.004	0.030759395	0.004	0	0.0013	0	0.0024	0.2691992	0.225

Midwest Beef

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	10:39:56	0.0307936	0.004	0.031230401	0.004	0	0.0013	0	0.0024	0	0.149
08/31/95	10:44:56	0.0289587	0.003	0.029177252	0.004	0	0.0012	0	0.0022	0	0.103
08/31/95	10:49:55	0.0280115	0.003	0.027902049	0.004	0	0.0011	0	0.0021	0	0.133
08/31/95	10:54:55	0.0254042	0.003	0.025404154	0.004	0	0.0011	0	0.002	0	0.132
08/31/95	10:59:55	0.0248612	0.003	0.024642198	0.004	0	0.001	0	0.0019	0.2022851	0.17
08/31/95	11:04:56	0.0244277	0.003	0.024318123	0.004	0	0.001	0	0.0019	0.2173295	0.178
08/31/95	11:09:56	0.0239674	0.003	0.023857924	0.004	0	0.001	0	0.0019	0.1580314	0.144
08/31/95	11:14:55	0.0255278	0.003	0.025527785	0.004	0	0.0011	0	0.002	0	0.073
08/31/95	11:19:55	0.02609	0.003	0.026747757	0.004	0	0.0011	0	0.002	0	0.047
08/31/95	11:24:56	0.0267527	0.003	0.027300901	0.004	0	0.0011	0	0.0021	0	0.049
08/31/95	11:29:56	0.0266578	0.003	0.027096596	0.004	0	0.0011	0	0.002	0	0.044
08/31/95	11:34:56	0.0272213	0.003	0.027989687	0.004	0	0.0012	0	0.0021	0	0.066
08/31/95	11:39:56	0.0257707	0.003	0.026318986	0.004	0	0.0011	0	0.002	0	0.112
08/31/95	11:44:57	0.0252224	0.003	0.025551349	0.004	0	0.0011	0	0.002	0	0.136
08/31/95	11:49:57	0.0242488	0.003	0.024687689	0.004	0	0.0011	0	0.002	0.2145086	0.174
08/31/95	11:54:57	0.0232827	0.003	0.023612182	0.004	0	0.001	0	0.0019	0.1720944	0.148
08/31/95	11:59:56	0.0216473	0.003	0.02208683	0.003	0	0.001	0.0023076	0.0018	0	0.132
08/31/95	12:04:58	0.0215453	0.003	0.022094954	0.003	0	0.001	0.0021985	0.0018	0.2165525	0.177
08/31/95	12:09:58	0.0211522	0.003	0.021703025	0.003	0	0.001	0.0025339	0.0018	0	0.102
08/31/95	12:14:57	0.0233256	0.003	0.023985708	0.004	0	0.0011	0	0.002	0.2664834	0.216
08/31/95	12:19:58	0.0195919	0.003	0.020362321	0.003	0	0.0009	0.0027517	0.0018	0	0.141
08/31/95	12:24:58	0.0192864	0.003	0.01983745	0.003	0	0.0009	0.0029756	0.0017	0	0.123
08/31/95	12:29:58	0.0199294	0.003	0.020369798	0.003	0	0.001	0.0027527	0.0018	0.2133874	0.176
08/31/95	12:34:58	0.0204912	0.003	0.021372548	0.004	0	0.001	0.0025339	0.0019	0.2243016	0.183
08/31/95	12:39:57	0.0202746	0.003	0.021045905	0.004	0	0.001	0.0026445	0.0019	0.2640104	0.213
08/31/95	12:44:58	0.0197309	0.003	0.020392257	0.003	0	0.001	0.0028659	0.0019	0.2681857	0.216
08/31/95	12:49:57	0.0196279	0.003	0.020510006	0.003	0	0.001	0.002867	0.0019	0.2326673	0.193
08/31/95	12:54:57	0.019966	0.003	0.021179381	0.004	0	0.001	0.0026474	0.0019	0.2613227	0.206
08/31/95	12:59:58	0.0188733	0.003	0.019866586	0.003	0	0.001	0.0030904	0.0018	0.2227265	0.182
08/31/95	13:04:58	0.0186662	0.003	0.019549789	0.003	0	0.0009	0.0032031	0.0017	0	0.137
08/31/95	13:09:57	0.0203192	0.003	0.021423531	0.004	0	0.001	0.0026503	0.0019	0.2268244	0.184
08/31/95	13:14:57	0.0197707	0.003	0.020875199	0.003	0	0.001	0.0026508	0.0019	0.2428813	0.197
08/31/95	13:19:58	0.0199879	0.003	0.020981808	0.004	0	0.001	0.0026503	0.0019	0.282371	0.226
08/31/95	13:24:58	0.0199176	0.003	0.021356077	0.004	0	0.0011	0.0026557	0.002	0.2454289	0.197
08/31/95	13:29:58	0.0186867	0.003	0.019792452	0.003	0	0.001	0.003096	0.0019	0.2412689	0.2
08/31/95	13:34:58	0.0188111	0.003	0.020028238	0.004	0	0.001	0.0030983	0.0019	0.2414454	0.197
08/31/95	13:39:59	0.0185863	0.003	0.019913945	0.003	0	0.001	0.0032084	0.0019	0.2169514	0.182
08/31/95	13:44:59	0.0186936	0.003	0.019910305	0.003	0	0.001	0.0030972	0.0019	0.2435694	0.201
08/31/95	13:49:58	0.0180365	0.003	0.019364319	0.003	0	0.001	0.0034303	0.0019	0.2236302	0.185
08/31/95	13:54:59	0.0170499	0.003	0.018710652	0.003	0	0.001	0.0037643	0.0018	0.2187707	0.18
08/31/95	13:59:59	0.0184994	0.003	0.020160975	0.004	0	0.001	0.0032125	0.0019	0.2451442	0.196
08/31/95	14:04:59	0.0185095	0.003	0.020172017	0.004	0	0.0011	0.0031034	0.002	0.2059319	0.173
08/31/95	14:10:00	0.0214068	0.003	0.023181475	0.004	0	0.0011	0	0.0021	0.235475	0.19
08/31/95	14:15:00	0.0191885	0.003	0.020852236	0.004	0	0.0011	0.0028838	0.002	0.2669752	0.213
08/31/95	14:19:59	0.018873	0.003	0.020538276	0.004	0	0.0011	0.0029975	0.002	0.2421296	0.195
08/31/95	14:24:59	0.0202126	0.003	0.021989517	0.004	0	0.0011	0	0.0021	0.2471044	0.193
08/31/95	14:30:00	0.0194281	0.003	0.021093364	0.004	0	0.001	0.0025534	0.0019	0.2208142	0.177
08/31/95	14:35:00	0.0194352	0.003	0.020878935	0.004	0	0.0011	0.0026654	0.002	0.2294462	0.184
08/31/95	14:39:59	0.0195534	0.003	0.021108739	0.004	0	0.0011	0.0025553	0.002	0.2108652	0.173
08/31/95	14:44:59	0.0201162	0.003	0.021783261	0.004	0	0.0011	0.0024451	0.002	0.2619548	0.21
08/31/95	14:50:00	0.0204533	0.003	0.021898386	0.004	0	0.0011	0	0.002	0.2188727	0.181
08/31/95	14:55:00	0.0195676	0.003	0.022013551	0.004	0	0.0011	0.002446	0.002	0.3004071	0.216
08/31/95	14:59:59	0.0196788	0.003	0.021457653	0.004	0	0.0011	0.0025571	0.002	0.245818	0.194
08/31/95	15:04:59	0.0212509	0.003	0.023809855	0.004	0	0.0011	0	0.0021	0.2147337	0.173
08/31/95	15:10:00	0.0205833	0.003	0.022252201	0.004	0	0.0011	0	0.0021	0.2314229	0.187
08/31/95	15:14:59	0.0219344	0.003	0.023715836	0.004	0	0.0012	0	0.0022	0.2065393	0.17
08/31/95	15:19:59	0.0201677	0.003	0.021727583	0.004	0	0.0011	0.0023399	0.002	0.2004509	0.166
08/31/95	15:25:00	0.0203942	0.003	0.021842974	0.004	0	0.0011	0	0.002	0.204945	0.168
08/31/95	15:30:00	0.0194991	0.003	0.020836195	0.004	0	0.001	0.0025627	0.0019	0.2187243	0.174
08/31/95	15:35:00	0.0207323	0.003	0.022292798	0.004	0	0.0011	0	0.002	0.196511	0.164
08/31/95	15:40:01	0.0215204	0.003	0.023192932	0.004	0	0.0011	0	0.0021	0.2327099	0.183
08/31/95	15:45:01	0.0214322	0.003	0.022994946	0.004	0	0.0011	0	0.0021	0.2077359	0.17

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	15:50:01	0.0217631	0.003	0.023213987	0.004	0	0.0011	0	0.0021	0.2204213	0.178
08/31/95	15:55:02	0.0213128	0.003	0.022763434	0.004	0	0.0011	0	0.0021	0.2432563	0.194
08/31/95	16:00:01	0.0203122	0.003	0.021651507	0.004	0	0.0011	0	0.002	0.2510012	0.197
08/31/95	16:05:01	0.0200927	0.003	0.021543809	0.004	0	0.0011	0.0023441	0.002	0.2502654	0.194
08/31/95	16:10:02	0.0208931	0.003	0.022569033	0.004	0	0.0011	0	0.0021	0.2230089	0.178
08/31/95	16:15:01	0.0205392	0.003	0.022101939	0.004	0	0.0011	0	0.002	0.2607582	0.201
08/31/95	16:20:01	0.019437	0.003	0.022006266	0.004	0	0.0011	0	0.002	0.2578196	0.187
08/31/95	16:25:02	0.0193324	0.003	0.02100865	0.004	0	0.001	0.0025702	0.0019	0.2211496	0.178
08/31/95	16:30:02	0.0179817	0.003	0.019545292	0.004	0	0.001	0.0032389	0.0019	0.2377824	0.189
08/31/95	16:35:03	0.019563	0.003	0.021239842	0.004	0	0.0011	0.0025711	0.002	0.2855082	0.221
08/31/95	16:40:03	0.0198948	0.003	0.022688983	0.004	0	0.0011	0	0.002	0.2723796	0.196
08/31/95	16:45:02	0.0182215	0.003	0.019674801	0.003	0	0.001	0.0031301	0.0019	0.2500712	0.196
08/31/95	16:50:02	0.0185636	0.003	0.020129247	0.003	0	0.001	0.0029076	0.0019	0.2661534	0.206
08/31/95	16:55:03	0.018567	0.003	0.020132892	0.003	0	0.001	0.0030199	0.0019	0.2568062	0.199
08/31/95	17:00:02	0.0186789	0.003	0.021027688	0.004	0	0.001	0.0025725	0.0019	0.3068029	0.215
08/31/95	17:05:02	0.0195736	0.003	0.020915838	0.004	0	0.001	0.0024607	0.0019	0.2660897	0.207
08/31/95	17:10:03	0.0174453	0.003	0.018899126	0.003	0	0.0009	0.0033549	0.0018	0.2548586	0.196
08/31/95	17:15:02	0.018567	0.003	0.020021043	0.003	0	0.001	0.0030199	0.0019	0.2695571	0.206
08/31/95	17:20:02	0.0219185	0.003	0.0249379	0.004	0	0.0011	0	0.0021	0.3078656	0.233
08/31/95	17:25:03	0.0195666	0.003	0.021020073	0.003	0	0.001	0.0025716	0.0019	0.2458678	0.191
08/31/95	17:30:03	0.0224736	0.003	0.024374339	0.004	0	0.0012	0	0.0021	0.2914858	0.226
08/31/95	17:35:02	0.0229293	0.003	0.024495184	0.004	0	0.0011	0	0.0021	0.2630716	0.213
08/31/95	17:40:03	0.0241684	0.003	0.025734855	0.004	0	0.0012	0	0.0022	0.2628312	0.211
08/31/95	17:45:03	0.0255157	0.004	0.027418179	0.004	0	0.0013	0	0.0023	0.2777629	0.225
08/31/95	17:50:02	0.0241596	0.003	0.025949236	0.004	0	0.0012	0	0.0022	0	0.485
08/31/95	17:55:03	0.0232522	0.003	0.025264399	0.004	0	0.0012	0	0.0022	0.2376642	0.193
08/31/95	18:00:03	0.0213247	0.003	0.023111043	0.004	0	0.0011	0	0.002	0.2283192	0.184
08/31/95	18:05:02	0.0200893	0.003	0.022098192	0.004	0	0.0011	0.0024554	0.002	0.2183034	0.176
08/31/95	18:10:02	0.0213209	0.003	0.022995361	0.004	0	0.0011	0	0.002	0.2230327	0.181
08/31/95	18:15:03	0.0226522	0.003	0.024214472	0.004	0	0.0011	0	0.0021	0.2146942	0.182
08/31/95	18:20:02	0.0277246	0.004	0.02928338	0.004	0	0.0013	0	0.0024	0.2292566	0.186
08/31/95	18:25:02	0.0293626	0.004	0.030808519	0.005	0	0.0014	0	0.0025	0.2311195	0.194
08/31/95	18:30:04	0.0291191	0.004	0.030341641	0.005	0	0.0013	0	0.0025	0.237176	0.196
08/31/95	18:35:02	0.0288757	0.004	0.029875267	0.005	0	0.0013	0	0.0025	0.2458879	0.212
08/31/95	18:40:02	0.0290872	0.004	0.030530482	0.005	0	0.0013	0	0.0025	0.3103007	0.246
08/31/95	18:45:03	0.0299479	0.004	0.031057093	0.005	0	0.0014	0	0.0026	0.3354166	0.277
08/31/95	18:50:03	0.0298152	0.004	0.031145238	0.005	0	0.0014	0	0.0026	0.3406026	0.285
08/31/95	18:55:04	0.0298043	0.004	0.030690666	0.005	0	0.0014	0	0.0026	0.3874558	0.311
08/31/95	19:00:04	0.0300149	0.004	0.03156549	0.005	0	0.0014	0	0.0026	0.3864281	0.309
08/31/95	19:05:03	0.030325	0.004	0.031874419	0.005	0	0.0014	0	0.0026	0	0.614
08/31/95	19:10:03	0.0292912	0.004	0.030507102	0.005	0	0.0014	0	0.0026	0.5082306	0.416
08/31/95	19:15:04	0.0288333	0.004	0.029717093	0.005	0	0.0014	0	0.0025	0.42322	0.355
08/31/95	19:20:03	0.0283758	0.004	0.029259096	0.005	0	0.0013	0	0.0025	0.3904157	0.327
08/31/95	19:25:03	0.0289066	0.004	0.030340927	0.005	0	0.0013	0	0.0025	0.4076717	0.297
08/31/95	19:30:04	0.0290063	0.004	0.030329784	0.005	0	0.0013	0	0.0025	0.3918608	0.29
08/31/95	19:35:04	0.0293372	0.004	0.030770945	0.005	0	0.0014	0	0.0025	0.6336168	0.553
08/31/95	19:40:05	0.0296626	0.004	0.030985832	0.005	0	0.0014	0	0.0026	0.6338312	0.548
08/31/95	19:45:05	0.0298722	0.004	0.030974445	0.005	0	0.0014	0	0.0026	0	0.53
08/31/95	19:50:04	0.0294258	0.004	0.030527916	0.005	0	0.0013	0	0.0025	0.4636496	0.335
08/31/95	19:55:04	0.029415	0.004	0.030406523	0.005	0	0.0014	0	0.0025	0.6083508	0.539
Run 19											
08/31/95	20:49:52	0	0.003	0	0.003	0	0.001	0.0082262	0.0019	0.4051665	0.287
08/31/95	20:54:52	0	0.003	0	0.004	0	0.001	0.0083297	0.0019	0.4175809	0.301
08/31/95	20:59:52	0	0.003	0	0.004	0.00142403	0.0011	0.0085442	0.002	0.4226072	0.302
08/31/95	21:04:53	0	0.003	0	0.004	0.0016425	0.0011	0.0088695	0.002	0.3767894	0.27
08/31/95	21:09:53	0	0.003	0	0.004	0.00164311	0.001	0.0089823	0.0019	0.3804342	0.277
08/31/95	21:14:53	0	0.003	0	0.004	0.00164311	0.001	0.0088728	0.0019	0.3838299	0.272
08/31/95	21:19:54	0	0.003	0	0.004	0.00164189	0.001	0.0089757	0.0019	0.3729284	0.265
08/31/95	21:24:54	0	0.003	0	0.004	0.00164098	0.001	0.0090801	0.0019	0.3440588	0.253
08/31/95	21:29:55	0	0.003	0	0.003	0.00164098	0.001	0.0090801	0.0019	0.332572	0.25
08/31/95	21:34:55	0	0.003	0	0.003	0.00164098	0.001	0.0090801	0.0018	0.3213039	0.24
08/31/95	21:39:54	0	0.003	0	0.003	0.00164189	0.001	0.0090851	0.0018	0.3164473	0.236

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/31/95	21:44:54	0	0.003	0	0.003	0.00175038	0.001	0.0090801	0.0018	0.335745	0.248
08/31/95	21:49:55	0	0.003	0	0.003	0.00164007	0.001	0.0090751	0.0018	0.3406974	0.25
08/31/95	21:54:55	0	0.003	0	0.003	0.00174844	0.001	0.00907	0.0018	0.3343886	0.252
08/31/95	21:59:54	0	0.003	0	0.003	0.00163613	0.001	0.0090532	0.0019	0.3337697	0.258
08/31/95	22:04:54	0	0.003	0	0.003	0.00174358	0.001	0.0090448	0.0019	0.3287741	0.249
08/31/95	22:09:55	0	0.003	0	0.003	0.00163309	0.001	0.0090364	0.0019	0.3293396	0.254
08/31/95	22:14:55	0	0.003	0	0.004	0.00174034	0.001	0.009028	0.0019	0.3392579	0.256
08/31/95	22:19:54	0	0.003	0	0.004	0.0017384	0.001	0.0089093	0.0019	0.3293179	0.255
08/31/95	22:24:55	0	0.003	0	0.004	0.00184602	0.001	0.0090129	0.0019	0.3157773	0.241
08/31/95	22:29:55	0	0.003	0	0.003	0.00173613	0.001	0.0088977	0.0019	0.2832064	0.223
08/31/95	22:34:54	0	0.003	0	0.003	0.00162823	0.001	0.008901	0.0018	0.2722401	0.21
08/31/95	22:39:55	0	0.003	0	0.003	0.00152053	0.0009	0.008906	0.0018	0.2562096	0.203
08/31/95	22:44:56	0	0.003	0	0.003	0.00141271	0.001	0.0088022	0.0018	0.2775425	0.215
08/31/95	22:49:56	0	0.003	0	0.003	0.00130379	0.001	0.0088006	0.0018	0.2773821	0.216
08/31/95	22:54:55	0	0.003	0	0.003	0.00141244	0.001	0.0088006	0.0018	0.2798811	0.214
08/31/95	22:59:55	0	0.003	0	0.003	0.00152109	0.001	0.0089093	0.0018	0.3103029	0.237
08/31/95	23:04:55	0	0.003	0	0.003	0.00151996	0.001	0.0087941	0.0018	0.3422093	0.259
08/31/95	23:09:56	0	0.003	0	0.003	0.00162762	0.001	0.0087892	0.0019	0.3539537	0.275
08/31/95	23:14:55	0	0.003	0	0.004	0.00151798	0.001	0.0087826	0.0019	0.3675682	0.283
08/31/95	23:19:56	0	0.003	0	0.004	0.00151656	0.001	0.0087744	0.0019	0.3529261	0.269
08/31/95	23:24:56	0	0.003	0	0.003	0.001516	0.001	0.0087711	0.0019	0.347813	0.267
08/31/95	23:29:55	0	0.003	0	0.004	0.00151458	0.001	0.0087629	0.0019	0.3811332	0.297
08/31/95	23:34:55	0	0.003	0	0.004	0.00151373	0.0011	0.008758	0.002	0.3919478	0.303
08/31/95	23:39:56	0	0.003	0	0.004	0.00140482	0.0011	0.0087531	0.002	0.414637	0.32
08/31/95	23:44:56	0	0.003	0	0.004	0.00129675	0.0011	0.008645	0.002	0.4305222	0.331
08/31/95	23:49:55	0	0.003	0	0.003	0.00118958	0.001	0.0086515	0.0019	0.3491963	0.277
08/31/95	23:54:55	0	0.003	0	0.003	0	0.001	0.0086645	0.0018	0.3082381	0.235
08/31/95	23:59:56	0	0.003	0	0.003	0	0.001	0.0085546	0.0018	0.3098048	0.235
09/01/95	00:04:56	0	0.003	0	0.003	0	0.001	0.0085498	0.0019	0.323592	0.25
09/01/95	00:09:56	0	0.003	0	0.003	0	0.001	0.0086499	0.0019	0.3245887	0.254
09/01/95	00:14:57	0	0.003	0	0.003	0	0.001	0.008537	0.0018	0.3118711	0.242
09/01/95	00:19:57	0	0.003	0	0.003	0	0.001	0.0085338	0.0018	0.3185578	0.247
09/01/95	00:24:57	0	0.003	0	0.003	0	0.001	0.0086353	0.0019	0.3288972	0.249
09/01/95	00:29:56	0	0.003	0	0.003	0	0.001	0.0085226	0.0019	0.3106961	0.24
09/01/95	00:34:56	0	0.003	0	0.004	0	0.001	0.0085162	0.0019	0.3071211	0.236
09/01/95	00:39:57	0	0.003	0	0.004	0	0.001	0.0085098	0.0019	0.330373	0.253
09/01/95	00:44:57	0	0.003	0	0.003	0	0.001	0.0084005	0.0019	0.337419	0.259
09/01/95	00:49:56	0	0.003	0	0.003	0	0.001	0.0084052	0.0019	0.3406266	0.26
09/01/95	00:54:56	0	0.003	0	0.003	0	0.001	0.0084036	0.0019	0.3427174	0.257
09/01/95	00:59:57	0	0.003	0	0.003	0	0.001	0.008399	0.0019	0.3447879	0.256
09/01/95	01:04:57	0	0.003	0	0.003	0	0.001	0.0082928	0.0019	0.3426987	0.256
09/01/95	01:09:57	0	0.003	0	0.003	0	0.001	0.008296	0.0019	0.3268821	0.247
09/01/95	01:14:57	0	0.003	0	0.003	0	0.001	0.0083022	0.0018	0.3158065	0.24
09/01/95	01:19:58	0	0.003	0	0.003	0	0.001	0.0084116	0.0019	0.3349536	0.25
09/01/95	01:24:58	0	0.003	0	0.004	0	0.001	0.0084068	0.0019	0.3526565	0.272
09/01/95	01:29:58	0	0.003	0	0.004	0	0.0011	0.0083942	0.002	0.3821523	0.29
09/01/95	01:34:58	0	0.003	0	0.004	0	0.0011	0.0083895	0.002	0.419044	0.31
09/01/95	01:39:59	0	0.003	0	0.004	0	0.0011	0.0083895	0.002	0.4297998	0.325
09/01/95	01:44:59	0	0.003	0	0.004	0	0.0011	0.0083864	0.002	0.4196422	0.315
09/01/95	01:49:58	0	0.003	0	0.004	0	0.0011	0.0083895	0.002	0.4207682	0.317
09/01/95	01:54:58	0	0.003	0	0.004	0	0.001	0.008388	0.0019	0.4277866	0.319
09/01/95	01:59:59	0	0.003	0	0.004	0	0.0011	0.0083895	0.002	0.4110879	0.302
09/01/95	02:04:59	0	0.003	0	0.004	0	0.0011	0.0083895	0.002	0.4236723	0.32
09/01/95	02:09:59	0	0.003	0	0.004	0	0.001	0.0083864	0.0019	0.403192	0.304
09/01/95	02:14:58	0	0.003	0	0.004	0	0.001	0.0083801	0.0019	0.4311445	0.327
09/01/95	02:19:58	0	0.003	0	0.004	0	0.0011	0.0083816	0.002	0.4228406	0.322
09/01/95	02:24:59	0	0.003	0	0.004	0	0.0011	0.0083769	0.002	0.4452621	0.337
09/01/95	02:29:59	0	0.003	0	0.004	0	0.001	0.0083769	0.0019	0.413473	0.319
09/01/95	02:34:59	0	0.003	0	0.004	0	0.001	0.0083737	0.0019	0.4314602	0.321
09/01/95	02:39:59	0	0.003	0	0.004	0	0.001	0.008257	0.0019	0.432259	0.33
09/01/95	02:45:00	0	0.003	0	0.004	0	0.001	0.0082523	0.0019	0.4590219	0.342
09/01/95	02:50:00	0	0.003	0	0.004	0	0.001	0.008257	0.0019	0.4136004	0.32

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/01/95	02:55:00	0	0.003	0	0.003	0	0.001	0.0081559	0.0018	0.3791426	0.29
09/01/95	02:59:59	0	0.003	0	0.003	0	0.001	0.0082632	0.0018	0.3617577	0.279
09/01/95	03:04:59	0	0.003	0	0.003	0	0.001	0.0081498	0.0018	0.3643801	0.278
09/01/95	03:09:59	0	0.003	0	0.003	0	0.001	0.0082554	0.0019	0.3674205	0.284
09/01/95	03:15:00	0	0.003	0	0.004	0	0.001	0.0082586	0.0019	0.3765686	0.287
09/01/95	03:20:00	0	0.003	0	0.003	0	0.001	0.008257	0.0019	0.3800362	0.294
09/01/95	03:24:59	0	0.003	0	0.003	0	0.001	0.0081498	0.0018	0.3888294	0.309
09/01/95	03:29:59	0	0.003	0	0.003	0	0.001	0.0080456	0.0018	0.3944471	0.304
09/01/95	03:34:59	0	0.003	0	0.003	0	0.001	0.0079413	0.0018	0.4276489	0.332
09/01/95	03:40:00	0	0.003	0	0.003	0	0.001	0.0080486	0.0018	0.478516	0.369
09/01/95	03:45:00	0	0.003	0	0.003	0	0.001	0.0080456	0.0018	0.4725427	0.37
09/01/95	03:49:59	0	0.003	0	0.003	0	0.0009	0.0080425	0.0018	0.5557922	0.439
09/01/95	03:54:59	0	0.003	0	0.003	0	0.001	0.0080395	0.0018	0.5817376	0.448
09/01/95	04:00:00	0	0.003	0	0.003	0	0.0009	0.0080395	0.0018	0.563086	0.451
09/01/95	04:05:00	0	0.003	0	0.003	0	0.0009	0.0080334	0.0017	0.6183591	0.482
09/01/95	04:10:00	0	0.003	0	0.003	0	0.0009	0.0079248	0.0016	0.6496203	0.502
09/01/95	04:14:59	0	0.003	0	0.003	0	0.001	0.0080319	0.0018	0.6303437	0.486
09/01/95	04:19:59	0	0.003	0	0.003	0	0.001	0.0078207	0.0018	0.5882646	0.452
09/01/95	04:25:00	0	0.003	0	0.004	0	0.001	0.0079248	0.0019	0.569087	0.446
09/01/95	04:30:00	0	0.003	0	0.003	0	0.001	0.0079203	0.0018	0.5513183	0.432
09/01/95	04:35:00	0	0.003	0	0.003	0	0.001	0.0078089	0.0018	0.6018166	0.459
09/01/95	04:39:59	0	0.003	0	0.003	0	0.001	0.0078118	0.0018	0.5293838	0.407
09/01/95	04:44:59	0	0.003	0	0.003	0	0.001	0.0077019	0.0018	0.5000876	0.402
09/01/95	04:50:00	0	0.003	0	0.003	0	0.001	0.0078103	0.0019	0.5308886	0.412
09/01/95	04:55:00	0	0.003	0	0.003	0	0.001	0.0078148	0.0018	0.5425373	0.417
09/01/95	05:00:00	0	0.003	0	0.003	0	0.001	0.0077077	0.0018	0.5394328	0.422
09/01/95	05:04:59	0	0.003	0	0.003	0	0.001	0.0077048	0.0018	0.5687639	0.432
09/01/95	05:09:59	0	0.003	0	0.003	0	0.001	0.0077033	0.0018	0.4751463	0.369
09/01/95	05:15:00	0	0.003	0	0.003	0	0.001	0.0077004	0.0018	0.4935759	0.377
09/01/95	05:20:00	0	0.003	0	0.003	0	0.001	0.0077004	0.0018	0.4986026	0.382
09/01/95	05:25:00	0	0.003	0	0.003	0	0.001	0.0078089	0.0018	0.4598666	0.365
09/01/95	05:29:59	0	0.003	0	0.003	0	0.001	0.0078074	0.0018	0.448229	0.355
09/01/95	05:34:59	0	0.003	0	0.003	0	0.001	0.0078059	0.0018	0.4676055	0.369
09/01/95	05:40:00	0	0.003	0	0.003	0	0.001	0.0078044	0.0018	0.4908233	0.39
09/01/95	05:45:00	0	0.003	0	0.003	0	0.001	0.0078059	0.0018	0.459158	0.367
09/01/95	05:50:00	0	0.003	0	0.003	0	0.0009	0.0078044	0.0018	0.4431415	0.384
09/01/95	05:54:59	0	0.003	0	0.003	0	0.0009	0.0078015	0.0018	0.4471416	0.393
09/01/95	05:59:59	0	0.003	0	0.003	0	0.001	0.0078015	0.0018	0.4439356	0.38
09/01/95	06:05:00	0	0.003	0	0.003	0	0.001	0.0078	0.0018	0.4265419	0.362
09/01/95	06:10:00	0	0.003	0	0.003	0	0.0009	0.0076873	0.0018	0.4250443	0.368
09/01/95	06:15:00	0	0.003	0	0.003	0	0.0009	0.0077882	0.0017	0.4305898	0.371
09/01/95	06:19:59	0	0.003	0	0.003	0	0.0009	0.00768	0.0017	0.4069347	0.353
09/01/95	06:24:59	0	0.003	0	0.003	0	0.0009	0.0076844	0.0017	0.3978811	0.347
09/01/95	06:29:59	0	0.003	0	0.003	0	0.0009	0.0076859	0.0017	0.4127945	0.355
09/01/95	06:35:00	0	0.003	0	0.003	0	0.0009	0.0077911	0.0017	0.422215	0.368
09/01/95	06:40:00	0.0028795	0.003	0	0.003	0	0.0009	0.0076786	0.0017	0.4795907	0.42
09/01/95	06:44:59	0	0.003	0	0.003	0	0.0009	0.0077823	0.0017	0.4209884	0.368
09/01/95	06:49:59	0	0.003	0	0.003	0	0.0009	0.0077823	0.0017	0.4472135	0.391
09/01/95	06:55:00	0	0.003	0	0.003	0	0.001	0.0077808	0.0018	0.4705776	0.412
09/01/95	07:00:00	0	0.003	0	0.003	0	0.001	0.0077778	0.0018	0.4772178	0.42
09/01/95	07:05:00	0	0.003	0	0.003	0	0.001	0.0077778	0.0018	0.4783898	0.419
09/01/95	07:09:59	0	0.003	0	0.003	0	0.001	0.0077823	0.0018	0.4727991	0.409
09/01/95	07:14:59	0	0.003	0	0.003	0	0.001	0.0077837	0.0018	0.4997587	0.436
09/01/95	07:20:00	0	0.003	0	0.003	0	0.0009	0.0077837	0.0018	0.5098882	0.442
09/01/95	07:25:00	0	0.003	0	0.003	0	0.0009	0.007775	0.0018	0.5324253	0.466
09/01/95	07:30:00	0	0.003	0	0.003	0	0.001	0.0077735	0.0018	0.5218885	0.459
09/01/95	07:35:00	0	0.003	0	0.003	0	0.0009	0.007775	0.0018	0.5157038	0.465
09/01/95	07:40:01	0.0031976	0.003	0	0.003	0	0.001	0.0076743	0.0018	0.5460466	0.467
09/01/95	07:45:01	0.003197	0.003	0	0.003	0	0.0009	0.0076728	0.0017	0.5178093	0.454
09/01/95	07:50:02	0.0034108	0.003	0	0.003	0	0.0009	0.0076743	0.0017	0.5955031	0.511
09/01/95	07:55:01	0.0034121	0.003	0	0.003	0	0.0009	0.0076772	0.0017	0.618974	0.533
09/01/95	08:00:01	0.0038415	0.003	0	0.003	0	0.001	0.0075763	0.0018	0.5810286	0.501

Midwest Beef

Site: Beef processin											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/01/95	08:05:01	0.0041648	0.003	0	0.003	0	0.0009	0.0075821	0.0017	0.5187838	0.451
09/01/95	08:10:02	0.0041672	0.003	0	0.003	0	0.0009	0.0075864	0.0016	0.5267718	0.451
09/01/95	08:15:02	0.0042741	0.003	0	0.003	0	0.0009	0.0074796	0.0016	0.5090399	0.429
09/01/95	08:20:01	0.0043826	0.002	0	0.003	0	0.0008	0.0073755	0.0016	0.5024984	0.429
09/01/95	08:25:01	0.0042757	0.002	0	0.003	0	0.0008	0.0072686	0.0015	0.475241	0.412
09/01/95	08:30:01	0.0057776	0.003	0	0.003	0	0.0009	0.0072755	0.0017	0.4878877	0.411
09/01/95	08:35:02	0.0063221	0.003	0	0.003	0	0.0009	0.0070722	0.0017	0.483482	0.399
09/01/95	08:40:02	0.0060052	0.002	0	0.003	0	0.0008	0.0071848	0.0015	0.4397771	0.374
09/01/95	08:45:02	0.007946	0.002	0.003328719	0.003	0	0.0008	0.0069796	0.0015	0.3437171	0.289
09/01/95	08:50:02	0.0096749	0.003	0.00483747	0.003	0	0.0009	0.0063425	0.0016	0.402155	0.337
09/01/95	08:55:03	0.0104197	0.002	0.005585807	0.003	0	0.0008	0.0061229	0.0015	0.3714561	0.301
09/01/95	09:00:06	0.0108473	0.002	0.006229151	0.003	0	0.0008	0.005907	0.0015	0.3864221	0.314
09/01/95	09:05:02	0.011395	0.002	0.007095013	0.003	0	0.0008	0.00559	0.0016	0.4047382	0.336
09/01/95	09:10:02	0.0118384	0.002	0.007963986	0.003	0	0.0008	0.0053811	0.0014	0.3781817	0.31
09/01/95	09:15:03	0.0120627	0.002	0.007970025	0.003	0	0.0008	0.0053852	0.0014	0.4354434	0.346
09/01/95	09:20:03	0.0115372	0.002	0.007547697	0.003	0	0.0008	0.005499	0.0014	0.4351787	0.356
09/01/95	09:25:03	0.0116537	0.002	0.007553354	0.003	0	0.0008	0.0056111	0.0014	0.4140317	0.335
09/01/95	09:30:02	0.0106886	0.002	0.006909802	0.003	0	0.0008	0.0059381	0.0015	0.4267882	0.338
09/01/95	09:35:04	0.0108067	0.002	0.007132399	0.003	0	0.0009	0.0060517	0.0016	0.437778	0.361
09/01/95	09:40:03	0.0083367	0.002	0.004980358	0.003	0	0.0008	0.006063	0.0014	0.3737434	0.303
09/01/95	09:45:03	0.0048785	0.002	0	0.003	0	0.0007	0.0069382	0.0014	0.3661008	0.299
09/01/95	09:50:02	0.0035835	0.002	0	0.003	0	0.0008	0.0073842	0.0015	0.4061336	0.324
09/01/95	09:55:02	0.003262	0.002	0	0.003	0	0.0008	0.0075026	0.0015	0.3718678	0.301
09/01/95	10:00:03	0.0030502	0.003	0	0.003	0	0.0009	0.0076255	0.0016	0.3794216	0.302
09/01/95	10:05:03	0.0027274	0.002	0	0.003	0	0.0009	0.007855	0.0016	0.3820573	0.306
09/01/95	10:10:03	0.0030575	0.002	0	0.003	0	0.0009	0.0079714	0.0016	0.3518356	0.287
09/01/95	10:15:03	0	0.003	0	0.003	0	0.0009	0.0080806	0.0016	0.3451745	0.279
09/01/95	10:20:04	0	0.003	0	0.003	0	0.0009	0.0080866	0.0016	0.3643351	0.293
09/01/95	10:25:04	0	0.003	0	0.003	0	0.0009	0.0080896	0.0016	0.3638139	0.295
09/01/95	10:30:04	0	0.003	0	0.003	0	0.0009	0.0081001	0.0016	0.3395464	0.275
09/01/95	10:35:04	0	0.003	0	0.003	0	0.0009	0.0081061	0.0016	0.336949	0.272

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 20											
09/05/95	20:49:50	14724.963	216.7	510.47	48.77	0.00058856	0.0006	4.9932	0.298	0	0.017
09/05/95	20:54:51	14698.6124	422.8	505.86	48.57	0.00058844	0.0006	5.5476	0.298	0	0.017
09/05/95	20:59:51	14615.0684	345.6	520.20	48.92	0.00058802	0.0006	15.9470	0.309	0	0.017
09/05/95	21:04:51	14415.5168	290.3	498.72	48.72	0.00058788	0.0006	12.6610	0.307	0	0.017
09/05/95	21:09:52	14452.9239	272.7	487.65	48.53	0.00058777	0.0006	3.1750	0.299	0	0.017
09/05/95	21:14:53	14258.6101	252.9	501.67	48.76	0.00058743	0.0006	14.4927	0.309	0	0.017
09/05/95	21:19:52	14108.0901	248.5	491.40	48.66	0.00058698	0.0006	9.6199	0.304	0	0.017
09/05/95	21:24:52	14328.3106	244.5	495.90	48.7	0	0.0006	7.6523	0.306	0	0.017
09/05/95	21:29:52	14297.5873	235.3	499.33	48.83	0.00058687	0.0006	7.2411	0.307	0	0.017
09/05/95	21:34:52	14217.9963	242.3	500.41	48.97	0.00058664	0.0006	7.8603	0.31	0	0.017
09/05/95	21:39:51	14068.2475	239.6	494.05	48.82	0.00058653	0.0006	10.1379	0.311	0	0.017
09/05/95	21:44:51	13988.4461	238.3	498.95	48.58	0	0.0006	15.3924	0.318	0	0.017
09/05/95	21:49:52	13880.073	224.5	499.63	48.83	0.00058608	0.0006	12.9084	0.315	0	0.017
09/05/95	21:54:52	13909.899	215.6	505.98	48.96	0.00058586	0.0006	5.6963	0.311	0	0.017
09/05/95	21:59:52	13940.6739	220.6	509.69	49.02	0.00058563	0.0006	8.0330	0.316	0	0.017
09/05/95	22:04:51	13625.0374	226.2	498.08	48.78	0.00058552	0.0006	20.3454	0.328	0	0.017
09/05/95	22:09:52	13764.9677	229.4	493.01	48.73	0.00058541	0.0006	3.3122	0.313	0	0.017
09/05/95	22:14:52	13838.0221	218.9	496.52	48.96	0.00058529	0.0006	5.4281	0.318	0	0.017
09/05/95	22:19:52	13494.8668	212.2	502.77	48.74	0	0.0006	32.5980	0.354	0	0.017
09/05/95	22:24:52	13595.5755	214.6	498.56	48.88	0.00058493	0.0006	7.7875	0.319	0	0.017
09/05/95	22:29:53	13784.6846	211.7	499.83	49.04	0.00058482	0.0006	4.0028	0.321	0	0.017
09/05/95	22:34:53	14079.2843	213.3	495.46	49.84	0.00068219	0.0006	2.4500	0.343	0	0.017
09/05/95	22:39:52	13945.33	204.9	506.96	49.84	0.00068206	0.0006	8.0328	0.344	0	0.017
09/05/95	22:44:52	13308.177	200.8	499.27	48.98	0.00058417	0.0006	9.8815	0.323	0	0.017
09/05/95	22:49:53	13238.12	199	499.18	48.81	0.00058383	0.0006	5.0583	0.32	0	0.017
09/05/95	22:54:53	13200.8392	201.7	497.04	48.76	0.00058372	0.0006	4.2820	0.321	0	0.017
09/05/95	22:59:53	13399.8436	201.7	500.73	49.06	0.00058406	0.0006	10.3108	0.336	0	0.017
09/05/95	23:04:55	13381.0143	202.8	508.42	49.42	0.00068101	0.0006	20.4714	0.369	0	0.017
09/05/95	23:09:55	13525.0853	201.2	515.50	49.61	0.00068098	0.0006	19.7663	0.372	0	0.017
09/05/95	23:14:54	13498.6957	196.8	509.76	50.47	0.00068111	0.0006	9.6031	0.376	0	0.018
09/05/95	23:19:54	13359.1214	195.3	507.33	50.04	0.00068098	0.0006	7.0546	0.364	0	0.017
09/05/95	23:24:55	13184.9857	198.6	511.41	49.34	0.00068098	0.0006	13.2589	0.353	0	0.017
09/05/95	23:29:54	13188.9483	201.2	510.05	49.1	0.00058347	0.0006	15.6561	0.35	0	0.017
09/05/95	23:34:54	13424.6702	197.5	517.54	51.43	0.00068071	0.0006	6.8763	0.4	0	0.018
09/05/95	23:39:53	13149.9382	202.7	520.93	49.51	0.00068045	0.0006	13.1996	0.364	0	0.017
09/05/95	23:44:54	12718.4303	202.5	522.95	48.8	0.00058311	0.0006	46.2610	0.414	0	0.017
09/05/95	23:49:54	12893.0498	204.8	501.38	48.66	0.00058288	0.0006	6.1002	0.34	0	0.017
09/05/95	23:54:54	13045.7648	202.4	505.94	49.89	0.00058288	0.0006	4.4079	0.373	0	0.017
09/05/95	23:59:53	12859.8136	206.2	509.34	49.27	0.00067977	0.0006	4.5538	0.357	0	0.017
09/06/95	00:04:53	12691.9605	204.2	500.89	48.81	0.00058243	0.0006	4.5365	0.348	0	0.017
09/06/95	00:09:54	12341.3638	211.3	513.31	48.22	0.00058209	0.0006	21.8110	0.361	0	0.017
09/06/95	00:14:54	12279.9072	210.5	506.42	48.16	0	0.0006	10.3132	0.337	0	0.017
09/06/95	00:19:54	12358.4131	208.7	504.67	48.09	0	0.0006	4.8725	0.337	0	0.017
09/06/95	00:24:53	12064.5087	209.6	515.90	47.95	0	0.0006	17.8377	0.354	0	0.017
09/06/95	00:29:55	12067.0227	205.9	504.36	47.85	0	0.0006	8.7139	0.329	0	0.017
09/06/95	00:34:55	12150.598	208.1	515.80	48.04	0	0.0006	8.1070	0.341	0	0.017
09/06/95	00:39:54	12140.4923	205.1	527.04	48.23	0	0.0006	11.2348	0.363	0	0.017
09/06/95	00:44:54	12227.0564	206.8	518.32	48.66	0.00058162	0.0006	7.7006	0.366	0	0.017
09/06/95	00:49:54	12335.2372	201.5	526.36	53.76	0.00067855	0.0006	7.9166	0.467	0.02491262	0.019
09/06/95	00:54:55	12183.3065	202.5	528.78	50.05	0.00067842	0.0006	12.7978	0.392	0	0.017
09/06/95	00:59:55	12047.9962	209.2	518.70	48.26	0	0.0006	11.4237	0.366	0	0.017
09/06/95	01:04:54	11888.2639	204.3	523.53	47.93	0	0.0006	16.0953	0.369	0	0.017
09/06/95	01:09:54	11522.2164	205.4	518.30	47.73	0.00058094	0.0006	19.3771	0.366	0	0.017
09/06/95	01:14:55	11518.3184	205.2	527.57	47.76	0.00058049	0.0006	46.1249	0.438	0	0.017
09/06/95	01:19:54	11687.9047	204.2	517.29	48.54	0.00058058	0.0006	14.8136	0.393	0	0.017
09/06/95	01:24:54	11817.2775	199.6	532.99	52.08	0.00067773	0.0006	13.4797	0.455	0.02565711	0.018
09/06/95	01:29:54	11677.5673	201.5	536.19	52.87	0.00077455	0.0006	11.9831	0.442	0.02691576	0.018
09/06/95	01:34:54	11278.5005	204.3	530.45	49.38	0.00067734	0.0006	23.8234	0.412	0.0201267	0.017
09/06/95	01:39:55	11737.5883	200.4	527.25	50.81	0.00067757	0.0006	9.1453	0.417	0.02003679	0.018
09/06/95	01:44:54	11569.6471	200.6	563.84	57.2	0.00077437	0.0007	23.8911	0.538	0.04665571	0.02
09/06/95	01:49:54	11496.3046	199.8	544.47	51.89	0.00067708	0.0006	11.9715	0.425	0.02389119	0.018

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	01:54:54	11602.5349	198.7	539.35	57.74	0.00077395	0.0007	7.0592	0.494	0.03705304	0.02
09/06/95	01:59:54	11300.7257	196.5	544.08	63.39	0.00087053	0.0008	10.6059	0.564	0.05078087	0.022
09/06/95	02:04:54	11095.5903	199.8	539.22	54.66	0.00077335	0.0007	33.0335	0.518	0.03895767	0.019
09/06/95	02:09:54	11274.0976	197.5	539.78	54.83	0.00077332	0.0007	25.2067	0.517	0.03934252	0.019
09/06/95	02:14:55	11209.7209	198.5	550.72	62.53	0.00087032	0.0007	13.5710	0.594	0.05192909	0.022
09/06/95	02:19:55	11067.9554	196.5	546.46	54.69	0.00077362	0.0007	14.5300	0.465	0.03374907	0.019
09/06/95	02:24:54	10900.4015	199.9	541.02	50.29	0.00067652	0.0006	28.4119	0.446	0.02454806	0.017
09/06/95	02:29:54	11279.8008	195.9	538.04	54.42	0.00067665	0.0006	9.2009	0.499	0.03035271	0.019
09/06/95	02:34:55	11245.8316	191.7	556.41	64.1	0.00077347	0.0008	9.7445	0.59	0.05356263	0.022
09/06/95	02:39:55	10813.7356	196.4	547.59	55.82	0.00086964	0.0007	19.6528	0.484	0.03797446	0.019
09/06/95	02:44:54	10990.2638	197.9	539.17	52.87	0.00077287	0.0006	7.8927	0.451	0.02637408	0.018
09/06/95	02:49:54	10883.5115	196.3	548.83	56.25	0.00077287	0.0007	10.5152	0.501	0.03825691	0.02
09/06/95	02:54:54	10682.0359	196.2	545.91	53.18	0.00077242	0.0006	12.4179	0.456	0.03176562	0.018
09/06/95	02:59:55	10611.2632	200.4	541.37	50.35	0.00067586	0.0006	9.8576	0.423	0.0235587	0.017
09/06/95	03:04:55	10489.8851	203.3	541.07	49.36	0.00067573	0.0006	15.3164	0.414	0.02181652	0.017
09/06/95	03:09:54	10528.4216	199.4	534.03	48.88	0.00067586	0.0006	10.5382	0.409	0.01795868	0.017
09/06/95	03:14:54	10378.3165	195.6	531.40	49.94	0.00067534	0.0006	13.1686	0.443	0.02363686	0.017
09/06/95	03:19:55	10708.9601	195.8	533.53	53.56	0.00077212	0.0006	4.8270	0.487	0.03271842	0.019
09/06/95	03:24:55	10519.5986	191.5	558.34	60.46	0.00086863	0.0007	25.3162	0.61	0.0572331	0.021
09/06/95	03:29:55	10435.7243	197.1	542.60	55.01	0.00086846	0.0007	13.7470	0.489	0.03811582	0.019
09/06/95	03:34:54	10605.9791	195.4	545.69	55.24	0.00077212	0.0007	8.6481	0.497	0.04015003	0.019
09/06/95	03:39:54	10419.6087	197.4	544.32	56.1	0.00086829	0.0007	13.0419	0.511	0.04100271	0.019
09/06/95	03:44:55	10309.1814	194.9	544.01	55.95	0.00086795	0.0007	11.9945	0.503	0.04002236	0.019
09/06/95	03:49:55	10291.5547	200.6	540.73	53.6	0.00077137	0.0006	9.4134	0.464	0.03413291	0.019
09/06/95	03:54:55	10304.1858	198.7	546.51	53.7	0.00077137	0.0006	13.6485	0.482	0.03808616	0.019
09/06/95	03:59:55	10224.6388	193.3	537.06	54.59	0.00086779	0.0007	10.0772	0.487	0.03673627	0.019
09/06/95	04:04:56	10120.8479	195.1	545.06	54.6	0.00086762	0.0007	23.6259	0.514	0.04530888	0.019
09/06/95	04:09:56	10052.4719	193.3	541.45	57.47	0.00086694	0.0007	20.9281	0.55	0.04739278	0.02
09/06/95	04:14:56	10200.3943	192.8	538.38	60.66	0.00086711	0.0007	7.5714	0.552	0.05144853	0.021
09/06/95	04:19:56	10178.2799	195.3	549.09	64.98	0.00096331	0.0008	12.1172	0.603	0.06223009	0.023
09/06/95	04:24:56	10277.1909	195.6	552.28	69.99	0.0009635	0.0008	8.3603	0.628	0.06677067	0.024
09/06/95	04:29:57	10089.5587	192.9	557.28	73.27	0.00105965	0.0009	19.2589	0.666	0.07465684	0.025
09/06/95	04:34:57	10075.9395	190.4	551.68	71.78	0.00105944	0.0009	6.3296	0.615	0.07030823	0.025
09/06/95	04:39:57	10271.5287	199.6	564.31	78.18	0.00105965	0.0009	5.1609	0.613	0.08515696	0.027
09/06/95	04:44:56	10009.2912	193.4	571.90	84.84	0.00115575	0.001	8.3039	0.679	0.09351957	0.029
09/06/95	04:49:56	9878.01901	192.6	564.85	72.21	0.00105903	0.0009	17.0145	0.625	0.07557596	0.025
09/06/95	04:54:57	9902.92018	192.8	565.09	70.32	0.00105805	0.0008	23.5336	0.63	0.07415936	0.024
09/06/95	04:59:57	10074.324	195	566.19	75.9	0.00105903	0.0009	4.4675	0.642	0.07576851	0.026
09/06/95	05:04:57	9844.71857	192.2	583.31	81.25	0.00115468	0.001	25.2003	0.712	0.09275942	0.028
09/06/95	05:09:56	9876.57501	193.6	572.05	71.85	0.00115508	0.0009	15.7800	0.617	0.0727698	0.025
09/06/95	05:14:56	9712.06881	194.6	581.43	71.2	0.0011544	0.0008	38.8357	0.673	0.08205865	0.025
09/06/95	05:19:56	9889.46171	194.8	559.31	67.97	0.0010582	0.0008	5.4503	0.569	0.06079843	0.024
09/06/95	05:24:57	9919.48662	193.6	573.08	79.07	0.00115463	0.0009	12.0448	0.687	0.08371037	0.027
09/06/95	05:29:57	9557.5347	188.8	564.68	72.14	0.00115418	0.0009	11.6130	0.609	0.07107797	0.025
09/06/95	05:34:57	9822.80269	191.9	563.72	65.72	0.00105799	0.0008	6.0386	0.539	0.06049803	0.023
09/06/95	05:39:57	9703.05699	195.4	574.88	67.89	0.00105799	0.0008	9.8391	0.595	0.06934671	0.024
09/06/95	05:44:58	9896.18056	192.3	558.15	77.42	0.00105784	0.0009	2.8396	0.65	0.07501041	0.027
09/06/95	05:49:58	9822.32179	189.7	585.74	94.85	0.00115418	0.0011	12.7006	0.749	0.11089703	0.033
09/06/95	05:54:58	9518.40839	190.9	583.28	90.86	0.0012492	0.0011	33.6432	0.803	0.10800758	0.031
09/06/95	05:59:57	9633.81507	192	565.31	82.28	0.00115311	0.001	3.7658	0.699	0.084465	0.029
09/06/95	06:04:57	9805.42755	187.9	577.34	94.19	0.00115333	0.0011	3.7905	0.694	0.10245423	0.033
09/06/95	06:09:57	9590.38141	190.8	593.27	102.9	0.0012492	0.0012	14.7303	0.765	0.12386279	0.036
09/06/95	06:14:58	9454.77511	189.5	573.56	87.51	0.00124895	0.001	8.2215	0.711	0.0975145	0.03
09/06/95	06:19:58	9446.33927	188	580.78	81.23	0.0012492	0.001	11.8349	0.694	0.09340157	0.028
09/06/95	06:24:58	9488.4256	189.8	578.45	80.94	0.00115249	0.001	8.8566	0.689	0.08749297	0.028
09/06/95	06:29:58	9693.25158	194	585.10	83.05	0.00115271	0.001	8.4316	0.717	0.09202484	0.029
09/06/95	06:34:58	9519.25463	187.4	605.15	89.72	0.00124853	0.0011	45.3124	0.845	0.11371205	0.031
09/06/95	06:39:58	9668.37221	186.6	578.95	87.76	0.00124877	0.001	4.9070	0.733	0.0956751	0.03
09/06/95	06:44:59	9781.80623	191.1	603.56	109.7	0	0.0013	6.9190	0.783	0.13114659	0.038
09/06/95	06:50:01	9524.50911	190.3	596.45	106.1	0.00134509	0.0013	22.3959	0.765	0.13114659	0.037
09/06/95	06:54:59	9771.51106	195.5	624.82	108.5	0.00134536	0.0013	81.1547	0.871	0.15442762	0.038
09/06/95	07:00:02	9996.15146	197.2	641.72	141.7	0	0.0017	50.5589	0.861	0.19636328	0.049

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	07:04:58	10203.4538	199	662.95	168.9	0	0.002	50.5294	0.846	0.23706346	0.058
09/06/95	07:10:00	10415.9828	204.8	671.92	190.2	0	0.0023	25.8163	0.758	0.26342593	0.066
09/06/95	07:14:59	10503.1831	202.1	668.91	182.9	0	0.0022	35.0170	0.855	0.25687973	0.063
09/06/95	07:19:59	10772.9364	212.9	654.54	164.2	0	0.002	35.8789	1.055	0.26283949	0.057
09/06/95	07:24:59	11007.6339	203	639.88	143	0	0.0017	16.8900	1.128	0.21232448	0.05
09/06/95	07:29:59	11270.5806	198.3	637.49	129.5	0.00155202	0.0015	16.4828	1.103	0.1794524	0.045
09/06/95	07:34:59	11459.813	196.5	636.48	105.1	0.00155382	0.0013	26.2014	0.862	0.14761293	0.036
09/06/95	07:39:59	11713.471	201.5	629.00	91.7	0.00145896	0.0011	26.1319	0.677	0.14998067	0.032
09/06/95	07:44:59	12139.2015	197.9	610.73	71.88	0.00136432	0.0009	14.8696	0.466	0.09374804	0.025
09/06/95	07:50:00	12979.4784	194.4	607.92	75.05	0.00136589	0.0009	9.4749	0.518	0.07561183	0.026
09/06/95	07:55:00	13144.9114	194.7	592.45	73.04	0.00136621	0.0009	4.0310	0.468	0.06460231	0.025
09/06/95	08:00:00	13296.1861	200	574.41	64.3	0.00126887	0.0008	3.7549	0.393	0.04655773	0.022
09/06/95	08:05:00	13423.6822	198.2	554.06	55	0.0010749	0.0007	5.3642	0.349	0.02638379	0.019
09/06/95	08:10:00	13657.1419	200.9	553.31	53.2	0.00097793	0.0006	13.3482	0.349	0.02503493	0.018
09/06/95	08:15:00	13818.231	200.6	541.70	51.84	0.00088098	0.0006	4.4356	0.321	0	0.018
09/06/95	08:20:01	14003.7015	196.4	540.34	51.92	0.00088131	0.0006	3.8317	0.317	0	0.018
09/06/95	08:25:01	14314.0111	193.7	542.15	51.96	0.00088186	0.0006	4.3108	0.315	0	0.018
09/06/95	08:30:01	14380.6525	189	541.80	51.25	0.00088321	0.0006	6.4355	0.311	0	0.018
09/06/95	08:35:00	14852.8106	189.8	543.82	51.34	0.00088489	0.0006	3.5783	0.309	0	0.018
09/06/95	08:40:00	14933.5613	184.1	544.44	51.11	0.00088607	0.0006	2.3995	0.303	0	0.018
09/06/95	08:45:01	15333.9968	184.7	545.10	51.03	0.00088826	0.0006	2.7903	0.304	0	0.018
09/06/95	08:50:01	15514.173	181.9	547.11	51.04	0.00088944	0.0006	2.8225	0.303	0	0.018
09/06/95	08:55:01	15825.0537	183.4	550.02	50.88	0.00089096	0.0006	4.0981	0.299	0	0.018
09/06/95	09:00:00	16265.4996	181.2	553.08	50.64	0.00089319	0.0006	6.9639	0.301	0	0.018
09/06/95	09:05:00	16352.7498	187.4	548.42	50.48	0.00089352	0.0006	2.9890	0.296	0	0.018
09/06/95	09:10:00	16605.2734	196.8	548.05	50.09	0.0008947	0.0006	3.0990	0.291	0	0.017
09/06/95	09:15:01	16737.4314	204.4	546.47	49.83	0.00089504	0.0006	2.9564	0.29	0	0.017
09/06/95	09:20:01	16774.9895	216.1	541.81	49.45	0.00089588	0.0006	2.3864	0.287	0	0.017
09/06/95	09:25:00	17254.1826	224	546.03	49.53	0.00089709	0.0006	4.5755	0.285	0	0.017
09/06/95	09:30:01	16745.5652	247	537.17	48.75	0.00089895	0.0006	2.5778	0.28	0	0.017
09/06/95	09:35:01	17040.4995	249	541.87	49	0.00089962	0.0006	2.9665	0.28	0	0.017
09/06/95	09:40:01	17150.6163	262.4	541.18	48.65	0.00100089	0.0006	3.3459	0.277	0	0.017
09/06/95	09:45:00	16565.4859	284.5	532.47	47.74	0.00090114	0.0006	2.5272	0.272	0	0.017
09/06/95	09:50:01	16753.6714	286.3	533.95	47.53	0.00090347	0.0006	3.1755	0.268	0	0.016
09/06/95	09:55:02	16162.7214	324.3	526.23	46.35	0.00090366	0.0006	8.3906	0.261	0	0.016
09/06/95	10:00:02	15895.4891	339.5	522.31	46.12	0.00090383	0.0006	5.7309	0.258	0	0.016
09/06/95	10:05:01	15753.499	346.3	522.06	45.68	0.00090566	0.0005	5.0176	0.253	0	0.016
09/06/95	10:10:01	14680.51	364.9	516.05	44.62	0.00090481	0.0005	7.0928	0.243	0	0.015
09/06/95	10:15:02	14681.7549	374.4	512.92	44.39	0.00090515	0.0005	6.2186	0.244	0	0.015
09/06/95	10:20:03	14754.871	382.2	521.17	44.76	0.00090515	0.0005	5.0681	0.244	0	0.016
09/06/95	10:25:01	15584.1144	374.5	521.62	45.58	0.00090681	0.0005	4.4740	0.249	0	0.016
09/06/95	10:30:01	15863.7365	372.1	525.33	45.54	0.00090765	0.0005	6.0773	0.245	0	0.016
09/06/95	10:35:02	16027.9583	373.3	529.04	46.21	0.00100981	0.0006	4.1904	0.248	0	0.016
09/06/95	10:40:02	16177.8263	379.8	530.34	46.08	0.00090984	0.0005	5.4969	0.253	0	0.016
09/06/95	10:45:01	16510.4703	381.4	531.56	46.31	0.00101056	0.0006	5.7770	0.248	0	0.016
09/06/95	10:50:01	16350.3932	390.7	531.05	46.03	0.00101094	0.0005	4.6830	0.251	0	0.016
09/06/95	10:55:07	16401.2596	394.9	535.08	46.26	0.00101169	0.0006	4.2922	0.251	0	0.016
09/06/95	11:00:01	16861.8501	390.3	537.91	46.19	0.00101206	0.0006	3.4529	0.251	0	0.016
09/06/95	11:05:01	16535.4548	399.1	537.92	46.09	0.00101131	0.0005	3.4191	0.247	0	0.016
09/06/95	11:10:00	16402.6753	413.6	533.76	45.73	0.00091119	0.0005	6.4741	0.25	0	0.016
09/06/95	11:15:01	16320.4985	415.2	530.52	45.8	0.00091086	0.0005	4.9553	0.253	0	0.016
09/06/95	11:20:01	17090.5109	402.7	542.13	46.15	0.00091268	0.0006	3.8446	0.249	0	0.016
09/06/95	11:25:00	17243.7825	410.1	546.09	46.48	0.00101428	0.0006	4.5606	0.245	0	0.016
09/06/95	11:30:00	17226.5397	417.7	545.38	46.24	0.00101428	0.0006	6.2197	0.249	0	0.016
09/06/95	11:35:02	16718.2373	429.2	538.89	45.66	0.00091268	0.0005	5.9475	0.248	0	0.016
09/06/95	11:40:00	16850.1543	436.2	538.29	45.84	0.00091218	0.0005	5.5333	0.25	0	0.016
09/06/95	11:45:00	17087.2101	430.8	543.55	45.51	0.00091336	0.0005	4.7833	0.244	0	0.016
09/06/95	11:50:00	17154.7566	428	544.05	45.53	0.00091386	0.0005	5.2957	0.246	0	0.016
09/06/95	11:55:01	17130.47	453.4	540.49	45.47	0.00081185	0.0005	4.0155	0.254	0	0.016
09/06/95	12:00:01	17203.1215	437	545.76	45.34	0.00091451	0.0005	5.7265	0.249	0	0.016
09/06/95	12:05:02	17174.8542	439.6	547.29	45.34	0.00091435	0.0005	6.0804	0.251	0	0.016
09/06/95	12:10:02	17571.5936	440.5	549.32	45.74	0.00091401	0.0005	4.3360	0.254	0	0.016

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	12:15:02	17605.1785	444.7	563.14	46.07	0.00091567	0.0005	4.8259	0.248	0	0.016
09/06/95	12:20:03	17443.1451	459	549.50	45.35	0.00081378	0.0005	4.4956	0.248	0	0.016
09/06/95	12:25:03	17289.4207	469.4	548.99	45.53	0.00091651	0.0005	2.4830	0.248	0	0.016
09/06/95	12:30:02	17819.5334	471.5	554.70	45.45	0.00091702	0.0005	4.0297	0.249	0	0.016
09/06/95	12:35:04	18129.5615	467.3	560.20	46.2	0.00091719	0.0006	5.9391	0.255	0	0.016
09/06/95	12:40:02	17351.3595	484.2	550.11	45.42	0.00081438	0.0005	6.9380	0.251	0	0.016
09/06/95	12:45:04	17425.262	481.5	553.15	45.52	0.00081481	0.0005	5.1163	0.252	0	0.016
09/06/95	12:50:03	17362.2299	473.8	555.90	45.16	0.00091716	0.0005	4.0883	0.247	0	0.016
09/06/95	12:55:02	17026.2634	482	548.97	44.95	0.00091767	0.0005	4.2393	0.243	0	0.016
09/06/95	13:00:02	16923.4015	471	549.08	45.18	0.00081496	0.0005	2.5519	0.243	0	0.016
09/06/95	13:05:03	17580.947	471.3	564.26	45.33	0.00071322	0.0005	6.0113	0.257	0	0.016
09/06/95	13:10:03	17206.6063	460.5	560.28	45.61	0.00061244	0.0005	4.1389	0.253	0	0.016
09/06/95	13:15:02	16975.2297	468.8	548.65	45.63	0.0006121	0.0005	8.4883	0.243	0	0.016
09/06/95	13:20:02	17273.9143	469.1	552.11	45.31	0.000613	0.0005	4.4091	0.251	0	0.016
09/06/95	13:25:05	17845.3193	472	557.82	47.77	0	0.0006	7.9032	0.267	0	0.017
09/06/95	13:30:02	17307.3449	470	539.82	49.86	0.00143188	0.0006	5.6708	0.265	0	0.017
09/06/95	13:35:02	16103.1567	473.8	524.88	51.52	0.0019372	0.0006	2.8520	0.268	0	0.018
09/06/95	13:40:03	16657.9394	475.4	538.22	49.29	0	0.0006	2.5503	0.262	0	0.017
09/06/95	13:45:04	16268.8112	463.7	532.32	48.51	0.00683371	0.0006	6.5743	0.261	0	0.017
09/06/95	13:50:02	16248.4121	464.8	530.89	49.9	0.00101996	0.0006	6.2740	0.258	0	0.017
09/06/95	13:55:02	15566.8211	464.8	525.40	50.51	0	0.0006	3.4089	0.25	0	0.018
09/06/95	14:00:03	16320.4421	484.9	523.67	55.47	0.00214619	0.0007	4.2042	0.258	0	0.019
09/06/95	14:05:03	15912.6672	495.1	511.05	56.19	0.0030626	0.0007	4.0664	0.263	0	0.02
09/06/95	14:10:02	16636.8846	483.7	530.38	55.68	0.00583058	0.0007	5.4944	0.256	0	0.019
09/06/95	14:15:03	16336.2871	491.9	525.61	52.83	0.00501949	0.0006	3.8590	0.231	0	0.018
09/06/95	14:20:03	16447.444	496.6	533.31	50.64	0.00511817	0.0006	5.2853	0.217	0	0.018
09/06/95	14:25:04	16364.4959	505.4	532.69	51.71	0.01239052	0.0006	5.5659	0.222	0	0.018
09/06/95	14:30:02	16620.6804	523.2	528.69	58.66	0.00901294	0.0007	6.0785	0.251	0	0.02
09/06/95	14:35:04	16114.7961	547.3	514.41	61.96	0.00593272	0.0007	8.0610	0.255	0	0.021
09/06/95	14:40:03	16106.9376	561.6	501.24	67.29	0.01216559	0.0008	9.1121	0.264	0	0.023
09/06/95	14:45:02	16348.494	583.1	501.05	66.46	0.00163807	0.0008	5.7123	0.267	0	0.023
09/06/95	14:50:02	16423.4453	573.9	510.72	63.72	0.00490881	0.0008	4.4113	0.264	0	0.022
09/06/95	14:55:03	16163.892	527.7	518.08	60.36	0	0.0007	3.2350	0.243	0	0.021
09/06/95	15:00:03	15851.6014	555.8	521.63	55.34	0.00624401	0.0007	7.4711	0.218	0	0.019
09/06/95	15:05:02	16471.3552	579.4	524.89	55.14	0.00727162	0.0007	4.8938	0.225	0	0.019
09/06/95	15:10:03	16286.0422	585	523.52	56.97	0.0038939	0.0007	4.8083	0.241	0	0.02
09/06/95	15:15:03	15298.3846	558.6	507.34	63.69	0.00256131	0.0008	4.2760	0.249	0	0.022
09/06/95	15:20:02	15157.7014	561.6	505.00	63.97	0.00256084	0.0008	5.1230	0.237	0	0.022
09/06/95	15:25:02	15317.3661	566.2	511.83	61.29	0.00440788	0.0007	4.3941	0.236	0	0.021
09/06/95	15:30:03	15405.8653	618.5	498.80	67.33	0.00440777	0.0008	5.4865	0.254	0	0.023
09/06/95	15:35:03	16009.8663	625.4	491.63	70.49	0.01096615	0.0008	7.0158	0.271	0	0.024
09/06/95	15:40:02	15670.6181	614.6	490.53	67.52	0.00727394	0.0008	7.6081	0.273	0	0.023
09/06/95	15:45:03	15413.5445	615.3	469.66	75.83	0.00573508	0.0009	7.4091	0.282	0	0.026
09/06/95	15:50:03	15769.7452	653.3	507.89	61.73	0.00583428	0.0007	5.7274	0.27	0	0.021
09/06/95	15:55:02	16007.1254	666.4	502.13	65.54	0.00317478	0.0008	6.0452	0.264	0	0.023
09/06/95	16:00:01	16349.829	662.2	508.26	67.41	0.01167713	0.0008	5.6106	0.256	0	0.023
09/06/95	16:05:02	16456.8616	647.4	511.40	67.04	0.01599097	0.0008	7.2175	0.259	0	0.023
09/06/95	16:10:02	16343.0889	661.7	511.36	66.93	0.00923211	0.0008	6.0921	0.26	0	0.023
09/06/95	16:15:02	16460.0865	665.8	505.11	71.96	0.00840993	0.0009	7.2851	0.267	0	0.025
09/06/95	16:20:03	16298.4818	664.9	500.54	69.65	0.00912116	0.0008	6.1511	0.258	0	0.024
09/06/95	16:37:43	16449.7877	793.8	414.70	75.78	0	0.0009	7.7687	0.242	0	0.026
09/06/95	16:40:46	16880.5481	785.2	421.54	80.99	0.16949613	0.001	35.6856	0.266	0	0.028
Run 21											
09/06/95	16:49:36	16999.9345	796.4	424.67	82.09	0.16205838	0.001	30.7468	0.263	0	0.028
09/06/95	16:54:36	17023.7657	795.7	410.81	85.06	0.15653943	0.001	29.7691	0.267	0	0.029
09/06/95	16:59:35	16406.4073	765	417.10	89.42	0.15454585	0.0011	29.0889	0.266	0	0.031
09/06/95	17:04:36	16072.6923	826.9	425.14	86.85	0.14914114	0.001	29.8509	0.269	0	0.03
09/06/95	17:09:36	16366.6267	857.9	525.21	88.72	0.14651035	0.0011	26.1572	0.28	0	0.031
09/06/95	17:14:37	16388.0456	813.7	468.28	74.93	0.14311007	0.0009	23.0336	0.26	0	0.026
09/06/95	17:19:36	16529.0914	849.4	534.44	76.48	0.13956101	0.0009	25.5100	0.275	0	0.027
09/06/95	17:24:36	16767.9593	772.9	499.19	80.14	0.13578081	0.001	23.3870	0.262	0	0.028
09/06/95	17:29:35	16309.7459	808.3	493.68	86.47	0.13276562	0.001	20.6570	0.264	0	0.03

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	17:34:36	16277.3569	788.6	468.40	85.92	0.12952804	0.001	18.4537	0.27	0	0.03
09/06/95	17:39:36	16450.553	801.7	444.48	86.73	0.12619194	0.001	19.5848	0.262	0	0.03
09/06/95	17:44:35	16571.1342	810.2	453.35	83.9	0.12313151	0.001	18.1221	0.267	0	0.029
09/06/95	17:49:36	16652.0076	789.4	479.90	78.89	0.12053666	0.0009	21.2295	0.266	0	0.027
09/06/95	17:54:36	16654.6293	779.6	448.63	74.15	0.11733207	0.0009	24.6176	0.266	0	0.026
09/06/95	17:59:36	16383.3947	799.4	436.28	73.67	0.11459697	0.0009	21.5801	0.261	0	0.026
09/06/95	18:04:35	16557.2973	796.6	420.30	72.82	0.11176702	0.0009	22.5935	0.262	0	0.025
09/06/95	18:09:36	16623.7644	788.9	419.71	71.48	0.10891793	0.0009	22.7181	0.266	0	0.025
09/06/95	18:14:36	16496.2841	797.7	415.80	72.53	0.10631354	0.0009	22.5180	0.261	0	0.025
09/06/95	18:19:35	16548.0531	794.2	417.73	72.16	0.10389887	0.0009	26.4944	0.27	0	0.025
09/06/95	18:24:36	16611.4999	788.6	417.01	71.14	0.10148766	0.0008	25.3611	0.268	0	0.025
09/06/95	18:29:36	16632.3856	785.5	423.37	70.78	0.09919972	0.0008	24.0484	0.267	0	0.025
09/06/95	18:34:35	16733.091	774	414.77	70.47	0.0968783	0.0008	22.5341	0.272	0	0.024
09/06/95	18:39:36	16759.2653	768.5	412.63	70.85	0.09457585	0.0008	16.1483	0.268	0	0.025
09/06/95	18:44:36	16871.1484	741.4	411.39	71.8	0.09232911	0.0009	19.0234	0.274	0	0.025
09/06/95	18:49:36	16804.8301	699	399.28	72.28	0.0901215	0.0009	11.3226	0.278	0	0.025
09/06/95	18:54:35	16641.5772	698.2	397.17	71.94	0.08803518	0.0009	10.0158	0.278	0	0.025
09/06/95	18:59:36	16937.285	667.9	409.10	72.52	0.0858717	0.0009	32.9490	0.306	0	0.025
09/06/95	19:04:36	16722.5802	669.7	404.46	73.62	0.08370585	0.0009	28.6926	0.305	0	0.026
09/06/95	19:09:35	16467.1037	663.2	398.18	73.37	0.08170467	0.0009	16.6180	0.294	0	0.025
09/06/95	19:14:36	16466.5246	637.2	413.56	73.37	0.07988295	0.0009	39.6025	0.322	0	0.025
09/06/95	19:19:36	16304.822	653.7	403.97	73.72	0.07803028	0.0009	38.1925	0.326	0	0.026
09/06/95	19:24:36	16154.6662	657.1	391.34	73.2	0.0760697	0.0009	14.8981	0.302	0	0.025
09/06/95	19:29:35	16038.436	660.4	385.54	74.38	0.07437218	0.0009	12.0634	0.3	0	0.026
09/06/95	19:34:36	15935.9774	642.8	395.60	73.69	0.07263399	0.0009	18.6975	0.307	0	0.026
09/06/95	19:39:36	15805.1198	637	398.21	73.59	0.07097063	0.0009	43.1680	0.341	0	0.026
09/06/95	19:44:35	15676.7202	663.6	378.26	72.75	0.06943611	0.0009	13.7187	0.307	0	0.025
09/06/95	19:49:36	15820.5664	606.2	402.77	71.7	0.06799313	0.0009	33.9957	0.328	0	0.025
09/06/95	19:54:36	15516.5011	.645	385.17	72.68	0.06638469	0.0009	29.1872	0.326	0	0.025
09/06/95	19:59:36	15728.415	599.3	398.46	71.07	0.06496673	0.0008	21.5543	0.313	0	0.025
09/06/95	20:04:35	15640.2672	600.1	402.73	69.92	0.06367336	0.0008	43.2011	0.353	0	0.024
09/06/95	20:09:36	15529.1163	619.3	390.40	68.95	0.06223338	0.0008	28.0998	0.322	0	0.024
09/06/95	20:14:36	15522.4817	586.5	423.96	68.65	0.06090638	0.0008	74.1080	0.439	0	0.024
09/06/95	20:19:36	15404.3459	612.7	396.56	68.98	0.05965752	0.0008	47.3657	0.364	0	0.024
09/06/95	20:24:35	15410.7041	607.7	394.25	67.99	0.05842243	0.0008	23.1807	0.314	0	0.024
09/06/95	20:29:36	15367.4666	624.7	381.24	67.16	0.05730603	0.0008	8.4239	0.304	0	0.023
09/06/95	20:34:36	15321.9458	625.3	391.09	65.04	0.05625418	0.0008	14.0231	0.301	0	0.023
09/06/95	20:39:36	15219.8939	601	394.90	62.65	0.05523196	0.0007	7.7387	0.296	0	0.022
09/06/95	20:44:37	15075.5407	591.4	395.45	62.18	0.05415574	0.0007	6.0110	0.299	0	0.022
09/06/95	20:49:36	14982.685	569.8	402.68	62.46	0.05300043	0.0007	22.5809	0.319	0	0.022
09/06/95	20:54:35	14946.8583	537.1	406.83	63.33	0.05183594	0.0008	29.5258	0.332	0	0.022
09/06/95	20:59:35	14885.3114	537.1	405.85	62.94	0.05069353	0.0008	32.5256	0.332	0	0.022
09/06/95	21:04:36	14706.6887	544.4	403.19	61.89	0.04972777	0.0007	16.1431	0.309	0	0.021
09/06/95	21:09:36	14584.0327	542.5	391.93	61.03	0.04880495	0.0007	4.5737	0.309	0	0.021
09/06/95	21:14:37	14546.3895	519.7	403.88	60.99	0.04780191	0.0007	7.5227	0.311	0	0.021
09/06/95	21:19:35	14575.9814	518.3	396.90	62.07	0.04671757	0.0007	18.7894	0.322	0	0.022
09/06/95	21:24:36	14509.8581	492.3	404.12	62.35	0.04572924	0.0007	34.5138	0.351	0	0.022
09/06/95	21:29:36	14468.6574	483.7	396.30	62.82	0.04475996	0.0007	32.6906	0.351	0	0.022
09/06/95	21:34:36	14541.2958	466.3	416.27	63.7	0.04380206	0.0008	27.4187	0.347	0	0.022
09/06/95	21:39:35	14362.4305	469.7	415.20	63.8	0.04276443	0.0008	41.4180	0.377	0	0.022
09/06/95	21:44:35	14283.5729	486	392.23	64.11	0.04182772	0.0008	15.3024	0.337	0	0.022
09/06/95	21:49:36	14344.7627	444.3	438.52	64.53	0.04112932	0.0008	32.9073	0.372	0	0.022
09/06/95	21:54:36	14231.8992	479.9	402.65	64.79	0.04029411	0.0008	31.2089	0.361	0	0.022
09/06/95	21:59:35	14341.1145	432.1	445.84	65.65	0.0395818	0.0008	9.7395	0.349	0	0.023
09/06/95	22:04:35	14160.6856	447	412.52	64.23	0.03867346	0.0008	12.5272	0.338	0	0.022
09/06/95	22:09:36	14073.1694	448.2	412.54	63.63	0.03797736	0.0008	21.7273	0.354	0	0.022
09/06/95	22:14:36	13886.5306	436.6	415.53	63.55	0.03707769	0.0008	42.4794	0.384	0	0.022
09/06/95	22:19:36	14023.2091	439.2	415.35	63.17	0.03638229	0.0008	28.7755	0.371	0	0.022
09/06/95	22:24:37	13889.076	415.9	422.78	62.95	0.03567349	0.0008	29.9849	0.37	0	0.022
09/06/95	22:29:37	13742.2594	397.2	457.42	63.95	0.03514845	0.0008	25.9647	0.378	0	0.022
09/06/95	22:34:36	13654.9123	396.9	458.93	64.57	0.03443478	0.0008	20.3234	0.362	0	0.022
09/06/95	22:39:37	13809.2315	455.3	485.82	66.66	0.03412738	0.0008	7.7264	0.362	0	0.023

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	22:44:37	13924.9507	432.9	436.89	64.21	0.03314671	0.0008	7.4420	0.361	0	0.022
09/06/95	22:49:35	13476.3194	426.5	531.22	69.76	0.0328399	0.0008	25.1704	0.392	0	0.024
09/06/95	22:54:36	13548.1162	434	491.14	68.54	0.03184127	0.0008	6.8355	0.378	0	0.024
09/06/95	22:59:36	13547.3763	417.3	456.86	65.14	0.03124743	0.0008	10.7900	0.358	0	0.023
09/06/95	23:04:37	13184.666	434.7	458.44	64.25	0.03075175	0.0008	18.5028	0.369	0	0.022
09/06/95	23:09:36	13167.5041	401.6	454.96	65.12	0.02993949	0.0008	18.2959	0.361	0	0.023
09/06/95	23:14:36	13292.3248	468.5	468.87	65.5	0.02943896	0.0008	14.2302	0.373	0	0.023
09/06/95	23:19:36	13006.8186	424.4	504.67	66.94	0.02903657	0.0008	16.6426	0.371	0	0.023
09/06/95	23:24:36	13012.1359	470.8	554.62	75.55	0.02893323	0.0009	14.9247	0.392	0	0.026
09/06/95	23:29:37	12986.8044	467	561.83	74.3	0.02823813	0.0009	23.6662	0.408	0	0.026
09/06/95	23:34:36	12942.395	395.3	476.63	66.07	0.02764655	0.0008	17.4136	0.377	0	0.023
09/06/95	23:39:36	13074.4732	460.4	477.81	68.19	0.0270604	0.0008	18.2777	0.391	0	0.024
09/06/95	23:44:36	12651.1963	354.4	539.42	70.85	0.02655148	0.0008	27.8024	0.405	0	0.025
09/06/95	23:49:36	12795.57	378.9	503.50	68.08	0.02586817	0.0008	42.0603	0.424	0	0.024
09/06/95	23:54:35	12766.537	358.1	501.26	67.29	0.02546789	0.0008	39.9422	0.425	0	0.023
09/06/95	23:59:36	12787.5609	402.4	519.79	69.36	0.02565315	0.0008	15.4466	0.39	0	0.024
09/07/95	00:04:36	12696.729	359.5	477.37	63.52	0.02466823	0.0008	42.5631	0.44	0	0.022
09/07/95	00:09:36	12699.5301	345.5	503.99	63.45	0.02436632	0.0008	27.2180	0.411	0	0.022
09/07/95	00:14:35	12886.3512	336.6	431.03	58.82	0.02389179	0.0007	3.9717	0.391	0	0.02
09/07/95	00:19:36	12518.9482	330.6	452.21	58.51	0.02339517	0.0007	23.3111	0.404	0	0.02
09/07/95	00:24:36	12421.6472	349.4	491.14	64.63	0.02336909	0.0008	15.9035	0.389	0	0.022
09/07/95	00:29:36	12226.1716	290.4	488.03	61.28	0.0225814	0.0007	24.8319	0.407	0	0.021
09/07/95	00:34:35	12373.4791	325.5	472.17	62.03	0.02228509	0.0007	9.2775	0.395	0	0.022
09/07/95	00:39:35	12323.3062	319.7	469.91	60.21	0.02189487	0.0007	19.7918	0.425	0	0.021
09/07/95	00:44:37	11992.7737	283.7	456.21	58.35	0.02140003	0.0007	22.7938	0.398	0	0.02
09/07/95	00:49:36	12190.3349	294.9	448.53	57.91	0.02110822	0.0007	7.7927	0.385	0	0.02
09/07/95	00:54:36	12169.6158	292.1	431.79	56.21	0.0208164	0.0007	13.6609	0.403	0	0.019
09/07/95	00:59:35	12160.083	313.2	405.04	51.48	0.02033003	0.0006	4.2931	0.433	0	0.018
09/07/95	01:04:37	11891.7653	296.6	433.53	52.68	0.02003733	0.0006	21.7983	0.417	0	0.018
09/07/95	01:09:35	11868.9072	296.9	438.78	54.39	0.01964825	0.0006	13.0014	0.403	0	0.019
09/07/95	01:14:36	11815.6983	301.1	438.03	53.22	0.01944619	0.0006	28.0031	0.448	0	0.018
09/07/95	01:19:36	11661.2282	318.5	485.29	57.12	0.01914337	0.0007	8.7883	0.402	0	0.02
09/07/95	01:24:36	11637.9839	318.3	429.43	53.41	0.01865388	0.0006	14.4801	0.414	0	0.019
09/07/95	01:29:36	11339.0872	271.8	469.35	56.69	0.01845159	0.0007	18.3277	0.401	0	0.02
09/07/95	01:34:35	11544.3855	327.2	426.91	53.92	0.01806314	0.0006	6.1877	0.404	0	0.019
09/07/95	01:39:36	11461.8389	299.9	442.84	52.54	0.01786891	0.0006	9.9345	0.42	0	0.018
09/07/95	01:44:36	11217.7137	293.3	438.20	52.18	0.01757076	0.0006	42.1530	0.479	0	0.018
09/07/95	01:49:36	11147.4445	285.7	435.42	52.67	0.01717245	0.0006	26.3355	0.436	0	0.018
09/07/95	01:54:36	11556.0235	312.5	403.64	50.6	0.01727953	0.0006	4.8716	0.427	0	0.018
09/07/95	01:59:35	11596.9087	320.5	419.84	54.66	0.0167974	0.0007	7.4676	0.675	0.03505123	0.019
09/07/95	02:04:36	11767.8411	339.5	426.40	64.55	0.01661287	0.0008	4.5140	0.788	0.05498764	0.022
09/07/95	02:09:36	11597.2561	338.2	443.58	77.76	0.01642175	0.0009	9.9012	0.911	0.08269179	0.027
09/07/95	02:14:36	11061.7023	310.1	432.97	52.26	0.01611149	0.0006	42.3584	0.648	0.03154358	0.018
09/07/95	02:19:37	10822.5926	283.1	436.13	50	0.01571106	0.0006	39.0805	0.502	0	0.017
09/07/95	02:24:38	11083.3387	316.9	441.19	56.28	0.01599579	0.0007	7.0485	0.415	0	0.02
09/07/95	02:29:38	10894.0232	273.9	472.80	53.91	0.01521728	0.0006	18.9926	0.446	0	0.019
09/07/95	02:34:38	10854.8164	290.4	419.56	50.86	0.01502927	0.0006	13.1272	0.427	0	0.018
09/07/95	02:39:37	10865.786	296.6	419.75	51.42	0.01473485	0.0006	22.9637	0.464	0	0.018
09/07/95	02:44:37	11056.8543	299.4	398.52	49.53	0.01444403	0.0006	4.5536	0.486	0	0.017
09/07/95	02:49:37	11027.7088	311.7	407.95	51.55	0.01435824	0.0006	3.9464	0.584	0.02163437	0.018
09/07/95	02:54:37	10695.4078	303.5	426.33	51.7	0.01425292	0.0006	29.9437	0.616	0.03597165	0.018
09/07/95	02:59:36	10714.0785	295	406.50	49.07	0.0139539	0.0006	13.4520	0.467	0	0.017
09/07/95	03:04:38	10990.1597	308.5	409.57	52.34	0.01376545	0.0006	3.4186	0.597	0.02336249	0.018
09/07/95	03:09:38	10962.0472	313.6	424.31	56.56	0.01357157	0.0007	8.4349	0.685	0.04013307	0.02
09/07/95	03:14:37	10759.0553	303.9	433.42	51.38	0.01337769	0.0006	33.2566	0.616	0.03547996	0.018
09/07/95	03:19:36	10494.8744	295.8	414.87	48.62	0.0130767	0.0006	18.9708	0.489	0	0.017
09/07/95	03:24:37	10674.4733	299.2	420.91	49	0.01316844	0.0006	5.7757	0.427	0	0.017
09/07/95	03:29:38	10593.384	299.2	407.88	49.67	0.01268866	0.0006	8.9994	0.541	0	0.017
09/07/95	03:34:37	10330.4041	303.9	415.59	48.67	0.01277557	0.0006	11.7249	0.456	0	0.017
09/07/95	03:39:36	10431.4451	313.9	404.54	49.45	0.01239084	0.0006	3.7792	0.471	0	0.017
09/07/95	03:44:37	10442.6742	292.5	409.88	48.66	0.01219486	0.0006	5.5057	0.495	0	0.017
09/07/95	03:49:38	10171.7803	291.8	415.43	48.19	0.01199662	0.0006	32.1984	0.551	0	0.017

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	03:54:37	10089.097	279.6	416.43	48.5	0.01179853	0.0006	12.1354	0.449	0	0.017
09/07/95	03:59:37	10026.9319	294.3	411.19	47.93	0.01160737	0.0006	9.4784	0.474	0	0.017
09/07/95	04:04:38	10009.4085	290.3	417.88	49.47	0.01179853	0.0006	9.5330	0.45	0	0.017
09/07/95	04:09:38	9800.97401	291.6	406.23	47.88	0.01130837	0.0006	29.2210	0.511	0	0.017
09/07/95	04:14:38	10071.6017	286.1	425.56	48.7	0.01150168	0.0006	3.9268	0.424	0	0.017
09/07/95	04:19:37	9921.40332	292.4	416.48	48.67	0.01101841	0.0006	23.0738	0.579	0.02512971	0.017
09/07/95	04:24:37	10017.163	290.7	408.58	48.22	0.01092764	0.0006	7.5540	0.502	0	0.017
09/07/95	04:29:37	9996.17802	294.3	414.19	49.14	0.01083093	0.0006	12.7990	0.558	0.02311244	0.017
09/07/95	04:34:39	10223.6276	299.2	416.80	53.45	0.01073423	0.0006	5.1363	0.635	0.03307303	0.019
09/07/95	04:39:38	10217.8419	306.9	429.83	61.14	0.01073841	0.0007	6.4529	0.746	0.05407904	0.021
09/07/95	04:44:38	10227.4194	310.2	441.34	69.39	0.01054493	0.0008	8.2739	0.833	0.07216988	0.024
09/07/95	04:49:37	10176.3394	313	439.69	66.16	0.01054493	0.0008	16.5469	0.858	0.06888063	0.023
09/07/95	04:54:36	10157.9017	315.6	443.30	70.78	0.01044664	0.0008	19.0820	0.866	0.07554465	0.025
09/07/95	04:59:38	9722.7226	312.5	443.55	63.07	0.01033983	0.0008	25.9032	0.788	0.06571105	0.022
09/07/95	05:04:37	9848.65982	304.7	434.97	58.99	0.0101426	0.0007	9.9107	0.707	0.05051982	0.02
09/07/95	05:09:37	9867.49608	306.5	448.69	63.12	0.01004601	0.0008	11.7995	0.777	0.06462286	0.022
09/07/95	05:14:36	9763.7788	304.5	451.69	64.17	0.00994747	0.0008	17.6372	0.806	0.06789389	0.022
09/07/95	05:19:36	9766.98932	303.9	452.25	61.09	0.00975386	0.0007	21.8398	0.768	0.06489694	0.021
09/07/95	05:24:38	9774.81172	302.8	447.71	61.51	0.00965728	0.0007	13.1134	0.759	0.0579437	0.021
09/07/95	05:29:38	9816.6918	301.2	452.81	63	0.00956444	0.0008	12.8646	0.776	0.06134768	0.022
09/07/95	05:34:37	9745.4291	302.3	450.34	65.69	0.00946458	0.0008	11.1348	0.799	0.0644171	0.023
09/07/95	05:39:37	9648.03143	307.5	459.43	68.38	0.00946274	0.0008	19.7373	0.84	0.07541221	0.024
09/07/95	05:44:37	9620.1796	304.1	455.67	64.04	0.00936435	0.0008	15.3566	0.764	0.0627508	0.022
09/07/95	05:49:37	9753.21129	303.2	458.37	63.88	0.00917127	0.0008	24.5502	0.794	0.06767432	0.022
09/07/95	05:54:37	9413.57243	304.2	455.98	61.49	0.00906942	0.0007	23.7842	0.754	0.06445075	0.021
09/07/95	05:59:39	9322.43057	293.5	453.78	58.76	0.00896768	0.0007	23.9185	0.712	0.05862739	0.02
09/07/95	06:04:39	9451.27086	293.2	443.26	55.74	0.00877654	0.0007	6.3915	0.639	0.04166445	0.019
09/07/95	06:09:38	9341.71589	288.3	443.56	56.7	0.0086784	0.0007	6.9877	0.671	0.04724905	0.02
09/07/95	06:14:37	9225.16525	289	444.25	56.02	0.00858029	0.0007	9.0562	0.662	0.04936079	0.019
09/07/95	06:19:37	9341.62586	286.9	435.86	51.97	0.00838748	0.0006	5.9582	0.593	0.03489962	0.018
09/07/95	06:24:38	9283.31622	296.6	448.11	56.13	0.00838584	0.0007	45.8722	0.791	0.05561642	0.019
09/07/95	06:29:37	9211.08478	299.3	447.94	55.36	0.00828621	0.0007	34.8340	0.74	0.05588373	0.019
09/07/95	06:34:38	9370.35479	300.6	450.24	57.4	0.00819146	0.0007	14.2850	0.728	0.0654353	0.02
09/07/95	06:39:39	9313.31347	301.1	463.55	62.49	0.00818986	0.0007	66.0344	0.959	0.07380507	0.022
09/07/95	06:44:37	9554.17819	306.1	450.11	63.21	0.00819787	0.0008	5.5598	0.786	0.07397368	0.022
Run 22											
09/07/95	12:22:11	17696.36	269.4	582.94	51.92	0.0107497	0.0006	6.5641	0.193	0.04412496	0.018
09/07/95	12:27:11	17884.1482	279.1	578.01	51.18	0.0038875	0.0006	4.6725	0.201	0.03580594	0.018
09/07/95	12:32:11	17575.895	275.6	576.10	49.84	0.00932327	0.0006	6.1451	0.194	0.03770288	0.017
09/07/95	12:37:12	17642.5365	275.9	576.18	50.34	0.01279491	0.0006	4.9238	0.199	0.03848707	0.017
09/07/95	12:42:11	17686.1063	277	587.39	50.93	0.00737955	0.0006	7.0440	0.192	0.04150994	0.018
09/07/95	12:47:11	17413.4239	272	568.22	50.93	0.00328153	0.0006	5.0590	0.175	0.03927578	0.018
09/07/95	12:52:10	17019.9449	264.6	570.57	50.92	0.00164016	0.0006	2.3871	0.165	0.02778022	0.018
09/07/95	12:57:11	16910.7226	276.5	574.38	50.97	0.00102604	0.0006	2.2481	0.167	0.02677971	0.018
Run 23											
09/07/95	16:47:44	15219.3279	502.4	395.41	55.41	0	0.0007	1.8804	0.293	0.01981683	0.019
09/07/95	16:52:45	15401.4964	409.2	410.75	55.35	0	0.0007	1.8753	0.225	0	0.019
09/07/95	16:57:45	15806.0374	419	392.88	55.26	0	0.0007	1.7964	0.296	0	0.019
09/07/95	17:02:44	15957.8027	576.1	391.41	55.57	0	0.0007	2.0877	0.328	0.03386998	0.019
09/07/95	17:07:45	16073.6458	418.7	425.62	55.91	0	0.0007	2.7248	0.263	0.18214318	0.019
09/07/95	17:12:45	17144.9039	394.1	455.04	59.01	0	0.0007	2.5663	0.257	0.16754482	0.02
09/07/95	17:17:45	16426.0104	383	425.29	56.83	0	0.0007	2.1504	0.282	0.05647799	0.02
09/07/95	17:22:45	17034.0131	371.4	422.66	57.15	0	0.0007	1.9831	0.233	0	0.02
09/07/95	17:27:44	17252.8081	434.2	464.66	61.1	0	0.0007	2.0284	0.295	0	0.021
09/07/95	17:32:45	16977.325	320.4	420.83	57.75	0	0.0007	1.9723	0.275	0	0.02
09/07/95	17:37:45	16558.5576	337.4	432.56	56.76	0	0.0007	1.8913	0.233	0	0.02
09/07/95	17:42:44	16182.6246	349.6	505.26	59.91	0	0.0007	1.9436	0.249	0	0.021
09/07/95	17:47:45	16263.5498	405	445.89	59.03	0	0.0007	1.9073	0.311	0	0.02
09/07/95	17:52:45	15523.1234	536.6	350.07	54.98	0	0.0007	1.9718	0.287	0	0.019
09/07/95	17:57:44	16230.7378	420.3	413.61	56.48	0	0.0007	1.8585	0.288	0	0.02
09/07/95	18:02:44	16159.3804	367.4	437.06	57.83	0	0.0007	1.9185	0.265	0	0.02
09/07/95	18:07:45	16462.9868	385.1	464.84	60.68	0	0.0007	1.8984	0.327	0	0.021

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	18:12:45	16599.0913	282.2	438.87	55.72	0	0.0007	1.8542	0.253	0	0.019
09/07/95	18:17:44	16843.6513	312	462.03	57.54	0	0.0007	1.8191	0.239	0	0.02
09/07/95	18:22:45	17630.5048	292.1	421.74	59.85	0	0.0007	1.7541	0.269	0	0.021
09/07/95	18:27:45	17705.1427	286.6	433.72	56.42	0	0.0007	1.8620	0.261	0	0.02
09/07/95	18:32:44	17603.9224	283.3	424.76	56.79	0	0.0007	1.8363	0.274	0	0.02
09/07/95	18:37:45	17233.2161	284.2	460.34	56.45	0	0.0007	1.8396	0.287	0	0.02
09/07/95	18:42:45	17149.8456	261.6	433.66	55.23	0	0.0007	1.8993	0.252	0	0.019
09/07/95	18:47:44	16939.2233	320	419.22	54.59	0	0.0007	1.8516	0.254	0	0.019
09/07/95	18:52:44	16787.0155	261	425.49	54.54	0	0.0007	1.8953	0.26	0	0.019
09/07/95	18:57:45	16685.6799	275.9	425.26	54.69	0	0.0007	1.8714	0.261	0	0.019
09/07/95	19:02:44	15743.308	305	416.20	53.85	0	0.0006	1.8746	0.258	0	0.019
09/07/95	19:07:44	15447.5118	330.2	415.85	53.8	0	0.0006	1.8691	0.258	0	0.019
09/07/95	19:12:45	15497.8784	283	418.57	53.73	0	0.0006	1.8943	0.264	0	0.019
09/07/95	19:17:44	15184.606	299.7	418.10	53.77	0	0.0006	1.8752	0.264	0	0.019
09/07/95	19:22:44	15224.1454	264.3	425.41	53.96	0	0.0006	1.8984	0.274	0	0.019
09/07/95	19:27:45	15065.6795	297.4	424.81	53.97	0	0.0006	1.8747	0.28	0	0.019
09/07/95	19:32:44	15240.4772	277.7	431.10	54.26	0	0.0006	1.8689	0.29	0	0.019
09/07/95	19:37:44	15048.1571	278.9	426.08	54.61	0	0.0007	1.8755	0.292	0	0.019
09/07/95	19:42:45	14974.0225	254.7	434.34	54.65	0.00069829	0.0007	1.8929	0.303	0	0.019
09/07/95	19:47:45	15037.3841	249.4	447.08	55.31	0.00069763	0.0007	1.8792	0.309	0	0.019
09/07/95	19:52:44	14876.3067	279.3	432.40	55.39	0.0006971	0.0007	1.9006	0.315	0	0.019
09/07/95	19:57:45	14841.5373	291	451.81	56.04	0.00069647	0.0007	1.8434	0.326	0	0.019
09/07/95	20:02:45	14664.0422	287.7	449.66	56.34	0	0.0007	1.8839	0.424	0	0.02
09/07/95	20:07:44	14662.0497	264.9	453.18	56.03	0.00079506	0.0007	1.9184	0.33	0	0.019
09/07/95	20:12:44	14638.1	245.1	441.19	56.32	0.00079476	0.0007	1.8752	0.341	0	0.02
09/07/95	20:17:45	14526.6933	244.6	454.34	57.14	0.0007943	0.0007	2.0609	0.348	0	0.02
09/07/95	20:22:45	14703.7698	272.3	462.32	57.05	0.00079385	0.0007	2.2386	0.422	0	0.02
09/07/95	20:27:46	14343.3337	251.5	447.82	57.27	0.00089226	0.0007	2.5328	0.362	0	0.02
09/07/95	20:32:46	14280.9875	246.3	453.39	57.21	0.00089192	0.0007	2.6601	0.362	0	0.02
09/07/95	20:37:45	14291.3467	243.2	452.52	57.48	0.00089175	0.0007	2.3971	0.37	0	0.02
09/07/95	20:42:45	14226.1401	234	461.17	58.04	0.00089124	0.0007	2.1600	0.377	0	0.02
09/07/95	20:47:46	14198.7416	239.7	459.90	58.16	0.00098989	0.0007	2.0410	0.38	0	0.02
09/07/95	20:52:46	14217.1744	238.4	464.78	58.33	0.00098952	0.0007	1.9397	0.393	0	0.02
09/07/95	20:57:45	14083.3606	239.3	463.02	58.57	0.00098914	0.0007	1.9173	0.393	0	0.02
09/07/95	21:02:45	14026.8586	242.2	465.32	59.02	0.00098857	0.0007	1.9044	0.402	0	0.02
09/07/95	21:07:46	14046.9979	249.5	463.86	59.4	0.0009882	0.0007	1.8771	0.418	0	0.021
09/07/95	21:12:46	14073.9359	248.8	467.08	59.36	0.00108623	0.0007	1.8629	0.421	0	0.021
09/07/95	21:17:45	13903.4157	240.5	471.14	60.04	0.00108581	0.0007	1.9163	0.427	0	0.021
09/07/95	21:22:45	13965.2036	243.8	472.24	60.11	0.0010856	0.0007	2.8762	0.442	0	0.021
09/07/95	21:27:46	13825.1032	248.2	471.66	60.15	0.00108519	0.0007	3.3235	0.447	0	0.021
09/07/95	21:32:46	13758.9002	242.4	472.48	59.75	0.00108457	0.0007	3.0523	0.45	0	0.021
09/07/95	21:37:46	13626.1974	244.6	478.01	60.36	0.00108415	0.0007	3.2643	0.456	0	0.021
09/07/95	21:42:46	13554.5121	250.5	474.47	60.09	0.00108394	0.0007	4.0949	0.471	0	0.021
09/07/95	21:47:47	13560.6852	256	473.99	60.31	0.00108374	0.0007	3.5204	0.474	0	0.021
09/07/95	21:52:45	13524.0063	251.2	476.16	60.07	0.00108353	0.0007	3.5599	0.478	0	0.021
09/07/95	21:57:46	13373.8821	249.2	476.87	60.21	0.00108291	0.0007	3.7366	0.477	0	0.021
09/07/95	22:02:46	13400.7486	253.3	481.70	60.32	0.0010827	0.0007	4.4172	0.484	0	0.021
09/07/95	22:07:46	13256.1933	263.4	483.58	60.4	0.00108228	0.0007	4.5726	0.493	0	0.021
09/07/95	22:12:46	13286.7037	268.4	483.98	60.66	0.00108208	0.0007	5.0519	0.5	0	0.021
09/07/95	22:17:45	13318.4816	268.5	483.60	60.71	0.00108166	0.0007	4.7614	0.504	0	0.021
09/07/95	22:22:46	13103.6091	263.7	482.63	60.71	0.00108125	0.0007	4.1436	0.504	0	0.021
09/07/95	22:27:47	13195.6355	276	487.25	60.89	0.00108104	0.0007	4.6684	0.504	0	0.021
09/07/95	22:32:45	13237.0355	276.3	485.99	61.01	0.00108062	0.0007	5.4199	0.512	0	0.021
09/07/95	22:37:46	13240.5604	275.9	493.84	61.74	0.00117909	0.0007	4.9431	0.516	0	0.021
09/07/95	22:42:47	13231.3377	286.2	493.06	62.11	0.00117886	0.0007	5.0932	0.521	0.04175132	0.022
09/07/95	22:47:47	13347.4349	276.9	495.52	62.36	0.00117841	0.0007	4.7216	0.525	0.029853	0.022
09/07/95	22:52:45	13225.6777	283.8	495.92	62.3	0.00117818	0.0007	4.2847	0.521	0	0.022
09/07/95	22:57:45	13305.6958	285.3	502.30	62.9	0.00117818	0.0008	4.8060	0.534	0	0.022
09/07/95	23:02:46	13276.9286	313.2	509.07	62.23	0.00147273	0.0007	10.0127	0.555	0.10613453	0.022
09/07/95	23:07:46	13160.6284	292	504.85	62.58	0.00127587	0.0007	5.5911	0.546	0	0.022
09/07/95	23:12:45	13147.7952	299.1	508.48	63	0.00127563	0.0008	6.2881	0.553	0	0.022
09/07/95	23:17:45	12982.1699	298.1	508.49	62.96	0.00127514	0.0008	6.2259	0.552	0	0.022

SE Chicken

Site: Chicken processing plant in SE U.S.											
in ppm	"upwind" data										
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	23:22:46	12925.3427	295.7	506.72	62.17	0.00127489	0.0007	6.6365	0.549	0	0.022
09/07/95	23:27:46	12886.5776	302.6	509.86	62.29	0.00127465	0.0007	6.7921	0.552	0	0.022
09/07/95	23:32:46	12793.3212	301.7	507.70	62.56	0.0012744	0.0007	7.1271	0.555	0	0.022
09/07/95	23:37:45	12781.3518	298.4	509.37	62.7	0.00127416	0.0007	7.1581	0.556	0	0.022
09/07/95	23:42:46	12763.3104	299.2	515.54	62.54	0.00127391	0.0007	6.9940	0.555	0	0.022
09/07/95	23:47:46	12596.5261	302.8	506.72	62.19	0.00127391	0.0007	6.4981	0.553	0	0.022
09/07/95	23:52:46	12495.0914	303.4	507.41	62.2	0.00127342	0.0007	6.0658	0.557	0	0.022
09/07/95	23:57:45	12455.6154	307.2	513.29	62.86	0.00127342	0.0007	6.2596	0.562	0	0.022
09/08/95	00:02:45	12509.2359	312.3	522.00	63.17	0.00137111	0.0008	6.6550	0.564	0	0.022
09/08/95	00:07:46	12193.0979	307.2	516.61	62.11	0.00127268	0.0007	7.4348	0.558	0	0.022
09/08/95	00:12:46	12182.5261	311.8	514.07	61.52	0.00127244	0.0007	7.3619	0.555	0	0.021

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 20											
09/05/95	20:49:50	0.60081671	0.102	0.90372642	0.048	0	0.025	0	2.793	0.02010897	0.02
09/05/95	20:54:51	0.59854431	0.076	0.48291532	0.048	0	0.025	0	2.787	0	0.02
09/05/95	20:59:51	0.62800232	0.074	0.3154712	0.048	0	0.025	0	2.89	0	0.02
09/05/95	21:04:51	0.60865232	0.07	0.26513412	0.047	0	0.025	0	2.871	0	0.02
09/05/95	21:09:52	0.58815995	0.068	0.26028331	0.047	0	0.025	3.02896499	2.796	0	0.02
09/05/95	21:14:53	0.60779508	0.07	0.25651145	0.047	0	0.025	0	2.888	0	0.02
09/05/95	21:19:52	0.5922639	0.068	0.24985828	0.047	0	0.025	0	2.85	0	0.02
09/05/95	21:24:52	0.59658485	0.069	0.25597277	0.047	0	0.025	0	2.862	0	0.02
09/05/95	21:29:52	0.59704103	0.07	0.28609846	0.047	0	0.025	0	2.87	0	0.02
09/05/95	21:34:52	0.60033213	0.069	0.26731401	0.047	0	0.025	0	2.899	0	0.02
09/05/95	21:39:51	0.59171237	0.069	0.27830912	0.047	0	0.025	0	2.912	0	0.02
09/05/95	21:44:51	0.59879721	0.069	0.27316642	0.047	0	0.025	0	2.978	0	0.02
09/05/95	21:49:52	0.59790092	0.069	0.27223491	0.047	0	0.025	0	2.944	0	0.02
09/05/95	21:54:52	0.60255366	0.07	0.27339981	0.047	0	0.025	0	2.91	0	0.02
09/05/95	21:59:52	0.61071644	0.071	0.28032246	0.047	0	0.025	0	2.956	0	0.02
09/05/95	22:04:51	0.60279226	0.07	0.28231796	0.047	0	0.025	0	3.073	0	0.02
09/05/95	22:09:52	0.58589485	0.069	0.28684943	0.047	0	0.025	0	2.928	0	0.02
09/05/95	22:14:52	0.59114752	0.069	0.29372033	0.047	0	0.025	0	2.98	0	0.02
09/05/95	22:19:52	0.60494331	0.071	0.28721402	0.047	0	0.025	0	3.315	0	0.02
09/05/95	22:24:52	0.59945785	0.07	0.28700666	0.047	0	0.025	0	2.982	0	0.02
09/05/95	22:29:53	0.59329945	0.069	0.28529448	0.047	0	0.025	0	3.002	0	0.02
09/05/95	22:34:53	0.57859272	0.068	0.30805652	0.047	0	0.026	0	3.213	0.02270711	0.02
09/05/95	22:39:52	0.5931944	0.07	0.29864337	0.047	0	0.026	0	3.22	0.02416429	0.02
09/05/95	22:44:52	0.59945603	0.07	0.28517244	0.047	0	0.025	0	3.025	0	0.02
09/05/95	22:49:53	0.60232098	0.07	0.292403	0.047	0	0.025	0	2.991	0	0.02
09/05/95	22:54:53	0.59938367	0.07	0.29127653	0.047	0	0.025	0	3.006	0	0.02
09/05/95	22:59:53	0.60060611	0.07	0.29417045	0.047	0	0.025	0	3.146	0	0.02
09/05/95	23:04:55	0.59821623	0.07	0.29312498	0.047	0	0.025	0	3.454	0.02208409	0.02
09/05/95	23:09:55	0.59556331	0.069	0.29048547	0.047	0	0.026	0	3.48	0.02305595	0.02
09/05/95	23:14:54	0.58585065	0.069	0.31710468	0.047	0	0.026	0	3.518	0.02880116	0.021
09/05/95	23:19:54	0.58330572	0.069	0.32959303	0.047	0	0.026	0	3.407	0.0266554	0.02
09/05/95	23:24:55	0.59974646	0.071	0.32735553	0.047	0	0.025	0	3.303	0.02188856	0.02
09/05/95	23:29:54	0.59513931	0.071	0.32732662	0.047	0	0.025	0	3.277	0	0.02
09/05/95	23:34:54	0.58629001	0.071	0.35338827	0.047	0	0.027	0	3.747	0.03209084	0.021
09/05/95	23:39:53	0.60501944	0.073	0.36899965	0.047	0	0.026	0	3.405	0.0220661	0.02
09/05/95	23:44:54	0.61060983	0.072	0.33207923	0.047	0	0.025	0	3.876	0	0.02
09/05/95	23:49:54	0.58909901	0.071	0.35108902	0.047	0	0.025	0	3.178	0	0.02
09/05/95	23:54:54	0.58501884	0.073	0.41773182	0.047	0	0.026	0	3.49	0.02263524	0.02
09/05/95	23:59:53	0.59188199	0.075	0.45000511	0.047	0	0.025	0	3.345	0.02126697	0.02
09/06/95	00:04:53	0.59233291	0.074	0.42566041	0.047	0	0.025	0	3.257	0	0.02
09/06/95	00:09:54	0.61420623	0.075	0.40067473	0.046	0	0.025	0	3.378	0	0.02
09/06/95	00:14:54	0.61001364	0.074	0.39138258	0.046	0	0.025	0	3.151	0	0.02
09/06/95	00:19:54	0.59874322	0.073	0.39470115	0.046	0	0.025	0	3.152	0	0.02
09/06/95	00:24:53	0.6207292	0.075	0.37557947	0.046	0	0.025	0	3.316	0	0.02
09/06/95	00:29:55	0.61081667	0.074	0.38471755	0.046	0	0.025	0	3.079	0	0.02
09/06/95	00:34:55	0.6113984	0.075	0.39072876	0.046	0	0.025	0	3.194	0	0.02
09/06/95	00:39:54	0.6227186	0.075	0.38309214	0.046	0	0.025	0	3.4	0	0.02
09/06/95	00:44:54	0.60284666	0.074	0.40606603	0.046	0	0.025	0	3.428	0	0.02
09/06/95	00:49:54	0.59072963	0.074	0.4257441	0.046	0	0.028	0	4.369	0.03993774	0.022
09/06/95	00:54:55	0.60641287	0.076	0.44824349	0.046	0	0.026	0	3.665	0.02888142	0.02
09/06/95	00:59:55	0.60491869	0.076	0.45407654	0.046	0	0.025	0	3.422	0	0.02
09/06/95	01:04:54	0.61022579	0.076	0.44517425	0.046	0	0.025	0	3.454	0	0.02
09/06/95	01:09:54	0.60979579	0.074	0.39494396	0.046	0	0.025	0	3.427	0	0.019
09/06/95	01:14:55	0.61590215	0.075	0.38999396	0.046	0	0.025	0	4.102	0	0.02
09/06/95	01:19:54	0.59731793	0.073	0.38385878	0.046	0	0.025	0	3.681	0.02002994	0.02
09/06/95	01:24:54	0.60463642	0.074	0.40305867	0.046	0	0.027	0	4.257	0.03417721	0.021
09/06/95	01:29:54	0.60889647	0.075	0.41806566	0.046	0	0.027	0	4.134	0.03930863	0.022
09/06/95	01:34:54	0.61405793	0.075	0.38608433	0.045	0	0.025	0	3.856	0.02748069	0.02
09/06/95	01:39:55	0.59703816	0.073	0.3942504	0.046	0	0.026	0	3.904	0.03039397	0.021
09/06/95	01:44:54	0.63188475	0.077	0.41254485	0.046	0	0.029	0	5.032	0.04994677	0.023
09/06/95	01:49:54	0.61217544	0.077	0.43971394	0.045	0	0.027	0	3.98	0.03714258	0.021

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	01:54:54	0.59362256	0.076	0.48033508	0.046	0	0.03	0	4.627	0.04982328	0.024
09/06/95	01:59:54	0.60259962	0.076	0.45644745	0.045	0	0.033	0	5.28	0.06132394	0.026
09/06/95	02:04:54	0.60534232	0.075	0.41587075	0.045	0	0.028	0	4.853	0.04359779	0.022
09/06/95	02:09:54	0.59874099	0.074	0.40425167	0.045	0	0.028	0	4.843	0.04262912	0.022
09/06/95	02:14:55	0.60506576	0.075	0.41320857	0.045	0	0.032	0	5.559	0.05956856	0.026
09/06/95	02:19:55	0.60951407	0.076	0.42249198	0.045	0	0.028	0	4.349	0.04496653	0.022
09/06/95	02:24:54	0.61234844	0.075	0.40716919	0.045	0	0.026	0	4.179	0.03121663	0.021
09/06/95	02:29:54	0.59671103	0.075	0.42870783	0.045	0	0.028	0	4.673	0.0421458	0.022
09/06/95	02:34:55	0.60195113	0.076	0.43903952	0.045	0	0.033	0	5.518	0.06526133	0.026
09/06/95	02:39:55	0.61106998	0.076	0.42100441	0.045	0	0.029	0	4.529	0.04898996	0.023
09/06/95	02:44:54	0.59868201	0.074	0.41657525	0.045	0	0.027	0	4.225	0.03806369	0.022
09/06/95	02:49:54	0.60988858	0.075	0.4148363	0.045	0	0.029	0	4.69	0.04791775	0.023
09/06/95	02:54:54	0.61185033	0.075	0.40812551	0.045	0	0.027	0	4.269	0.04035876	0.022
09/06/95	02:59:55	0.61407103	0.075	0.39624961	0.045	0	0.026	0	3.962	0.02993113	0.021
09/06/95	03:04:55	0.61086258	0.075	0.39134591	0.044	0	0.025	0	3.88	0.02731892	0.02
09/06/95	03:09:54	0.6054779	0.074	0.38543578	0.045	0	0.025	0	3.827	0.02394491	0.02
09/06/95	03:14:54	0.60259512	0.073	0.38118049	0.044	0	0.026	0	4.149	0.02903957	0.02
09/06/95	03:19:55	0.59240604	0.073	0.38576848	0.045	0	0.028	0	4.554	0.03899186	0.022
09/06/95	03:24:55	0.61769284	0.075	0.38769877	0.044	0	0.031	0	5.713	0.05482024	0.025
09/06/95	03:29:55	0.61062501	0.074	0.37961422	0.044	0	0.028	0	4.573	0.04487052	0.022
09/06/95	03:34:54	0.61064728	0.074	0.37582749	0.045	0	0.028	0	4.653	0.04468622	0.023
09/06/95	03:39:54	0.61012032	0.074	0.37751436	0.044	0	0.029	0	4.783	0.04698428	0.023
09/06/95	03:44:55	0.61412624	0.074	0.3742814	0.044	0	0.029	0	4.712	0.04715888	0.023
09/06/95	03:49:55	0.61497092	0.075	0.37661907	0.044	0	0.028	0	4.346	0.04146088	0.022
09/06/95	03:54:55	0.62413088	0.075	0.37189445	0.044	0	0.028	0	4.516	0.04030383	0.022
09/06/95	03:59:55	0.61545302	0.075	0.3725694	0.044	0	0.028	0	4.558	0.04329287	0.022
09/06/95	04:04:56	0.62497339	0.075	0.37085804	0.044	0	0.028	0	4.81	0.04367005	0.022
09/06/95	04:09:56	0.6136017	0.074	0.37307369	0.044	0	0.03	0	5.145	0.05134218	0.023
09/06/95	04:14:56	0.60456844	0.074	0.372761	0.044	0	0.031	0	5.168	0.05857811	0.025
09/06/95	04:19:56	0.61228241	0.074	0.36846763	0.044	0	0.033	0	5.645	0.06743198	0.027
09/06/95	04:24:56	0.60112871	0.073	0.36825035	0.044	0	0.036	0	5.879	0.07476773	0.029
09/06/95	04:29:57	0.60659886	0.074	0.36413271	0.044	0	0.038	0	6.233	0.07937708	0.03
09/06/95	04:34:57	0.59482687	0.072	0.3512522	0.044	0	0.037	0	5.754	0.07888005	0.029
09/06/95	04:39:57	0.59715838	0.073	0.36577035	0.044	0	0.04	0	5.739	0.0865056	0.032
09/06/95	04:44:56	0.61206683	0.074	0.34499188	0.044	0	0.044	0	6.356	0.09534951	0.035
09/06/95	04:49:56	0.60999911	0.073	0.33330444	0.044	0	0.037	0	5.855	0.07875304	0.029
09/06/95	04:54:57	0.60587527	0.072	0.32366571	0.044	0	0.036	0	5.9	0.07646783	0.029
09/06/95	04:59:57	0.59247704	0.071	0.33234169	0.044	0	0.039	0	6.007	0.0835668	0.031
09/06/95	05:04:57	0.61525281	0.073	0.32215615	0.044	0	0.042	0	6.661	0.09170096	0.033
09/06/95	05:09:56	0.61180534	0.073	0.32024487	0.044	0	0.037	0	5.771	0.07989277	0.029
09/06/95	05:14:56	0.62116375	0.074	0.32246258	0.043	0	0.037	0	6.302	0.07936504	0.029
09/06/95	05:19:56	0.59336193	0.072	0.37556501	0.044	0	0.035	0	5.323	0.07340064	0.028
09/06/95	05:24:57	0.60059786	0.073	0.36707479	0.044	0	0.041	0	6.426	0.091023	0.032
09/06/95	05:29:57	0.60574976	0.073	0.34298248	0.043	0	0.037	0	5.7	0.08079228	0.029
09/06/95	05:34:57	0.61152064	0.073	0.34827245	0.044	0	0.034	0	5.043	0.07098179	0.027
09/06/95	05:39:57	0.62546692	0.075	0.347503	0.044	0	0.035	0	5.572	0.07261687	0.028
09/06/95	05:44:58	0.59162054	0.073	0.4062102	0.044	0	0.04	0	6.082	0.08597347	0.032
09/06/95	05:49:58	0.60623067	0.077	0.45243678	0.044	0	0.049	0	7.013	0.10685741	0.039
09/06/95	05:54:58	0.61345232	0.075	0.37533596	0.043	0	0.047	0	7.52	0.10118504	0.037
09/06/95	05:59:57	0.59721274	0.076	0.44615587	0.044	0	0.042	0	6.546	0.09196019	0.034
09/06/95	06:04:57	0.59261989	0.079	0.53629889	0.044	0	0.048	0	6.499	0.11091199	0.038
09/06/95	06:09:57	0.61066564	0.08	0.51024934	0.043	0	0.053	0	7.156	0.12059565	0.042
09/06/95	06:14:58	0.6067035	0.077	0.46355414	0.043	0	0.045	0	6.659	0.10251031	0.036
09/06/95	06:19:58	0.62421464	0.079	0.4716203	0.043	0	0.042	0	6.498	0.09561169	0.033
09/06/95	06:24:58	0.61081812	0.078	0.47722567	0.043	0	0.042	0	6.451	0.09517622	0.033
09/06/95	06:29:58	0.61276251	0.079	0.49153562	0.044	0	0.043	0	6.711	0.09711599	0.034
09/06/95	06:34:58	0.63242725	0.08	0.4697345	0.043	0	0.046	0	7.912	0.10670109	0.037
09/06/95	06:39:58	0.59691272	0.078	0.49883613	0.044	0	0.045	0	6.864	0.10508891	0.036
09/06/95	06:44:59	0.60327432	0.081	0.55321763	0.044	0	0.056	0	7.327	0.12999365	0.045
09/06/95	06:50:01	0.60942331	0.079	0.4954747	0.043	0	0.055	0	7.161	0.12720739	0.043
09/06/95	06:54:59	0.61963242	0.077	0.42378706	0.044	0	0.056	0	8.153	0.13261364	0.044
09/06/95	07:00:02	0.61573984	0.076	0.4034058	0.044	0	0.073	0	8.06	0.1615355	0.058

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	07:04:58	0.61182014	0.075	0.39748089	0.044	0	0.087	0	7.919	0.18622288	0.069
09/06/95	07:10:00	0.60758694	0.075	0.4018427	0.044	0	0.098	0	7.097	0.19735242	0.078
09/06/95	07:14:59	0.60882138	0.075	0.39126096	0.045	0	0.094	0	8.002	0.18712901	0.075
09/06/95	07:19:59	0.60906787	0.074	0.38308589	0.045	0	0.085	0	9.873	0.16832562	0.067
09/06/95	07:24:59	0.60625375	0.073	0.36950856	0.045	0	0.074	0	10.56	0.15505211	0.058
09/06/95	07:29:59	0.60490008	0.074	0.38625916	0.045	0	0.067	0	10.33	0.15074001	0.053
09/06/95	07:34:59	0.60385341	0.074	0.38923198	0.045	0	0.054	0	8.073	0.14207744	0.043
09/06/95	07:39:59	0.60254881	0.073	0.39508527	0.046	0	0.047	0	6.336	0.12916623	0.037
09/06/95	07:44:59	0.59990948	0.074	0.41757832	0.046	0	0.037	0	4.359	0.10748865	0.029
09/06/95	07:50:00	0.59435779	0.074	0.43035328	0.047	0	0.039	0	4.844	0.10780784	0.031
09/06/95	07:55:00	0.5887398	0.077	0.52091713	0.047	0	0.038	0	4.378	0.10724764	0.03
09/06/95	08:00:00	0.58670553	0.074	0.4500581	0.047	0	0.033	0	3.674	0.09106576	0.026
09/06/95	08:05:00	0.58650191	0.072	0.40240168	0.047	0	0.028	0	3.269	0.06566633	0.022
09/06/95	08:10:00	0.58597387	0.072	0.4006567	0.047	0	0.027	0	3.27	0.0575999	0.022
09/06/95	08:15:00	0.58516487	0.072	0.40094268	0.047	0	0.027	0	3.002	0.0496284	0.021
09/06/95	08:20:01	0.58215743	0.071	0.40041072	0.047	0	0.027	0	2.972	0.04994118	0.021
09/06/95	08:25:01	0.58124184	0.071	0.40506638	0.047	0	0.027	0	2.952	0.05026586	0.021
09/06/95	08:30:01	0.58056066	0.072	0.41049447	0.047	0	0.026	0	2.912	0.04798752	0.021
09/06/95	08:35:00	0.57999742	0.073	0.44185597	0.047	0	0.026	3.17184551	2.893	0.04886569	0.021
09/06/95	08:40:00	0.57791582	0.072	0.4398855	0.047	0	0.026	4.06313216	2.837	0.0482417	0.021
09/06/95	08:45:01	0.57816094	0.072	0.43110396	0.048	0	0.026	4.20642189	2.847	0.04747276	0.021
09/06/95	08:50:01	0.57784199	0.072	0.42841543	0.048	0	0.026	4.67353305	2.837	0.0485241	0.021
09/06/95	08:55:01	0.5777388	0.071	0.42092964	0.048	0	0.026	5.04976973	2.797	0.0504878	0.021
09/06/95	09:00:00	0.57759315	0.071	0.41860617	0.048	0	0.026	5.25689163	2.814	0.04912519	0.021
09/06/95	09:05:00	0.57483272	0.071	0.43534395	0.048	0	0.026	5.68975182	2.768	0.05202286	0.021
09/06/95	09:10:00	0.57390169	0.072	0.44019343	0.048	0	0.026	6.11180948	2.726	0.05179331	0.02
09/06/95	09:15:01	0.57252672	0.071	0.44234825	0.048	0	0.026	6.22748367	2.712	0.05260841	0.02
09/06/95	09:20:01	0.57097537	0.071	0.43191459	0.048	0	0.025	6.63350738	2.683	0.05225977	0.02
09/06/95	09:25:00	0.57015225	0.069	0.3955182	0.048	0	0.026	6.64346982	2.667	0.05462298	0.02
09/06/95	09:30:01	0.56933244	0.069	0.37975472	0.047	0	0.025	7.18457582	2.62	0.05273816	0.02
09/06/95	09:35:01	0.56945937	0.068	0.37494157	0.048	0	0.025	7.19795848	2.622	0.05617626	0.02
09/06/95	09:40:01	0.56880465	0.068	0.35801764	0.048	0	0.025	7.48363962	2.595	0.05624991	0.02
09/06/95	09:45:00	0.56811629	0.067	0.34042922	0.047	0	0.025	7.58456269	2.545	0.05346741	0.019
09/06/95	09:50:01	0.56787853	0.067	0.34923977	0.047	0	0.024	7.87721903	2.511	0.05400719	0.019
09/06/95	09:55:02	0.56760098	0.066	0.30001622	0.047	0	0.024	7.79560228	2.447	0.04819538	0.019
09/06/95	10:00:02	0.56640126	0.065	0.28119212	0.047	0	0.024	8.071218	2.416	0.05051416	0.019
09/06/95	10:05:01	0.56734372	0.065	0.27864043	0.046	0	0.024	8.37732617	2.372	0.0490061	0.019
09/06/95	10:10:01	0.56641369	0.065	0.24379716	0.046	0	0.023	8.16946694	2.273	0.04705034	0.018
09/06/95	10:15:02	0.56632298	0.065	0.23845708	0.046	0	0.023	8.48428464	2.282	0.04485527	0.018
09/06/95	10:20:03	0.56531726	0.064	0.23564105	0.046	0	0.023	8.65224049	2.287	0.04485527	0.018
09/06/95	10:25:01	0.56474039	0.064	0.24312553	0.046	0	0.023	8.48974586	2.327	0.05350172	0.019
09/06/95	10:30:01	0.56486197	0.065	0.24799064	0.046	0	0.023	8.59142855	2.297	0.05435826	0.019
09/06/95	10:35:02	0.56488955	0.065	0.26032986	0.047	0	0.024	8.65510959	2.321	0.05988193	0.019
09/06/95	10:40:02	0.56551828	0.065	0.25738462	0.047	0	0.024	8.77897888	2.366	0.05721905	0.019
09/06/95	10:45:01	0.56419709	0.064	0.25102374	0.047	0	0.024	8.98996468	2.324	0.06083587	0.019
09/06/95	10:50:01	0.56420407	0.064	0.2544529	0.047	0	0.024	9.05294287	2.346	0.05934202	0.019
09/06/95	10:55:07	0.56441991	0.065	0.25545085	0.047	0	0.024	9.23163956	2.352	0.06060002	0.019
09/06/95	11:00:01	0.56189637	0.064	0.26445159	0.047	0	0.024	9.40002422	2.348	0.0611285	0.019
09/06/95	11:05:01	0.5622894	0.065	0.28407751	0.047	0	0.024	9.53869363	2.313	0.06118437	0.019
09/06/95	11:10:00	0.56372427	0.064	0.25007165	0.047	0	0.024	9.52499627	2.338	0.05487402	0.019
09/06/95	11:15:01	0.56432531	0.065	0.24997911	0.047	0	0.024	9.78764365	2.368	0.05262718	0.019
09/06/95	11:20:01	0.56089489	0.065	0.28110661	0.047	0	0.024	9.61867298	2.328	0.06175827	0.019
09/06/95	11:25:00	0.56069425	0.064	0.2603658	0.047	0	0.024	9.6650787	2.292	0.06562395	0.019
09/06/95	11:30:00	0.56150567	0.064	0.2538744	0.047	0	0.024	9.67826435	2.334	0.06197254	0.019
09/06/95	11:35:02	0.56231462	0.064	0.24966972	0.047	0	0.024	9.967521	2.317	0.05435539	0.019
09/06/95	11:40:00	0.56301643	0.065	0.25328138	0.047	0	0.024	10.0207803	2.336	0.05148737	0.019
09/06/95	11:45:00	0.56019314	0.064	0.2573641	0.046	0	0.023	10.0489719	2.286	0.05429408	0.019
09/06/95	11:50:00	0.55969113	0.064	0.25618663	0.046	0	0.023	10.038292	2.298	0.05625343	0.019
09/06/95	11:55:01	0.55956856	0.064	0.248528	0.047	0	0.023	10.3714014	2.378	0.04952293	0.019
09/06/95	12:00:01	0.56049532	0.064	0.25636869	0.047	0	0.023	10.6286821	2.335	0.051416	0.019
09/06/95	12:05:02	0.56089989	0.064	0.25489908	0.047	0	0.023	10.6775183	2.35	0.04856188	0.019
09/06/95	12:10:02	0.55967734	0.064	0.25612525	0.047	0	0.024	10.6532667	2.376	0.05341867	0.019

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	12:15:02	0.55998302	0.064	0.26116941	0.047	0	0.024	10.6421192	2.323	0.05565238	0.019
09/06/95	12:20:03	0.55926948	0.064	0.26274883	0.047	0	0.023	10.9046359	2.322	0.04964051	0.019
09/06/95	12:25:03	0.56172109	0.065	0.27790733	0.047	0	0.023	11.1712842	2.316	0.05152844	0.019
09/06/95	12:30:02	0.55887277	0.064	0.27143793	0.047	0	0.023	10.9431058	2.333	0.05532688	0.019
09/06/95	12:35:04	0.56050427	0.064	0.2705707	0.048	0	0.024	10.8330189	2.388	0.05594852	0.019
09/06/95	12:40:02	0.56110703	0.065	0.26375695	0.047	0	0.023	10.8515982	2.35	0.04733577	0.019
09/06/95	12:45:04	0.55936511	0.064	0.27051597	0.047	0	0.023	10.8573053	2.362	0.05112915	0.019
09/06/95	12:50:03	0.55855319	0.064	0.26781204	0.047	0	0.023	10.9652113	2.311	0.05360317	0.018
09/06/95	12:55:02	0.5609009	0.064	0.26306568	0.046	0	0.023	10.8896956	2.271	0.05230725	0.018
09/06/95	13:00:02	0.55987561	0.065	0.2765761	0.047	0	0.023	10.8898658	2.275	0.05042548	0.018
09/06/95	13:05:03	0.55967304	0.065	0.28640832	0.047	0	0.023	11.3299912	2.404	0.03097408	0.019
09/06/95	13:10:03	0.55834121	0.064	0.27682292	0.047	0	0.024	10.4318961	2.368	0.02357894	0.019
09/06/95	13:15:02	0.55925749	0.064	0.25718499	0.047	0	0.024	8.50006095	2.273	0	0.019
09/06/95	13:20:02	0.55660674	0.063	0.25827861	0.047	0	0.023	10.5027851	2.346	0	0.019
09/06/95	13:25:05	0.55894587	0.064	0.26503862	0.048	0	0.025	12.4995037	2.499	0	0.02
09/06/95	13:30:02	0.55781976	0.063	0.25599979	0.047	0	0.026	12.815331	2.483	0	0.02
09/06/95	13:35:02	0.55893418	0.064	0.25693435	0.046	0	0.027	12.5816267	2.507	0	0.021
09/06/95	13:40:03	0.55812315	0.064	0.26890367	0.047	0	0.025	12.0567668	2.455	0	0.02
09/06/95	13:45:04	0.5610779	0.064	0.26131278	0.047	0	0.025	11.943687	2.447	0	0.02
09/06/95	13:50:02	0.55954797	0.064	0.26886045	0.047	0	0.026	11.6275006	2.414	0	0.02
09/06/95	13:55:02	0.55923618	0.064	0.24409724	0.045	0	0.026	12.1128656	2.338	0	0.021
09/06/95	14:00:03	0.55862245	0.064	0.27215726	0.047	0	0.029	12.611418	2.418	0	0.023
09/06/95	14:05:03	0.56076298	0.065	0.26532368	0.046	0	0.03	13.250871	2.463	0	0.024
09/06/95	14:10:02	0.55973533	0.064	0.26268281	0.047	0	0.029	11.8964215	2.393	0	0.023
09/06/95	14:15:03	0.55859747	0.064	0.28139873	0.047	0	0.027	8.53210774	2.165	0	0.022
09/06/95	14:20:03	0.5588018	0.064	0.2777119	0.046	0	0.026	7.03236559	2.031	0	0.021
09/06/95	14:25:04	0.55992856	0.065	0.2820123	0.047	0	0.027	7.39130278	2.079	0	0.021
09/06/95	14:30:02	0.55962163	0.065	0.29793911	0.047	0	0.03	10.9793994	2.349	0	0.024
09/06/95	14:35:04	0.56217616	0.066	0.29643132	0.047	0	0.032	12.1109275	2.384	0	0.025
09/06/95	14:40:03	0.56084403	0.065	0.30178848	0.047	0	0.035	12.9732241	2.47	0	0.027
09/06/95	14:45:02	0.56083571	0.066	0.31768405	0.047	0	0.034	13.2991162	2.501	0	0.027
09/06/95	14:50:02	0.5611383	0.066	0.32766304	0.047	0	0.033	12.8038118	2.467	0	0.026
09/06/95	14:55:03	0.5586839	0.065	0.32265197	0.047	0	0.031	10.3085003	2.278	0	0.025
09/06/95	15:00:03	0.56124455	0.065	0.307492	0.046	0	0.029	7.06494592	2.039	0	0.023
09/06/95	15:05:02	0.55981264	0.066	0.32394573	0.047	0	0.028	7.0524512	2.105	0	0.023
09/06/95	15:10:03	0.55846759	0.065	0.32401368	0.047	0	0.029	8.77152772	2.256	0	0.023
09/06/95	15:15:03	0.55938964	0.065	0.31299182	0.046	0	0.033	11.5361307	2.33	0	0.026
09/06/95	15:20:02	0.56102835	0.066	0.30576403	0.046	0	0.033	10.7964922	2.215	0	0.026
09/06/95	15:25:02	0.56010767	0.065	0.31049893	0.046	0	0.032	10.5891512	2.205	0	0.025
09/06/95	15:30:03	0.56122157	0.066	0.32576478	0.046	0	0.035	12.4340049	2.374	0	0.027
09/06/95	15:35:03	0.561836	0.067	0.34671492	0.046	0	0.036	14.5532127	2.537	0	0.029
09/06/95	15:40:02	0.56214202	0.066	0.32230705	0.046	0	0.035	14.8142403	2.553	0	0.028
09/06/95	15:45:03	0.56255008	0.066	0.31614639	0.046	0	0.039	15.6076155	2.64	0	0.031
09/06/95	15:50:03	0.56142127	0.067	0.34217526	0.046	0	0.032	14.2990978	2.525	0	0.025
09/06/95	15:55:02	0.56234526	0.067	0.35690643	0.046	0	0.034	13.4672011	2.475	0	0.027
09/06/95	16:00:01	0.56091207	0.067	0.3563574	0.047	0	0.035	11.8102926	2.393	0	0.028
09/06/95	16:05:02	0.56081155	0.066	0.34770111	0.047	0	0.035	11.9727269	2.423	0	0.027
09/06/95	16:10:02	0.56069673	0.066	0.3436396	0.047	0	0.034	12.3915413	2.435	0	0.027
09/06/95	16:15:02	0.56100412	0.066	0.34521753	0.047	0	0.037	13.3943579	2.5	0	0.029
09/06/95	16:20:03	0.56069491	0.066	0.34404182	0.047	0	0.036	11.765267	2.413	0	0.028
09/06/95	16:37:43	0.56213579	0.067	0.34849554	0.047	0	0.039	11.040126	2.263	0	0.031
09/06/95	16:40:46	0.56038957	0.067	0.36218433	0.047	0	0.042	7.66155221	2.492	0	0.033
Run 21											
09/06/95	16:49:36	0.55997782	0.068	0.413295	0.047	0	0.042	9.15460724	2.458	0	0.033
09/06/95	16:54:36	0.56018168	0.067	0.36133153	0.047	0	0.044	10.1002766	2.504	0	0.035
09/06/95	16:59:35	0.56612262	0.066	0.35225407	0.047	0	0.046	8.79100974	2.489	0	0.036
09/06/95	17:04:36	0.56088926	0.067	0.35521965	0.046	0	0.045	9.73557382	2.515	0	0.035
09/06/95	17:09:36	0.56140147	0.067	0.35344471	0.046	0	0.046	10.6534389	2.618	0	0.036
09/06/95	17:14:37	0.56405813	0.067	0.35245967	0.047	0	0.039	9.66197435	2.432	0	0.031
09/06/95	17:19:36	0.56222859	0.067	0.34880036	0.047	0	0.039	9.08168257	2.571	0	0.031
09/06/95	17:24:36	0.56212642	0.066	0.34757435	0.047	0	0.041	10.0257117	2.457	0	0.033
09/06/95	17:29:35	0.56394751	0.066	0.34508849	0.046	0	0.045	10.1729104	2.467	0	0.035

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	17:34:36	0.56261509	0.067	0.35194065	0.046	0	0.044	10.3091662	2.526	0	0.035
09/06/95	17:39:36	0.56261	0.067	0.34409493	0.047	0	0.045	10.2320549	2.451	0	0.035
09/06/95	17:44:35	0.56363014	0.066	0.34256471	0.047	0	0.043	9.86684293	2.501	0	0.034
09/06/95	17:49:36	0.56423804	0.066	0.33968496	0.046	0	0.041	9.6174389	2.489	0	0.032
09/06/95	17:54:36	0.56515115	0.067	0.33782665	0.047	0	0.038	9.07157307	2.487	0	0.03
09/06/95	17:59:36	0.5655488	0.067	0.33635485	0.047	0	0.038	8.85503555	2.446	0	0.03
09/06/95	18:04:35	0.56524799	0.067	0.3385584	0.047	0	0.038	9.08081627	2.453	0	0.03
09/06/95	18:09:36	0.56482744	0.067	0.33855069	0.047	0	0.037	9.02971338	2.486	0	0.029
09/06/95	18:14:36	0.56531159	0.067	0.33418635	0.047	0	0.037	8.96347161	2.442	0	0.03
09/06/95	18:19:35	0.56692423	0.067	0.33150138	0.047	0	0.037	8.4845665	2.526	0	0.029
09/06/95	18:24:36	0.56711303	0.067	0.33145869	0.047	0	0.037	8.5371418	2.51	0	0.029
09/06/95	18:29:36	0.56740619	0.067	0.33218721	0.047	0	0.036	8.50906422	2.495	0	0.029
09/06/95	18:34:35	0.56799462	0.067	0.33157509	0.047	0	0.036	8.67040488	2.542	0	0.029
09/06/95	18:39:36	0.5688727	0.067	0.33000287	0.047	0	0.036	9.34721239	2.513	0	0.029
09/06/95	18:44:36	0.57146969	0.067	0.32916897	0.047	0	0.037	9.0559389	2.566	0	0.029
09/06/95	18:49:36	0.56730067	0.067	0.36412317	0.047	0	0.037	9.62744097	2.604	0	0.029
09/06/95	18:54:35	0.5685942	0.068	0.370616	0.047	0	0.037	9.91910164	2.601	0	0.029
09/06/95	18:59:36	0.58326233	0.068	0.32836853	0.047	0	0.037	7.37569334	2.869	0	0.03
09/06/95	19:04:36	0.58192147	0.067	0.32477469	0.047	0	0.038	7.77670574	2.855	0	0.03
09/06/95	19:09:35	0.57775437	0.067	0.33444711	0.047	0	0.038	8.77170856	2.756	0	0.03
09/06/95	19:14:36	0.59139473	0.069	0.33599008	0.047	0	0.038	6.30433001	3.019	0	0.03
09/06/95	19:19:36	0.58687984	0.068	0.31853181	0.047	0	0.038	6.34058605	3.055	0	0.03
09/06/95	19:24:36	0.57707017	0.067	0.31427484	0.047	0	0.038	8.65755202	2.822	0	0.03
09/06/95	19:29:35	0.57591023	0.067	0.31465922	0.047	0	0.038	8.95760527	2.808	0	0.03
09/06/95	19:34:36	0.58416486	0.068	0.31847211	0.047	0	0.038	7.62756676	2.873	0	0.03
09/06/95	19:39:36	0.58730191	0.068	0.3136862	0.047	0	0.038	5.0845673	3.194	0	0.03
09/06/95	19:44:35	0.57252411	0.067	0.33701915	0.047	0	0.037	8.02151401	2.87	0	0.03
09/06/95	19:49:36	0.58751251	0.069	0.3480411	0.047	0	0.037	5.61092891	3.073	0	0.029
09/06/95	19:54:36	0.58223455	0.067	0.31440666	0.047	0	0.037	6.04429136	3.054	0	0.03
09/06/95	19:59:36	0.58639187	0.068	0.32662445	0.047	0	0.037	6.67077964	2.934	0	0.029
09/06/95	20:04:35	0.58937656	0.068	0.31707345	0.047	0	0.036	4.07609011	3.303	0	0.029
09/06/95	20:09:36	0.58147447	0.067	0.31583936	0.047	0	0.036	5.36141534	3.011	0	0.028
09/06/95	20:14:36	0.60250614	0.07	0.31983299	0.047	0	0.035	0	4.107	0	0.028
09/06/95	20:19:36	0.58595398	0.068	0.31913299	0.047	0	0.036	0	3.404	0	0.028
09/06/95	20:24:35	0.58323071	0.069	0.35272045	0.047	0	0.035	5.31763333	2.941	0	0.028
09/06/95	20:29:36	0.57256282	0.069	0.38233865	0.047	0	0.035	6.64292255	2.849	0	0.027
09/06/95	20:34:36	0.57319524	0.068	0.35245981	0.047	0	0.034	6.08939044	2.814	0	0.027
09/06/95	20:39:36	0.57116226	0.068	0.35711349	0.046	0	0.032	6.4902536	2.772	0	0.026
09/06/95	20:44:37	0.57137792	0.067	0.34079217	0.046	0	0.032	6.65427387	2.797	0	0.025
09/06/95	20:49:36	0.58151041	0.068	0.32467748	0.047	0	0.032	4.81088535	2.981	0	0.025
09/06/95	20:54:35	0.58700968	0.068	0.31479638	0.047	0	0.033	4.14985996	3.105	0	0.026
09/06/95	20:59:35	0.58406903	0.068	0.3153933	0.046	0	0.032	3.51872765	3.105	0	0.026
09/06/95	21:04:36	0.57365952	0.069	0.37982068	0.046	0	0.032	4.95586927	2.89	0	0.025
09/06/95	21:09:36	0.57025256	0.069	0.40346089	0.046	0	0.031	6.11900775	2.893	0	0.025
09/06/95	21:14:37	0.57382168	0.069	0.38340908	0.046	0	0.031	5.39336727	2.914	0	0.025
09/06/95	21:19:35	0.58148465	0.068	0.31658609	0.046	0	0.032	4.58428586	3.011	0	0.025
09/06/95	21:24:36	0.5855525	0.067	0.29788483	0.047	0	0.032	0	3.281	0	0.025
09/06/95	21:29:36	0.58534542	0.068	0.29866381	0.047	0	0.032	0	3.286	0	0.026
09/06/95	21:34:36	0.59177278	0.068	0.29751784	0.047	0	0.033	0	3.246	0	0.026
09/06/95	21:39:35	0.59949219	0.069	0.29312897	0.047	0	0.033	0	3.524	0	0.026
09/06/95	21:44:35	0.58272716	0.067	0.2912156	0.047	0	0.033	4.33962547	3.15	0	0.026
09/06/95	21:49:36	0.5993834	0.069	0.28612987	0.047	0	0.033	0	3.486	0	0.026
09/06/95	21:54:36	0.590422	0.068	0.28619655	0.047	0	0.033	0	3.375	0	0.026
09/06/95	21:59:35	0.58614534	0.067	0.2769741	0.047	0	0.034	3.84593263	3.267	0	0.027
09/06/95	22:04:35	0.59309145	0.067	0.27337117	0.047	0	0.033	4.29541092	3.164	0	0.026
09/06/95	22:09:36	0.59592969	0.068	0.27538504	0.046	0	0.033	0	3.316	0	0.026
09/06/95	22:14:36	0.59373484	0.068	0.27144412	0.046	0	0.033	0	3.593	0	0.026
09/06/95	22:19:36	0.59529291	0.068	0.27001558	0.047	0	0.033	0	3.477	0	0.026
09/06/95	22:24:37	0.59996327	0.068	0.26779687	0.047	0	0.032	0	3.466	0	0.026
09/06/95	22:29:37	0.59860367	0.068	0.26803149	0.047	0	0.033	0	3.534	0	0.026
09/06/95	22:34:36	0.59265107	0.068	0.26753178	0.047	0	0.033	0	3.389	0	0.026
09/06/95	22:39:37	0.58663785	0.067	0.27154801	0.047	0	0.034	0	3.389	0	0.027

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	22:44:37	0.58575525	0.069	0.33274193	0.047	0	0.033	0	3.382	0	0.026
09/06/95	22:49:35	0.60082316	0.069	0.28536404	0.047	0	0.036	0	3.67	0	0.028
09/06/95	22:54:36	0.58274417	0.068	0.27471666	0.047	0	0.035	0	3.534	0	0.028
09/06/95	22:59:36	0.59203591	0.068	0.26790507	0.046	0	0.034	0	3.351	0	0.027
09/06/95	23:04:37	0.5924119	0.068	0.26883298	0.046	0	0.033	0	3.455	0	0.026
09/06/95	23:09:36	0.59468041	0.068	0.2687705	0.046	0	0.034	0	3.378	0	0.027
09/06/95	23:14:36	0.58897475	0.068	0.26495061	0.046	0	0.034	0	3.487	0	0.027
09/06/95	23:19:36	0.60175111	0.069	0.26426211	0.046	0	0.034	0	3.474	0	0.027
09/06/95	23:24:36	0.59889841	0.068	0.26616621	0.046	0	0.039	0	3.67	0	0.031
09/06/95	23:29:37	0.59036259	0.068	0.26772484	0.046	0	0.038	0	3.823	0	0.03
09/06/95	23:34:36	0.59562195	0.067	0.26611025	0.046	0	0.034	0	3.528	0	0.027
09/06/95	23:39:36	0.58819743	0.069	0.27431629	0.046	0	0.035	0	3.66	0	0.028
09/06/95	23:44:36	0.59047766	0.068	0.28093812	0.046	0	0.036	0	3.795	0	0.029
09/06/95	23:49:36	0.59613938	0.069	0.28650222	0.046	0	0.035	0	3.966	0	0.028
09/06/95	23:54:35	0.59942245	0.069	0.28902642	0.046	0	0.035	0	3.978	0	0.027
09/06/95	23:59:36	0.59363155	0.069	0.29330432	0.046	0	0.036	0	3.646	0	0.028
09/07/95	00:04:36	0.61095312	0.07	0.29738382	0.046	0	0.033	0	4.116	0	0.026
09/07/95	00:09:36	0.59278379	0.069	0.29775641	0.046	0	0.033	0	3.851	0	0.026
09/07/95	00:14:35	0.57974148	0.068	0.30854534	0.046	0	0.03	0	3.66	0	0.024
09/07/95	00:19:36	0.59735657	0.069	0.30374724	0.046	0	0.03	0	3.785	0	0.024
09/07/95	00:24:36	0.59464607	0.069	0.30876415	0.046	0	0.033	0	3.64	0	0.026
09/07/95	00:29:36	0.59295633	0.069	0.30669819	0.046	0	0.032	0	3.814	0	0.025
09/07/95	00:34:35	0.58398609	0.069	0.31549457	0.046	0	0.032	0	3.7	0	0.025
09/07/95	00:39:35	0.59067482	0.069	0.31859462	0.046	0	0.031	0	3.982	0	0.025
09/07/95	00:44:37	0.59132185	0.069	0.31127322	0.046	0	0.03	0	3.725	0	0.024
09/07/95	00:49:36	0.58957094	0.069	0.31273232	0.046	0	0.03	0	3.603	0	0.024
09/07/95	00:54:36	0.59161367	0.069	0.31905505	0.046	0	0.029	0	3.774	0	0.023
09/07/95	00:59:35	0.58081638	0.068	0.32576688	0.046	0	0.027	0	4.057	0	0.021
09/07/95	01:04:37	0.58905855	0.069	0.33411759	0.046	0	0.027	0	3.907	0	0.022
09/07/95	01:09:35	0.58721044	0.068	0.31359392	0.046	0	0.028	0	3.769	0	0.022
09/07/95	01:14:36	0.59641458	0.069	0.30773592	0.046	0	0.027	0	4.194	0	0.022
09/07/95	01:19:36	0.58839143	0.068	0.30648829	0.045	0	0.029	0	3.764	0	0.023
09/07/95	01:24:36	0.58992911	0.069	0.31099524	0.045	0	0.028	0	3.87	0	0.022
09/07/95	01:29:36	0.58782894	0.068	0.2952255	0.045	0	0.029	0	3.756	0	0.023
09/07/95	01:34:35	0.58646935	0.068	0.29677932	0.045	0	0.028	0	3.778	0	0.022
09/07/95	01:39:36	0.59219905	0.069	0.30056676	0.046	0	0.027	0	3.927	0	0.021
09/07/95	01:44:36	0.60041503	0.069	0.297635	0.045	0	0.027	0	4.485	0	0.021
09/07/95	01:49:36	0.59172198	0.069	0.30153663	0.045	0	0.027	0	4.084	0	0.022
09/07/95	01:54:36	0.58546533	0.068	0.31588529	0.045	0	0.026	0	4	0	0.021
09/07/95	01:59:35	0.58674402	0.069	0.31817974	0.045	0	0.028	0	6.32	0	0.022
09/07/95	02:04:36	0.58213065	0.068	0.30505511	0.046	0	0.033	0	7.378	0	0.026
09/07/95	02:09:36	0.58778217	0.069	0.30074158	0.046	0	0.04	0	8.525	0	0.032
09/07/95	02:14:36	0.59398986	0.069	0.29369498	0.045	0	0.027	0	6.061	0	0.021
09/07/95	02:19:37	0.59265609	0.069	0.29346708	0.045	0	0.026	0	4.694	0	0.02
09/07/95	02:24:38	0.60086011	0.069	0.2921898	0.045	0	0.029	0	3.882	0	0.023
09/07/95	02:29:38	0.59424941	0.069	0.29349	0.045	0	0.028	0	4.175	0	0.022
09/07/95	02:34:38	0.59622562	0.069	0.2934101	0.045	0	0.026	0	4	0	0.021
09/07/95	02:39:37	0.58978162	0.069	0.29246731	0.045	0	0.027	0	4.343	0	0.021
09/07/95	02:44:37	0.58299583	0.068	0.29149792	0.045	0	0.026	0	4.551	0	0.02
09/07/95	02:49:37	0.58432207	0.069	0.31229167	0.045	0	0.027	0	5.471	0	0.021
09/07/95	02:54:37	0.59678027	0.069	0.29320285	0.045	0	0.027	0	5.768	0	0.021
09/07/95	02:59:36	0.58693607	0.068	0.29196605	0.045	0	0.025	0	4.371	0	0.02
09/07/95	03:04:38	0.58299583	0.069	0.31466652	0.045	0	0.027	0	5.586	0	0.021
09/07/95	03:09:38	0.58764894	0.069	0.30642664	0.045	0	0.029	0	6.413	0	0.023
09/07/95	03:14:37	0.59947559	0.07	0.29459999	0.045	0	0.026	0	5.764	0	0.021
09/07/95	03:19:36	0.59523197	0.069	0.29427416	0.044	0	0.025	0	4.575	0	0.02
09/07/95	03:24:37	0.59209568	0.069	0.30645672	0.045	0	0.025	0	3.993	0	0.02
09/07/95	03:29:38	0.58823075	0.07	0.32738678	0.045	0	0.026	0	5.065	0	0.02
09/07/95	03:34:37	0.5943544	0.069	0.29974199	0.044	0	0.025	0	4.265	0	0.02
09/07/95	03:39:36	0.58769387	0.069	0.29960674	0.044	0	0.025	0	4.404	0	0.02
09/07/95	03:44:37	0.58922482	0.069	0.30274232	0.044	0	0.025	0	4.632	0	0.02
09/07/95	03:49:38	0.59218805	0.069	0.30446263	0.044	0	0.025	0	5.159	0	0.02

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	03:54:37	0.58828244	0.069	0.30792229	0.044	0	0.025	0	4.199	0	0.02
09/07/95	03:59:37	0.5937171	0.07	0.31262523	0.044	0	0.025	0	4.433	0	0.02
09/07/95	04:04:38	0.59746981	0.07	0.32030107	0.044	0	0.025	0	4.215	0	0.02
09/07/95	04:09:38	0.59905366	0.071	0.31789085	0.044	0	0.025	0	4.78	0	0.02
09/07/95	04:14:38	0.58938838	0.069	0.31740758	0.044	0	0.025	0	3.969	0	0.02
09/07/95	04:19:37	0.59944027	0.071	0.31557118	0.044	0	0.025	0	5.421	0	0.02
09/07/95	04:24:37	0.59289691	0.07	0.31371025	0.044	0	0.025	0	4.695	0	0.02
09/07/95	04:29:37	0.59425077	0.07	0.31699822	0.044	0	0.025	0	5.221	0	0.02
09/07/95	04:34:39	0.58902872	0.07	0.32744233	0.044	0	0.028	0	5.941	0	0.022
09/07/95	04:39:38	0.5908062	0.071	0.35668945	0.044	0	0.031	0	6.982	0	0.025
09/07/95	04:44:38	0.59312802	0.071	0.35146536	0.044	0	0.036	0	7.795	0	0.028
09/07/95	04:49:37	0.5960303	0.071	0.34169437	0.044	0	0.034	0	8.028	0	0.027
09/07/95	04:54:36	0.59255636	0.071	0.34483569	0.044	0	0.036	0	8.109	0	0.029
09/07/95	04:59:38	0.59719746	0.071	0.33493308	0.044	0	0.032	0	7.375	0	0.026
09/07/95	05:04:37	0.5912654	0.071	0.34513826	0.044	0	0.03	0	6.617	0	0.024
09/07/95	05:09:37	0.59744756	0.072	0.35924131	0.044	0	0.033	0	7.272	0	0.026
09/07/95	05:14:36	0.59704129	0.073	0.38756498	0.043	0	0.033	0	7.541	0	0.026
09/07/95	05:19:36	0.6005864	0.074	0.40203267	0.043	0	0.031	0	7.186	0	0.025
09/07/95	05:24:38	0.59469546	0.075	0.44162753	0.043	0	0.032	0	7.105	0	0.025
09/07/95	05:29:38	0.59714964	0.075	0.44199314	0.044	0	0.032	0	7.263	0	0.026
09/07/95	05:34:37	0.59414397	0.074	0.43672286	0.044	0	0.034	0	7.477	0	0.027
09/07/95	05:39:37	0.59895254	0.074	0.42389193	0.043	0	0.035	0	7.862	0	0.028
09/07/95	05:44:37	0.59690487	0.074	0.42033379	0.043	0	0.033	0	7.153	0	0.026
09/07/95	05:49:37	0.59931836	0.074	0.41994763	0.043	0	0.033	0	7.431	0	0.026
09/07/95	05:54:37	0.60060767	0.074	0.42085954	0.043	0	0.032	0	7.056	0	0.025
09/07/95	05:59:39	0.60015937	0.074	0.42090226	0.043	0	0.03	0	6.665	0	0.024
09/07/95	06:04:39	0.59130721	0.073	0.42291341	0.043	0	0.029	0	5.979	0	0.023
09/07/95	06:09:38	0.59495233	0.075	0.44288753	0.043	0	0.029	0	6.282	0	0.023
09/07/95	06:14:37	0.59801754	0.075	0.4343171	0.043	0	0.029	0	6.196	0	0.023
09/07/95	06:19:37	0.59580016	0.074	0.41619244	0.043	0	0.027	0	5.548	0	0.021
09/07/95	06:24:38	0.60204539	0.074	0.4030022	0.043	0	0.029	0	7.409	0	0.023
09/07/95	06:29:37	0.59747421	0.072	0.36767643	0.043	0	0.029	0	6.924	0	0.023
09/07/95	06:34:38	0.60048215	0.072	0.34847431	0.043	0	0.03	0	6.811	0	0.023
09/07/95	06:39:39	0.60335163	0.072	0.35775225	0.043	0	0.032	0	8.982	0	0.026
09/07/95	06:44:37	0.59188589	0.07	0.32878263	0.043	0	0.033	0	7.362	0	0.026
Run 22											
09/07/95	12:22:11	0.55867724	0.063	0.2261532	0.046	0	0.027	6.31160923	1.802	0.09039985	0.021
09/07/95	12:27:11	0.55693588	0.062	0.19590966	0.046	0	0.026	6.80210631	1.879	0.08583196	0.021
09/07/95	12:32:11	0.55857639	0.063	0.19875976	0.046	0	0.026	6.18101862	1.814	0.07530331	0.02
09/07/95	12:37:12	0.55744843	0.063	0.19079763	0.046	0	0.026	6.82429063	1.863	0.07932841	0.021
09/07/95	12:42:11	0.5587956	0.063	0.1933031	0.046	0	0.026	6.91114958	1.799	0.08465979	0.021
09/07/95	12:47:11	0.55980803	0.063	0.19801966	0.047	0	0.026	4.90485764	1.642	0.0676815	0.021
09/07/95	12:52:10	0.5591922	0.064	0.22500951	0.046	0	0.026	5.40432865	1.547	0.06816917	0.021
09/07/95	12:57:11	0.55878285	0.064	0.2210096	0.046	0	0.026	5.41647935	1.558	0.06895007	0.021
Run 23											
09/07/95	16:47:44	0.53980228	0.063	0.20405145	0.061	0	0.029	0	2.743	0	0.023
09/07/95	16:52:45	0.54158088	0.062	0.20413671	0.061	0	0.029	0	2.108	0	0.023
09/07/95	16:57:45	0.54287185	0.063	0.20173805	0.061	0	0.028	0	2.768	0	0.023
09/07/95	17:02:44	0.54181665	0.063	0.20939675	0.061	0	0.029	0	3.07	0	0.023
09/07/95	17:07:45	0.54333712	0.062	0.21585049	0.061	0	0.029	0	2.458	0	0.023
09/07/95	17:12:45	0.54000429	0.062	0.23670997	0.062	0	0.03	0	2.41	0	0.024
09/07/95	17:17:45	0.54165185	0.062	0.21207642	0.062	0	0.029	0	2.636	0	0.023
09/07/95	17:22:45	0.54083441	0.061	0.20756069	0.063	0	0.029	0	2.184	0	0.023
09/07/95	17:27:44	0.54458698	0.061	0.20930599	0.062	0	0.031	0	2.761	0	0.025
09/07/95	17:32:45	0.53882704	0.061	0.20634615	0.062	0	0.03	0	2.571	0	0.024
09/07/95	17:37:45	0.54284276	0.061	0.20902329	0.062	0	0.029	0	2.184	0	0.023
09/07/95	17:42:44	0.53882704	0.062	0.20758175	0.061	0	0.031	0	2.332	0	0.024
09/07/95	17:47:45	0.54194008	0.062	0.20896058	0.061	0	0.03	0	2.915	0	0.024
09/07/95	17:52:45	0.5436237	0.062	0.2055513	0.062	0	0.028	0	2.69	0	0.022
09/07/95	17:57:44	0.54449859	0.061	0.20414866	0.061	0	0.029	0	2.692	0	0.023
09/07/95	18:02:44	0.54523267	0.062	0.20320179	0.062	0	0.03	0	2.483	0	0.024
09/07/95	18:07:45	0.54015665	0.062	0.20187262	0.062	0	0.031	0	3.057	0	0.025

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	18:12:45	0.5456468	0.061	0.1997457	0.062	0	0.029	0	2.37	0	0.023
09/07/95	18:17:44	0.54065991	0.062	0.20007156	0.062	0	0.03	0	2.238	0	0.023
09/07/95	18:22:45	0.539843	0.061	0.19985159	0.063	0	0.031	0	2.515	0	0.024
09/07/95	18:27:45	0.54308944	0.061	0.1997325	0.063	0	0.029	0	2.443	0	0.023
09/07/95	18:32:44	0.54532659	0.062	0.20070131	0.064	0	0.029	0	2.565	0	0.023
09/07/95	18:37:45	0.54461677	0.062	0.19989565	0.063	0	0.029	0	2.69	0	0.023
09/07/95	18:42:45	0.54574174	0.062	0.19988613	0.063	0	0.028	0	2.355	0	0.023
09/07/95	18:47:44	0.54270376	0.062	0.19951305	0.063	0	0.028	0	2.373	0	0.022
09/07/95	18:52:44	0.54380529	0.062	0.19823295	0.063	0	0.028	0	2.429	0	0.022
09/07/95	18:57:45	0.54540533	0.062	0.19703019	0.063	0	0.028	0	2.442	0	0.022
09/07/95	19:02:44	0.54467531	0.062	0.20005608	0.062	0	0.028	0	2.411	0	0.022
09/07/95	19:07:44	0.54606736	0.062	0.20029498	0.062	0	0.028	0	2.419	0	0.022
09/07/95	19:12:45	0.54585464	0.062	0.19880263	0.062	0	0.028	0	2.476	0	0.022
09/07/95	19:17:44	0.54473698	0.062	0.1987784	0.061	0	0.028	0	2.474	0	0.022
09/07/95	19:22:44	0.54562488	0.062	0.19819066	0.062	0	0.028	0	2.567	0	0.022
09/07/95	19:27:45	0.54661014	0.062	0.19760367	0.061	0	0.028	0	2.617	0	0.022
09/07/95	19:32:44	0.54719294	0.062	0.19451975	0.062	0	0.028	0	2.714	0	0.022
09/07/95	19:37:44	0.54797714	0.062	0.19437265	0.062	0	0.028	0	2.735	0	0.022
09/07/95	19:42:45	0.54766221	0.062	0.19402605	0.062	0	0.028	0	2.831	0	0.022
09/07/95	19:47:45	0.54714376	0.062	0.19264643	0.063	0	0.029	0	2.891	0	0.023
09/07/95	19:52:44	0.54911907	0.062	0.1924008	0.063	0	0.029	0	2.952	0	0.023
09/07/95	19:57:45	0.54812043	0.062	0.19222521	0.062	0	0.029	0	3.047	0	0.023
09/07/95	20:02:45	0.55377472	0.062	0.19141971	0.062	0	0.029	0	3.969	0	0.023
09/07/95	20:07:44	0.54898709	0.062	0.19230449	0.063	0	0.029	0	3.092	0	0.023
09/07/95	20:12:44	0.54798374	0.062	0.18885371	0.063	0	0.029	0	3.191	0	0.023
09/07/95	20:17:45	0.54806845	0.062	0.19212182	0.063	0	0.029	0	3.255	0	0.023
09/07/95	20:22:45	0.56313661	0.062	0.1941953	0.063	0	0.029	0	3.95	0	0.023
09/07/95	20:27:46	0.54923774	0.063	0.20184983	0.063	0	0.03	0	3.386	0	0.023
09/07/95	20:32:46	0.55110977	0.063	0.20385413	0.063	0	0.029	0	3.391	0.02328912	0.023
09/07/95	20:37:45	0.54902314	0.063	0.19876203	0.063	0	0.03	0	3.46	0.02952696	0.023
09/07/95	20:42:45	0.54821425	0.063	0.19726207	0.063	0	0.03	0	3.525	0.02802468	0.024
09/07/95	20:47:46	0.54840124	0.063	0.1987707	0.063	0	0.03	0	3.56	0.03227054	0.024
09/07/95	20:52:46	0.54858792	0.063	0.19414313	0.064	0	0.03	0	3.68	0.03265404	0.024
09/07/95	20:57:45	0.5487743	0.063	0.19525603	0.063	0	0.03	0	3.678	0.03620249	0.024
09/07/95	21:02:45	0.54895444	0.063	0.19524312	0.064	0	0.03	0	3.765	0.03756576	0.024
09/07/95	21:07:46	0.54825073	0.063	0.19754023	0.064	0	0.031	0	3.913	0.04031837	0.024
09/07/95	21:12:46	0.54844546	0.063	0.19887813	0.064	0	0.031	0	3.937	0.04117785	0.024
09/07/95	21:17:45	0.54823587	0.063	0.20176344	0.064	0	0.031	0	3.992	0.04659117	0.025
09/07/95	21:22:45	0.54941407	0.064	0.22077228	0.065	0	0.031	0	4.139	0.04559535	0.025
09/07/95	21:27:46	0.55038784	0.064	0.22473266	0.065	0	0.031	0	4.181	0.04863617	0.025
09/07/95	21:32:46	0.54879029	0.064	0.22223739	0.065	0	0.031	0	4.216	0.04979143	0.024
09/07/95	21:37:46	0.54996008	0.064	0.23220537	0.065	0	0.031	0	4.267	0.051645	0.025
09/07/95	21:42:46	0.55064312	0.065	0.24881422	0.066	0	0.031	0	4.407	0.05400008	0.025
09/07/95	21:47:47	0.55043917	0.065	0.24088487	0.066	0	0.031	0	4.434	0.05369417	0.025
09/07/95	21:52:45	0.55062926	0.065	0.24054323	0.066	0	0.031	0	4.478	0.0538809	0.025
09/07/95	21:57:46	0.55110042	0.065	0.23479359	0.066	0	0.031	0	4.469	0.05690176	0.025
09/07/95	22:02:46	0.55217592	0.065	0.25020164	0.066	0	0.031	0	4.533	0.05757984	0.025
09/07/95	22:07:46	0.55324329	0.066	0.28552588	0.066	0	0.031	0	4.614	0.05824649	0.025
09/07/95	22:12:46	0.55333394	0.067	0.31704805	0.066	0	0.031	0	4.683	0.06049784	0.025
09/07/95	22:17:45	0.55233501	0.066	0.28093664	0.067	0	0.031	0	4.717	0.06165463	0.025
09/07/95	22:22:46	0.55222135	0.066	0.25851587	0.067	0	0.031	0	4.715	0.06241733	0.025
09/07/95	22:27:47	0.55299984	0.066	0.28470598	0.066	0	0.031	0	4.721	0.06270018	0.025
09/07/95	22:32:45	0.55337693	0.067	0.31072807	0.067	0	0.031	0	4.789	0.06464087	0.025
09/07/95	22:37:46	0.55289367	0.067	0.29123455	0.067	0	0.032	0	4.831	0.07084349	0.025
09/07/95	22:42:47	0.5548505	0.067	0.29461697	0.067	0	0.032	0	4.872	0.07073165	0.025
09/07/95	22:47:47	0.55286976	0.067	0.28252332	0.068	0	0.032	0	4.911	0.07188289	0.025
09/07/95	22:52:45	0.55305808	0.066	0.2735345	0.067	0	0.032	0	4.875	0.07334181	0.025
09/07/95	22:57:45	0.55394172	0.067	0.28894904	0.068	0	0.032	0	5	0.0744218	0.026
09/07/95	23:02:46	0.56572354	0.069	0.31643994	0.068	0	0.032	0	5.196	0.07334181	0.025
09/07/95	23:07:46	0.55441583	0.068	0.29629693	0.068	0	0.032	0	5.112	0.07743567	0.026
09/07/95	23:12:45	0.55617362	0.068	0.30595437	0.068	0	0.032	0	5.172	0.07702828	0.026
09/07/95	23:17:45	0.55566547	0.068	0.30701376	0.068	0	0.032	0	5.171	0.07817571	0.026

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	23:22:46	0.55683348	0.069	0.33156992	0.068	0	0.032	0	5.14	0.07717998	0.025
09/07/95	23:27:46	0.55692245	0.069	0.3397423	0.068	0	0.032	0	5.171	0.07863588	0.025
09/07/95	23:32:46	0.5575015	0.07	0.36065553	0.068	0	0.032	0	5.195	0.07930697	0.026
09/07/95	23:37:45	0.55759022	0.07	0.35352925	0.068	0	0.032	0	5.2	0.08115393	0.026
09/07/95	23:42:46	0.55709091	0.07	0.34973746	0.068	0	0.032	0	5.197	0.08211824	0.026
09/07/95	23:47:46	0.5571889	0.07	0.34944348	0.067	0	0.032	0	5.172	0.0826082	0.025
09/07/95	23:52:46	0.55628865	0.07	0.34872118	0.068	0	0.032	0	5.211	0.08443754	0.025
09/07/95	23:57:45	0.55599479	0.07	0.35930036	0.068	0	0.032	0	5.264	0.0862987	0.026
09/08/95	00:02:45	0.5572588	0.071	0.37548862	0.068	0	0.033	0	5.277	0.08784906	0.026
09/08/95	00:07:46	0.55919786	0.071	0.38865818	0.067	0	0.032	0	5.219	0.08419296	0.025
09/08/95	00:12:46	0.55820917	0.071	0.38271048	0.067	0	0.032	0	5.194	0.08495977	0.025

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 20											
09/05/95	20:49:50	0.01736238	0.005	0	0.006	0	0.002	0.00441416	0.003	0	0.157
09/05/95	20:54:51	0.0160841	0.005	0	0.006	0	0.002	0.00460947	0.003	0	0.158
09/05/95	20:59:51	0.01685649	0.005	0	0.006	0	0.002	0.00401812	0.003	0	0.199
09/05/95	21:04:51	0.01626469	0.005	0	0.006	0	0.002	0.00411516	0.003	0	0.171
09/05/95	21:09:52	0.01537993	0.005	0	0.006	0	0.002	0.00450622	0.003	0	0.153
09/05/95	21:14:53	0.01664387	0.005	0	0.006	0	0.002	0.0038183	0.003	0	0.185
09/05/95	21:19:52	0.01614198	0.005	0	0.006	0	0.002	0.00401104	0.003	0	0.166
09/05/95	21:24:52	0.01487304	0.005	0	0.006	0	0.002	0.0044032	0.003	0	0.161
09/05/95	21:29:52	0.0162367	0.005	0	0.006	0	0.002	0.00391246	0.003	0	0.159
09/05/95	21:34:52	0.01671935	0.005	0	0.006	0	0.002	0.00361764	0.003	0	0.166
09/05/95	21:39:51	0.01671614	0.005	0	0.006	0	0.002	0.00351919	0.003	0	0.166
09/05/95	21:44:51	0.01553414	0.005	0	0.006	0	0.002	0.00381026	0.003	0	0.178
09/05/95	21:49:52	0.01562884	0.005	0	0.006	0	0.002	0.00400489	0.003	0	0.176
09/05/95	21:54:52	0.01572049	0.005	0	0.006	0	0.002	0.00371043	0.003	0	0.159
09/05/95	21:59:52	0.01639769	0.005	0	0.006	0	0.002	0.00351379	0.003	0	0.163
09/05/95	22:04:51	0.01561385	0.005	0	0.006	0	0.002	0.00370829	0.003	0	0.2
09/05/95	22:09:52	0.01600112	0.005	0	0.006	0	0.002	0.00370758	0.003	0	0.154
09/05/95	22:14:52	0.0162907	0.005	0	0.006	0	0.002	0.00351177	0.003	0	0.156
09/05/95	22:19:52	0.0150139	0.005	0	0.006	0	0.002	0.0040947	0.003	0	0.279
09/05/95	22:24:52	0.01628061	0.005	0	0.006	0	0.002	0.00350959	0.003	0	0.163
09/05/95	22:29:53	0.01637495	0.005	0	0.006	0	0.002	0.00341145	0.003	0	0.156
09/05/95	22:34:53	0.01871144	0.005	0	0.006	0	0.002	0	0.003	0	0.154
09/05/95	22:39:52	0.01890271	0.005	0	0.006	0	0.002	0	0.003	0	0.162
09/05/95	22:44:52	0.01655149	0.005	0	0.006	0	0.002	0.00321294	0.003	0	0.174
09/05/95	22:49:53	0.01634732	0.005	0	0.006	0	0.002	0.00321108	0.003	0	0.158
09/05/95	22:54:53	0.01624689	0.005	0	0.006	0	0.002	0.00321046	0.003	0	0.157
09/05/95	22:59:53	0.01752173	0.005	0	0.006	0	0.002	0	0.003	0	0.167
09/05/95	23:04:55	0.01858177	0.005	0	0.006	0	0.002	0	0.003	0	0.226
09/05/95	23:09:55	0.01877552	0.005	0	0.006	0	0.002	0	0.003	0	0.219
09/05/95	23:14:54	0.02053056	0.005	0	0.006	0	0.002	0	0.003	0	0.174
09/05/95	23:19:54	0.02004019	0.005	0	0.006	0	0.002	0	0.003	0	0.166
09/05/95	23:24:55	0.01867824	0.005	0	0.006	0	0.002	0	0.003	0	0.187
09/05/95	23:29:54	0.01711512	0.005	0	0.006	0	0.002	0	0.003	0	0.199
09/05/95	23:34:54	0.02188012	0.005	0.00680715	0.006	0	0.002	0	0.003	0	0.165
09/05/95	23:39:53	0.01895546	0.005	0	0.006	0	0.002	0	0.003	0	0.185
09/05/95	23:44:54	0.01759038	0.005	0	0.006	0	0.002	0	0.003	0	0.322
09/05/95	23:49:54	0.01680642	0.005	0	0.006	0	0.002	0	0.003	0	0.161
09/05/95	23:54:54	0.01962368	0.005	0	0.006	0	0.002	0	0.003	0	0.158
09/05/95	23:59:53	0.01903345	0.005	0	0.006	0	0.002	0	0.003	0	0.158
09/06/95	00:04:53	0.01786123	0.005	0	0.006	0	0.002	0	0.003	0	0.158
09/06/95	00:09:54	0.01717177	0.005	0	0.006	0	0.002	0	0.003	0	0.228
09/06/95	00:14:54	0.01610149	0.005	0	0.006	0	0.002	0	0.003	0	0.176
09/06/95	00:19:54	0.01648629	0.005	0	0.006	0	0.002	0	0.003	0	0.158
09/06/95	00:24:53	0.01667949	0.005	0	0.006	0	0.002	0	0.003	0	0.202
09/06/95	00:29:55	0.01560976	0.005	0	0.006	0	0.002	0	0.003	0	0.165
09/06/95	00:34:55	0.01667626	0.005	0	0.006	0	0.002	0	0.003	0	0.166
09/06/95	00:39:54	0.01793321	0.005	0	0.006	0	0.002	0	0.003	0	0.177
09/06/95	00:44:54	0.01841789	0.005	0	0.006	0	0.002	0	0.003	0	0.167
09/06/95	00:49:54	0.02442794	0.005	0.01124461	0.006	0	0.002	0	0.003	0	0.169
09/06/95	00:54:55	0.02122494	0.005	0.00600889	0.006	0	0.002	0	0.003	0	0.185
09/06/95	00:59:55	0.01772904	0.005	0	0.006	0	0.002	0	0.003	0	0.177
09/06/95	01:04:54	0.01753188	0.005	0	0.006	0	0.002	0	0.003	0	0.197
09/06/95	01:09:54	0.01752509	0.005	0	0.006	0	0.002	0	0.003	0	0.214
09/06/95	01:14:55	0.01789851	0.005	0	0.006	0	0.002	0	0.003	0	0.269
09/06/95	01:19:54	0.01915907	0.005	0	0.006	0	0.002	0	0.003	0	0.174
09/06/95	01:24:54	0.02313981	0.005	0.00939147	0.006	0	0.002	0	0.003	0	0.187
09/06/95	01:29:54	0.02401118	0.005	0.0110374	0.006	0	0.002	0	0.003	0	0.181
09/06/95	01:34:54	0.02070728	0.005	0.00580578	0.006	0	0.002	0	0.003	0	0.232
09/06/95	01:39:55	0.02197271	0.005	0.0073565	0.006	0	0.002	0	0.003	0	0.17
09/06/95	01:44:54	0.0271997	0.005	0.01558417	0.007	0	0.002	0	0.004	0	0.228
09/06/95	01:49:54	0.02331084	0.005	0.00976927	0.006	0	0.002	0	0.003	0	0.174

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	01:54:54	0.02708838	0.006	0.01625303	0.007	0	0.002	0	0.004	0	0.162
09/06/95	01:59:54	0.03046852	0.006	0.02147305	0.007	0	0.002	0	0.004	0	0.174
09/06/95	02:04:54	0.02523065	0.005	0.01334034	0.006	0	0.002	0	0.003	0	0.275
09/06/95	02:09:54	0.02513282	0.005	0.01333973	0.006	0	0.002	0	0.003	0	0.25
09/06/95	02:14:55	0.02997769	0.006	0.02050087	0.007	0	0.002	0	0.004	0	0.182
09/06/95	02:19:55	0.02562609	0.005	0.0132482	0.006	0	0.002	0	0.003	0	0.181
09/06/95	02:24:54	0.02193862	0.005	0.00763503	0.006	0	0.002	0	0.003	0	0.248
09/06/95	02:29:54	0.02522948	0.005	0.01275974	0.006	0	0.002	0	0.003	0	0.169
09/06/95	02:34:55	0.0315188	0.006	0.02233388	0.007	0	0.002	0	0.004	0	0.167
09/06/95	02:39:55	0.02647583	0.005	0.01488058	0.006	0	0.002	0	0.004	0	0.209
09/06/95	02:44:54	0.02405548	0.005	0.01101335	0.006	0	0.002	0	0.003	0	0.16
09/06/95	02:49:54	0.0265673	0.005	0.0150709	0.006	0	0.002	0	0.004	0	0.169
09/06/95	02:54:54	0.02442767	0.005	0.01177935	0.006	0	0.002	0	0.003	0	0.178
09/06/95	02:59:55	0.02182076	0.005	0.00772416	0.006	0	0.002	0	0.003	0	0.168
09/06/95	03:04:55	0.02104425	0.005	0.00627466	0.006	0	0.002	0	0.003	0	0.175
09/06/95	03:09:54	0.02046903	0.005	0	0.006	0	0.002	0	0.003	0	0.165
09/06/95	03:14:54	0.02151436	0.005	0.00742873	0.006	0	0.002	0	0.003	0	0.173
09/06/95	03:19:55	0.02441817	0.005	0.01206431	0.006	0	0.002	0	0.003	0	0.154
09/06/95	03:24:55	0.02866481	0.006	0.01910987	0.007	0	0.002	0	0.004	0	0.206
09/06/95	03:29:55	0.02595735	0.005	0.01399188	0.006	0	0.002	0	0.003	0	0.169
09/06/95	03:34:54	0.02557634	0.005	0.0139946	0.006	0	0.002	0	0.004	0	0.159
09/06/95	03:39:54	0.02633821	0.005	0.01514688	0.006	0	0.002	0	0.004	0	0.176
09/06/95	03:44:55	0.0264244	0.005	0.01485167	0.006	0	0.002	0	0.004	0	0.175
09/06/95	03:49:55	0.02458727	0.005	0.01243826	0.006	0	0.002	0	0.003	0	0.164
09/06/95	03:54:55	0.02458727	0.005	0.012149	0.006	0	0.002	0	0.003	0	0.179
09/06/95	03:59:55	0.02506937	0.005	0.01320963	0.006	0	0.002	0	0.003	0	0.168
09/06/95	04:04:56	0.02535369	0.005	0.01339986	0.006	0	0.002	0	0.003	0	0.236
09/06/95	04:09:56	0.02716416	0.006	0.01637556	0.007	0	0.002	0	0.004	0	0.191
09/06/95	04:14:56	0.02909636	0.006	0.01926911	0.007	0	0.002	0	0.004	0	0.159
09/06/95	04:19:56	0.03150037	0.006	0.02292687	0.007	0	0.002	0	0.004	0	0.175
09/06/95	04:24:56	0.03362621	0.007	0.026689	0.008	0	0.002	0	0.004	0	0.159
09/06/95	04:29:57	0.03525729	0.007	0.02909208	0.008	0	0.003	0	0.005	0	0.2
09/06/95	04:34:57	0.03476886	0.007	0.02812329	0.008	0	0.002	0	0.005	0	0.155
09/06/95	04:39:57	0.03747292	0.007	0.03227102	0.009	0	0.003	0	0.005	0	0.154
09/06/95	04:44:56	0.03968081	0.008	0.0365988	0.01	0	0.003	0	0.005	0	0.162
09/06/95	04:49:56	0.03456277	0.007	0.02820861	0.008	0	0.002	0	0.005	0	0.185
09/06/95	04:54:57	0.03385745	0.007	0.02683588	0.008	0	0.002	0	0.004	0	0.207
09/06/95	04:59:57	0.03619944	0.007	0.03042294	0.009	0	0.003	0	0.005	0	0.153
09/06/95	05:04:57	0.03868183	0.008	0.03425555	0.009	0	0.003	0	0.005	0	0.214
09/06/95	05:09:56	0.03455603	0.007	0.0280106	0.008	0	0.002	0	0.005	0	0.191
09/06/95	05:14:56	0.03453582	0.007	0.02780182	0.008	0	0.002	0	0.005	0	0.284
09/06/95	05:19:56	0.03309282	0.007	0.02510821	0.008	0	0.002	0	0.004	0	0.153
09/06/95	05:24:57	0.03800643	0.008	0.03300305	0.009	0	0.003	0	0.005	0	0.164
09/06/95	05:29:57	0.03510617	0.007	0.02856584	0.008	0	0.002	0	0.005	0	0.165
09/06/95	05:34:57	0.03222073	0.006	0.02356442	0.008	0	0.002	0	0.004	0	0.152
09/06/95	05:39:57	0.03318254	0.007	0.02510332	0.008	0	0.002	0	0.004	0	0.166
09/06/95	05:44:58	0.03683203	0.007	0.03173517	0.009	0	0.003	0	0.005	0	0.151
09/06/95	05:49:58	0.04366631	0.009	0.04280067	0.011	0	0.003	0	0.006	0	0.168
09/06/95	05:54:58	0.04189618	0.009	0.0403587	0.01	0	0.003	0	0.006	0	0.239
09/06/95	05:59:57	0.03862905	0.008	0.03507364	0.009	0	0.003	0	0.005	0	0.152
09/06/95	06:04:57	0.0440188	0.009	0.04276936	0.011	0	0.003	0	0.006	0	0.152
09/06/95	06:09:57	0.04708516	0.01	0.04794999	0.012	0	0.004	0	0.006	0	0.176
09/06/95	06:14:58	0.04140763	0.008	0.03881365	0.01	0	0.003	0	0.006	0	0.157
09/06/95	06:19:58	0.03930169	0.008	0.03488145	0.009	0	0.003	0	0.005	0	0.171
09/06/95	06:24:58	0.03918456	0.008	0.03447857	0.009	0	0.003	0	0.005	0	0.161
09/06/95	06:29:58	0.03976857	0.008	0.03563801	0.01	0	0.003	0	0.005	0	0.156
09/06/95	06:34:58	0.04244994	0.009	0.04014496	0.01	0	0.003	0	0.006	0	0.3
09/06/95	06:39:58	0.04207399	0.008	0.03900009	0.01	0	0.003	0	0.006	0	0.152
09/06/95	06:44:59	0.05015276	0.011	0.05178609	0.013	0	0.004	0	0.007	0	0.158
09/06/95	06:50:01	0.04890375	0.01	0.05015276	0.012	0	0.004	0	0.007	0	0.224
09/06/95	06:54:59	0.05016255	0.01	0.05150791	0.012	0	0.004	0	0.007	0	0.694
09/06/95	07:00:02	0.05993843	0.014	0.06907831	0.016	0	0.005	0	0.009	0	0.462

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	07:04:58	0.06836517	0.016	0.08309739	0.019	0	0.006	0	0.011	0	0.43
09/06/95	07:10:00	0.07359721	0.018	0.09288875	0.022	0	0.006	0	0.012	0	0.278
09/06/95	07:14:59	0.07091001	0.017	0.08965189	0.021	0	0.006	0	0.011	0	0.336
09/06/95	07:19:59	0.06520199	0.016	0.08048673	0.019	0	0.006	0	0.01	0	0.336
09/06/95	07:24:59	0.05979197	0.014	0.0704518	0.016	0	0.005	0	0.009	0	0.194
09/06/95	07:29:59	0.05703676	0.012	0.06402086	0.015	0	0.004	0	0.008	0	0.2
09/06/95	07:34:59	0.05156741	0.01	0.05215009	0.012	0	0.004	0	0.007	0	0.25
09/06/95	07:39:59	0.04727017	0.009	0.04474132	0.011	0	0.003	0	0.006	0	0.251
09/06/95	07:44:59	0.04005244	0.007	0.03176909	0.008	0	0.002	0	0.005	0	0.187
09/06/95	07:50:00	0.04078161	0.007	0.03317164	0.009	0	0.003	0	0.005	0	0.167
09/06/95	07:55:00	0.04020567	0.007	0.03181322	0.008	0	0.003	0	0.005	0	0.154
09/06/95	08:00:00	0.03582115	0.006	0.02440133	0.007	0	0.002	0	0.004	0	0.152
09/06/95	08:05:00	0.02921761	0.005	0.01426679	0.006	0	0.002	0	0.003	0	0.156
09/06/95	08:10:00	0.02708858	0.005	0.0106594	0.006	0	0.002	0	0.003	0	0.185
09/06/95	08:15:00	0.02505892	0.005	0.00783091	0.006	0	0.002	0	0.003	0	0.154
09/06/95	08:20:01	0.02526436	0.005	0.00793183	0.006	0	0.002	0	0.003	0	0.153
09/06/95	08:25:01	0.02488797	0.005	0.00764276	0.006	0	0.002	0	0.003	0	0.153
09/06/95	08:30:01	0.02404283	0.005	0.00667311	0.006	0	0.002	0	0.003	0	0.157
09/06/95	08:35:00	0.02418704	0.005	0.00688249	0.006	0	0.002	0	0.003	0	0.153
09/06/95	08:40:00	0.02382549	0.005	0.00679322	0.006	0	0.002	0	0.003	0	0.151
09/06/95	08:45:01	0.02348964	0.005	0.00631654	0.006	0	0.002	0	0.003	0	0.152
09/06/95	08:50:01	0.02352085	0.005	0.00672024	0.006	0	0.002	0	0.003	0	0.152
09/06/95	08:55:01	0.02365997	0.005	0.0069297	0.006	0	0.002	0	0.003	0	0.153
09/06/95	09:00:00	0.02292509	0.005	0.00615305	0.006	0	0.002	0.00317577	0.003	0	0.161
09/06/95	09:05:00	0.02333086	0.005	0.00685034	0.006	0	0.002	0.00327625	0.003	0	0.152
09/06/95	09:10:00	0.02266579	0.005	0.00636233	0.006	0	0.002	0.00357881	0.003	0	0.151
09/06/95	09:15:01	0.02277377	0.005	0.00656362	0.006	0	0.002	0.00367961	0.003	0	0.151
09/06/95	09:20:01	0.02249659	0.005	0.00647026	0.006	0	0.002	0.0039817	0.003	0	0.15
09/06/95	09:25:00	0.02252699	0.005	0.00667836	0.006	0	0.002	0.0038874	0.003	0	0.152
09/06/95	09:30:01	0.02177447	0.005	0.00579321	0.006	0	0.002	0.00449473	0.003	0	0.149
09/06/95	09:35:01	0.02229058	0.005	0.00649725	0.006	0	0.002	0.0044981	0.003	0	0.15
09/06/95	09:40:01	0.02211962	0.005	0.00640568	0.006	0	0.002	0.00480426	0.003	0	0.149
09/06/95	09:45:00	0.02132689	0.005	0	0.006	0	0.002	0.00510644	0.003	0	0.147
09/06/95	09:50:01	0.02098049	0.005	0	0.005	0	0.002	0.00552118	0.003	0	0.146
09/06/95	09:55:02	0.01917774	0.004	0	0.005	0	0.002	0.00652646	0.003	0	0.157
09/06/95	10:00:02	0.01958302	0.004	0	0.005	0	0.002	0.00652767	0.003	0	0.15
09/06/95	10:05:01	0.01881754	0.004	0	0.005	0	0.002	0.007044	0.003	0	0.146
09/06/95	10:10:01	0.01839789	0.004	0	0.005	0	0.002	0.00733905	0.003	0	0.15
09/06/95	10:15:02	0.01780131	0.004	0	0.005	0	0.002	0.0076435	0.003	0	0.148
09/06/95	10:20:03	0.01930989	0.004	0	0.005	0	0.002	0.00744235	0.003	0	0.145
09/06/95	10:25:01	0.01944601	0.004	0	0.005	0	0.002	0.00705296	0.003	0	0.146
09/06/95	10:30:01	0.01956494	0.004	0	0.005	0	0.002	0.00716036	0.003	0	0.148
09/06/95	10:35:02	0.02080215	0.004	0	0.005	0	0.002	0.00676575	0.003	0	0.145
09/06/95	10:40:02	0.02001656	0.004	0	0.005	0	0.002	0.00717765	0.003	0	0.149
09/06/95	10:45:01	0.02061548	0.004	0	0.005	0	0.002	0.00697288	0.003	0	0.148
09/06/95	10:50:01	0.02021874	0.004	0	0.005	0	0.002	0.00717765	0.003	0	0.146
09/06/95	10:55:07	0.02053724	0.004	0	0.005	0	0.002	0.00708181	0.003	0	0.147
09/06/95	11:00:01	0.02024122	0.004	0	0.005	0	0.002	0.00708443	0.003	0	0.144
09/06/95	11:05:01	0.0204285	0.004	0	0.005	0	0.002	0.00718031	0.003	0	0.143
09/06/95	11:10:00	0.01913504	0.004	0	0.005	0	0.002	0.00779576	0.003	0	0.15
09/06/95	11:15:01	0.01862193	0.004	0	0.005	0	0.002	0.00789408	0.003	0	0.148
09/06/95	11:20:01	0.02018045	0.004	0	0.005	0	0.002	0.00730147	0.003	0	0.143
09/06/95	11:25:00	0.02089418	0.004	0.00547711	0.005	0	0.002	0.00709996	0.003	0	0.143
09/06/95	11:30:00	0.02028561	0.004	0	0.005	0	0.002	0.00740425	0.003	0	0.148
09/06/95	11:35:02	0.01835508	0.004	0	0.005	0	0.002	0.00790993	0.003	0	0.148
09/06/95	11:40:00	0.0179395	0.004	0	0.005	0	0.002	0.00790554	0.003	0	0.148
09/06/95	11:45:00	0.01836865	0.004	0	0.005	0	0.002	0.00781429	0.003	0	0.142
09/06/95	11:50:00	0.01868345	0.004	0	0.005	0	0.002	0.00781862	0.003	0	0.143
09/06/95	11:55:01	0.0169474	0.004	0	0.005	0	0.002	0.00852444	0.003	0	0.142
09/06/95	12:00:01	0.01747737	0.004	0	0.005	0	0.002	0.00853546	0.003	0	0.145
09/06/95	12:05:02	0.01727096	0.004	0	0.005	0	0.002	0.00863548	0.003	0	0.147
09/06/95	12:10:02	0.01787393	0.004	0	0.005	0	0.002	0.00802296	0.003	0	0.144

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	12:15:02	0.01872036	0.004	0	0.005	0	0.002	0.00813929	0.003	0	0.142
09/06/95	12:20:03	0.01678419	0.004	0	0.005	0	0.002	0.00854468	0.003	0	0.142
09/06/95	12:25:03	0.0175156	0.004	0	0.005	0	0.002	0.00835046	0.003	0	0.14
09/06/95	12:30:02	0.01813662	0.004	0	0.005	0	0.002	0.00815129	0.003	0	0.141
09/06/95	12:35:04	0.01793614	0.004	0	0.005	0	0.002	0.00815279	0.003	0	0.148
09/06/95	12:40:02	0.01598219	0.004	0	0.005	0	0.002	0.00855098	0.003	0	0.15
09/06/95	12:45:04	0.0172128	0.004	0	0.005	0	0.002	0.00835177	0.003	0	0.144
09/06/95	12:50:03	0.01722231	0.004	0	0.005	0	0.002	0.00825448	0.003	0	0.141
09/06/95	12:55:02	0.01723182	0.004	0	0.005	0	0.002	0.00815708	0.003	0	0.14
09/06/95	13:00:02	0.01701223	0.004	0	0.005	0	0.002	0.00814957	0.003	0	0.138
09/06/95	13:05:03	0.01395871	0.004	0	0.005	0	0.002	0.00927185	0.003	0	0.147
09/06/95	13:10:03	0.01163636	0.004	0	0.005	0	0.002	0.01000319	0.003	0	0.142
09/06/95	13:15:02	0.00989565	0.004	0	0.005	0	0.002	0.00948759	0.003	0	0.154
09/06/95	13:20:02	0.00960371	0.004	0	0.005	0	0.002	0.01062539	0.003	0	0.141
09/06/95	13:25:05	0.00470907	0.005	0	0.006	0.00184268	0.002	0.01289875	0.003	0	0.154
09/06/95	13:30:02	0	0.005	0	0.006	0.00286376	0.002	0.01431881	0.003	0	0.145
09/06/95	13:35:02	0	0.005	0	0.006	0.00346657	0.002	0.01488588	0.003	0	0.141
09/06/95	13:40:03	0	0.005	0	0.006	0.00275642	0.002	0.01347581	0.003	0	0.142
09/06/95	13:45:04	0	0.005	0	0.006	0.00254989	0.002	0.01336143	0.003	0	0.149
09/06/95	13:50:02	0	0.005	0	0.006	0.00305987	0.002	0.01366741	0.003	0	0.147
09/06/95	13:55:02	0	0.005	0	0.006	0.00357764	0.002	0.01441278	0.003	0	0.137
09/06/95	14:00:03	0	0.005	0	0.006	0.00459898	0.002	0.01584092	0.004	0	0.141
09/06/95	14:05:03	0	0.006	0	0.007	0.00530852	0.002	0.01674224	0.004	0	0.142
09/06/95	14:10:02	0	0.005	0	0.006	0.00460309	0.002	0.01544591	0.004	0	0.146
09/06/95	14:15:03	0	0.005	0	0.006	0.00460974	0.002	0.01341945	0.003	0	0.14
09/06/95	14:20:03	0	0.005	0	0.006	0.00429926	0.002	0.01197652	0.003	0	0.141
09/06/95	14:25:04	0	0.005	0	0.006	0.00450564	0.002	0.01269772	0.003	0	0.144
09/06/95	14:30:02	0	0.006	0	0.007	0.00563309	0.002	0.01587506	0.004	0	0.146
09/06/95	14:35:04	0	0.006	0	0.007	0.00613729	0.002	0.01718442	0.004	0	0.15
09/06/95	14:40:03	0	0.006	0	0.008	0.00725846	0.002	0.01840174	0.004	0	0.155
09/06/95	14:45:02	0	0.006	0	0.008	0.00716658	0.002	0.0181212	0.004	0	0.146
09/06/95	14:50:02	0	0.006	0	0.007	0.00644281	0.002	0.0175899	0.004	0	0.143
09/06/95	14:55:03	0	0.006	0	0.007	0.00613601	0.002	0.01595363	0.004	0	0.139
09/06/95	15:00:03	0	0.005	0	0.006	0.00542513	0.002	0.01371635	0.004	0	0.149
09/06/95	15:05:02	0	0.005	0	0.006	0.00542811	0.002	0.01341666	0.003	0	0.145
09/06/95	15:10:03	0	0.005	0	0.007	0.00553344	0.002	0.01444843	0.004	0	0.143
09/06/95	15:15:03	0	0.006	0	0.007	0.00686431	0.002	0.01710954	0.004	0	0.14
09/06/95	15:20:02	0	0.006	0	0.007	0.00696548	0.002	0.0171064	0.004	0	0.141
09/06/95	15:25:02	0	0.006	0	0.007	0.00645805	0.002	0.0164014	0.004	0	0.139
09/06/95	15:30:03	0	0.006	0	0.008	0.00779047	0.002	0.01793859	0.004	0	0.142
09/06/95	15:35:03	0	0.007	0	0.008	0.00809651	0.002	0.01896017	0.004	0	0.148
09/06/95	15:40:02	0	0.006	0	0.008	0.00758128	0.002	0.01874831	0.004	0	0.15
09/06/95	15:45:03	0	0.007	0	0.009	0.00942192	0.003	0.01956073	0.005	0	0.15
09/06/95	15:50:03	0	0.006	0	0.007	0.0062437	0.002	0.01770754	0.004	0	0.145
09/06/95	15:55:02	0	0.006	0	0.008	0.00686162	0.002	0.01822937	0.004	0	0.146
09/06/95	16:00:01	0	0.006	0	0.008	0.0072726	0.002	0.01813028	0.004	0	0.145
09/06/95	16:05:02	0	0.006	0	0.008	0.00717544	0.002	0.0181436	0.004	0	0.151
09/06/95	16:10:02	0	0.006	0	0.008	0.00728311	0.002	0.01815648	0.004	0	0.146
09/06/95	16:15:02	0	0.007	0	0.008	0.00830737	0.002	0.01907619	0.005	0	0.149
09/06/95	16:20:03	0	0.007	0	0.008	0.00778885	0.002	0.01844728	0.004	0	0.148
09/06/95	16:37:43	0	0.007	0	0.009	0.00869704	0.003	0.01207354	0.005	0	0.151
09/06/95	16:40:46	0	0.008	0	0.009	0.00786691	0.003	0.01246445	0.005	0	0.321
Run 21											
09/06/95	16:49:36	0	0.008	0	0.009	0.00840531	0.003	0.01281297	0.005	0	0.281
09/06/95	16:54:36	0	0.008	0	0.01	0.00901536	0.003	0.0130108	0.005	0	0.277
09/06/95	16:59:35	0	0.009	0	0.01	0.01012577	0.003	0.01176226	0.006	0	0.274
09/06/95	17:04:36	0	0.008	0	0.01	0.00971104	0.003	0.01410656	0.005	0	0.276
09/06/95	17:09:36	0	0.008	0	0.01	0.01042851	0.003	0.0147226	0.006	0	0.247
09/06/95	17:14:37	0	0.007	0	0.009	0.00746217	0.003	0.0123688	0.005	0	0.234
09/06/95	17:19:36	0	0.007	0	0.009	0.00756041	0.003	0.01338396	0.005	0	0.25
09/06/95	17:24:36	0	0.008	0	0.009	0.00796908	0.003	0.01348613	0.005	0	0.235
09/06/95	17:29:35	0	0.008	0	0.01	0.00949785	0.003	0.01450209	0.005	0	0.217

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	17:34:36	0	0.008	0	0.01	0.00939053	0.003	0.01408579	0.005	0	0.203
09/06/95	17:39:36	0	0.008	0	0.01	0.00938533	0.003	0.01387397	0.005	0	0.211
09/06/95	17:44:35	0	0.008	0	0.01	0.00897728	0.003	0.01387397	0.005	0	0.206
09/06/95	17:49:36	0	0.008	0	0.009	0.00764827	0.003	0.01356292	0.005	0	0.22
09/06/95	17:54:36	0	0.007	0	0.009	0.00642217	0.003	0.01264047	0.005	0	0.244
09/06/95	17:59:36	0	0.007	0	0.008	0.00631557	0.003	0.01263113	0.005	0	0.223
09/06/95	18:04:35	0	0.007	0	0.008	0.0059039	0.002	0.01211318	0.005	0	0.232
09/06/95	18:09:36	0	0.007	0	0.008	0.00559336	0.002	0.0117969	0.005	0	0.229
09/06/95	18:14:36	0	0.007	0	0.008	0.00589501	0.002	0.01199331	0.005	0	0.229
09/06/95	18:19:35	0	0.007	0	0.008	0.00578909	0.002	0.01188286	0.005	0	0.255
09/06/95	18:24:36	0	0.007	0	0.008	0.00548033	0.002	0.01167108	0.004	0	0.254
09/06/95	18:29:36	0	0.007	0	0.008	0.00547729	0.002	0.01156316	0.004	0	0.237
09/06/95	18:34:35	0	0.007	0	0.008	0.00537087	0.002	0.01134976	0.004	0	0.231
09/06/95	18:39:36	0	0.007	0	0.008	0.00556924	0.002	0.011341	0.004	0	0.193
09/06/95	18:44:36	0	0.007	0	0.008	0.00566312	0.002	0.01122512	0.005	0	0.211
09/06/95	18:49:36	0	0.007	0	0.008	0.00585992	0.002	0.01111364	0.005	0	0.172
09/06/95	18:54:35	0	0.007	0	0.008	0.00585555	0.002	0.01090344	0.005	0	0.165
09/06/95	18:59:36	0	0.007	0	0.008	0.00584573	0.002	0.01068357	0.005	0	0.286
09/06/95	19:04:36	0	0.007	0	0.008	0.00612972	0.003	0.01045067	0.005	0	0.236
09/06/95	19:09:35	0	0.007	0	0.008	0.00622321	0.003	0.01023818	0.005	0	0.192
09/06/95	19:14:36	0	0.007	0	0.008	0.00622204	0.003	0.01003555	0.005	0	0.3
09/06/95	19:19:36	0	0.007	0	0.008	0.00621037	0.003	0.00971622	0.005	0	0.279
09/06/95	19:24:36	0	0.007	0	0.008	0.00619753	0.003	0.00959618	0.005	0	0.186
09/06/95	19:29:35	0	0.007	0	0.009	0.00648885	0.003	0.00938387	0.005	0	0.172
09/06/95	19:34:36	0	0.007	0	0.008	0.00628563	0.003	0.00927879	0.005	0	0.181
09/06/95	19:39:36	0	0.007	0	0.008	0.00637938	0.003	0.00897101	0.005	0	0.297
09/06/95	19:44:35	0	0.007	0	0.008	0.00617653	0.002	0.0088663	0.005	0	0.173
09/06/95	19:49:36	0	0.007	0	0.008	0.0059818	0.002	0.00847422	0.005	0	0.248
09/06/95	19:54:36	0	0.007	0	0.008	0.00627022	0.002	0.00836029	0.005	0	0.254
09/06/95	19:59:36	0	0.007	0	0.008	0.00596938	0.002	0.00795917	0.004	0	0.191
09/06/95	20:04:35	0	0.007	0	0.008	0.00567091	0.002	0.00746172	0.004	0	0.326
09/06/95	20:09:36	0	0.007	0	0.008	0.0055672	0.002	0.00735666	0.004	0	0.224
09/06/95	20:14:36	0	0.007	0	0.008	0.00546468	0.002	0.00715377	0.004	0	0.421
09/06/95	20:19:36	0	0.007	0	0.008	0.00555877	0.002	0.00714699	0.004	0	0.27
09/06/95	20:24:35	0	0.007	0	0.008	0.00536533	0.002	0.00695505	0.004	0	0.207
09/06/95	20:29:36	0	0.006	0	0.008	0.00527295	0.002	0.00696427	0.004	0	0.16
09/06/95	20:34:36	0	0.006	0	0.007	0.00477912	0.002	0.00686998	0.004	0	0.171
09/06/95	20:39:36	0	0.006	0	0.007	0.00418726	0.002	0.00648028	0.004	0	0.154
09/06/95	20:44:37	0	0.006	0	0.007	0.00408911	0.002	0.00658247	0.004	0	0.153
09/06/95	20:49:36	0	0.006	0	0.007	0.00408462	0.002	0.00647562	0.004	0	0.202
09/06/95	20:54:35	0	0.006	0	0.007	0.00427821	0.002	0.00636756	0.004	0	0.251
09/06/95	20:59:35	0	0.006	0	0.007	0.00427416	0.002	0.00616274	0.004	0	0.24
09/06/95	21:04:36	0	0.006	0	0.007	0.00417713	0.002	0.0062657	0.004	0	0.169
09/06/95	21:09:36	0	0.006	0	0.007	0.00417476	0.002	0.00646094	0.004	0	0.152
09/06/95	21:14:37	0	0.006	0	0.007	0.00407459	0.002	0.0060622	0.004	0	0.161
09/06/95	21:19:35	0	0.006	0	0.007	0.00427416	0.002	0.00606334	0.004	0	0.205
09/06/95	21:24:36	0	0.006	0	0.007	0.00436461	0.002	0.00595174	0.004	0	0.261
09/06/95	21:29:36	0	0.006	0	0.007	0.00435716	0.002	0.00574353	0.004	0	0.239
09/06/95	21:34:36	0	0.006	0	0.007	0.00464717	0.002	0.00563593	0.004	0	0.255
09/06/95	21:39:35	0	0.006	0	0.007	0.00464187	0.002	0.00553074	0.004	0	0.295
09/06/95	21:44:35	0	0.006	0	0.007	0.00483386	0.002	0.00542576	0.004	0	0.192
09/06/95	21:49:36	0	0.006	0	0.007	0.00512884	0.002	0.00542473	0.004	0	0.264
09/06/95	21:54:36	0	0.006	0	0.007	0.00502445	0.002	0.00541852	0.004	0	0.239
09/06/95	21:59:35	0	0.006	0	0.008	0.00541542	0.002	0.00531696	0.004	0	0.173
09/06/95	22:04:35	0	0.006	0	0.007	0.0052155	0.002	0.0052155	0.004	0	0.182
09/06/95	22:09:36	0	0.006	0	0.007	0.00501773	0.002	0.00491935	0.004	0	0.232
09/06/95	22:14:36	0	0.006	0	0.007	0.00501582	0.002	0.00491747	0.004	0	0.311
09/06/95	22:19:36	0	0.006	0	0.007	0.00491653	0.002	0.0045232	0.004	0	0.284
09/06/95	22:24:37	0	0.006	0	0.007	0.00481543	0.002	0.00452061	0.004	0	0.278
09/06/95	22:29:37	0	0.006	0	0.007	0.00510536	0.002	0.00451628	0.004	0	0.271
09/06/95	22:34:36	0	0.006	0	0.007	0.00519955	0.002	0.00461093	0.004	0	0.223
09/06/95	22:39:37	0	0.006	0	0.008	0.00431496	0.002	0.00509949	0.004	0	0.163

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/06/95	22:44:37	0	0.006	0	0.007	0.00509949	0.002	0.00431496	0.004	0	0.164
09/06/95	22:49:35	0	0.007	0	0.008	0.00588177	0.002	0.00499951	0.004	0	0.241
09/06/95	22:54:36	0	0.007	0	0.008	0.00597636	0.002	0.00489866	0.004	0	0.159
09/06/95	22:59:36	0	0.006	0	0.008	0.00519158	0.002	0.0045059	0.004	0	0.179
09/06/95	23:04:37	0	0.006	0	0.007	0.00538645	0.002	0.00460297	0.004	0	0.209
09/06/95	23:09:36	0	0.006	0	0.008	0.00547912	0.002	0.00440287	0.004	0	0.211
09/06/95	23:14:36	0	0.006	0	0.008	0.00557482	0.002	0.00449898	0.004	0	0.183
09/06/95	23:19:36	0	0.006	0	0.008	0.00557267	0.002	0.00449725	0.004	0	0.205
09/06/95	23:24:36	0	0.007	0	0.009	0.00537611	0.003	0.00547386	0.005	0	0.192
09/06/95	23:29:37	0	0.007	0	0.009	0.0069374	0.003	0.00547175	0.005	0	0.249
09/06/95	23:34:36	0	0.006	0	0.008	0.00410302	0.002	0.00488455	0.004	0	0.192
09/06/95	23:39:36	0	0.007	0	0.008	0.0065453	0.002	0.00498224	0.004	0	0.212
09/06/95	23:44:36	0	0.007	0	0.008	0.00605218	0.002	0.00478317	0.004	0	0.252
09/06/95	23:49:36	0	0.007	0	0.008	0.00575933	0.002	0.00449032	0.004	0	0.344
09/06/95	23:54:35	0	0.006	0	0.008	0.00565953	0.002	0.00429344	0.004	0	0.343
09/06/95	23:59:36	0	0.007	0	0.008	0.00477949	0.002	0.00477949	0.004	0	0.197
09/07/95	00:04:36	0	0.006	0	0.007	0.00438763	0.002	0	0.004	0	0.323
09/07/95	00:09:36	0	0.006	0	0.007	0.0047758	0.002	0	0.004	0	0.209
09/07/95	00:14:35	0	0.006	0	0.007	0.0039007	0.002	0	0.004	0	0.155
09/07/95	00:19:36	0	0.006	0	0.007	0.00380171	0.002	0	0.004	0	0.238
09/07/95	00:24:36	0	0.006	0	0.007	0.00457645	0.002	0	0.004	0	0.203
09/07/95	00:29:36	0	0.006	0	0.007	0.00418535	0.002	0	0.004	0	0.245
09/07/95	00:34:35	0	0.006	0	0.007	0.00467111	0.002	0	0.004	0	0.166
09/07/95	00:39:35	0	0.006	0	0.007	0.00428166	0.002	0	0.004	0	0.201
09/07/95	00:44:37	0	0.006	0	0.007	0.0035991	0.002	0	0.004	0	0.213
09/07/95	00:49:36	0	0.006	0	0.007	0.00340455	0.002	0	0.004	0	0.165
09/07/95	00:54:36	0	0.005	0	0.006	0.00321001	0.002	0	0.004	0	0.185
09/07/95	00:59:35	0	0.005	0	0.006	0	0.002	0	0.003	0	0.157
09/07/95	01:04:37	0	0.005	0	0.006	0.00204264	0.002	0	0.003	0	0.198
09/07/95	01:09:35	0	0.005	0	0.006	0.00262625	0.002	0	0.003	0	0.188
09/07/95	01:14:36	0	0.005	0	0.006	0.002528	0.002	0	0.003	0	0.263
09/07/95	01:19:36	0	0.005	0	0.007	0.00320676	0.002	0	0.004	0	0.165
09/07/95	01:24:36	0	0.005	0	0.006	0.00242889	0.002	0	0.003	0	0.178
09/07/95	01:29:36	0	0.005	0	0.007	0.00330186	0.002	0	0.004	0	0.189
09/07/95	01:34:35	0	0.005	0	0.006	0.00252495	0.002	0	0.003	0	0.161
09/07/95	01:39:36	0	0.005	0	0.006	0.00223361	0.002	0	0.003	0	0.175
09/07/95	01:44:36	0	0.005	0	0.006	0.00232982	0.002	0	0.003	0	0.372
09/07/95	01:49:36	0	0.005	0	0.006	0.00232847	0.002	0	0.003	0	0.209
09/07/95	01:54:36	0	0.005	0	0.006	0	0.002	0	0.003	0	0.159
09/07/95	01:59:35	0	0.005	0	0.006	0	0.002	0	0.003	0	0.167
09/07/95	02:04:36	0	0.006	0.01369833	0.007	0	0.002	0	0.004	0	0.162
09/07/95	02:09:36	0	0.007	0.02370951	0.009	0	0.003	0	0.005	0	0.174
09/07/95	02:14:36	0	0.005	0	0.006	0	0.002	0	0.003	0	0.323
09/07/95	02:19:37	0	0.005	0	0.006	0.00174567	0.002	0	0.003	0	0.261
09/07/95	02:24:38	0	0.005	0	0.006	0.00465332	0.002	0	0.004	0	0.165
09/07/95	02:29:38	0	0.005	0	0.006	0.00281084	0.002	0	0.003	0	0.227
09/07/95	02:34:38	0	0.005	0	0.006	0.00193926	0.002	0	0.003	0	0.194
09/07/95	02:39:37	0	0.005	0	0.006	0.00222961	0.002	0	0.003	0	0.216
09/07/95	02:44:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.16
09/07/95	02:49:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.159
09/07/95	02:54:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.246
09/07/95	02:59:36	0	0.005	0	0.006	0	0.002	0	0.003	0	0.182
09/07/95	03:04:38	0	0.005	0	0.006	0	0.002	0	0.003	0	0.158
09/07/95	03:09:38	0	0.005	0.00649497	0.007	0	0.002	0	0.004	0	0.169
09/07/95	03:14:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.283
09/07/95	03:19:36	0	0.005	0	0.006	0	0.002	0	0.003	0	0.216
09/07/95	03:24:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.162
09/07/95	03:29:38	0	0.005	0	0.006	0	0.002	0	0.003	0	0.164
09/07/95	03:34:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.172
09/07/95	03:39:36	0	0.005	0	0.006	0	0.002	0	0.003	0	0.155
09/07/95	03:44:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.158
09/07/95	03:49:38	0	0.005	0	0.006	0	0.002	0	0.003	0	0.221

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	03:54:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.174
09/07/95	03:59:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.171
09/07/95	04:04:38	0	0.005	0	0.006	0	0.002	0	0.003	0	0.175
09/07/95	04:09:38	0	0.005	0	0.006	0	0.002	0	0.003	0	0.261
09/07/95	04:14:38	0	0.005	0	0.006	0	0.002	0	0.003	0	0.155
09/07/95	04:19:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.242
09/07/95	04:24:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.164
09/07/95	04:29:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.175
09/07/95	04:34:39	0	0.005	0	0.006	0	0.002	0	0.003	0	0.157
09/07/95	04:39:38	0	0.006	0.01267326	0.007	0	0.002	0	0.004	0	0.161
09/07/95	04:44:38	0	0.007	0.01867129	0.008	0	0.002	0	0.004	0	0.165
09/07/95	04:49:37	0	0.006	0.01625273	0.008	0	0.002	0	0.004	0	0.21
09/07/95	04:54:36	0	0.007	0.01982926	0.008	0	0.002	0	0.004	0	0.19
09/07/95	04:59:38	0	0.006	0.01488162	0.007	0	0.002	0	0.004	0	0.264
09/07/95	05:04:37	0	0.006	0.01120516	0.007	0	0.002	0	0.004	0	0.175
09/07/95	05:09:37	0	0.006	0.01458603	0.007	0	0.002	0	0.004	0	0.176
09/07/95	05:14:36	0	0.006	0.01564553	0.007	0	0.002	0	0.004	0	0.19
09/07/95	05:19:36	0	0.006	0.01332705	0.007	0	0.002	0	0.004	0	0.227
09/07/95	05:24:38	0	0.006	0.01361677	0.007	0	0.002	0	0.004	0	0.174
09/07/95	05:29:38	0	0.006	0.01487802	0.007	0	0.002	0	0.004	0	0.182
09/07/95	05:34:37	0	0.006	0.01719077	0.008	0	0.002	0	0.004	0	0.181
09/07/95	05:39:37	0	0.007	0.01969794	0.008	0	0.002	0	0.004	0	0.235
09/07/95	05:44:37	0	0.006	0.01631521	0.007	0	0.002	0	0.004	0	0.205
09/07/95	05:49:37	0	0.006	0.01592905	0.007	0	0.002	0	0.004	0	0.252
09/07/95	05:54:37	0	0.006	0.01456896	0.007	0	0.002	0	0.004	0	0.248
09/07/95	05:59:39	0	0.006	0.01292117	0.007	0	0.002	0	0.004	0	0.248
09/07/95	06:04:39	0	0.005	0.0095481	0.006	0	0.002	0	0.004	0	0.159
09/07/95	06:09:38	0	0.005	0.01041408	0.007	0	0.002	0	0.004	0	0.158
09/07/95	06:14:37	0	0.005	0.01012282	0.006	0	0.002	0	0.004	0	0.166
09/07/95	06:19:37	0	0.005	0	0.006	0	0.002	0	0.003	0	0.157
09/07/95	06:24:38	0	0.005	0.0096389	0.006	0	0.002	0	0.004	0	0.284
09/07/95	06:29:37	0	0.005	0.00915337	0.006	0	0.002	0	0.004	0	0.261
09/07/95	06:34:38	0	0.006	0.01060071	0.007	0	0.002	0	0.004	0	0.184
09/07/95	06:39:39	0	0.006	0.0150308	0.007	0	0.002	0	0.004	0	0.445
09/07/95	06:44:37	0	0.006	0.01581706	0.007	0	0.002	0	0.004	0	0.156
Run 22											
09/07/95	12:22:11	0.02825635	0.005	0.01791617	0.006	0	0.002	0	0.003	0	0.142
09/07/95	12:27:11	0.02721252	0.005	0.01667534	0.006	0	0.002	0	0.003	0	0.138
09/07/95	12:32:11	0.0251011	0.005	0.01444594	0.006	0	0.002	0	0.003	0	0.14
09/07/95	12:37:12	0.02569217	0.005	0.01525153	0.006	0	0.002	0	0.003	0	0.138
09/07/95	12:42:11	0.02685335	0.005	0.01598902	0.006	0	0.002	0	0.003	0	0.142
09/07/95	12:47:11	0.02368852	0.005	0.01425413	0.006	0	0.002	0	0.003	0	0.139
09/07/95	12:52:10	0.02460241	0.005	0.01527399	0.006	0	0.002	0	0.003	0	0.134
09/07/95	12:57:11	0.02452242	0.005	0.01518543	0.006	0	0.002	0	0.003	0	0.133
Run 23											
09/07/95	16:47:44	0	0.005	0	0.006	0.0081538	0.002	0.00918593	0.004	0	0.177
09/07/95	16:52:45	0	0.005	0	0.006	0.00793865	0.002	0.00866035	0.004	0	0.178
09/07/95	16:57:45	0	0.005	0	0.006	0.00792138	0.002	0.00833288	0.004	0	0.183
09/07/95	17:02:44	0	0.005	0	0.006	0.00802996	0.002	0.00833881	0.004	0	0.18
09/07/95	17:07:45	0	0.005	0	0.006	0.00762795	0.002	0.0084526	0.004	0	0.179
09/07/95	17:12:45	0	0.006	0	0.007	0.00815529	0.002	0.00887791	0.004	0	0.183
09/07/95	17:17:45	0	0.005	0	0.007	0.00846654	0.002	0.00877629	0.004	0	0.181
09/07/95	17:22:45	0	0.005	0	0.007	0.00805059	0.002	0.00866986	0.004	0	0.184
09/07/95	17:27:44	0	0.006	0	0.007	0.0083434	0.002	0.0083434	0.004	0	0.184
09/07/95	17:32:45	0	0.006	0	0.007	0.00792847	0.002	0.00823737	0.004	0	0.185
09/07/95	17:37:45	0	0.005	0	0.007	0.00803144	0.002	0.00844331	0.004	0	0.183
09/07/95	17:42:44	0	0.006	0	0.007	0.0081344	0.002	0.00844331	0.004	0	0.18
09/07/95	17:47:45	0	0.006	0	0.007	0.00843246	0.002	0.00822679	0.004	0	0.179
09/07/95	17:52:45	0	0.005	0	0.006	0.0080005	0.002	0.00728251	0.003	0	0.185
09/07/95	17:57:44	0	0.005	0	0.007	0.00817412	0.002	0.00725453	0.004	0	0.186
09/07/95	18:02:44	0	0.006	0	0.007	0.00794473	0.002	0.00651875	0.004	0	0.186
09/07/95	18:07:45	0.00640381	0.006	0	0.007	0.00772524	0.002	0.00609887	0.004	0	0.188

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	18:12:45	0	0.005	0	0.006	0.0063943	0.002	0.00588681	0.004	0	0.193
09/07/95	18:17:44	0	0.006	0	0.007	0.00679756	0.002	0.00588446	0.004	0	0.193
09/07/95	18:22:45	0	0.006	0	0.007	0.00710854	0.002	0.00528063	0.004	0	0.194
09/07/95	18:27:45	0	0.005	0	0.007	0.00630199	0.002	0.00528554	0.004	0	0.197
09/07/95	18:32:44	0	0.005	0	0.007	0.00650045	0.002	0.0049769	0.004	0	0.197
09/07/95	18:37:45	0.00679503	0.005	0	0.007	0.00598369	0.002	0.00446241	0.004	0	0.199
09/07/95	18:42:45	0.0058671	0.005	0	0.006	0.00526016	0.002	0.00424859	0.004	0	0.201
09/07/95	18:47:44	0	0.005	0	0.006	0.00504841	0.002	0.00363485	0.003	0	0.2
09/07/95	18:52:44	0.00705455	0.005	0	0.006	0.00453507	0.002	0.00372884	0.003	0	0.203
09/07/95	18:57:45	0.00724524	0.005	0	0.006	0.00422639	0.002	0.00352199	0.003	0	0.204
09/07/95	19:02:44	0.00733874	0.005	0	0.006	0.00412176	0.002	0.00371964	0.003	0	0.201
09/07/95	19:07:44	0.00793148	0.005	0	0.006	0.00401594	0.002	0.00361435	0.003	0	0.201
09/07/95	19:12:45	0.0098298	0.005	0	0.006	0.00381155	0.002	0	0.003	0	0.202
09/07/95	19:17:44	0.0097185	0.005	0	0.006	0.00370706	0.002	0	0.003	0	0.202
09/07/95	19:22:44	0.01121078	0.005	0	0.006	0.00350337	0.002	0	0.003	0	0.203
09/07/95	19:27:45	0.01280024	0.005	0	0.006	0.00350006	0.002	0	0.003	0	0.203
09/07/95	19:32:44	0.01428676	0.005	0	0.006	0.00309713	0.002	0	0.003	0	0.206
09/07/95	19:37:44	0.01387663	0.005	0	0.006	0.00279529	0.002	0	0.003	0	0.208
09/07/95	19:42:45	0.01536247	0.005	0	0.006	0.00279318	0.002	0	0.003	0	0.21
09/07/95	19:47:45	0.01564692	0.005	0	0.006	0.00249155	0.002	0	0.004	0	0.211
09/07/95	19:52:44	0.01653133	0.005	0	0.006	0.00248966	0.002	0	0.004	0	0.213
09/07/95	19:57:45	0.02069404	0.005	0	0.006	0.0022884	0.002	0	0.004	0	0.213
09/07/95	20:02:45	0.02008664	0.005	0	0.007	0.00288373	0.002	0	0.004	0	0.215
09/07/95	20:07:44	0.01937952	0.005	0	0.006	0.00188826	0.002	0	0.004	0	0.215
09/07/95	20:12:44	0.0194715	0.005	0	0.006	0.00188754	0.002	0	0.004	0	0.217
09/07/95	20:17:45	0.02035399	0.005	0	0.007	0	0.002	0	0.004	0	0.219
09/07/95	20:22:45	0.02470855	0.005	0	0.007	0.00218308	0.002	0	0.004	0	0.22
09/07/95	20:27:46	0.0211169	0.006	0	0.007	0	0.002	0	0.004	0	0.222
09/07/95	20:32:46	0.02170348	0.005	0	0.007	0	0.002	0	0.004	0	0.222
09/07/95	20:37:45	0.02209568	0.006	0	0.007	0	0.002	0	0.004	0	0.222
09/07/95	20:42:45	0.0229743	0.006	0	0.007	0	0.002	0	0.004	0	0.224
09/07/95	20:47:46	0.02316352	0.006	0	0.007	0	0.002	0	0.004	0	0.225
09/07/95	20:52:46	0.02374839	0.006	0	0.007	0	0.002	0	0.004	0	0.228
09/07/95	20:57:45	0.02433282	0.006	0	0.007	0	0.002	0	0.004	0	0.227
09/07/95	21:02:45	0.02510975	0.006	0	0.007	0	0.002	0	0.004	0	0.23
09/07/95	21:07:46	0.0252978	0.006	0.00681855	0.007	0	0.002	0	0.004	0	0.234
09/07/95	21:12:46	0.0251807	0.006	0.00691235	0.007	0	0.002	0	0.004	0	0.234
09/07/95	21:17:45	0.0263556	0.006	0.0077981	0.007	0	0.002	0	0.004	0	0.236
09/07/95	21:22:45	0.02684401	0.006	0.00769792	0.007	0	0.002	0	0.004	0	0.241
09/07/95	21:27:46	0.02712971	0.006	0.00779363	0.007	0	0.002	0	0.004	0	0.243
09/07/95	21:32:46	0.02671976	0.006	0.00788775	0.007	0	0.002	0	0.004	0	0.243
09/07/95	21:37:46	0.027498	0.006	0.00887032	0.007	0	0.002	0	0.004	0	0.245
09/07/95	21:42:46	0.02759128	0.006	0.00847446	0.007	0	0.002	0	0.004	0	0.252
09/07/95	21:47:47	0.02788156	0.006	0.0082758	0.007	0	0.002	0	0.004	0	0.251
09/07/95	21:52:45	0.02807323	0.006	0.00827421	0.007	0	0.002	0	0.004	0	0.252
09/07/95	21:57:46	0.02815554	0.006	0.00866324	0.007	0	0.002	0	0.004	0	0.251
09/07/95	22:02:46	0.02893756	0.006	0.00876001	0.007	0	0.002	0	0.004	0	0.254
09/07/95	22:07:46	0.02902486	0.006	0.0092486	0.007	0	0.002	0	0.004	0	0.258
09/07/95	22:12:46	0.02960951	0.006	0.00954194	0.007	0	0.002	0	0.004	0	0.262
09/07/95	22:17:45	0.02969649	0.006	0.00963661	0.007	0	0.002	0	0.004	0	0.263
09/07/95	22:22:46	0.0294885	0.006	0.00943632	0.007	0	0.002	0	0.004	0	0.26
09/07/95	22:27:47	0.02987595	0.006	0.00982761	0.007	0	0.002	0	0.004	0	0.261
09/07/95	22:32:45	0.03015919	0.006	0.01011856	0.007	0	0.002	0	0.004	0	0.266
09/07/95	22:37:46	0.03144233	0.006	0.01120133	0.007	0	0.002	0	0.004	0	0.266
09/07/95	22:42:47	0.031731	0.006	0.01119918	0.007	0	0.002	0	0.004	0	0.268
09/07/95	22:47:47	0.03171882	0.006	0.01090027	0.007	0	0.002	0	0.004	0	0.267
09/07/95	22:52:45	0.03200727	0.006	0.01168363	0.007	0	0.002	0	0.004	0	0.264
09/07/95	22:57:45	0.03239999	0.006	0.01207636	0.007	0	0.002	0	0.004	0	0.27
09/07/95	23:02:46	0.03171272	0.006	0.01089818	0.007	0	0.002	0	0.004	0	0.298
09/07/95	23:07:46	0.03199497	0.006	0.01177729	0.007	0	0.002	0	0.004	0	0.277
09/07/95	23:12:45	0.03297007	0.006	0.01187315	0.007	0	0.002	0	0.004	0	0.28
09/07/95	23:17:45	0.03256504	0.006	0.01226093	0.007	0	0.002	0	0.004	0	0.281

SE Chicken

Site: Chicken processing											
in ppm	"upwind" data										
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
09/07/95	23:22:46	0.03236264	0.006	0.0118663	0.007	0	0.002	0	0.004	0	0.28
09/07/95	23:27:46	0.03255251	0.006	0.01186402	0.007	0	0.002	0	0.004	0	0.281
09/07/95	23:32:46	0.0330364	0.006	0.01186173	0.007	0	0.002	0	0.004	0	0.283
09/07/95	23:37:45	0.03332408	0.006	0.01244752	0.007	0	0.002	0	0.004	0	0.283
09/07/95	23:42:46	0.03341566	0.006	0.01234713	0.007	0	0.002	0	0.004	0	0.281
09/07/95	23:47:46	0.03253372	0.006	0.01234713	0.007	0	0.002	0	0.004	0	0.278
09/07/95	23:52:46	0.03320688	0.006	0.01253829	0.007	0	0.002	0	0.004	0	0.279
09/07/95	23:57:45	0.0335987	0.006	0.01312602	0.007	0	0.002	0	0.004	0	0.282
09/08/95	00:02:45	0.03457159	0.006	0.01351524	0.007	0	0.002	0	0.004	0	0.283
09/08/95	00:07:46	0.03348138	0.006	0.01204155	0.007	0	0.002	0	0.004	0	0.284
09/08/95	00:12:46	0.03347493	0.006	0.01203923	0.007	0	0.002	0	0.004	0	0.284

Small town POTW

Site: POTW in small town in SW U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 24											
10/04/95	10:44:50	13728.832	274.9	430.09	15.8	0.00063186	0.0002	2.7218	0.185	0	0.006
10/04/95	10:49:50	13845.3057	291.7	428.61	14.28	0.00052655	0.0002	2.9768	0.185	0	0.005
10/04/95	10:54:50	13103.2863	347.5	423.35	13.7	0.00042124	0.0002	2.5201	0.173	0	0.005
10/04/95	10:59:51	13265.7808	350.1	423.14	13.68	0.00052655	0.0002	2.5668	0.175	0	0.005
10/04/95	11:04:51	13225.6574	352.5	430.09	13.94	0.00052655	0.0002	2.4533	0.165	0	0.005
10/04/95	11:09:50	13384.5713	347.8	422.93	13.71	0.00052655	0.0002	2.4947	0.163	0	0.005
10/04/95	11:14:50	13638.4754	346.3	429.04	13.75	0.00042124	0.0002	2.5233	0.164	0	0.005
10/04/95	11:19:51	13690.4989	359.9	417.24	17.16	0	0.0002	2.5530	0.18	0	0.006
10/04/95	11:24:51	13768.0076	350.1	413.98	16.86	0	0.0002	2.5329	0.173	0	0.006
10/04/95	11:29:50	14000.8496	356.8	419.66	17.05	0	0.0002	2.5318	0.173	0	0.006
10/04/95	11:34:50	13846.2535	345.7	435.46	14.76	0.00031593	0.0002	2.4523	0.152	0	0.005
10/04/95	11:39:51	13612.0424	342.1	425.56	16.25	0.00021062	0.0002	2.4597	0.153	0	0.006
10/04/95	11:44:51	13495.6741	361.2	417.87	18.22	0	0.0002	2.5382	0.162	0	0.006
10/04/95	11:49:51	13542.5374	362.3	428.61	17.76	0	0.0002	2.5000	0.164	0	0.006
10/04/95	11:54:50	13239.1372	363.8	419.56	16.68	0	0.0002	2.4279	0.157	0	0.006
10/04/95	11:59:50	13448.7055	362.9	426.19	15.67	0.00021062	0.0002	2.4120	0.156	0	0.005
10/04/95	12:04:52	13486.7227	354.6	434.09	15.73	0.00021062	0.0002	2.3993	0.152	0	0.005
10/04/95	12:09:52	13515.2619	362.3	433.88	14.61	0.00031593	0.0002	2.4629	0.154	0	0.005
10/04/95	12:14:51	13162.471	355.4	443.04	14.8	0.00147435	0.0002	2.4597	0.142	0	0.005
10/04/95	12:19:51	13212.4936	381.5	444.73	16.03	0.00252746	0.0002	2.5403	0.151	0	0.006
10/04/95	12:24:52	12908.1456	361.6	431.77	14.61	0.00042124	0.0002	2.3781	0.148	0	0.005
10/04/95	12:29:52	12825.266	374	425.56	15.22	0.00695051	0.0002	2.4502	0.154	0	0.005
10/04/95	12:34:51	13322.9645	364.1	443.67	15.5	0.00989921	0.0002	2.4958	0.144	0	0.005
10/04/95	12:39:51	12989.7614	375.8	440.73	14.88	0.00558147	0.0002	2.4682	0.149	0	0.005
10/04/95	12:44:52	12527.4473	360.9	445.89	14.21	0.00410712	0.0002	2.5042	0.139	0	0.005
10/04/95	12:49:51	12761.3424	364.2	439.36	13.5	0.00579209	0.0002	2.4470	0.142	0	0.005
10/04/95	12:54:51	12456.3626	364.8	442.31	13.47	0.00368588	0.0002	2.5605	0.136	0	0.005
10/04/95	12:59:52	11870.9403	369.2	447.89	13.39	0.0049496	0.0002	2.3463	0.133	0	0.005
10/04/95	13:04:52	11276.4613	365.1	445.67	13.85	0.00052655	0.0002	2.4396	0.127	0	0.005
10/04/95	13:09:51	11996.6813	368.2	448.41	13.2	0.00379119	0.0002	2.4692	0.13	0	0.005
10/04/95	13:14:51	12276.9131	363.9	437.88	13.56	0.00473898	0.0002	2.4745	0.13	0	0.005
10/04/95	13:19:52	11733.5098	364.5	457.36	15.5	0.00800361	0.0002	2.5286	0.128	0	0.005
10/04/95	13:24:52	11750.8861	374.2	443.04	14.11	0.0020009	0.0002	2.4025	0.132	0	0.005
10/04/95	13:29:51	11794.906	374	438.72	14.19	0.00579209	0.0002	2.5000	0.132	0	0.005
10/04/95	13:34:52	11317.3218	383.8	440.62	13.64	0.00368588	0.0002	2.4311	0.123	0	0.005
10/04/95	13:39:52	11794.8006	382.9	445.78	14.16	0.0058974	0.0002	2.6082	0.123	0	0.005
10/04/95	13:44:51	11653.263	361	447.57	13.93	0.0020009	0.0002	2.3495	0.113	0	0.005
10/04/95	13:49:51	11497.2979	355.9	445.99	13.37	0.00063186	0.0002	2.2435	0.115	0	0.005
10/04/95	13:54:52	12021.7452	371.4	449.89	15.08	0.00358056	0.0002	2.5223	0.119	0	0.005
10/04/95	13:59:51	11708.7618	362.2	437.78	16.32	0.00315932	0.0002	2.4682	0.113	0	0.006
10/04/95	14:04:50	11774.0544	356	450.94	13.46	0.00242215	0.0002	2.4205	0.115	0	0.005
10/04/95	14:09:50	12024.0621	355.3	460.63	12.91	0.00516023	0.0002	2.5414	0.121	0	0.005
10/04/95	14:14:51	11815.8628	363.8	463.79	13.03	0.00505491	0.0002	2.5361	0.117	0	0.005
Run 25											
10/04/95	14:39:53	11813.6513	342.9	461.79	12.25	0.00242215	0.0001	2.5201	0.116	0	0.004
10/04/95	14:45:06	11493.2839	344	454.12	12.72	0.00031616	0.0002	2.4806	0.121	0	0.004
10/04/95	14:49:59	12159.3574	352.3	456.92	12.45	0.00147597	0.0001	2.5335	0.139	0	0.004
10/04/95	14:54:59	12084.6166	359.9	458.56	12.76	0.00579527	0.0002	2.5130	0.134	0	0.004
10/04/95	14:59:58	12081.8777	373.2	462.42	13.13	0.00221153	0.0002	2.4830	0.126	0	0.005
10/04/95	15:04:58	12330.4851	344	468.24	13.35	0.00674482	0.0002	2.3597	0.126	0	0.005
10/04/95	15:09:59	12634.8569	361.6	463.76	13.37	0.00179222	0.0002	2.4762	0.119	0	0.005
10/04/95	15:14:59	13194.1304	357.8	461.28	12.45	0.00580686	0.0001	2.4809	0.152	0	0.004
10/04/95	15:19:58	12852.6069	360.1	475.72	11.61	0.00422394	0.0001	2.4898	0.15	0	0.004
10/04/95	15:24:59	13384.2022	368.9	475.60	12.31	0.00633012	0.0001	2.5290	0.14	0	0.004
10/04/95	15:29:59	13536.5639	367.5	469.06	14.25	0.00717404	0.0002	2.6118	0.155	0	0.005
10/04/95	15:35:00	13109.8396	370.9	455.13	13.93	0.00653505	0.0002	2.4884	0.154	0	0.005
10/04/95	15:40:00	13357.3349	368.1	452.36	13.18	0.00654223	0.0002	2.5581	0.161	0	0.005
10/04/95	15:44:59	13354.5946	374.1	463.77	10.97	0.00421996	0.0001	2.5363	0.161	0	0.004
10/04/95	15:50:00	13638.2998	381.1	471.06	12.88	0.00401263	0.0002	2.5770	0.155	0	0.005
10/04/95	15:55:00	13784.9555	362.4	468.71	13.93	0.00379519	0.0002	2.5175	0.161	0	0.005
10/04/95	15:59:59	13813.2941	426.6	459.41	15.84	0.01002608	0.0002	2.5681	0.174	0	0.006

Small town POTW

Site: POTW in small town in SW U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/04/95	16:05:00	13740.8436	364.6	459.05	14.9	0.00232055	0.0002	2.5550	0.162	0	0.005
10/04/95	16:10:00	13740.3268	390.2	453.87	15.13	0.00253383	0.0002	2.4638	0.162	0	0.005
10/04/95	16:14:59	14162.6873	367.2	441.92	18.18	0.00992598	0.0002	2.5631	0.173	0	0.006
10/04/95	16:20:00	14244.479	366.7	448.90	17.94	0.00685744	0.0002	2.5448	0.17	0	0.006
10/04/95	16:25:00	14464.0313	389.8	471.67	18.65	0.00443177	0.0002	2.5931	0.17	0	0.007
Run 26											
10/04/95	17:19:51	13249.5996	354.6	455.26	14.8	0.01099569	0.0002	2.4152	0.135	0.01131288	0.005
10/04/95	17:24:52	13127.3764	354.3	452.03	15.92	0.00762204	0.0002	2.4321	0.146	0	0.006
10/04/95	17:29:52	12786.5878	355.6	446.70	16.69	0.00973394	0.0002	2.4158	0.162	0	0.006
10/04/95	17:34:52	12925.0437	348.2	448.14	16.76	0.00698559	0.0002	2.4572	0.16	0	0.006
10/04/95	17:39:53	12678.8257	347.3	448.30	17.06	0.00656462	0.0002	2.4464	0.17	0	0.006
10/04/95	17:44:52	12684.0139	343.9	446.18	17.39	0.00847048	0.0002	2.4208	0.167	0	0.006
10/04/95	17:49:52	12776.4518	342.6	444.81	17.62	0.00900646	0.0002	2.4023	0.165	0	0.006
10/04/95	17:54:53	12844.7698	342.4	443.17	17.91	0.01059196	0.0002	2.4302	0.169	0	0.006
10/04/95	17:59:52	12815.7086	343	447.40	18.2	0.01111345	0.0002	2.3666	0.152	0	0.006
10/04/95	18:04:52	12997.6515	341.3	442.10	18.55	0.01111345	0.0002	2.4274	0.168	0	0.006
10/04/95	18:09:53	12948.9585	340.7	440.70	17.89	0.0115305	0.0002	2.4058	0.171	0.00666442	0.006
10/04/95	18:14:53	13053.4155	335.3	440.72	18.13	0.00973038	0.0002	2.4171	0.173	0	0.006
10/04/95	18:19:52	12911.1615	338.5	441.46	17.83	0.01099956	0.0002	2.3798	0.161	0	0.006
10/04/95	18:24:53	12877.6856	331.3	443.84	17.4	0.00930392	0.0002	2.3470	0.149	0	0.006
10/04/95	18:29:53	12764.6281	336.7	437.60	17.73	0.01035361	0.0002	2.3474	0.167	0	0.006
10/04/95	18:34:52	12887.9226	332.9	438.63	17.74	0.01140384	0.0002	2.3472	0.149	0	0.006
10/04/95	18:39:53	12737.9647	338.1	434.67	18.67	0.00971083	0.0002	2.3888	0.171	0	0.007
10/04/95	18:44:53	12585.4903	331.7	434.26	17.97	0.01255826	0.0002	2.3693	0.17	0	0.006
10/04/95	18:49:52	12661.8926	327.5	431.26	17.7	0.01380945	0.0002	2.3889	0.168	0	0.006
10/04/95	18:54:53	12822.1927	326.2	431.97	17.91	0.01600261	0.0002	2.4028	0.174	0	0.006
10/04/95	18:59:53	12914.562	319.8	429.77	18.3	0.01956385	0.0002	2.4821	0.174	0.00883529	0.006
10/04/95	19:04:52	12872.6915	318	428.62	18.44	0.01881373	0.0002	2.5216	0.176	0.00987984	0.006
10/04/95	19:09:53	12752.9265	314.5	429.11	19.37	0.02624232	0.0002	2.5532	0.176	0.01354104	0.007
10/04/95	19:14:53	12736.3744	313.2	427.30	19.67	0.02956316	0.0002	2.6598	0.179	0.02023294	0.007
10/04/95	19:19:52	12695.0503	309.7	427.14	19.81	0.03581351	0.0002	2.7487	0.181	0.02429454	0.007
10/04/95	19:24:53	12668.304	306.6	425.08	20.41	0.04526747	0.0002	2.8295	0.179	0.02937681	0.007
10/04/95	19:29:53	12695.8553	306.3	424.94	22.68	0.07830632	0.0003	2.9375	0.181	0.04009283	0.008
10/04/95	19:34:52	12879.3795	307.5	420.82	24.55	0.09959923	0.0003	3.2209	0.186	0.06090675	0.009
10/04/95	19:39:52	12952.1411	300.7	421.29	29.75	0.12532415	0.0004	3.2763	0.189	0.06688122	0.01
10/04/95	19:44:53	13017.9951	292.3	478.81	323	0.19306415	0.0039	3.3366	0.19	0.12222542	0.112
10/04/95	19:49:53	12893.104	288.1	418.79	28.84	0.12515963	0.0003	3.2886	0.191	0.08091233	0.01
10/04/95	19:54:54	12731.8536	284.8	412.34	26.33	0.11715952	0.0003	3.3295	0.19	0.06844692	0.009
10/04/95	19:59:54	12646.6028	281.6	409.44	26.24	0.09423899	0.0003	3.1560	0.19	0.05739445	0.009
10/04/95	20:04:53	12730.8235	285	410.28	27.95	0.11698494	0.0003	3.1861	0.191	0.07259704	0.01
10/04/95	20:09:53	12563.0383	291.1	409.53	22.42	0.06416059	0.0003	3.3489	0.189	0.0593926	0.008
10/04/95	20:14:54	12497.5215	295.9	408.19	21.31	0.03272958	0.0003	3.0616	0.188	0.04018695	0.007
10/04/95	20:19:54	12435.1832	294.9	406.28	19.11	0.01811879	0.0002	3.0510	0.191	0.02816177	0.007
10/04/95	20:24:55	12439.6438	291	405.81	18.52	0.0186295	0.0002	2.9453	0.19	0.01666306	0.006
10/04/95	20:29:55	12444.8737	290.2	402.48	18.76	0.01706747	0.0002	2.9991	0.194	0.01199895	0.007
10/04/95	20:34:54	12862.0639	297.6	401.43	21.26	0.03215154	0.0003	3.0558	0.199	0.03763074	0.007
10/04/95	20:39:54	12969.4792	301.3	399.89	21.75	0.03429685	0.0003	3.0859	0.207	0.03729266	0.008
10/04/95	20:44:55	12879.8408	302.1	397.78	18.97	0.00536978	0.0002	2.9200	0.204	0.01931057	0.007
10/04/95	20:49:55	13043.7391	305.3	397.40	21.88	0.02798022	0.0003	2.7184	0.208	0.01765542	0.008
10/04/95	20:54:53	13194.6642	310.2	397.83	23.33	0.03460753	0.0003	2.6356	0.208	0.0170455	0.008
10/04/95	20:59:54	13185.2835	309.7	398.20	22.96	0.03531745	0.0003	2.6179	0.206	0.01765872	0.008
10/04/95	21:04:54	13169.8253	309.5	397.98	21.41	0.02466704	0.0003	2.6290	0.211	0.0087728	0.007
10/04/95	21:09:55	13170.8574	308.7	397.87	21.83	0.02435741	0.0003	2.5614	0.21	0	0.008
10/04/95	21:14:54	13063.342	312.7	396.56	20.79	0.01733593	0.0002	2.5286	0.204	0	0.007
10/04/95	21:19:53	13049.1904	309.7	393.86	21.7	0.0232047	0.0003	2.5719	0.207	0	0.008
10/04/95	21:24:54	13059.054	309.9	393.44	22.06	0.02226449	0.0003	2.5840	0.208	0	0.008
10/04/95	21:29:54	13012.8372	309.6	394.94	22.35	0.02400778	0.0003	2.5571	0.211	0	0.008
10/04/95	21:34:53	13102.6553	310	392.10	21.94	0.0191722	0.0003	2.5612	0.207	0	0.008
10/04/95	21:39:53	13031.5745	309.7	393.28	22.26	0.02165416	0.0003	2.4811	0.204	0	0.008
10/04/95	21:44:54	12970.1179	313.2	394.00	21.73	0.01876694	0.0003	2.4364	0.204	0	0.008
10/04/95	21:49:54	12964.5497	312.3	392.56	21.58	0.01814825	0.0003	2.4427	0.206	0	0.008
10/04/95	21:54:54	12938.9225	314.2	392.59	21.97	0.01876342	0.0003	2.4536	0.207	0	0.008

Small town POTW

Site: POTW in small town in SW U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/04/95	21:59:54	13008.6831	317.8	392.44	22.51	0.01875638	0.0003	2.4953	0.211	0	0.008
10/04/95	22:04:55	12973.2315	317.6	391.82	21.9	0.01875638	0.0003	2.4714	0.207	0	0.008
10/04/95	22:09:55	12911.547	317.3	390.98	22.04	0.01895182	0.0003	2.4669	0.205	0	0.008
10/04/95	22:14:54	12925.4824	315.3	390.35	22.64	0.02377938	0.0003	2.5184	0.203	0	0.008
10/04/95	22:19:54	12873.8512	317.2	390.00	22.65	0.02468324	0.0003	2.5244	0.204	0	0.008
10/04/95	22:24:54	12852.9127	322	391.14	22.73	0.02757849	0.0003	2.5362	0.204	0	0.008
10/04/95	22:29:55	12919.2424	325.6	392.45	21.96	0.01914389	0.0003	2.5128	0.206	0	0.008
10/04/95	22:34:55	12881.7227	329.8	392.88	21.72	0.02389185	0.0003	2.4312	0.206	0	0.008
10/04/95	22:39:56	12909.9432	329.8	392.82	21.45	0.01730749	0.0003	2.4799	0.208	0	0.007
10/04/95	22:44:56	12924.5722	335.1	392.72	21.53	0.01792561	0.0003	2.4612	0.209	0	0.008
10/04/95	22:49:57	12898.6633	333.8	391.20	21.31	0.01905526	0.0003	2.5178	0.206	0	0.007
10/04/95	22:54:57	12965.3524	335.2	392.04	22.38	0.02223161	0.0003	2.5346	0.206	0	0.008
10/04/95	22:59:55	13016.1445	337.3	392.20	23.34	0.0290137	0.0003	2.5689	0.204	0	0.008
10/04/95	23:04:55	12993.7435	336.1	390.38	22.28	0.02191049	0.0003	2.5435	0.204	0	0.008
10/04/95	23:09:56	12970.5134	336.5	390.49	23.4	0.02898645	0.0003	2.6162	0.208	0	0.008
10/04/95	23:14:56	13015.803	334.6	391.31	24.35	0.03626488	0.0003	2.7474	0.208	0.0141772	0.008
10/04/95	23:19:56	13052.1813	332.8	389.39	25.41	0.05977957	0.0003	2.7987	0.21	0.02239166	0.009
10/04/95	23:24:55	12928.8452	324.8	393.41	24.87	0.05326848	0.0003	3.1614	0.21	0.01149532	0.009
10/04/95	23:29:55	12846.3701	315.2	397.33	24.27	0.03550564	0.0003	3.5367	0.212	0	0.008
10/04/95	23:34:56	12860.0182	329.9	391.59	24.24	0.04227839	0.0003	2.9068	0.21	0	0.008
10/04/95	23:39:56	12985.0405	333.3	390.16	21.71	0.02320407	0.0003	2.6060	0.208	0	0.008
10/04/95	23:44:56	13049.7244	339.4	387.80	22.47	0.02238269	0.0003	2.5874	0.207	0	0.008
10/04/95	23:49:55	13091.8092	337.4	388.26	21.61	0.01644312	0.0003	2.5950	0.206	0	0.008
10/04/95	23:54:55	13005.77	329.6	387.62	21.98	0.02127729	0.0003	2.6224	0.207	0	0.008
10/04/95	23:59:56	12993.1731	329.3	388.09	23.05	0.03061956	0.0003	2.7758	0.211	0	0.008
10/05/95	00:04:56	12977.9906	332	387.30	21.93	0.0196216	0.0003	2.8655	0.209	0	0.008
10/05/95	00:09:56	13043.7384	334.8	390.38	24.02	0.03698311	0.0003	2.9339	0.209	0	0.008
10/05/95	00:14:55	13168.5131	347.2	390.79	21.24	0.01604712	0.0003	2.6586	0.21	0	0.007
10/05/95	00:19:55	13164.3047	352.3	390.70	20.8	0.01163043	0.0002	2.5636	0.208	0	0.007
10/05/95	00:24:56	13091.6002	354.1	389.89	20.59	0.00072087	0.0002	2.5111	0.207	0	0.007
10/05/95	00:29:57	13096.0419	351.8	390.43	20.45	0.0008237	0.0002	2.5168	0.209	0	0.007
10/05/95	00:34:56	13075.2754	348.7	390.70	20.33	0.00061754	0.0002	2.4464	0.208	0	0.007
10/05/95	00:39:55	13002.7957	349.8	388.42	20.36	0.00185159	0.0002	2.4907	0.207	0	0.007
10/05/95	00:44:55	12991.6631	347.7	389.13	20.51	0.00133651	0.0002	2.4861	0.207	0	0.007
10/05/95	00:49:56	12916.8576	337.4	389.26	20.47	0.00102789	0.0002	2.6182	0.207	0	0.007
10/05/95	00:54:56	12896.8285	344.3	387.29	20.46	0	0.0002	2.6405	0.205	0	0.007
10/05/95	00:59:56	12886.4305	345.7	386.79	20.62	0.00061672	0.0002	2.6555	0.205	0	0.007
10/05/95	01:04:57	12815.208	346.8	385.30	20.77	0	0.0002	2.7322	0.206	0	0.007
10/05/95	01:09:55	12891.498	338.7	385.63	20.92	0.00030801	0.0002	2.6473	0.21	0	0.007
10/05/95	01:14:56	12812.0822	338.8	385.45	20.89	0	0.0002	2.7938	0.208	0	0.007
10/05/95	01:19:56	12848.0241	333.2	382.93	21.14	0	0.0003	2.4910	0.211	0	0.007
10/05/95	01:24:56	12797.7394	342.7	380.09	21.24	0	0.0003	2.4982	0.211	0	0.007
10/05/95	01:29:55	12836.6577	341.4	384.54	20.83	0	0.0002	2.5563	0.206	0	0.007
10/05/95	01:34:55	12783.1471	337.7	385.84	20.66	0	0.0002	2.9573	0.203	0	0.007
10/05/95	01:39:55	12818.7489	330	387.05	20.49	0	0.0002	2.8943	0.2	0	0.007
10/05/95	01:44:56	12867.2199	340.4	387.90	20.51	0	0.0002	2.6205	0.201	0	0.007
10/05/95	01:49:56	12766.1534	330.9	384.36	20.78	0	0.0002	2.8472	0.203	0	0.007
10/05/95	01:54:55	12827.6473	342.9	383.48	21.01	0.00348619	0.0003	2.6883	0.203	0	0.007
10/05/95	01:59:55	12816.2502	331.7	382.11	21.43	0.00922467	0.0003	3.1271	0.208	0	0.007
10/05/95	02:04:55	12712.5726	318	382.19	21.65	0	0.0003	3.0294	0.204	0	0.008
10/05/95	02:09:56	12761.3986	324.7	382.66	21.31	0	0.0003	2.8123	0.205	0	0.007
10/05/95	02:14:56	12832.2144	328.4	382.78	21.41	0.00358602	0.0003	3.0223	0.202	0	0.007
10/05/95	02:19:56	12967.9152	336.2	381.94	21.36	0.00246084	0.0003	2.7121	0.206	0	0.007
10/05/95	02:24:55	12842.7968	338.3	378.72	21.36	0	0.0003	2.6139	0.207	0	0.007
10/05/95	02:29:55	12814.9791	328.1	378.85	21.51	0	0.0003	2.8712	0.212	0	0.007
10/05/95	02:34:56	12889.5883	330.2	379.73	21.43	0	0.0003	2.5759	0.211	0	0.007
10/05/95	02:39:56	12921.8547	327.2	379.35	21.7	0	0.0003	2.7395	0.212	0	0.008
10/05/95	02:44:56	12861.6664	323.7	379.76	21.39	0	0.0003	2.7746	0.209	0	0.007
10/05/95	02:49:55	12924.3613	334.6	380.44	21.34	0	0.0003	2.7250	0.208	0	0.007
10/05/95	02:54:55	13058.3519	331.9	380.78	21.28	0	0.0003	2.4624	0.214	0	0.007
10/05/95	02:59:56	13039.5848	336.5	378.60	21.5	0	0.0003	2.4013	0.215	0	0.007
10/05/95	03:04:56	13054.1467	343.8	376.81	21.74	0	0.0003	2.2897	0.214	0	0.008

Small town POTW

Site: POTW in small town in SW U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	03:09:56	12923.1283	344.6	378.10	21.22	0	0.0003	2.4151	0.213	0	0.007
10/05/95	03:14:55	13032.5482	331.6	374.82	21.68	0	0.0003	2.4051	0.216	0	0.008
10/05/95	03:19:55	12957.8182	310	374.32	21.88	0	0.0003	2.2220	0.219	0	0.008
10/05/95	03:24:56	13034.7018	310.6	377.19	21.14	0	0.0003	2.2254	0.222	0	0.007
10/05/95	03:29:56	13129.2689	313.7	381.34	20.58	0	0.0002	2.1868	0.221	0	0.007
10/05/95	03:34:56	13285.1335	314.4	382.31	20.79	0	0.0002	2.2134	0.222	0	0.007
10/05/95	03:39:55	13311.9231	314.1	381.93	20.8	0	0.0002	2.2244	0.224	0	0.007
10/05/95	03:44:55	13296.1675	304.9	381.21	20.75	0	0.0002	2.2230	0.224	0	0.007
10/05/95	03:49:55	13312.6413	301.2	379.26	21	0	0.0003	2.2340	0.225	0	0.007
10/05/95	03:54:56	13314.5406	294.8	378.43	21.04	0	0.0003	2.2573	0.226	0	0.007
10/05/95	03:59:56	13383.9273	302.5	379.99	20.9	0	0.0002	2.2517	0.227	0	0.007
10/05/95	04:04:56	13496.3309	304.3	380.47	21.05	0	0.0003	2.2614	0.228	0	0.007
10/05/95	04:09:56	13514.7265	302.3	381.21	20.81	0	0.0002	2.2609	0.228	0	0.007
10/05/95	04:14:57	13544.2224	298.8	381.82	20.89	0	0.0002	2.2466	0.227	0	0.007
10/05/95	04:19:57	13510.9629	290.4	381.03	20.81	0	0.0002	2.2388	0.228	0	0.007
10/05/95	04:24:57	13473.1266	285.6	379.97	21.34	0	0.0003	2.2635	0.229	0	0.007
10/05/95	04:29:57	13241.263	279.2	379.15	21.24	0	0.0003	2.2541	0.227	0	0.007
10/05/95	04:34:58	12964.4952	272.3	377.61	21.28	0	0.0003	2.2467	0.224	0	0.007
10/05/95	04:39:58	12336.3864	262.4	371.55	21.56	0	0.0003	2.2235	0.216	0	0.008
10/05/95	04:44:58	10928.5553	248.2	364.52	21.36	0	0.0003	2.1767	0.198	0	0.007
10/05/95	04:49:57	9971.04591	240.1	360.16	21.3	0	0.0003	2.1652	0.188	0	0.007
10/05/95	04:54:57	9619.63703	235.8	357.50	21.33	0	0.0003	2.1368	0.184	0	0.007
10/05/95	04:59:58	9240.73212	237.7	353.89	21.32	0	0.0003	2.1382	0.181	0	0.007
10/05/95	05:04:58	8872.54164	236.3	352.44	21.13	0	0.0003	2.1323	0.176	0	0.007
10/05/95	05:09:58	8738.40891	235.4	349.11	21.4	0	0.0003	2.1169	0.175	0	0.007
10/05/95	05:14:57	8543.30795	240.1	350.47	21.26	0	0.0003	2.1194	0.173	0	0.007
10/05/95	05:19:57	8436.65291	238.8	348.22	21.26	0	0.0003	2.1105	0.174	0	0.007
10/05/95	05:24:58	8387.76733	240.4	346.71	21.34	0	0.0003	2.1113	0.173	0	0.007
10/05/95	05:29:58	8256.10132	240	346.66	21.21	0	0.0003	2.1158	0.172	0	0.007
10/05/95	05:34:58	8112.90694	242.4	345.38	21.08	0	0.0003	2.1012	0.172	0	0.007
10/05/95	05:39:57	8061.81071	243	344.11	21.3	0	0.0003	2.0927	0.17	0	0.007
10/05/95	05:44:57	7980.30167	241.2	344.43	21.29	0	0.0003	2.1025	0.172	0	0.007
10/05/95	05:49:57	7914.40914	240.6	343.26	21.19	0	0.0003	2.0991	0.17	0	0.007
10/05/95	05:54:58	7883.33322	238.1	341.42	21.36	0	0.0003	2.1064	0.172	0	0.007
10/05/95	05:59:58	7820.01358	241.2	340.23	21.26	0	0.0003	2.0990	0.172	0	0.007
10/05/95	06:04:57	7768.33318	240.1	340.10	21.42	0	0.0003	2.0972	0.171	0	0.007
10/05/95	06:09:57	7782.81794	236.7	339.57	21.47	0	0.0003	2.0974	0.171	0	0.007
10/05/95	06:14:57	7741.79824	236.4	338.30	21.36	0	0.0003	2.1000	0.17	0	0.007
10/05/95	06:19:58	7731.00882	236.3	337.17	21.36	0	0.0003	2.0942	0.17	0	0.007
10/05/95	06:24:58	7685.27745	233.4	336.97	21.52	0	0.0003	2.0881	0.169	0	0.007
10/05/95	06:29:58	7683.63428	229.5	336.24	21.57	0	0.0003	2.0974	0.169	0	0.008
10/05/95	06:34:58	7673.6215	230.8	334.82	21.66	0	0.0003	2.1136	0.169	0	0.008
10/05/95	06:39:59	7667.50266	228.9	334.93	21.63	0	0.0003	2.1104	0.168	0	0.008
10/05/95	06:44:59	7675.41752	227.9	332.57	21.65	0	0.0003	2.0967	0.169	0	0.008
10/05/95	06:49:59	7657.28993	225.7	332.83	21.51	0	0.0003	2.1032	0.17	0	0.007
10/05/95	06:54:58	7646.82446	224.1	332.77	21.67	0	0.0003	2.1188	0.171	0	0.008
10/05/95	06:59:58	7638.719	220.7	332.17	21.64	0	0.0003	2.1036	0.171	0	0.008
10/05/95	07:04:59	7627.16451	223.7	331.31	21.66	0	0.0003	2.1032	0.171	0	0.008
10/05/95	07:09:59	7620.80347	221.2	330.80	21.64	0	0.0003	2.1054	0.171	0	0.008
10/05/95	07:14:59	7632.48217	220.8	330.30	21.76	0	0.0003	2.1104	0.173	0	0.008
10/05/95	07:19:58	7618.63869	218.3	331.83	21.62	0	0.0003	2.1060	0.174	0	0.008
10/05/95	07:24:58	7597.71804	217.4	330.72	21.67	0	0.0003	2.1043	0.172	0	0.008
10/05/95	07:29:59	7594.12654	218.7	330.92	21.76	0	0.0003	2.1133	0.171	0	0.008
10/05/95	07:34:59	7560.12976	216.6	329.33	21.78	0	0.0003	2.1271	0.171	0	0.008
10/05/95	07:39:59	7555.23494	215.4	328.95	21.64	0	0.0003	2.1160	0.171	0	0.008
10/05/95	07:44:58	7558.18498	212.2	331.71	21.36	0	0.0003	2.1164	0.173	0	0.007
10/05/95	07:49:58	7553.01901	207.1	332.13	21.25	0	0.0003	2.1192	0.174	0	0.007
10/05/95	07:54:58	7535.57779	204.9	333.66	20.97	0	0.0003	2.1240	0.174	0	0.007
10/05/95	07:59:59	7514.34536	206.6	336.73	20.46	0	0.0002	2.1245	0.176	0	0.007
10/05/95	08:04:59	7536.24978	206	338.72	20.15	0	0.0002	2.1147	0.177	0	0.007
10/05/95	08:09:59	7539.49405	207.6	340.14	19.94	0	0.0002	2.1217	0.177	0	0.007
10/05/95	08:14:58	7549.8354	206.7	341.84	19.72	0	0.0002	2.1099	0.176	0	0.007

Small town POTW

Site: POTW in small town in SW U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	08:19:58	7563.34328	207.5	343.52	19.33	0	0.0002	2.1043	0.176	0	0.007
10/05/95	08:24:59	7591.20903	204.9	345.71	18.94	0	0.0002	2.1035	0.174	0	0.007
10/05/95	08:29:59	7607.64333	203.4	348.98	18.61	0	0.0002	2.1122	0.174	0	0.006
10/05/95	08:34:59	7618.47118	205.7	350.22	18.18	0	0.0002	2.1140	0.171	0	0.006
10/05/95	08:39:58	7621.5877	204.8	351.20	17.85	0	0.0002	2.1064	0.17	0	0.006
10/05/95	08:44:58	7577.99366	205.6	353.54	17.55	0.00020048	0.0002	2.1082	0.171	0	0.006
10/05/95	08:49:59	7565.24917	205.1	356.28	17.25	0.00020055	0.0002	2.1020	0.17	0	0.006
10/05/95	08:54:58	7609.67334	203.9	358.47	16.97	0.0003009	0.0002	2.1105	0.168	0	0.006
10/05/95	08:59:57	7612.43145	201.6	360.04	16.77	0.00030095	0.0002	2.0968	0.166	0	0.006
10/05/95	09:04:58	7578.57352	204.1	362.36	16.43	0.00030096	0.0002	2.0918	0.164	0	0.006
10/05/95	09:09:57	7630.44343	201.7	365.41	15.18	0.00040144	0.0002	2.0896	0.157	0	0.005
Downwind											
Run 27											
10/05/95	15:34:52	7923.06719	330.6	380.36	25.63	0	0.0003	2.1873	0.137	0	0.009
10/05/95	15:39:52	7828.5259	309.1	377.01	25.4	0	0.0003	2.1509	0.125	0	0.009
10/05/95	15:44:51	7773.18831	316.4	378.48	25.12	0	0.0003	2.1734	0.123	0	0.009
10/05/95	15:49:51	7606.86932	321.5	384.44	25.5	0	0.0003	2.1188	0.123	0	0.009
10/05/95	15:54:52	7699.33124	325.8	373.69	27.29	0	0.0003	2.1367	0.126	0	0.009
10/05/95	15:59:52	7675.23735	315	368.06	29.1	0	0.0003	2.1606	0.122	0	0.01
10/05/95	16:04:52	7944.98146	325	371.47	29.24	0	0.0003	2.1780	0.123	0	0.01
10/05/95	16:09:52	7984.60219	313.8	367.47	29.76	0	0.0004	2.1656	0.126	0	0.01
10/05/95	16:14:54	7946.81556	315.7	361.13	30.54	0.00071878	0.0004	2.2016	0.132	0	0.011
10/05/95	16:19:53	8058.32892	320	362.06	30.43	0.01273265	0.0004	2.1974	0.133	0	0.011
10/05/95	16:24:52	7936.02223	322.4	361.52	31.2	0.00738626	0.0004	2.1706	0.132	0	0.011
10/05/95	16:29:52	7856.40541	308.7	364.04	28.72	0.00893672	0.0003	2.1941	0.14	0	0.01
10/05/95	16:35:01	8074.81989	311.9	360.07	30.41	0.01027592	0.0004	2.2291	0.139	0	0.011
10/05/95	16:39:53	7992.04596	309.7	360.55	29.51	0.00832505	0.0004	2.2067	0.138	0	0.01
10/05/95	16:44:53	7869.21677	314	361.30	28.91	0.00903776	0.0003	2.2051	0.142	0	0.01
10/05/95	16:49:54	7721.21344	317.8	355.19	31.04	0.00933889	0.0004	2.1797	0.133	0	0.011
10/05/95	16:54:55	7805.96943	314.2	361.37	28.39	0.01037481	0.0003	2.2014	0.141	0	0.01
10/05/95	16:59:55	8010.12363	308.8	361.72	28.14	0.01037288	0.0003	2.2433	0.145	0	0.01
10/05/95	17:04:54	7897.0684	307.9	358.20	28.42	0.00975327	0.0003	2.2074	0.143	0	0.01
10/05/95	17:09:55	7644.59484	322.6	359.01	29.85	0.01150474	0.0004	2.2220	0.138	0	0.01
10/05/95	17:14:55	7699.23892	325.7	356.51	31.28	0.01099319	0.0004	2.2318	0.133	0	0.011
10/05/95	17:19:55	7627.11982	328.7	352.35	32.01	0.01036321	0.0004	2.1648	0.127	0	0.011
10/05/95	17:24:54	7810.15497	326.4	354.72	33.14	0.00995303	0.0004	2.1535	0.123	0	0.012
10/05/95	17:29:55	7941.4795	320.6	358.96	30.13	0.01180439	0.0004	2.1998	0.133	0	0.01
10/05/95	17:34:56	8099.12903	309.8	359.27	28.22	0.01343922	0.0003	2.2419	0.145	0	0.01
10/05/95	17:39:55	8099.46446	312.8	356.53	28.7	0.01271872	0.0003	2.2787	0.143	0	0.01
10/05/95	17:44:54	7772.2924	308.6	356.56	27.5	0.00892695	0.0003	2.2144	0.144	0	0.01
10/05/95	17:49:56	7722.94127	317.6	352.42	27.99	0.01180219	0.0003	2.2056	0.141	0	0.01
10/05/95	17:54:55	7775.35674	320.4	356.81	28.97	0.00913046	0.0003	2.2130	0.14	0	0.01
10/05/95	17:59:54	7737.80155	325.1	350.89	31.29	0.01271872	0.0004	2.1878	0.134	0	0.011
10/05/95	18:04:54	7975.9619	321.8	354.83	31.76	0.01414414	0.0004	2.1985	0.132	0	0.011
10/05/95	18:09:55	7980.90583	329.4	358.80	32.61	0.01341415	0.0004	2.1934	0.127	0	0.011
10/05/95	18:14:56	8066.61966	325.1	361.81	32.53	0.01606448	0.0004	2.1949	0.126	0	0.011
10/05/95	18:19:54	7883.85405	326.2	357.75	30.09	0.01617285	0.0004	2.1936	0.135	0	0.01
10/05/95	18:24:55	7870.06002	319.7	352.91	30.58	0.01309716	0.0004	2.2134	0.136	0	0.011
10/05/95	18:29:55	7838.3687	322.7	348.50	30.28	0.01277856	0.0004	2.2412	0.14	0	0.011
10/05/95	18:34:55	7877.63957	317.1	343.87	30.3	0.01512415	0.0004	2.2517	0.141	0	0.011
10/05/95	18:39:54	8045.51342	310.5	347.46	30.11	0.01317513	0.0004	2.2535	0.143	0	0.01
10/05/95	18:44:54	8157.15866	316.1	344.51	30.32	0.0164249	0.0004	2.2633	0.144	0	0.011
10/05/95	18:49:55	8165.82158	318.1	342.01	30.16	0.01671841	0.0004	2.2688	0.145	0	0.01
10/05/95	18:54:55	8217.56624	314.7	342.43	30.53	0.01884856	0.0004	2.2624	0.147	0	0.011
10/05/95	18:59:55	8136.48297	313.5	341.47	30.61	0.01914035	0.0004	2.2792	0.146	0	0.011
10/05/95	19:04:55	8099.54046	314.8	340.97	30.65	0.0201471	0.0004	2.2595	0.148	0	0.011
10/05/95	19:09:56	8164.09459	312.3	337.85	31.08	0.02825544	0.0004	2.2907	0.147	0	0.011
10/05/95	19:14:56	8156.60368	315.2	336.35	31.47	0.03289362	0.0004	2.3495	0.15	0	0.011
10/05/95	19:19:55	8086.34036	309.2	334.91	31.91	0.02890696	0.0004	2.3687	0.151	0	0.011
10/05/95	19:24:56	8051.15387	304.5	334.05	31.6	0.03445948	0.0004	2.4068	0.154	0	0.011
10/05/95	19:29:56	8109.67804	305.9	332.42	31.97	0.04110985	0.0004	2.4556	0.153	0.01539088	0.011
10/05/95	19:34:57	8133.78404	300.2	330.19	34.65	0.06231467	0.0004	2.4991	0.156	0.0203332	0.012

Small town POTW

Site: POTW in small town in SW U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	19:39:55	8149.50699	300.2	328.18	34.96	0.06070716	0.0004	2.5209	0.157	0.01979801	0.012
10/05/95	19:44:55	8161.10179	295.9	324.80	35.32	0.0597528	0.0004	2.5373	0.157	0.02028769	0.012
10/05/95	19:49:56	8158.58294	298.1	324.92	33.34	0.05780219	0.0004	2.5349	0.159	0.01896477	0.012
10/05/95	19:54:56	8130.75609	295.8	323.73	34.77	0.05514804	0.0004	2.5222	0.159	0.01875235	0.012
10/05/95	19:59:55	8137.48413	296.2	324.89	33.95	0.05984111	0.0004	2.5122	0.159	0.01863738	0.012
10/05/95	20:04:55	8085.73082	294.5	322.60	34.32	0.05175222	0.0004	2.4894	0.162	0.01470005	0.012
10/05/95	20:09:55	8063.593	292.5	319.43	35.36	0.05684396	0.0004	2.5261	0.161	0.01700288	0.012
10/05/95	20:14:56	8105.00875	288	321.99	34.85	0.05848944	0.0004	2.5253	0.163	0.01577808	0.012
10/05/95	20:19:56	8087.42172	285.8	320.28	35.3	0.05879094	0.0004	2.5081	0.162	0	0.012
10/05/95	20:24:55	8088.69719	290.6	321.93	33.73	0.07867444	0.0004	2.5137	0.163	0	0.012
10/05/95	20:29:55	7955.22548	288.5	315.00	36.43	0.06454605	0.0004	2.5012	0.162	0	0.013
10/05/95	20:34:56	7811.33009	277.3	314.62	36.65	0.05066429	0.0004	2.5342	0.165	0	0.013
10/05/95	20:39:56	7856.66566	264	315.69	31.5	0.03238146	0.0004	2.4514	0.166	0	0.011
10/05/95	20:44:56	7176.11635	216.9	312.01	30.09	0.00929148	0.0004	2.4118	0.168	0	0.01
10/05/95	20:49:55	6866.82966	210.6	303.75	29.18	0.00288903	0.0003	2.2944	0.168	0	0.01
10/05/95	20:54:55	6860.11309	211.5	307.91	28.87	0.00308709	0.0003	2.3528	0.17	0	0.01
10/05/95	20:59:56	7025.20518	220.1	306.48	29.12	0.00258719	0.0003	2.3520	0.17	0	0.01
10/05/95	21:04:56	7128.84	220.6	302.49	29.43	0.00218832	0.0004	2.3390	0.169	0	0.01
10/05/95	21:09:56	6986.20164	213.2	304.34	29.3	0.00188846	0.0003	2.3342	0.17	0	0.01
10/05/95	21:14:56	6967.32156	204.1	301.39	29.81	0.00188555	0.0004	2.3406	0.171	0	0.01
10/05/95	21:19:57	6901.91507	190.7	297.91	30.08	0.0020805	0.0004	2.3317	0.173	0	0.01
10/05/95	21:24:57	6906.25542	192.8	294.44	30.52	0.00148407	0.0004	2.3345	0.172	0	0.011
10/05/95	21:29:56	6801.83499	182.5	296.82	30.12	0.00118611	0.0004	2.3831	0.173	0	0.01
10/05/95	21:34:56	6883.25089	180.5	293.15	30.43	0.00108537	0.0004	2.3292	0.175	0	0.011
10/05/95	21:39:57	6846.17467	181.3	288.29	30.36	0.00069016	0.0004	2.2966	0.175	0	0.011
10/05/95	21:44:57	6929.39192	187.7	289.64	30.27	0.00078787	0.0004	2.3188	0.174	0	0.011
10/05/95	21:49:57	6955.78548	185.9	292.79	30.36	0.00078787	0.0004	2.3347	0.178	0	0.011
10/05/95	21:54:56	6914.53531	182.3	290.16	30.58	0.00059056	0.0004	2.3264	0.176	0	0.011
10/05/95	21:59:56	6829.24465	191.9	289.23	30.36	0	0.0004	2.3021	0.173	0	0.011
10/05/95	22:04:57	6797.11292	193.5	287.31	30.18	0	0.0004	2.2639	0.173	0	0.01
10/05/95	22:09:57	6902.11262	189.1	289.16	29.97	0	0.0004	2.3364	0.175	0	0.01
10/05/95	22:14:57	6888.61984	194.5	289.78	30.01	0	0.0004	2.3511	0.178	0	0.01
10/05/95	22:19:57	6960.52309	194.5	287.80	30.13	0	0.0004	2.3155	0.177	0	0.01
10/05/95	22:24:58	7064.68016	191.9	291.18	30.24	0.00206302	0.0004	2.4805	0.179	0	0.011
10/05/95	22:29:58	6951.77731	188.6	289.05	30.45	0.00068727	0.0004	2.3850	0.179	0	0.011
10/05/95	22:34:58	6717.49352	189.5	284.44	30.78	0	0.0004	2.3293	0.181	0	0.011
10/05/95	22:39:58	6673.14621	190.3	282.50	30.89	0	0.0004	2.2698	0.179	0	0.011
10/05/95	22:44:59	6815.26409	190.5	283.86	30.39	0	0.0004	2.2897	0.177	0	0.011
10/05/95	22:49:59	6956.56987	196.3	280.96	30.67	0.00078317	0.0004	2.3652	0.181	0	0.011
10/05/95	22:54:58	6763.61592	188	281.16	31.03	0	0.0004	2.3427	0.18	0	0.011
10/05/95	22:59:58	6630.80896	187.2	276.66	31.28	0	0.0004	2.2755	0.181	0	0.011
10/05/95	23:04:59	6598.41548	184.1	278.25	31.19	0	0.0004	2.3096	0.18	0	0.011
10/05/95	23:09:59	6508.3004	181	275.62	30.97	0	0.0004	2.3146	0.18	0	0.011
10/05/95	23:14:59	6440.09445	172.8	278.91	30.98	0	0.0004	2.2960	0.179	0	0.011
10/05/95	23:19:58	6609.74519	169.4	277.65	31.2	0	0.0004	2.3334	0.18	0	0.011
10/05/95	23:24:58	6587.52204	181.4	279.65	31.43	0	0.0004	2.3161	0.182	0	0.011
10/05/95	23:29:59	6683.9466	182.8	276.03	31.38	0	0.0004	2.3369	0.182	0	0.011
10/05/95	23:34:59	6730.22693	176.1	279.67	31.27	0	0.0004	2.2942	0.183	0	0.011
10/05/95	23:39:59	6579.11206	179	277.96	31.4	0	0.0004	2.3232	0.182	0	0.011
10/05/95	23:44:59	6504.46829	179.7	277.87	31.26	0	0.0004	2.3104	0.179	0	0.011
10/05/95	23:50:00	6844.64322	176.5	280.51	31.27	0.00175499	0.0004	2.4156	0.183	0	0.011
10/05/95	23:55:00	6680.4867	172.9	277.95	31.51	0	0.0004	2.3626	0.183	0	0.011
10/06/95	00:00:00	6749.8215	170.2	270.53	31.91	0	0.0004	2.3048	0.188	0	0.011
10/06/95	00:05:00	6736.99978	170.4	274.16	31.63	0	0.0004	2.3368	0.186	0	0.011
10/06/95	00:10:01	6653.58257	172.2	272.94	31.72	0	0.0004	2.3285	0.186	0	0.011
10/06/95	00:15:01	6659.2797	176.9	275.71	31.39	0	0.0004	2.3133	0.186	0	0.011
10/06/95	00:20:01	6254.69087	167.2	274.24	31.45	0	0.0004	2.3183	0.182	0	0.011
10/06/95	00:25:00	6216.86973	169.5	272.42	31.77	0	0.0004	2.2966	0.184	0	0.011
10/06/95	00:30:00	6520.3281	174.6	271.66	31.42	0	0.0004	2.3220	0.185	0	0.011
10/06/95	00:35:01	6845.16117	171.2	276.54	31.72	0.00194473	0.0004	2.3532	0.187	0	0.011
10/06/95	00:40:01	6636.14313	165.5	274.77	31.84	0	0.0004	2.3748	0.189	0	0.011
10/06/95	00:45:01	6910.72893	160.7	276.50	31.97	0.00145626	0.0004	2.4043	0.193	0	0.011

Small town POTW

Site: POTW in small town in SW U.S.											
Upwind data in ppm											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/06/95	00:50:01	6969.95016	164.4	279.31	32.02	0.00349502	0.0004	2.4591	0.192	0	0.011
10/06/95	00:55:01	7434.30665	172.2	282.08	38.94	0.04010356	0.0005	2.7224	0.198	0	0.014
10/06/95	01:00:02	7286.21492	163	283.96	32.75	0.00913486	0.0004	2.5184	0.205	0	0.011
10/06/95	01:05:02	7528.19146	172.3	290.37	31.93	0.0061223	0.0004	2.6028	0.222	0	0.011
Run 28											
10/06/95	08:59:50	6595.03005	214.1	289.31	27.6	0	0.0003	2.1795	0.171	0	0.01
10/06/95	09:04:49	6639.75138	218.4	285.73	29.15	0.00361802	0.0003	2.2167	0.168	0	0.01
10/06/95	09:09:49	6592.51994	221.4	297.78	27.7	0.00792394	0.0003	2.1556	0.171	0	0.01
10/06/95	09:14:49	6634.75599	229.3	300.19	27.64	0.0039176	0.0003	2.1255	0.171	0	0.01
10/06/95	09:19:50	6612.63331	219.6	301.28	28.2	0.00587868	0.0003	2.1392	0.17	0	0.01
10/06/95	09:24:50	6692.38731	225.8	303.34	28.45	0.00735546	0.0003	2.1343	0.169	0	0.01
10/06/95	09:29:50	6829.67984	220.6	308.07	29.01	0.01481471	0.0003	2.1312	0.169	0	0.01
10/06/95	09:34:50	6759.36447	227.8	317.49	27.68	0.01021928	0.0003	2.1068	0.168	0	0.01
10/06/95	09:39:50	6610.97521	240	315.27	27.83	0.00944046	0.0003	2.0965	0.166	0	0.01
10/06/95	09:44:50	6496.36477	241.3	307.97	28.2	0.01120622	0.0003	2.1511	0.164	0	0.01
10/06/95	09:49:51	6537.44125	251	300.65	29.71	0.00963195	0.0004	2.1538	0.159	0	0.01
10/06/95	09:54:51	6680.20241	254.5	292.74	31.52	0.01121747	0.0004	2.2009	0.152	0	0.011
10/06/95	09:59:51	6612.78628	248.8	292.85	31.48	0.00974524	0.0004	2.1898	0.153	0	0.011
10/06/95	10:04:51	6659.74063	253.3	291.08	31.07	0.00836713	0.0004	2.1779	0.153	0	0.011
10/06/95	10:09:50	6778.10347	254	294.27	31.02	0.00946084	0.0004	2.1864	0.157	0	0.011
10/06/95	10:14:50	6821.19996	262.2	297.88	30.99	0.00719557	0.0004	2.1838	0.153	0	0.011
10/06/95	10:20:18	6863.53579	257.5	295.15	31.44	0.00986792	0.0004	2.2260	0.143	0	0.011
10/06/95	10:25:11	6890.49593	271	296.70	31.74	0.01046603	0.0004	2.2203	0.145	0	0.011
10/06/95	10:30:11	7046.54133	266.9	301.63	31.61	0.00968542	0.0004	2.2493	0.148	0	0.011
10/06/95	10:35:11	6884.53064	271.4	302.51	31.05	0.01038719	0.0004	2.2097	0.149	0	0.011
Run 29											
10/06/95	10:54:50	7243.41754	253.1	317.60	28.84	0.01255393	0.0003	2.1562	0.156	0	0.01
10/06/95	11:00:00	7340.13841	269.1	320.50	29.01	0.01147097	0.0003	2.1620	0.156	0	0.01
10/06/95	11:04:52	7350.34217	266.8	323.98	28.6	0.01030403	0.0003	2.1761	0.153	0	0.01
10/06/95	11:09:54	7268.71258	274	337.78	27.19	0.0067437	0.0003	2.1952	0.155	0	0.009
10/06/95	11:14:52	7277.53309	284	342.41	24.61	0.01021081	0.0003	2.1095	0.16	0	0.009
10/06/95	11:19:53	7332.51641	286.2	347.80	23.96	0.01160978	0.0003	2.0796	0.173	0	0.008
10/06/95	11:24:53	7271.29153	291	346.37	24.8	0.01091726	0.0003	2.1409	0.164	0	0.009
10/06/95	11:29:53	7287.2679	286.9	343.69	25.36	0.00845056	0.0003	2.1006	0.155	0	0.009
10/06/95	11:34:53	7273.71928	293.6	347.25	26.27	0.01015771	0.0003	2.0951	0.155	0	0.009
10/06/95	11:39:54	7402.60019	293.5	360.75	25.31	0.01303327	0.0003	2.0650	0.161	0	0.009
10/06/95	11:44:54	7508.80487	306.9	346.89	27	0.00925968	0.0003	2.1107	0.154	0	0.009
10/06/95	11:49:54	7602.84114	298.1	330.40	31.15	0.01323982	0.0004	2.1073	0.147	0	0.011
10/06/95	11:54:57	7483.99835	299.5	325.90	31.72	0.01207048	0.0004	2.0846	0.145	0	0.011

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 24											
10/04/95	10:44:50	0.48316558	0.054	0.15364834	0.014	0	0.008	0	1.728	0.04454643	0.006
10/04/95	10:49:50	0.4784266	0.053	0.15248992	0.014	0	0.007	0	1.736	0.03654282	0.006
10/04/95	10:54:50	0.47568852	0.053	0.15406958	0.013	0	0.007	0	1.619	0.03096135	0.006
10/04/95	10:59:51	0.47790005	0.053	0.14690845	0.013	0	0.007	0	1.633	0.03380474	0.006
10/04/95	11:04:51	0.47600445	0.053	0.16007229	0.012	0	0.007	0	1.54	0.03159322	0.006
10/04/95	11:09:50	0.47716287	0.052	0.15059433	0.012	0	0.007	0	1.525	0.03306757	0.006
10/04/95	11:14:50	0.47326638	0.052	0.15038371	0.012	0	0.007	0	1.539	0.02137808	0.006
10/04/95	11:19:51	0.47632039	0.052	0.15101557	0.013	0	0.009	0	1.682	0	0.007
10/04/95	11:24:51	0.46979112	0.052	0.14827749	0.013	0	0.009	0	1.623	0	0.007
10/04/95	11:29:50	0.47084423	0.052	0.14817218	0.012	0	0.009	0	1.617	0	0.007
10/04/95	11:34:50	0.47042299	0.052	0.15248992	0.012	0	0.008	0	1.423	0.0156913	0.006
10/04/95	11:39:51	0.46884333	0.052	0.1561758	0.012	0	0.008	0	1.434	0	0.007
10/04/95	11:44:51	0.4695805	0.053	0.15965105	0.012	0	0.009	0	1.518	0	0.007
10/04/95	11:49:51	0.46599994	0.052	0.1532271	0.012	0	0.009	0	1.533	0	0.007
10/04/95	11:54:50	0.46789553	0.052	0.15470145	0.012	0	0.009	0	1.468	0	0.007
10/04/95	11:59:50	0.46589463	0.052	0.15059433	0.012	0	0.008	0	1.464	0.00916203	0.006
10/04/95	12:04:52	0.46357779	0.052	0.15628111	0.012	0	0.008	0	1.421	0	0.006
10/04/95	12:09:52	0.46315655	0.052	0.15164744	0.012	0	0.008	0	1.441	0.01263729	0.006
10/04/95	12:14:51	0.46684242	0.053	0.15301648	0.011	0	0.008	0	1.326	0.01053107	0.006
10/04/95	12:19:51	0.46305124	0.052	0.15554393	0.011	0	0.008	0	1.417	0	0.007
10/04/95	12:24:52	0.46442028	0.053	0.15175275	0.012	0	0.008	0	1.39	0.00642395	0.006
10/04/95	12:29:52	0.47084423	0.052	0.15091026	0.011	0	0.008	0	1.443	0	0.006
10/04/95	12:34:51	0.46399903	0.052	0.15248992	0.011	0	0.008	0	1.346	0	0.006
10/04/95	12:39:51	0.46357779	0.052	0.15396427	0.011	0	0.008	0	1.393	0	0.006
10/04/95	12:44:52	0.4627353	0.052	0.15501738	0.011	0	0.007	0	1.302	0.00737175	0.006
10/04/95	12:49:51	0.46357779	0.053	0.15607049	0.011	0	0.007	0	1.329	0.01032045	0.006
10/04/95	12:54:51	0.46083971	0.052	0.15449083	0.011	0	0.007	0	1.274	0.01221604	0.006
10/04/95	12:59:52	0.45768039	0.051	0.1513315	0.011	0	0.007	0	1.247	0.01295322	0.006
10/04/95	13:04:52	0.46294593	0.052	0.15080495	0.011	0	0.007	0	1.192	0	0.006
10/04/95	13:09:51	0.46157689	0.052	0.15291117	0.01	0	0.007	0	1.221	0.00610802	0.005
10/04/95	13:14:51	0.46220875	0.052	0.15017309	0.01	0	0.007	0	1.216	0	0.006
10/04/95	13:19:52	0.46515745	0.052	0.14806687	0.01	0	0.008	0	1.201	0	0.006
10/04/95	13:24:52	0.46768491	0.052	0.14701377	0.011	0	0.007	0	1.235	0	0.006
10/04/95	13:29:51	0.46547338	0.053	0.14890936	0.01	0	0.007	0	1.232	0	0.006
10/04/95	13:34:52	0.46294593	0.052	0.14174823	0.011	0	0.007	0	1.149	0	0.006
10/04/95	13:39:52	0.45831225	0.051	0.14627659	0.011	0	0.007	0	1.148	0	0.006
10/04/95	13:44:51	0.46262999	0.052	0.14606597	0.01	0	0.007	0	1.058	0.0127426	0.006
10/04/95	13:49:51	0.46505214	0.052	0.14901467	0.01	0	0.007	0	1.079	0.02200994	0.005
10/04/95	13:54:52	0.46526276	0.052	0.14564473	0.01	0	0.008	0	1.109	0.00905672	0.006
10/04/95	13:59:51	0.46526276	0.052	0.14480224	0.009	0	0.008	0	1.059	0.01105763	0.007
10/04/95	14:04:50	0.46305124	0.052	0.14058981	0.01	0	0.007	0	1.08	0.02095683	0.006
10/04/95	14:09:50	0.46652649	0.053	0.14785625	0.01	0	0.007	0	1.136	0.02717017	0.005
10/04/95	14:14:51	0.46547338	0.053	0.1502784	0.01	0	0.007	0	1.096	0.02401084	0.005
Run 25											
10/04/95	14:39:53	0.45431045	0.051	0.14617128	0.009	0	0.006	0	1.084	0.01032045	0.005
10/04/95	14:45:06	0.45675099	0.051	0.14427598	0.01	0	0.007	0	1.131	0	0.005
10/04/95	14:49:59	0.46081893	0.052	0.14875669	0.011	0	0.006	0	1.298	0	0.005
10/04/95	14:54:59	0.45751036	0.052	0.14098315	0.011	0	0.007	0	1.252	0	0.005
10/04/95	14:59:58	0.45631135	0.051	0.14259071	0.01	0	0.007	0	1.181	0	0.005
10/04/95	15:04:58	0.4514816	0.051	0.14258978	0.011	0	0.007	0	1.183	0	0.005
10/04/95	15:09:59	0.45511925	0.051	0.14601347	0.009	0	0.007	0	1.111	0	0.005
10/04/95	15:14:59	0.45726363	0.052	0.14126501	0.011	0	0.006	0	1.426	0	0.005
10/04/95	15:19:58	0.45470722	0.052	0.14361399	0.012	0	0.006	0	1.404	0	0.005
10/04/95	15:24:59	0.45661291	0.052	0.15150096	0.011	0	0.006	0	1.308	0	0.005
10/04/95	15:29:59	0.45491835	0.052	0.15118228	0.012	0	0.007	0	1.448	0	0.006
10/04/95	15:35:00	0.45429146	0.053	0.14809269	0.012	0	0.007	0	1.44	0	0.006
10/04/95	15:40:00	0.45605676	0.052	0.15395345	0.012	0	0.007	0	1.506	0	0.005
10/04/95	15:44:59	0.45332933	0.052	0.15096911	0.012	0	0.006	0	1.505	0	0.005
10/04/95	15:50:00	0.45480006	0.052	0.15321915	0.011	0	0.007	0	1.447	0	0.005
10/04/95	15:55:00	0.45352461	0.053	0.1493827	0.012	0	0.007	0	1.505	0	0.006
10/04/95	15:59:59	0.45497277	0.052	0.14627517	0.012	0	0.008	0	1.633	0	0.007

Site: POTW in small											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/04/95	16:05:00	0.45588337	0.053	0.14904285	0.012	0	0.008	0	1.512	0	0.006
10/04/95	16:10:00	0.45281654	0.053	0.14727887	0.012	0	0.008	0	1.517	0	0.006
10/04/95	16:14:59	0.46029103	0.053	0.14624985	0.012	0	0.009	0	1.617	0	0.007
10/04/95	16:20:00	0.46134726	0.053	0.14390068	0.012	0	0.009	0	1.591	0	0.007
10/04/95	16:25:00	0.45773854	0.053	0.14909741	0.012	0	0.01	0	1.591	0	0.008
Run 26											
10/04/95	17:19:51	0.45780148	0.052	0.13501443	0.01	0	0.008	0	1.265	0.01881955	0.006
10/04/95	17:24:52	0.45340553	0.052	0.13444432	0.011	0	0.008	0	1.367	0	0.007
10/04/95	17:29:52	0.4497715	0.052	0.13098497	0.013	0	0.009	0	1.515	0	0.007
10/04/95	17:34:52	0.45575713	0.053	0.1334672	0.012	0	0.009	0	1.493	0	0.007
10/04/95	17:39:53	0.45179421	0.053	0.13245713	0.013	0	0.009	0	1.594	0	0.007
10/04/95	17:44:52	0.45285302	0.053	0.13288065	0.013	0	0.009	0	1.561	0	0.007
10/04/95	17:49:52	0.45265386	0.053	0.13202404	0.013	0	0.009	0	1.545	0	0.007
10/04/95	17:54:53	0.4522769	0.053	0.13229364	0.013	0	0.009	0	1.582	0	0.007
10/04/95	17:59:52	0.45448703	0.052	0.13558404	0.011	0	0.009	0	1.426	0	0.007
10/04/95	18:04:52	0.45353444	0.053	0.1334672	0.013	0	0.01	0	1.573	0	0.008
10/04/95	18:09:53	0.45339179	0.053	0.13011477	0.013	0	0.009	0	1.604	0	0.007
10/04/95	18:14:53	0.45309743	0.053	0.13146595	0.013	0	0.009	0	1.62	0	0.007
10/04/95	18:19:52	0.45182825	0.052	0.12913911	0.013	0	0.009	0	1.509	0	0.007
10/04/95	18:24:53	0.4547292	0.052	0.1294091	0.011	0	0.009	0	1.394	0	0.007
10/04/95	18:29:53	0.45196678	0.052	0.12942013	0.013	0	0.009	0	1.566	0	0.007
10/04/95	18:34:52	0.45720949	0.052	0.12987706	0.011	0	0.009	0	1.394	0	0.007
10/04/95	18:39:53	0.45429777	0.053	0.13046283	0.013	0	0.01	0	1.603	0	0.008
10/04/95	18:44:53	0.45135875	0.053	0.1277988	0.013	0	0.009	0	1.59	0	0.007
10/04/95	18:49:52	0.45202221	0.052	0.12670958	0.013	0	0.009	0	1.576	0	0.007
10/04/95	18:54:53	0.45144192	0.052	0.12675748	0.013	0	0.009	0	1.626	0	0.007
10/04/95	18:59:53	0.45396553	0.052	0.13011014	0.013	0	0.009	0	1.627	0	0.008
10/04/95	19:04:52	0.45447249	0.053	0.12959403	0.013	0	0.01	0	1.644	0	0.008
10/04/95	19:09:53	0.45399209	0.052	0.13383582	0.013	0	0.01	0	1.646	0	0.008
10/04/95	19:14:53	0.45435009	0.052	0.13492122	0.013	0	0.01	0	1.674	0	0.008
10/04/95	19:19:52	0.45416134	0.052	0.12932655	0.014	0	0.01	0	1.698	0	0.008
10/04/95	19:24:53	0.4551837	0.052	0.1281707	0.013	0	0.011	0	1.679	0	0.008
10/04/95	19:29:53	0.45584717	0.052	0.13625299	0.014	0	0.012	0	1.697	0	0.009
10/04/95	19:34:52	0.45481909	0.052	0.13276421	0.014	0	0.013	0	1.742	0	0.01
10/04/95	19:39:52	0.45441723	0.051	0.1330332	0.014	0	0.015	0	1.764	0	0.012
10/04/95	19:44:53	0.45717507	0.052	0.13065117	0.014	0	0.166	0	1.777	0	0.132
10/04/95	19:49:53	0.45670283	0.052	0.13014524	0.014	0.01973471	0.015	0	1.787	0	0.012
10/04/95	19:54:54	0.45617429	0.051	0,12713054	0.014	0	0.014	0	1.774	0	0.011
10/04/95	19:59:54	0.45957076	0.052	0.14250015	0.014	0	0.014	0	1.78	0	0.011
10/04/95	20:04:53	0.45995407	0.052	0.14311987	0.014	0.02115685	0.014	0	1.787	0	0.011
10/04/95	20:09:53	0.45928206	0.052	0.13993021	0.014	0.01876101	0.012	0	1.77	0	0.009
10/04/95	20:14:54	0.45966419	0.052	0.13661493	0.014	0	0.011	0	1.758	0	0.009
10/04/95	20:19:54	0.45938893	0.052	0.13925583	0.014	0	0.01	0	1.786	0	0.008
10/04/95	20:24:55	0.46056272	0.052	0.13961778	0.014	0.01014273	0.01	0	1.776	0	0.008
10/04/95	20:29:55	0.45916661	0.052	0.14098763	0.015	0	0.01	0	1.814	0	0.008
10/04/95	20:34:54	0.45921912	0.053	0.14028824	0.015	0	0.011	0	1.863	0	0.009
10/04/95	20:39:54	0.45897868	0.053	0.14131957	0.015	0	0.011	0	1.937	0	0.009
10/04/95	20:44:55	0.45880677	0.053	0.13176625	0.015	0	0.01	0	1.909	0	0.008
10/04/95	20:49:55	0.45914408	0.053	0.14465052	0.015	0	0.011	0	1.947	0	0.009
10/04/95	20:54:53	0.45929878	0.053	0.14349213	0.015	0	0.012	0	1.95	0	0.01
10/04/95	20:59:54	0.4569582	0.053	0.14085672	0.015	0	0.012	0	1.932	0	0.009
10/04/95	21:04:54	0.45752714	0.053	0.13592674	0.015	0	0.011	0	1.972	0	0.009
10/04/95	21:09:55	0.45763035	0.053	0.14067437	0.015	0	0.011	0	1.966	0	0.009
10/04/95	21:14:54	0.45713184	0.053	0.13507575	0.015	0	0.011	0	1.906	0	0.009
10/04/95	21:19:53	0.45831866	0.053	0.13180271	0.015	0	0.011	0	1.934	0	0.009
10/04/95	21:24:54	0.45858675	0.053	0.13224698	0.015	0	0.011	0	1.95	0	0.009
10/04/95	21:29:54	0.45923903	0.054	0.13353686	0.015	0	0.012	0	1.973	0	0.009
10/04/95	21:34:53	0.45982367	0.054	0.1321439	0.015	0	0.011	0	1.941	0	0.009
10/04/95	21:39:53	0.46020238	0.053	0.13198724	0.015	0	0.012	0	1.906	0	0.009
10/04/95	21:44:54	0.45865566	0.053	0.13209035	0.015	0	0.011	0	1.909	0	0.009
10/04/95	21:49:54	0.45783074	0.053	0.13147166	0.015	0	0.011	0	1.926	0	0.009
10/04/95	21:54:54	0.45856967	0.053	0.13309655	0.015	0	0.011	0	1.933	0	0.009

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/04/95	21:59:54	0.46045882	0.054	0.13108855	0.015	0	0.012	0	1.973	0	0.009
10/04/95	22:04:55	0.45963437	0.053	0.13057326	0.015	0	0.011	0	1.94	0	0.009
10/04/95	22:09:55	0.45968469	0.053	0.13235376	0.015	0	0.011	0	1.917	0	0.009
10/04/95	22:14:54	0.45942584	0.053	0.13485276	0.015	0	0.012	0	1.9	0	0.009
10/04/95	22:19:54	0.46034239	0.054	0.14069446	0.015	0	0.012	0	1.909	0	0.009
10/04/95	22:24:54	0.45926413	0.053	0.13305591	0.015	0	0.012	0	1.912	0	0.009
10/04/95	22:29:55	0.459865	0.054	0.1296844	0.015	0	0.011	0	1.933	0	0.009
10/04/95	22:34:55	0.45857932	0.053	0.12728588	0.015	0	0.011	0	1.925	0	0.009
10/04/95	22:39:56	0.45967862	0.053	0.12712761	0.015	0	0.011	0	1.949	0	0.009
10/04/95	22:44:56	0.45967862	0.054	0.12743668	0.015	0	0.011	0	1.952	0	0.009
10/04/95	22:49:57	0.45938639	0.053	0.12823678	0.015	0	0.011	0	1.93	0	0.009
10/04/95	22:54:57	0.4606884	0.053	0.1266996	0.015	0	0.012	0	1.93	0	0.009
10/04/95	22:59:55	0.46010385	0.053	0.12644625	0.015	0	0.012	0	1.913	0	0.01
10/04/95	23:04:55	0.46001742	0.053	0.12590817	0.015	0	0.012	0	1.912	0	0.009
10/04/95	23:09:56	0.46090519	0.054	0.12540239	0.015	0	0.012	0	1.945	0	0.01
10/04/95	23:14:56	0.46065638	0.054	0.12512923	0.015	0	0.013	0	1.943	0	0.01
10/04/95	23:19:56	0.46139147	0.054	0.12479756	0.016	0.01633153	0.013	0	1.965	0	0.01
10/04/95	23:24:55	0.46473927	0.054	0.1248063	0.016	0.01621661	0.013	0	1.966	0	0.01
10/04/95	23:29:55	0.47132192	0.055	0.12385926	0.016	0	0.013	0	1.983	0	0.01
10/04/95	23:34:56	0.46526749	0.054	0.1259116	0.016	0	0.013	0	1.964	0	0.01
10/04/95	23:39:56	0.46295206	0.054	0.12464489	0.015	0	0.011	0	1.942	0	0.009
10/04/95	23:44:56	0.46079593	0.053	0.12392618	0.015	0	0.012	0	1.936	0	0.009
10/04/95	23:49:55	0.46071576	0.053	0.12455666	0.015	0	0.011	0	1.931	0	0.009
10/04/95	23:54:55	0.46244702	0.054	0.12416893	0.016	0	0.011	0	1.933	0	0.009
10/04/95	23:59:56	0.46278688	0.054	0.12443049	0.016	0	0.012	0	1.973	0	0.009
10/05/95	00:04:56	0.46382987	0.054	0.12543439	0.016	0	0.011	0	1.955	0	0.009
10/05/95	00:09:56	0.4639326	0.054	0.12563985	0.016	0	0.012	0	1.952	0	0.01
10/05/95	00:14:55	0.46073749	0.054	0.12734829	0.015	0	0.011	0	1.961	0	0.009
10/05/95	00:19:55	0.4602767	0.054	0.12875808	0.015	0	0.011	0	1.95	0	0.009
10/05/95	00:24:56	0.4598151	0.053	0.13027236	0.015	0	0.011	0	1.936	0	0.008
10/05/95	00:29:57	0.45993474	0.054	0.13395458	0.015	0	0.011	0	1.957	0	0.008
10/05/95	00:34:56	0.45965916	0.053	0.13400721	0.015	0	0.011	0	1.946	0	0.008
10/05/95	00:39:55	0.45960596	0.053	0.13166867	0.015	0	0.011	0	1.934	0	0.008
10/05/95	00:44:55	0.45975815	0.053	0.13416467	0.015	0	0.011	0	1.935	0	0.008
10/05/95	00:49:56	0.46008288	0.054	0.1391761	0.016	0	0.011	0	1.941	0	0.008
10/05/95	00:54:56	0.46145587	0.054	0.13498509	0.015	0	0.011	0	1.917	0	0.008
10/05/95	00:59:56	0.46099689	0.054	0.13269721	0.015	0	0.011	0	1.921	0	0.008
10/05/95	01:04:57	0.46072073	0.053	0.13059234	0.015	0	0.011	0	1.929	0	0.009
10/05/95	01:09:55	0.4620167	0.054	0.13716762	0.016	0	0.011	0	1.964	0	0.009
10/05/95	01:14:56	0.46244296	0.054	0.13786035	0.016	0	0.011	0	1.945	0	0.009
10/05/95	01:19:56	0.46400113	0.054	0.13796013	0.016	0	0.011	0	1.975	0	0.009
10/05/95	01:24:56	0.46242471	0.054	0.13348026	0.016	0	0.011	0	1.977	0	0.009
10/05/95	01:29:55	0.46245221	0.054	0.13370879	0.016	0	0.011	0	1.926	0	0.009
10/05/95	01:34:55	0.46366349	0.054	0.13606401	0.015	0	0.011	0	1.902	0	0.008
10/05/95	01:39:55	0.46524453	0.054	0.1351405	0.015	0	0.011	0	1.868	0	0.008
10/05/95	01:44:56	0.46166871	0.054	0.13880839	0.015	0	0.011	0	1.881	0	0.008
10/05/95	01:49:56	0.46399797	0.054	0.14347913	0.015	0	0.011	0	1.9	0	0.009
10/05/95	01:54:55	0.4625356	0.054	0.12786121	0.015	0	0.011	0	1.902	0	0.009
10/05/95	01:59:55	0.46594856	0.054	0.13519273	0.016	0	0.011	0	1.951	0	0.009
10/05/95	02:04:55	0.4671617	0.055	0.14036351	0.016	0	0.011	0	1.913	0	0.009
10/05/95	02:09:56	0.4660642	0.055	0.13938942	0.016	0	0.011	0	1.919	0	0.009
10/05/95	02:14:56	0.46659245	0.055	0.13452698	0.015	0	0.011	0	1.89	0	0.009
10/05/95	02:19:56	0.46335588	0.054	0.13596147	0.015	0	0.011	0	1.929	0	0.009
10/05/95	02:24:55	0.46441111	0.054	0.12914544	0.016	0	0.011	0	1.939	0	0.009
10/05/95	02:29:55	0.46467524	0.054	0.13314477	0.016	0	0.011	0	1.981	0	0.009
10/05/95	02:34:56	0.46490934	0.054	0.13329926	0.016	0	0.011	0	1.974	0	0.009
10/05/95	02:39:56	0.46697113	0.055	0.14084881	0.016	0	0.011	0	1.988	0	0.009
10/05/95	02:44:56	0.46615224	0.055	0.14002992	0.016	0	0.011	0	1.956	0	0.009
10/05/95	02:49:55	0.46542135	0.054	0.13491068	0.016	0	0.011	0	1.943	0	0.009
10/05/95	02:54:55	0.46518667	0.054	0.13383347	0.016	0	0.011	0	2.008	0	0.009
10/05/95	02:59:56	0.46476026	0.054	0.13025976	0.016	0	0.011	0	2.01	0	0.009
10/05/95	03:04:56	0.46274199	0.054	0.1291468	0.016	0	0.011	0	2.007	0	0.009

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	03:09:56	0.46088772	0.054	0.12596577	0.017	0	0.011	0	1.993	0	0.009
10/05/95	03:14:55	0.46362738	0.054	0.12541493	0.017	0	0.011	0	2.024	0	0.009
10/05/95	03:19:55	0.46248109	0.054	0.13244286	0.016	0	0.011	0	2.051	0	0.009
10/05/95	03:24:56	0.46234917	0.054	0.12966964	0.016	0	0.011	0	2.077	0	0.009
10/05/95	03:29:56	0.45988965	0.053	0.1290829	0.016	0	0.011	0	2.071	0	0.008
10/05/95	03:34:56	0.46038197	0.054	0.13168331	0.016	0	0.011	0	2.08	0	0.009
10/05/95	03:39:55	0.46084949	0.054	0.12836494	0.016	0	0.011	0	2.093	0	0.009
10/05/95	03:44:55	0.46105222	0.053	0.126797	0.017	0	0.011	0	2.101	0	0.009
10/05/95	03:49:55	0.4623173	0.054	0.1221446	0.017	0	0.011	0	2.106	0	0.009
10/05/95	03:54:56	0.46307199	0.054	0.13092567	0.017	0	0.011	0	2.112	0	0.009
10/05/95	03:59:56	0.46176375	0.054	0.12673076	0.017	0	0.011	0	2.124	0	0.009
10/05/95	04:04:56	0.46276681	0.054	0.12695823	0.017	0	0.011	0	2.131	0	0.009
10/05/95	04:09:56	0.46145862	0.053	0.1231709	0.017	0	0.011	0	2.131	0	0.009
10/05/95	04:14:57	0.46196717	0.053	0.12083157	0.017	0	0.011	0	2.124	0	0.009
10/05/95	04:19:57	0.46102026	0.053	0.12226794	0.017	0	0.011	0	2.135	0	0.009
10/05/95	04:24:57	0.46267424	0.054	0.12090082	0.017	0	0.011	0	2.143	0	0.009
10/05/95	04:29:57	0.46220796	0.053	0.12265976	0.017	0	0.011	0	2.121	0	0.009
10/05/95	04:34:58	0.46275673	0.053	0.1234018	0.017	0	0.011	0	2.101	0	0.009
10/05/95	04:39:58	0.46423063	0.054	0.12178702	0.016	0	0.011	0	2.021	0	0.009
10/05/95	04:44:58	0.46370199	0.053	0.12177623	0.016	0	0.011	0	1.855	0	0.009
10/05/95	04:49:57	0.4646526	0.054	0.11988422	0.015	0	0.011	0	1.759	0	0.009
10/05/95	04:54:57	0.46543857	0.054	0.12321325	0.015	0	0.011	0	1.726	0	0.009
10/05/95	04:59:58	0.46579185	0.054	0.11958155	0.015	0	0.011	0	1.694	0	0.009
10/05/95	05:04:58	0.46571547	0.054	0.12064749	0.015	0	0.011	0	1.644	0	0.009
10/05/95	05:09:58	0.46625718	0.054	0.11825583	0.015	0	0.011	0	1.634	0	0.009
10/05/95	05:14:57	0.46621879	0.054	0.1203894	0.015	0	0.011	0	1.621	0	0.009
10/05/95	05:19:57	0.46614184	0.054	0.11883036	0.015	0	0.011	0	1.628	0	0.009
10/05/95	05:24:58	0.46658077	0.054	0.11694764	0.015	0	0.011	0	1.622	0	0.009
10/05/95	05:29:58	0.4666422	0.054	0.1202873	0.015	0	0.011	0	1.611	0	0.009
10/05/95	05:34:58	0.46635164	0.054	0.12107012	0.015	0	0.011	0	1.607	0	0.009
10/05/95	05:39:57	0.46676609	0.054	0.11711952	0.015	0	0.011	0	1.594	0	0.009
10/05/95	05:44:57	0.46674902	0.054	0.1201074	0.015	0	0.011	0	1.605	0	0.009
10/05/95	05:49:57	0.4669615	0.054	0.11988329	0.015	0	0.011	0	1.591	0	0.009
10/05/95	05:54:58	0.4672856	0.054	0.11933477	0.015	0	0.011	0	1.607	0	0.009
10/05/95	05:59:58	0.46706583	0.054	0.11900086	0.015	0	0.011	0	1.612	0	0.009
10/05/95	06:04:57	0.46708777	0.054	0.12196683	0.015	0	0.011	0	1.602	0	0.009
10/05/95	06:09:57	0.4674106	0.054	0.12051527	0.015	0	0.011	0	1.596	0	0.009
10/05/95	06:14:57	0.46792301	0.054	0.11688043	0.015	0	0.011	0	1.593	0	0.009
10/05/95	06:19:58	0.46804455	0.054	0.120446	0.015	0	0.011	0	1.591	0	0.009
10/05/95	06:24:58	0.46804455	0.054	0.11773823	0.015	0	0.011	0	1.583	0	0.009
10/05/95	06:29:58	0.46836636	0.054	0.12009908	0.015	0	0.011	0	1.581	0	0.009
10/05/95	06:34:58	0.46873432	0.054	0.11658264	0.015	0	0.011	0	1.579	0	0.009
10/05/95	06:39:59	0.4688649	0.054	0.11771672	0.015	0	0.011	0	1.575	0	0.009
10/05/95	06:44:59	0.46870488	0.054	0.11712621	0.015	0	0.011	0	1.58	0	0.009
10/05/95	06:49:59	0.46836084	0.054	0.12163789	0.015	0	0.011	0	1.588	0	0.009
10/05/95	06:54:58	0.46897032	0.054	0.11971584	0.015	0	0.011	0	1.601	0	0.009
10/05/95	06:59:58	0.46899947	0.054	0.11934718	0.015	0	0.011	0	1.602	0	0.009
10/05/95	07:04:59	0.46870955	0.054	0.11822584	0.015	0	0.011	0	1.603	0	0.009
10/05/95	07:09:59	0.46804652	0.054	0.1204803	0.015	0	0.011	0	1.601	0	0.009
10/05/95	07:14:59	0.46884506	0.054	0.12257648	0.016	0	0.011	0	1.615	0	0.009
10/05/95	07:19:58	0.46845546	0.054	0.12644505	0.016	0	0.011	0	1.626	0	0.009
10/05/95	07:24:58	0.46938907	0.054	0.12470485	0.015	0	0.011	0	1.608	0	0.009
10/05/95	07:29:59	0.46908978	0.054	0.12031524	0.015	0	0.011	0	1.601	0	0.009
10/05/95	07:34:59	0.46931751	0.054	0.1172546	0.015	0	0.011	0	1.602	0	0.009
10/05/95	07:39:59	0.46876418	0.054	0.12755488	0.015	0	0.011	0	1.605	0	0.009
10/05/95	07:44:58	0.46895413	0.054	0.12050277	0.016	0	0.011	0	1.621	0	0.009
10/05/95	07:49:58	0.469035	0.054	0.12942335	0.016	0	0.011	0	1.625	0	0.009
10/05/95	07:54:58	0.46881656	0.054	0.12588223	0.016	0	0.011	0	1.629	0	0.009
10/05/95	07:59:59	0.46842439	0.054	0.12640973	0.015	0	0.011	0	1.648	0	0.008
10/05/95	08:04:59	0.46829529	0.054	0.12159106	0.016	0	0.01	0	1.661	0	0.008
10/05/95	08:09:59	0.46804578	0.054	0.12550502	0.015	0	0.01	0	1.652	0	0.008
10/05/95	08:14:58	0.46731553	0.054	0.12387761	0.015	0	0.01	0	1.649	0	0.008

Site: POTW in small											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	08:19:58	0.46722121	0.053	0.11810536	0.015	0	0.01	0	1.644	0	0.008
10/05/95	08:24:59	0.46728987	0.053	0.11747287	0.015	0	0.01	0	1.625	0	0.008
10/05/95	08:29:59	0.46714741	0.053	0.12617486	0.015	0	0.01	0	1.624	0	0.008
10/05/95	08:34:59	0.46682545	0.053	0.12321788	0.015	0	0.009	0	1.605	0	0.007
10/05/95	08:39:58	0.46703066	0.053	0.12885678	0.015	0	0.009	0	1.592	0	0.007
10/05/95	08:44:58	0.46640747	0.053	0.12670085	0.015	0	0.009	0	1.596	0	0.007
10/05/95	08:49:59	0.46628504	0.053	0.12113383	0.015	0	0.009	0	1.589	0	0.007
10/05/95	08:54:58	0.46608873	0.053	0.12206369	0.015	0	0.009	0	1.574	0.00732182	0.007
10/05/95	08:59:57	0.46537524	0.053	0.12168574	0.015	0	0.009	0	1.558	0.00872767	0.007
10/05/95	09:04:58	0.46549093	0.053	0.12259265	0.014	0	0.008	0	1.539	0.01143663	0.007
10/05/95	09:09:57	0.46707374	0.053	0.12294055	0.014	0	0.008	0	1.47	0.01946977	0.006
Downwind											
Run 27											
10/05/95	15:34:52	0.47568537	0.054	0.12699293	0.011	0	0.013	0	1.281	0	0.01
10/05/95	15:39:52	0.47646636	0.054	0.12672959	0.011	0	0.013	0	1.167	0	0.01
10/05/95	15:44:51	0.47315684	0.054	0.12770003	0.011	0	0.013	0	1.153	0	0.01
10/05/95	15:49:51	0.47383219	0.054	0.12879779	0.011	0	0.013	0	1.148	0	0.01
10/05/95	15:54:52	0.47557105	0.054	0.1281172	0.01	0	0.014	0	1.177	0	0.011
10/05/95	15:59:52	0.47245325	0.054	0.12757366	0.011	0	0.015	0	1.143	0	0.012
10/05/95	16:04:52	0.47216406	0.054	0.12810016	0.01	0	0.015	0	1.153	0	0.012
10/05/95	16:09:52	0.47277993	0.054	0.12943454	0.011	0	0.015	0	1.183	0	0.012
10/05/95	16:14:54	0.47121068	0.054	0.12825063	0.011	0	0.016	0	1.24	0	0.012
10/05/95	16:19:53	0.47079995	0.054	0.12876404	0.011	0	0.016	0	1.245	0	0.012
10/05/95	16:24:52	0.47210505	0.055	0.12977247	0.011	0	0.016	0	1.235	0	0.013
10/05/95	16:29:52	0.47056461	0.054	0.12840117	0.011	0	0.015	0	1.305	0	0.012
10/05/95	16:35:01	0.47433658	0.055	0.13317596	0.011	0	0.016	0	1.304	0	0.012
10/05/95	16:39:53	0.47144438	0.055	0.13093964	0.011	0	0.015	0	1.292	0	0.012
10/05/95	16:44:53	0.47314716	0.055	0.12930156	0.011	0	0.015	0	1.327	0	0.012
10/05/95	16:49:54	0.47115237	0.055	0.12920515	0.011	0	0.016	0	1.249	0	0.013
10/05/95	16:54:55	0.47015373	0.055	0.12870933	0.011	0	0.015	0	1.317	0	0.012
10/05/95	16:59:55	0.47191474	0.055	0.12909615	0.012	0	0.015	0	1.353	0	0.012
10/05/95	17:04:54	0.47175025	0.055	0.12905116	0.011	0	0.015	0	1.335	0	0.012
10/05/95	17:09:55	0.4734408	0.055	0.13138008	0.012	0	0.015	0	1.289	0	0.012
10/05/95	17:14:55	0.47424821	0.055	0.1304799	0.011	0	0.016	0	1.245	0	0.013
10/05/95	17:19:55	0.47003842	0.054	0.12897583	0.011	0	0.017	0	1.186	0	0.013
10/05/95	17:24:54	0.46994731	0.054	0.12897899	0.011	0	0.017	0	1.153	0	0.014
10/05/95	17:29:55	0.47135437	0.054	0.12954034	0.011	0	0.016	0	1.249	0	0.012
10/05/95	17:34:56	0.4724244	0.055	0.12967306	0.012	0	0.015	0	1.359	0	0.012
10/05/95	17:39:55	0.47418254	0.056	0.13067457	0.012	0	0.015	0	1.342	0	0.012
10/05/95	17:44:54	0.47117862	0.055	0.13010768	0.012	0	0.014	0	1.344	0	0.011
10/05/95	17:49:56	0.46993234	0.055	0.12941356	0.012	0	0.014	0	1.319	0	0.011
10/05/95	17:54:55	0.4724244	0.055	0.13151967	0.012	0	0.015	0	1.306	0	0.012
10/05/95	17:59:54	0.46966945	0.054	0.13016172	0.011	0	0.016	0	1.253	0	0.013
10/05/95	18:04:54	0.47044636	0.054	0.13026957	0.011	0	0.016	0	1.237	0	0.013
10/05/95	18:09:55	0.47092874	0.054	0.13004555	0.011	0	0.017	0	1.187	0	0.013
10/05/95	18:14:56	0.47190687	0.054	0.13015298	0.011	0	0.017	0	1.181	0	0.013
10/05/95	18:19:54	0.46972912	0.054	0.12917807	0.011	0	0.016	0	1.259	0	0.012
10/05/95	18:24:55	0.47200919	0.054	0.13045994	0.011	0	0.016	0	1.275	0	0.013
10/05/95	18:29:55	0.47290895	0.055	0.13034131	0.011	0	0.016	0	1.308	0	0.012
10/05/95	18:34:55	0.46976843	0.055	0.13008815	0.012	0	0.016	0	1.318	0	0.012
10/05/95	18:39:54	0.47338565	0.055	0.13124068	0.012	0	0.016	0	1.338	0	0.012
10/05/95	18:44:54	0.47244556	0.055	0.12935888	0.012	0	0.016	0	1.344	0	0.012
10/05/95	18:49:55	0.47209118	0.055	0.12915991	0.012	0	0.016	0	1.353	0	0.012
10/05/95	18:54:55	0.47304801	0.055	0.12867965	0.012	0	0.016	0	1.371	0	0.012
10/05/95	18:59:55	0.47260384	0.055	0.12787385	0.012	0	0.016	0	1.369	0	0.013
10/05/95	19:04:55	0.47233752	0.055	0.12861582	0.012	0	0.016	0	1.381	0	0.013
10/05/95	19:09:56	0.47383765	0.055	0.1274544	0.012	0	0.016	0	1.373	0	0.013
10/05/95	19:14:56	0.47360728	0.055	0.12700594	0.012	0	0.016	0	1.408	0	0.013
10/05/95	19:19:55	0.47478406	0.055	0.12729203	0.012	0	0.016	0	1.411	0	0.013
10/05/95	19:24:56	0.47462869	0.055	0.12709468	0.012	0	0.016	0	1.437	0	0.013
10/05/95	19:29:56	0.47559848	0.055	0.12656975	0.012	0	0.016	0	1.434	0	0.013
10/05/95	19:34:57	0.47454239	0.055	0.1262479	0.012	0	0.018	0	1.46	0	0.014

Site: POTW in small											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	19:39:55	0.4740411	0.055	0.12737393	0.013	0	0.018	0	1.471	0	0.014
10/05/95	19:44:55	0.47499437	0.055	0.12657096	0.013	0	0.018	0	1.47	0	0.014
10/05/95	19:49:56	0.47553149	0.055	0.12680167	0.013	0.01765338	0.017	0	1.492	0	0.014
10/05/95	19:54:56	0.47536195	0.055	0.12703204	0.013	0	0.018	0	1.489	0	0.014
10/05/95	19:59:55	0.47570659	0.055	0.12824534	0.013	0.02065223	0.018	0	1.49	0	0.014
10/05/95	20:04:55	0.47553646	0.055	0.13068946	0.013	0	0.018	0	1.514	0	0.014
10/05/95	20:09:55	0.47618139	0.055	0.13310542	0.013	0	0.018	0	1.504	0	0.014
10/05/95	20:14:56	0.47605583	0.055	0.13135	0.013	0.01979797	0.018	0	1.524	0	0.014
10/05/95	20:19:56	0.4769603	0.055	0.12974205	0.013	0.02070245	0.018	0	1.518	0	0.014
10/05/95	20:24:55	0.47767343	0.055	0.12901403	0.013	0.0571721	0.017	0	1.53	0	0.014
10/05/95	20:29:55	0.48002988	0.055	0.12838942	0.013	0.03061671	0.019	0	1.516	0	0.015
10/05/95	20:34:56	0.48146125	0.056	0.12721252	0.013	0.01936279	0.019	0	1.54	0	0.015
10/05/95	20:39:56	0.48441869	0.056	0.13052838	0.014	0.02175473	0.016	0	1.553	0	0.013
10/05/95	20:44:56	0.48625389	0.056	0.14436755	0.014	0	0.016	0	1.576	0	0.012
10/05/95	20:49:55	0.48635353	0.057	0.1532183	0.014	0	0.015	0	1.568	0	0.012
10/05/95	20:54:55	0.48776033	0.057	0.18054502	0.014	0	0.015	0	1.587	0	0.012
10/05/95	20:59:56	0.48589344	0.057	0.173839	0.014	0	0.015	0	1.59	0	0.012
10/05/95	21:04:56	0.48650262	0.057	0.1659142	0.014	0	0.015	0	1.584	0	0.012
10/05/95	21:09:56	0.48722219	0.057	0.16459403	0.014	0	0.015	0	1.588	0	0.012
10/05/95	21:14:56	0.48835856	0.057	0.1729748	0.015	0	0.015	0	1.604	0	0.012
10/05/95	21:19:57	0.48812528	0.057	0.1824897	0.015	0	0.016	0	1.615	0	0.012
10/05/95	21:24:57	0.48786238	0.057	0.16413784	0.015	0	0.016	0	1.614	0	0.012
10/05/95	21:29:56	0.48926954	0.059	0.22368019	0.015	0	0.016	0	1.623	0	0.012
10/05/95	21:34:56	0.48930678	0.058	0.18046826	0.015	0	0.016	0	1.638	0	0.012
10/05/95	21:39:57	0.48853359	0.058	0.17293399	0.015	0	0.016	0	1.638	0	0.012
10/05/95	21:44:57	0.48857625	0.057	0.16712636	0.015	0	0.016	0	1.632	0	0.012
10/05/95	21:49:57	0.48965956	0.057	0.16299006	0.015	0	0.016	0	1.67	0	0.012
10/05/95	21:54:56	0.48819369	0.057	0.16141888	0.015	0	0.016	0	1.649	0	0.013
10/05/95	21:59:56	0.48779616	0.057	0.15948129	0.015	0	0.016	0	1.618	0	0.012
10/05/95	22:04:57	0.48819369	0.057	0.15492276	0.015	0	0.016	0	1.616	0	0.012
10/05/95	22:09:57	0.49075918	0.057	0.15466588	0.015	0	0.015	0	1.636	0	0.012
10/05/95	22:14:57	0.49059791	0.058	0.15845398	0.015	0	0.015	0	1.661	0	0.012
10/05/95	22:19:57	0.49001438	0.057	0.15613251	0.015	0	0.016	0	1.659	0	0.012
10/05/95	22:24:58	0.4913928	0.058	0.15354797	0.016	0	0.016	0	1.674	0	0.012
10/05/95	22:29:58	0.49081187	0.057	0.15748395	0.016	0	0.016	0	1.672	0	0.012
10/05/95	22:34:58	0.48994797	0.058	0.17080035	0.016	0	0.016	0	1.69	0	0.013
10/05/95	22:39:58	0.48976501	0.057	0.17249524	0.016	0	0.016	0	1.671	0	0.013
10/05/95	22:44:59	0.49065123	0.058	0.18407989	0.016	0	0.016	0	1.661	0	0.012
10/05/95	22:49:59	0.49104508	0.058	0.18923248	0.016	0	0.016	0	1.692	0	0.013
10/05/95	22:54:58	0.49067874	0.058	0.20247593	0.016	0	0.016	0	1.684	0	0.013
10/05/95	22:59:58	0.48942709	0.058	0.21716495	0.016	0	0.016	0	1.692	0	0.013
10/05/95	23:04:59	0.48953088	0.058	0.19087213	0.016	0	0.016	0	1.68	0	0.013
10/05/95	23:09:59	0.49050721	0.058	0.17046688	0.016	0	0.016	0	1.684	0	0.013
10/05/95	23:14:59	0.49148962	0.058	0.1636998	0.016	0	0.016	0	1.677	0	0.013
10/05/95	23:19:58	0.49158718	0.058	0.18350377	0.016	0	0.016	0	1.684	0	0.013
10/05/95	23:24:58	0.49265906	0.058	0.2001275	0.016	0	0.016	0	1.706	0	0.013
10/05/95	23:29:59	0.49119843	0.058	0.19624528	0.016	0	0.016	0	1.701	0	0.013
10/05/95	23:34:59	0.49091021	0.058	0.18462747	0.016	0	0.016	0	1.715	0	0.013
10/05/95	23:39:59	0.49081414	0.058	0.16656103	0.016	0	0.016	0	1.702	0	0.013
10/05/95	23:44:59	0.49129878	0.057	0.15590132	0.016	0	0.016	0	1.678	0	0.013
10/05/95	23:50:00	0.49334627	0.058	0.1713062	0.016	0	0.016	0	1.711	0	0.013
10/05/95	23:55:00	0.49403179	0.058	0.18062215	0.016	0	0.016	0	1.713	0	0.013
10/06/95	00:00:00	0.49247666	0.059	0.2116316	0.017	0	0.016	0	1.757	0	0.013
10/06/95	00:05:00	0.49247899	0.058	0.19058995	0.017	0	0.016	0	1.738	0	0.013
10/06/95	00:10:01	0.49325786	0.058	0.17216849	0.017	0	0.016	0	1.741	0	0.013
10/06/95	00:15:01	0.4921886	0.058	0.16416012	0.016	0	0.016	0	1.739	0	0.013
10/06/95	00:20:01	0.49462025	0.058	0.13425129	0.016	0	0.016	0	1.7	0	0.013
10/06/95	00:25:00	0.49338078	0.057	0.13349047	0.016	0	0.016	0	1.723	0	0.013
10/06/95	00:30:00	0.49289401	0.058	0.15030693	0.016	0	0.016	0	1.731	0	0.013
10/06/95	00:35:01	0.49318376	0.058	0.15236967	0.017	0	0.016	0	1.75	0	0.013
10/06/95	00:40:01	0.49357414	0.058	0.18062093	0.017	0	0.016	0	1.765	0	0.013
10/06/95	00:45:01	0.49260411	0.059	0.21474976	0.017	0	0.016	0	1.807	0	0.013

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/06/95	00:50:01	0.4951283	0.059	0.21154599	0.017	0	0.017	0	1.794	0	0.013
10/06/95	00:55:01	0.49435163	0.06	0.23110526	0.017	0.04311375	0.02	0	1.85	0	0.016
10/06/95	01:00:02	0.49503153	0.059	0.22283221	0.017	0	0.017	0	1.918	0	0.013
10/06/95	01:05:02	0.49289358	0.058	0.16112334	0.017	0	0.016	0	2.081	0	0.013
Run 28											
10/06/95	08:59:50	0.48864017	0.057	0.14666045	0.014	0	0.014	0	1.601	0	0.011
10/06/95	09:04:49	0.4903884	0.057	0.13904931	0.014	0	0.015	0	1.568	0	0.012
10/06/95	09:09:49	0.48697973	0.056	0.1308917	0.014	0	0.014	0	1.599	0	0.011
10/06/95	09:14:49	0.48597876	0.055	0.13006445	0.014	0	0.014	0	1.602	0	0.011
10/06/95	09:19:50	0.48655876	0.055	0.13021276	0.014	0	0.015	0	1.591	0	0.012
10/06/95	09:24:50	0.48742163	0.056	0.12984834	0.014	0	0.015	0	1.586	0	0.012
10/06/95	09:29:50	0.48643269	0.055	0.13068341	0.014	0	0.015	0	1.586	0	0.012
10/06/95	09:34:50	0.48580875	0.055	0.12862533	0.013	0	0.014	0	1.568	0	0.011
10/06/95	09:39:50	0.48746194	0.056	0.1280362	0.013	0	0.014	0	1.55	0	0.011
10/06/95	09:44:50	0.48678255	0.056	0.12769195	0.013	0	0.015	0	1.532	0	0.012
10/06/95	09:49:51	0.4886741	0.057	0.12924506	0.013	0	0.015	0	1.485	0	0.012
10/06/95	09:54:51	0.49081368	0.057	0.13165772	0.013	0	0.016	0	1.426	0	0.013
10/06/95	09:59:51	0.4905105	0.058	0.13348028	0.013	0	0.016	0	1.433	0	0.013
10/06/95	10:04:51	0.48962456	0.057	0.13328341	0.013	0	0.016	0	1.43	0	0.013
10/06/95	10:09:50	0.48900738	0.057	0.13373297	0.013	0	0.016	0	1.472	0	0.013
10/06/95	10:14:50	0.4893971	0.057	0.13425153	0.013	0	0.016	0	1.429	0	0.013
10/06/95	10:20:18	0.49714601	0.06	0.13696678	0.014	0	0.016	0	1.341	0	0.013
10/06/95	10:25:11	0.49713624	0.059	0.13753938	0.014	0	0.016	0	1.356	0	0.013
10/06/95	10:30:11	0.49632857	0.059	0.13905502	0.014	0	0.016	0	1.387	0	0.013
10/06/95	10:35:11	0.49690339	0.059	0.13859479	0.014	0	0.016	0	1.397	0	0.013
Run 29											
10/06/95	10:54:50	0.48584682	0.056	0.13670929	0.013	0	0.015	0	1.464	0	0.012
10/06/95	11:00:00	0.48662644	0.056	0.13725615	0.013	0	0.015	0	1.461	0	0.012
10/06/95	11:04:52	0.48765817	0.057	0.13722198	0.013	0	0.015	0	1.436	0	0.012
10/06/95	11:09:54	0.48951299	0.057	0.1431052	0.013	0	0.014	0	1.447	0	0.011
10/06/95	11:14:52	0.48466659	0.056	0.14057215	0.012	0	0.013	0	1.499	0	0.01
10/06/95	11:19:53	0.48314531	0.055	0.139615	0.012	0	0.012	0	1.618	0	0.01
10/06/95	11:24:53	0.48740599	0.056	0.14023716	0.012	0	0.013	0	1.536	0	0.01
10/06/95	11:29:53	0.48307391	0.056	0.14047817	0.012	0	0.013	0	1.454	0	0.01
10/06/95	11:34:53	0.4829893	0.055	0.13922042	0.012	0	0.014	0	1.455	0	0.011
10/06/95	11:39:54	0.48451936	0.056	0.13938637	0.012	0	0.013	0	1.51	0	0.01
10/06/95	11:44:54	0.48339518	0.056	0.14048828	0.012	0	0.014	0	1.439	0	0.011
10/06/95	11:49:54	0.48171038	0.056	0.14026243	0.012	0	0.016	0	1.378	0	0.013
10/06/95	11:54:57	0.48172198	0.055	0.13935921	0.012	0	0.016	0	1.358	0	0.013

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 24											
10/04/95	10:44:50	0.01021514	0.002	0.00958328	0.002	0	0.0005	0.00473898	0.001	0	0.039
10/04/95	10:49:50	0.00726644	0.001	0.0058974	0.002	0	0.0005	0.00610802	9E-04	0	0.042
10/04/95	10:54:50	0.00642395	0.001	0.00473898	0.002	0	0.0005	0.00705582	9E-04	0	0.038
10/04/95	10:59:51	0.00673989	0.001	0.00526554	0.002	0	0.0005	0.0068452	9E-04	0	0.037
10/04/95	11:04:51	0.00673989	0.001	0.00442305	0.002	0	0.0005	0.00747706	9E-04	0	0.036
10/04/95	11:09:50	0.00705582	0.001	0.00473898	0.002	0	0.0005	0.00758237	9E-04	0	0.036
10/04/95	11:14:50	0.00336994	0.001	0	0.002	0	0.0005	0.00800361	9E-04	0	0.038
10/04/95	11:19:51	0	0.002	0	0.002	0	0.0006	0.00937265	0.001	0	0.043
10/04/95	11:24:51	0	0.002	0	0.002	0	0.0006	0.0097939	0.001	0	0.043
10/04/95	11:29:50	0	0.002	0	0.002	0	0.0006	0.00968859	0.001	0	0.042
10/04/95	11:34:50	0.00284339	0.001	0	0.002	0	0.0005	0.00895141	9E-04	0	0.036
10/04/95	11:39:51	0	0.002	0	0.002	0	0.0005	0.00989921	0.001	0	0.038
10/04/95	11:44:51	0	0.002	0	0.002	0	0.0006	0.01000452	0.001	0	0.041
10/04/95	11:49:51	0	0.002	0	0.002	0	0.0006	0.01000452	0.001	0	0.042
10/04/95	11:54:50	0	0.002	0	0.002	0	0.0006	0.01021514	0.001	0	0.039
10/04/95	11:59:50	0	0.002	0	0.002	0	0.0005	0.01021514	0.001	0	0.04
10/04/95	12:04:52	0	0.002	0	0.002	0	0.0005	0.01010983	0.001	0	0.038
10/04/95	12:09:52	0	0.001	0	0.002	0	0.0005	0.0097939	9E-04	0	0.04
10/04/95	12:14:51	0	0.001	0	0.002	0	0.0005	0.00968859	9E-04	0	0.036
10/04/95	12:19:51	0	0.002	0	0.002	0	0.0005	0.01010983	0.001	0	0.04
10/04/95	12:24:52	0	0.001	0	0.002	0	0.0005	0.0097939	9E-04	0	0.039
10/04/95	12:29:52	0	0.001	0	0.002	0	0.0005	0.00947796	0.001	0	0.039
10/04/95	12:34:51	0	0.002	0	0.002	0	0.0005	0.00989921	0.001	0	0.038
10/04/95	12:39:51	0	0.001	0	0.002	0	0.0005	0.01000452	9E-04	0	0.039
10/04/95	12:44:52	0	0.001	0	0.002	0	0.0005	0.00968859	9E-04	0	0.038
10/04/95	12:49:51	0	0.001	0	0.002	0	0.0005	0.00937265	8E-04	0	0.04
10/04/95	12:54:51	0	0.001	0	0.002	0	0.0005	0.00958328	8E-04	0	0.037
10/04/95	12:59:52	0	0.001	0	0.002	0	0.0005	0.00947796	8E-04	0	0.036
10/04/95	13:04:52	0	0.001	0	0.002	0	0.0005	0.00947796	9E-04	0	0.036
10/04/95	13:09:51	0	0.001	0	0.002	0	0.0004	0.00916203	8E-04	0	0.037
10/04/95	13:14:51	0	0.001	0	0.002	0	0.0005	0.00937265	8E-04	0	0.037
10/04/95	13:19:52	0	0.002	0	0.002	0	0.0005	0.00958328	0.001	0	0.037
10/04/95	13:24:52	0	0.001	0	0.002	0	0.0005	0.00905672	9E-04	0	0.037
10/04/95	13:29:51	0	0.001	0	0.002	0	0.0005	0.00926734	9E-04	0	0.038
10/04/95	13:34:52	0	0.001	0	0.002	0	0.0005	0.00895141	9E-04	0	0.036
10/04/95	13:39:52	0	0.001	0	0.002	0	0.0005	0.00947796	9E-04	0	0.035
10/04/95	13:44:51	0	0.001	0	0.002	0	0.0005	0.01000452	9E-04	0	0.031
10/04/95	13:49:51	0.00179028	0.001	0	0.002	0	0.0004	0.00989921	8E-04	0	0.03
10/04/95	13:54:52	0	0.001	0	0.002	0	0.0005	0.01063638	9E-04	0	0.031
10/04/95	13:59:51	0	0.002	0	0.002	0	0.0005	0.01126825	0.001	0	0.031
10/04/95	14:04:50	0.00136904	0.001	0	0.002	0	0.0005	0.01000452	8E-04	0	0.031
10/04/95	14:09:50	0.00326463	0.001	0.00221153	0.002	0	0.0004	0.00916203	8E-04	0	0.035
10/04/95	14:14:51	0.00326463	0.001	0	0.002	0	0.0004	0.00947796	8E-04	0	0.032
Run 25											
10/04/95	14:39:53	0	0.001	0	0.001	0	0.0004	0.00905672	8E-04	0	0.033
10/04/95	14:45:06	0	0.001	0	0.002	0	0.0004	0.00811487	8E-04	0	0.037
10/04/95	14:49:59	0	0.001	0	0.001	0.00052713	0.0004	0.00769613	8E-04	0	0.044
10/04/95	14:54:59	0	0.001	0	0.002	0	0.0004	0.00790264	8E-04	0	0.041
10/04/95	14:59:58	0	0.001	0	0.002	0	0.0004	0.0088461	8E-04	0	0.034
10/04/95	15:04:58	0	0.001	0	0.002	0	0.0004	0.0086418	8E-04	0	0.036
10/04/95	15:09:59	0	0.001	0	0.002	0	0.0004	0.00959367	8E-04	0	0.034
10/04/95	15:14:59	0	0.001	0	0.001	0	0.0004	0.00749613	8E-04	0	0.045
10/04/95	15:19:58	0	0.001	0	0.001	0	0.0004	0.00760309	7E-04	0	0.044
10/04/95	15:24:59	0	0.001	0	0.001	0	0.0004	0.00844016	8E-04	0	0.041
10/04/95	15:29:59	0	0.001	0	0.002	0.000844	0.0005	0.00791254	9E-04	0	0.046
10/04/95	15:35:00	0	0.001	0	0.002	0.00084323	0.0005	0.0077999	9E-04	0	0.046
10/04/95	15:40:00	0	0.001	0	0.002	0	0.0004	0.00738639	8E-04	0	0.047
10/04/95	15:44:59	0	0.001	0	0.001	0	0.0004	0.00727943	7E-04	0	0.049
10/04/95	15:50:00	0	0.001	0	0.002	0	0.0004	0.00834205	8E-04	0	0.046
10/04/95	15:55:00	0	0.001	0	0.002	0.00073795	0.0005	0.00769579	9E-04	0	0.048
10/04/95	15:59:59	0	0.002	0	0.002	0.00094984	0.0005	0.00738763	0.001	0	0.05

Site: POTW in small											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/04/95	16:05:00	0	0.001	0	0.002	0.0010548	0.0005	0.00770002	9E-04	0	0.05
10/04/95	16:10:00	0	0.001	0	0.002	0.00116134	0.0005	0.00781264	9E-04	0	0.049
10/04/95	16:14:59	0	0.002	0	0.002	0.00168953	0.0006	0.00802526	0.001	0	0.05
10/04/95	16:20:00	0	0.002	0	0.002	0.00158249	0.0006	0.00780693	0.001	0	0.052
10/04/95	16:25:00	0	0.002	0	0.002	0.00168829	0.0006	0.00812491	0.001	0	0.05
Run 26											
10/04/95	17:19:51	0	0.001	0	0.002	0	0.0005	0.01131288	9E-04	0	0.035
10/04/95	17:24:52	0	0.002	0	0.002	0	0.0005	0.01090375	0.001	0	0.042
10/04/95	17:29:52	0	0.002	0	0.002	0	0.0006	0.01026296	0.001	0	0.048
10/04/95	17:34:52	0	0.002	0	0.002	0	0.0006	0.0110076	0.001	0	0.048
10/04/95	17:39:53	0	0.002	0	0.002	0.00074117	0.0006	0.00984693	0.001	0	0.053
10/04/95	17:44:52	0	0.002	0	0.002	0.00084705	0.0006	0.00984693	0.001	0	0.051
10/04/95	17:49:52	0	0.002	0	0.002	0.00095362	0.0006	0.00985412	0.001	0	0.05
10/04/95	17:54:53	0	0.002	0	0.002	0.00095328	0.0006	0.00974461	0.001	0	0.052
10/04/95	17:59:52	0	0.002	0	0.002	0	0.0006	0.0117485	0.001	0	0.044
10/04/95	18:04:52	0	0.002	0	0.002	0.00105842	0.0006	0.0097375	0.001	0	0.051
10/04/95	18:09:53	0	0.002	0	0.002	0.00084627	0.0006	0.00983795	0.001	0	0.052
10/04/95	18:14:53	0	0.002	0	0.002	0.00105765	0.0006	0.00973038	0.001	0	0.052
10/04/95	18:19:52	0	0.002	0	0.002	0	0.0006	0.01025921	0.001	0	0.047
10/04/95	18:24:53	0	0.002	0	0.002	0	0.0006	0.0116299	0.001	0	0.041
10/04/95	18:29:53	0	0.002	0	0.002	0.00073954	0.0006	0.01003666	0.001	0	0.049
10/04/95	18:34:52	0	0.002	0	0.002	0	0.0006	0.01055911	0.001	0	0.042
10/04/95	18:39:53	0	0.002	0	0.002	0.00116108	0.0006	0.00949972	0.001	0	0.052
10/04/95	18:44:53	0	0.002	0	0.002	0.00084425	0.0006	0.00960338	0.001	0	0.051
10/04/95	18:49:52	0	0.002	0	0.002	0.00073791	0.0006	0.00969824	0.001	0	0.05
10/04/95	18:54:53	0	0.002	0	0.002	0.00073696	0.0006	0.00968579	0.001	0	0.051
10/04/95	18:59:53	0	0.002	0	0.002	0.00063109	0.0006	0.00978193	0.001	0	0.051
10/04/95	19:04:52	0	0.002	0	0.002	0	0.0006	0.00987984	0.001	0	0.052
10/04/95	19:09:53	0	0.002	0	0.002	0	0.0007	0.01007705	0.001	0	0.051
10/04/95	19:14:53	0	0.002	0	0.002	0	0.0007	0.01006405	0.001	0	0.052
10/04/95	19:19:52	0	0.002	0	0.002	0	0.0007	0.0099482	0.001	0	0.052
10/04/95	19:24:53	0	0.002	0	0.002	0	0.0007	0.00982712	0.001	0	0.052
10/04/95	19:29:53	0	0.002	0	0.003	0	0.0008	0.00939676	0.001	0	0.053
10/04/95	19:34:52	0	0.002	0	0.003	0	0.0008	0.00938631	0.002	0	0.055
10/04/95	19:39:52	0	0.003	0	0.003	0	0.001	0.00927169	0.002	0	0.055
10/04/95	19:44:53	0	0.031	0	0.037	0	0.0109	0	0.02	0	0.055
10/04/95	19:49:53	0	0.003	0	0.003	0	0.001	0.00924416	0.002	0	0.055
10/04/95	19:54:54	0	0.003	0	0.003	0	0.0009	0.0091401	0.002	0	0.054
10/04/95	19:59:54	0	0.003	0	0.003	0	0.0009	0.00902951	0.002	0	0.054
10/04/95	20:04:53	0	0.003	0	0.003	0	0.0009	0.00871164	0.002	0	0.054
10/04/95	20:09:53	0	0.002	0	0.003	0.00082922	0.0008	0.00860312	0.001	0	0.054
10/04/95	20:14:54	0	0.002	0	0.002	0	0.0007	0.00890742	0.001	0	0.053
10/04/95	20:19:54	0	0.002	0	0.002	0.00072475	0.0006	0.00880055	0.001	0	0.053
10/04/95	20:24:55	0	0.002	0	0.002	0.00072448	0.0006	0.00859027	0.001	0	0.053
10/04/95	20:29:55	0	0.002	0	0.002	0.00072407	0.0006	0.00868889	0.001	0	0.054
10/04/95	20:34:54	0	0.002	0	0.002	0	0.0007	0.0087874	0.001	0	0.055
10/04/95	20:39:54	0	0.002	0	0.003	0.00082643	0.0007	0.00867752	0.001	0	0.057
10/04/95	20:44:55	0	0.002	0	0.002	0.00092939	0.0006	0.008571	0.001	0	0.056
10/04/95	20:49:55	0	0.002	0	0.003	0.00092923	0.0007	0.00877608	0.001	0	0.056
10/04/95	20:54:53	0	0.002	0	0.003	0.00092975	0.0008	0.00888432	0.002	0	0.056
10/04/95	20:59:54	0	0.002	0	0.003	0	0.0008	0.00908753	0.001	0	0.055
10/04/95	21:04:54	0	0.002	0	0.003	0.00072247	0.0007	0.00897922	0.001	0	0.056
10/04/95	21:09:55	0	0.002	0	0.003	0.00082567	0.0007	0.00908242	0.001	0	0.056
10/04/95	21:14:54	0	0.002	0	0.002	0.00082552	0.0007	0.00918391	0.001	0	0.054
10/04/95	21:19:53	0	0.002	0	0.003	0.00092819	0.0007	0.00907562	0.001	0	0.055
10/04/95	21:24:54	0	0.002	0	0.003	0.00103076	0.0007	0.00907072	0.001	0	0.055
10/04/95	21:29:54	0	0.002	0	0.003	0.00103038	0.0008	0.00896428	0.001	0	0.056
10/04/95	21:34:53	0	0.002	0	0.003	0.00113384	0.0007	0.00896764	0.001	0	0.054
10/04/95	21:39:53	0	0.002	0	0.003	0.00103115	0.0007	0.00907412	0.001	0	0.053
10/04/95	21:44:54	0	0.002	0	0.003	0.00092804	0.0007	0.00928035	0.001	0	0.054
10/04/95	21:49:54	0	0.002	0	0.003	0.00092804	0.0007	0.00928035	0.001	0	0.054
10/04/95	21:54:54	0	0.002	0	0.003	0.00092786	0.0007	0.00927861	0.001	0	0.054

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/04/95	21:59:54	0	0.002	0	0.003	0.00123668	0.0008	0.00917208	0.001	0	0.056
10/04/95	22:04:55	0	0.002	0	0.003	0.00103057	0.0007	0.00917208	0.001	0	0.054
10/04/95	22:09:55	0	0.002	0	0.003	0.00102999	0.0007	0.00916691	0.001	0	0.053
10/04/95	22:14:54	0	0.002	0	0.003	0.00102941	0.0008	0.00916175	0.001	0	0.053
10/04/95	22:19:54	0	0.002	0	0.003	0.00102847	0.0008	0.00915337	0.001	0	0.053
10/04/95	22:24:54	0	0.002	0	0.003	0.00092614	0.0008	0.00915853	0.001	0	0.053
10/04/95	22:29:55	0	0.002	0	0.003	0.00092632	0.0007	0.00905732	0.001	0	0.054
10/04/95	22:34:55	0	0.002	0	0.003	0.00082386	0.0007	0.00926839	0.001	0	0.053
10/04/95	22:39:56	0	0.002	0	0.003	0.00092719	0.0007	0.00927187	0.001	0	0.054
10/04/95	22:44:56	0	0.002	0	0.003	0.00092719	0.0007	0.00916885	0.001	0	0.054
10/04/95	22:49:57	0	0.002	0	0.002	0.00103001	0.0007	0.00916713	0.001	0	0.053
10/04/95	22:54:57	0	0.002	0	0.003	0.00102924	0.0008	0.00916025	0.001	0	0.054
10/04/95	22:59:55	0	0.002	0	0.003	0.00092597	0.0008	0.00925969	0.002	0	0.053
10/04/95	23:04:55	0	0.002	0	0.003	0.0009258	0.0007	0.00905222	0.001	0	0.053
10/04/95	23:09:56	0	0.002	0	0.003	0.00102789	0.0008	0.00914821	0.002	0	0.054
10/04/95	23:14:56	0	0.002	0	0.003	0.00082187	0.0008	0.009246	0.002	0	0.054
10/04/95	23:19:56	0	0.002	0	0.003	0	0.0009	0.00924426	0.002	0	0.054
10/04/95	23:24:55	0	0.002	0	0.003	0	0.0008	0.0089294	0.002	0	0.055
10/04/95	23:29:55	0	0.002	0	0.003	0.00092356	0.0008	0.00861987	0.002	0	0.056
10/04/95	23:34:56	0	0.002	0	0.003	0.00092356	0.0008	0.00872248	0.002	0	0.055
10/04/95	23:39:56	0	0.002	0	0.003	0.00092406	0.0007	0.00862452	0.001	0	0.053
10/04/95	23:44:56	0	0.002	0	0.003	0.00092406	0.0008	0.00882987	0.001	0	0.053
10/04/95	23:49:55	0	0.002	0	0.003	0.0010277	0.0007	0.00894095	0.001	0	0.053
10/04/95	23:54:55	0	0.002	0	0.003	0.0009251	0.0007	0.00894263	0.001	0	0.053
10/04/95	23:59:56	0	0.002	0	0.003	0.00092475	0.0008	0.00883652	0.001	0	0.054
10/05/95	00:04:56	0	0.002	0	0.003	0.00092458	0.0007	0.00883485	0.001	0	0.054
10/05/95	00:09:56	0	0.002	0	0.003	0.00092458	0.0008	0.00893759	0.002	0	0.054
10/05/95	00:14:55	0	0.002	0	0.002	0.00102866	0.0007	0.00884649	0.001	0	0.054
10/05/95	00:19:55	0	0.002	0	0.002	0.00113217	0.0007	0.00885148	0.001	0	0.054
10/05/95	00:24:56	0	0.002	0	0.002	0.00123579	0.0007	0.00875348	0.001	0	0.053
10/05/95	00:29:57	0	0.002	0	0.002	0.00123555	0.0007	0.00875184	0.001	0	0.055
10/05/95	00:34:56	0	0.002	0	0.002	0.00113217	0.0007	0.0089544	0.001	0	0.053
10/05/95	00:39:55	0	0.002	0	0.002	0.00113153	0.0007	0.00884649	0.001	0	0.053
10/05/95	00:44:55	0	0.002	0	0.002	0.0012337	0.0007	0.0088415	0.001	0	0.053
10/05/95	00:49:56	0	0.002	0	0.002	0.00113068	0.0007	0.00873705	0.001	0	0.053
10/05/95	00:54:56	0	0.002	0	0.002	0.00123274	0.0007	0.00862918	0.001	0	0.053
10/05/95	00:59:56	0	0.002	0	0.002	0.00123344	0.0007	0.00863406	0.001	0	0.053
10/05/95	01:04:57	0	0.002	0	0.002	0.00133572	0.0007	0.00873356	0.001	0	0.053
10/05/95	01:09:55	0	0.002	0	0.002	0.00133471	0.0007	0.00862431	0.001	0	0.054
10/05/95	01:14:56	0	0.002	0	0.002	0.00133446	0.0007	0.00862269	0.001	0	0.054
10/05/95	01:19:56	0	0.002	0	0.002	0.00133245	0.0007	0.0085072	0.001	0	0.054
10/05/95	01:24:56	0	0.002	0	0.002	0.00132969	0.0007	0.00848955	0.001	0	0.053
10/05/95	01:29:55	0	0.002	0	0.002	0.00133095	0.0007	0.00839519	0.001	0	0.053
10/05/95	01:34:55	0	0.002	0	0.002	0.00133296	0.0007	0.00840787	0.001	0	0.053
10/05/95	01:39:55	0	0.002	0	0.002	0.00123135	0.0007	0.00841422	0.001	0	0.051
10/05/95	01:44:56	0	0.002	0	0.002	0.00133371	0.0007	0.00841263	0.001	0	0.052
10/05/95	01:49:56	0	0.002	0	0.002	0.00143684	0.0007	0.00831317	0.001	0	0.053
10/05/95	01:54:55	0	0.002	0	0.002	0.00143549	0.0007	0.0082028	0.001	0	0.052
10/05/95	01:59:55	0	0.002	0	0.003	0.00153745	0.0007	0.00799472	0.001	0	0.055
10/05/95	02:04:55	0	0.002	0	0.003	0.00163809	0.0007	0.00778091	0.001	0	0.053
10/05/95	02:09:56	0	0.002	0	0.002	0.00153513	0.0007	0.00798265	0.001	0	0.053
10/05/95	02:14:56	0	0.002	0	0.003	0.00163932	0.0007	0.00788924	0.001	0	0.053
10/05/95	02:19:56	0	0.002	0	0.002	0.00143549	0.0007	0.00830534	0.001	0	0.053
10/05/95	02:24:55	0	0.002	0	0.002	0.00153745	0.0007	0.00819971	0.001	0	0.053
10/05/95	02:29:55	0	0.002	0	0.003	0.00153629	0.0007	0.00809111	0.001	0	0.054
10/05/95	02:34:56	0	0.002	0	0.003	0.00143333	0.0007	0.00819043	0.001	0	0.053
10/05/95	02:39:56	0	0.002	0	0.003	0.00153542	0.0007	0.00808652	0.001	0	0.054
10/05/95	02:44:56	0	0.002	0	0.002	0.00153542	0.0007	0.00808652	0.001	0	0.053
10/05/95	02:49:55	0	0.002	0	0.002	0.00143522	0.0007	0.00809874	0.001	0	0.053
10/05/95	02:54:55	0	0.002	0	0.002	0.00133321	0.0007	0.0083069	0.001	0	0.054
10/05/95	02:59:56	0	0.002	0	0.003	0.00143255	0.0007	0.008186	0.001	0	0.053
10/05/95	03:04:56	0	0.002	0	0.003	0.0015326	0.0007	0.00817385	0.001	0	0.053

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	03:09:56	0	0.002	0	0.002	0.00132703	0.0007	0.0083705	0.001	0	0.053
10/05/95	03:14:55	0	0.002	0	0.003	0.00142749	0.0007	0.00815707	0.001	0	0.053
10/05/95	03:19:55	0	0.002	0	0.003	0.00142521	0.0007	0.00855127	0.001	0	0.054
10/05/95	03:24:56	0	0.002	0	0.002	0.00091675	0.0007	0.00886195	0.001	0	0.054
10/05/95	03:29:56	0	0.002	0	0.002	0.00081505	0.0007	0.00906739	0.001	0	0.054
10/05/95	03:34:56	0	0.002	0	0.002	0.00081538	0.0007	0.00907106	0.001	0	0.054
10/05/95	03:39:55	0	0.002	0	0.002	0.00081566	0.0007	0.00897229	0.001	0	0.054
10/05/95	03:44:55	0	0.002	0	0.002	0.00071291	0.0007	0.0090642	0.001	0	0.054
10/05/95	03:49:55	0	0.002	0	0.002	0.0008143	0.0007	0.00895727	0.001	0	0.054
10/05/95	03:54:56	0	0.002	0	0.002	0.00091556	0.0007	0.00874872	0.001	0	0.054
10/05/95	03:59:56	0	0.002	0	0.002	0.00081368	0.0007	0.00884878	0.001	0	0.054
10/05/95	04:04:56	0	0.002	0	0.002	0.00081383	0.0007	0.00885045	0.001	0	0.055
10/05/95	04:09:56	0	0.002	0	0.002	0.00071197	0.0007	0.00884878	0.001	0	0.054
10/05/95	04:14:57	0	0.002	0	0.002	0.00071197	0.0007	0.00884878	0.001	0	0.054
10/05/95	04:19:57	0	0.002	0	0.002	0	0.0007	0.00894396	0.001	0	0.054
10/05/95	04:24:57	0	0.002	0	0.002	0.00091438	0.0007	0.00883897	0.001	0	0.054
10/05/95	04:29:57	0	0.002	0	0.002	0.00081232	0.0007	0.00883394	0.001	0	0.054
10/05/95	04:34:58	0	0.002	0	0.002	0.00081185	0.0007	0.00882891	0.001	0	0.053
10/05/95	04:39:58	0	0.002	0	0.003	0.00101405	0.0007	0.00882221	0.001	0	0.052
10/05/95	04:44:58	0	0.002	0	0.002	0.00101311	0.0007	0.0089154	0.001	0	0.049
10/05/95	04:49:57	0	0.002	0	0.002	0.00101254	0.0007	0.00891031	0.001	0	0.048
10/05/95	04:54:57	0	0.002	0	0.002	0.0010116	0.0007	0.00880095	0.001	0	0.048
10/05/95	04:59:58	0	0.002	0	0.002	0.00111192	0.0007	0.00879425	0.001	0	0.047
10/05/95	05:04:58	0	0.002	0	0.002	0.00101045	0.0007	0.00889194	0.001	0	0.047
10/05/95	05:09:58	0	0.002	0	0.003	0.00111086	0.0007	0.00888686	0.001	0	0.046
10/05/95	05:14:57	0	0.002	0	0.002	0.00100913	0.0007	0.00877944	0.001	0	0.047
10/05/95	05:19:57	0	0.002	0	0.002	0.00100875	0.0007	0.00897785	0.001	0	0.047
10/05/95	05:24:58	0	0.002	0	0.002	0.00100817	0.0007	0.00887189	0.001	0	0.047
10/05/95	05:29:58	0	0.002	0	0.002	0.00100743	0.0007	0.0088654	0.001	0	0.047
10/05/95	05:34:58	0	0.002	0	0.002	0.00100724	0.0007	0.0088637	0.001	0	0.047
10/05/95	05:39:57	0	0.002	0	0.002	0.00100705	0.0007	0.00896271	0.001	0	0.047
10/05/95	05:44:57	0	0.002	0	0.002	0.00100592	0.0007	0.00885214	0.001	0	0.048
10/05/95	05:49:57	0	0.002	0	0.002	0.00100573	0.0007	0.00885044	0.001	0	0.047
10/05/95	05:54:58	0	0.002	0	0.002	0.00100535	0.0007	0.00884706	0.001	0	0.048
10/05/95	05:59:58	0	0.002	0	0.002	0.00100423	0.0007	0.00883719	0.001	0	0.048
10/05/95	06:04:57	0	0.002	0	0.003	0.00110423	0.0007	0.00883381	0.001	0	0.048
10/05/95	06:09:57	0	0.002	0	0.003	0.0011038	0.0007	0.00883043	0.001	0	0.048
10/05/95	06:14:57	0	0.002	0	0.002	0.00110359	0.0007	0.00872841	0.001	0	0.048
10/05/95	06:19:58	0	0.002	0	0.002	0.00110317	0.0007	0.00872506	0.001	0	0.048
10/05/95	06:24:58	0	0.002	0	0.003	0.00110317	0.0007	0.00872506	0.001	0	0.047
10/05/95	06:29:58	0	0.002	0	0.003	0.00110275	0.0007	0.00882197	0.001	0	0.047
10/05/95	06:34:58	0	0.002	0	0.003	0.00110173	0.0007	0.00871365	0.001	0	0.047
10/05/95	06:39:59	0	0.002	0	0.003	0.00110109	0.0007	0.00870863	0.001	0	0.047
10/05/95	06:44:59	0	0.002	0	0.003	0.00110025	0.0007	0.00870195	0.001	0	0.047
10/05/95	06:49:59	0	0.002	0	0.003	0.00109944	0.0007	0.00869556	0.001	0	0.047
10/05/95	06:54:58	0	0.002	0	0.003	0.0009993	0.0007	0.00869389	0.001	0	0.048
10/05/95	06:59:58	0	0.002	0	0.003	0.00109859	0.0007	0.00868887	0.001	0	0.047
10/05/95	07:04:59	0	0.002	0	0.003	0.00109838	0.0007	0.0086872	0.001	0	0.047
10/05/95	07:09:59	0	0.002	0	0.003	0.001098	0.0007	0.00868416	0.001	0	0.047
10/05/95	07:14:59	0	0.002	0	0.003	0.001098	0.0007	0.00878398	0.001	0	0.048
10/05/95	07:19:58	0	0.002	0	0.003	0.00109779	0.0007	0.00878229	0.001	0	0.049
10/05/95	07:24:58	0	0.002	0	0.003	0.0010974	0.0007	0.00877922	0.001	0	0.048
10/05/95	07:29:59	0	0.002	0	0.003	0.0010974	0.0007	0.00867946	0.001	0	0.048
10/05/95	07:34:59	0	0.002	0	0.003	0.00109677	0.0007	0.00877415	0.001	0	0.047
10/05/95	07:39:59	0	0.002	0	0.003	0.00099652	0.0007	0.0087694	0.001	0	0.048
10/05/95	07:44:58	0	0.002	0	0.002	0.00089704	0.0007	0.00877109	0.001	0	0.048
10/05/95	07:49:58	0	0.002	0	0.002	0.00089739	0.0007	0.00887417	0.001	0	0.048
10/05/95	07:54:58	0	0.002	0	0.002	0.00069824	0.0007	0.00897734	0.001	0	0.048
10/05/95	07:59:59	0	0.002	0	0.002	0	0.0007	0.00907915	0.001	0	0.048
10/05/95	08:04:59	0	0.002	0	0.002	0	0.0007	0.00918422	0.001	0	0.049
10/05/95	08:09:59	0	0.002	0	0.002	0	0.0007	0.00929297	0.001	0	0.049
10/05/95	08:14:58	0	0.002	0	0.002	0	0.0007	0.0093983	0.001	0	0.049

Site: POTW in small											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	08:19:58	0	0.002	0	0.002	0	0.0007	0.00930042	0.001	0	0.048
10/05/95	08:24:59	0	0.002	0	0.002	0	0.0006	0.00930577	0.001	0	0.047
10/05/95	08:29:59	0	0.002	0	0.002	0	0.0006	0.00931291	0.001	0	0.047
10/05/95	08:34:59	0	0.002	0	0.002	0	0.0006	0.00931647	0.001	0	0.046
10/05/95	08:39:58	0	0.002	0	0.002	0	0.0006	0.00911817	0.001	0	0.046
10/05/95	08:44:58	0	0.002	0	0.002	0	0.0006	0.0092219	0.001	0	0.047
10/05/95	08:49:59	0	0.002	0	0.002	0	0.0006	0.00902487	0.001	0	0.047
10/05/95	08:54:58	0.00200598	0.002	0	0.002	0	0.0006	0.0089266	0.001	0	0.046
10/05/95	08:59:57	0.00240763	0.002	0	0.002	0	0.0006	0.0089283	0.001	0	0.046
10/05/95	09:04:58	0.00290932	0.002	0	0.002	0	0.0006	0.00882828	0.001	0	0.045
10/05/95	09:09:57	0.00501798	0.001	0	0.002	0	0.0005	0.00822949	9E-04	0	0.041
Downwind											
Run 27											
10/05/95	15:34:52	0	0.002	0	0.003	0.00348487	0.0009	0.0084047	0.002	0	0.036
10/05/95	15:39:52	0	0.002	0	0.003	0.00276836	0.0009	0.00902282	0.002	0	0.034
10/05/95	15:44:51	0	0.002	0	0.003	0.0027694	0.0008	0.0093339	0.002	0	0.033
10/05/95	15:49:51	0	0.002	0	0.003	0.00277095	0.0009	0.00944175	0.002	0	0.033
10/05/95	15:54:52	0	0.003	0	0.003	0.00317731	0.0009	0.00912194	0.002	0	0.033
10/05/95	15:59:52	0	0.003	0	0.003	0.00379439	0.001	0.00871685	0.002	0	0.034
10/05/95	16:04:52	0	0.003	0	0.003	0.00390049	0.001	0.00862213	0.002	0	0.033
10/05/95	16:09:52	0	0.003	0	0.003	0.00431106	0.001	0.00780097	0.002	0	0.036
10/05/95	16:14:54	0	0.003	0	0.004	0.00492877	0.001	0.00636632	0.002	0	0.038
10/05/95	16:19:53	0	0.003	0	0.004	0.00482608	0.001	0.00636632	0.002	0	0.038
10/05/95	16:24:52	0	0.003	0	0.004	0.00512935	0.001	0.00605263	0.002	0	0.039
10/05/95	16:29:52	0	0.003	0	0.003	0.00513605	0.001	0.00410884	0.002	0	0.04
10/05/95	16:35:01	0	0.003	0	0.004	0.00544624	0.001	0.0032883	0.002	0	0.041
10/05/95	16:39:53	0	0.003	0	0.003	0.0052417	0.001	0.00411113	0.002	0	0.04
10/05/95	16:44:53	0	0.003	0	0.003	0.00534049	0.001	0.00359456	0.002	0	0.042
10/05/95	16:49:54	0	0.003	0	0.004	0.00543914	0.001	0.00472076	0.002	0	0.04
10/05/95	16:54:55	0	0.003	0	0.003	0.00523877	0.001	0.00349251	0.002	0	0.041
10/05/95	16:59:55	0	0.003	0	0.003	0.00534049	0.0009	0.00246484	0.002	0	0.043
10/05/95	17:04:54	0	0.003	0	0.003	0.00533863	0.001	0.00236132	0.002	0	0.042
10/05/95	17:09:55	0	0.003	0	0.003	0.00554693	0.001	0.00308163	0.002	0	0.043
10/05/95	17:14:55	0	0.003	0	0.004	0.0056507	0.0011	0.00380138	0.002	0	0.04
10/05/95	17:19:55	0	0.003	0	0.004	0.00543812	0.0011	0.00523291	0.002	0	0.036
10/05/95	17:24:54	0	0.003	0	0.004	0.00543825	0.0011	0.00605391	0.002	0	0.034
10/05/95	17:29:55	0	0.003	0	0.003	0.00533764	0.001	0.00390058	0.002	0	0.037
10/05/95	17:34:56	0	0.003	0	0.003	0.00543724	0.0009	0.0019492	0.002	0	0.044
10/05/95	17:39:55	0	0.003	0	0.003	0.00564137	0.001	0	0.002	0	0.044
10/05/95	17:44:54	0	0.003	0	0.003	0.00543825	0.0009	0	0.002	0	0.042
10/05/95	17:49:56	0	0.003	0	0.003	0.00533664	0.0009	0.00256569	0.002	0	0.04
10/05/95	17:54:55	0	0.003	0	0.003	0.00533465	0.001	0.0028725	0.002	0	0.04
10/05/95	17:59:54	0	0.003	0	0.004	0.00543623	0.0011	0.0048208	0.002	0	0.039
10/05/95	18:04:54	0	0.003	0	0.004	0.00532968	0.0011	0.00553466	0.002	0	0.037
10/05/95	18:09:55	0	0.003	0	0.004	0.00501751	0.0011	0.00686067	0.002	0	0.035
10/05/95	18:14:56	0	0.003	0	0.004	0.00480911	0.0011	0.00726483	0.002	0	0.034
10/05/95	18:19:54	0	0.003	0	0.003	0.00481091	0.001	0.00573215	0.002	0	0.037
10/05/95	18:24:55	0	0.003	0	0.004	0.00542304	0.001	0.0042975	0.002	0	0.038
10/05/95	18:29:55	0	0.003	0	0.004	0.00572479	0.001	0.00245348	0.002	0	0.04
10/05/95	18:34:55	0	0.003	0	0.004	0.00572265	0.001	0.00255476	0.002	0	0.04
10/05/95	18:39:54	0	0.003	0	0.003	0.00571944	0.001	0.00234906	0.002	0	0.041
10/05/95	18:44:54	0	0.003	0	0.004	0.00571301	0.001	0.00244843	0.002	0	0.04
10/05/95	18:49:55	0	0.003	0	0.004	0.00560678	0.001	0.0024466	0.002	0	0.041
10/05/95	18:54:55	0	0.003	0	0.004	0.00570551	0.001	0.00224145	0.002	0	0.041
10/05/95	18:59:55	0	0.003	0	0.004	0.00570138	0.001	0.00244345	0.002	0	0.04
10/05/95	19:04:55	0	0.003	0	0.004	0.00559642	0.001	0.00264558	0.002	0	0.041
10/05/95	19:09:56	0	0.003	0	0.004	0.00548847	0.001	0.00284587	0.002	0	0.041
10/05/95	19:14:56	0	0.003	0	0.004	0.00548227	0.0011	0.00284266	0.002	0	0.041
10/05/95	19:19:55	0	0.003	0	0.004	0.00547711	0.0011	0.00314427	0.002	0	0.041
10/05/95	19:24:56	0	0.003	0	0.004	0.00547298	0.0011	0.00314189	0.002	0	0.042
10/05/95	19:29:56	0	0.003	0	0.004	0.00536656	0.0011	0.00313893	0.002	0	0.042
10/05/95	19:34:57	0	0.003	0	0.004	0.00546265	0.0012	0.00333829	0.002	0	0.042

Site: POTW in small											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/05/95	19:39:55	0	0.003	0	0.004	0.00535354	0.0012	0.00343435	0.002	0	0.043
10/05/95	19:44:55	0	0.003	0	0.004	0.00545042	0.0012	0.00343175	0.002	0	0.043
10/05/95	19:49:56	0	0.003	0	0.004	0.00544733	0.0011	0.0034298	0.002	0	0.043
10/05/95	19:54:56	0	0.003	0	0.004	0.00544423	0.0012	0.00362949	0.002	0	0.043
10/05/95	19:59:55	0	0.003	0	0.004	0.00533936	0.0011	0.00352599	0.002	0	0.043
10/05/95	20:04:55	0	0.003	0	0.004	0.00533632	0.0012	0.00352398	0.002	0	0.044
10/05/95	20:09:55	0	0.003	0	0.004	0.00533227	0.0012	0.00362192	0.002	0	0.043
10/05/95	20:14:56	0	0.003	0	0.004	0.00532636	0.0012	0.0036179	0.002	0	0.044
10/05/95	20:19:56	0	0.003	0	0.004	0.00532636	0.0012	0.0037184	0.002	0	0.044
10/05/95	20:24:55	0	0.003	0	0.004	0.00532535	0.0011	0.00351674	0.002	0	0.044
10/05/95	20:29:55	0	0.004	0	0.004	0.00542066	0.0012	0.00331263	0.002	0	0.044
10/05/95	20:34:56	0	0.004	0	0.004	0.00521692	0.0012	0.00331074	0.002	0	0.045
10/05/95	20:39:56	0	0.003	0	0.004	0.00511286	0.0011	0.00300757	0.002	0	0.045
10/05/95	20:44:56	0	0.003	0	0.003	0.00489551	0.001	0.00299725	0.002	0	0.045
10/05/95	20:49:55	0	0.003	0	0.003	0.00498109	0.001	0.0022913	0.002	0	0.045
10/05/95	20:54:55	0	0.003	0	0.003	0.00497918	0.001	0.00219084	0.002	0	0.047
10/05/95	20:59:56	0	0.003	0	0.003	0.00507486	0.001	0.00238817	0.002	0	0.046
10/05/95	21:04:56	0	0.003	0	0.003	0.00517239	0.001	0.00198938	0.002	0	0.046
10/05/95	21:09:56	0	0.003	0	0.003	0.00506902	0.001	0.00228603	0.002	0	0.046
10/05/95	21:14:56	0	0.003	0	0.003	0.00506122	0.001	0.00238175	0.002	0	0.046
10/05/95	21:19:57	0	0.003	0	0.003	0.00525079	0.001	0.00217957	0.002	0	0.046
10/05/95	21:24:57	0	0.003	0	0.004	0.0052437	0.001	0.00227557	0.002	0	0.046
10/05/95	21:29:56	0	0.003	0	0.003	0.0051398	0.001	0.00247106	0.002	0	0.047
10/05/95	21:34:56	0	0.003	0	0.004	0.00513086	0.001	0.00217075	0.002	0	0.047
10/05/95	21:39:57	0	0.003	0	0.004	0.00512689	0.001	0.00236626	0.002	0	0.047
10/05/95	21:44:57	0	0.003	0	0.004	0.00512114	0.001	0.00206815	0.002	0	0.047
10/05/95	21:49:57	0	0.003	0	0.004	0.00512114	0.001	0.00226512	0.002	0	0.048
10/05/95	21:54:56	0	0.003	0	0.004	0.00521659	0.001	0.00255908	0.002	0	0.047
10/05/95	21:59:56	0	0.003	0	0.004	0.00511915	0.001	0.00236269	0.002	0	0.047
10/05/95	22:04:57	0	0.003	0	0.004	0.00511816	0.001	0.0022638	0.002	0	0.048
10/05/95	22:09:57	0	0.003	0	0.003	0.00511617	0.001	0.00206615	0.002	0	0.048
10/05/95	22:14:57	0	0.003	0	0.003	0.00511142	0.001	0.00245741	0.002	0	0.048
10/05/95	22:19:57	0	0.003	0	0.004	0.00510943	0.001	0.00245646	0.002	0	0.048
10/05/95	22:24:58	0	0.003	0	0.004	0.0050102	0.001	0.00245598	0.002	0	0.049
10/05/95	22:29:58	0	0.003	0	0.004	0.00510546	0.001	0.00265091	0.002	0	0.048
10/05/95	22:34:58	0	0.003	0	0.004	0.00509852	0.001	0.0028434	0.002	0	0.048
10/05/95	22:39:58	0	0.003	0	0.004	0.00519151	0.001	0.00274268	0.002	0	0.047
10/05/95	22:44:59	0	0.003	0	0.004	0.00509157	0.001	0.0026437	0.002	0	0.049
10/05/95	22:49:59	0	0.003	0	0.004	0.00518847	0.001	0.00254529	0.002	0	0.049
10/05/95	22:54:58	0	0.003	0	0.004	0.00518667	0.001	0.00244654	0.002	0	0.048
10/05/95	22:59:58	0	0.003	0	0.004	0.00517757	0.0011	0.0029307	0.002	0	0.047
10/05/95	23:04:59	0	0.003	0	0.004	0.00507691	0.001	0.00292898	0.002	0	0.048
10/05/95	23:09:59	0	0.003	0	0.004	0.00507691	0.001	0.00312425	0.002	0	0.048
10/05/95	23:14:59	0	0.003	0	0.004	0.00497538	0.001	0.00302425	0.002	0	0.048
10/05/95	23:19:58	0	0.003	0	0.004	0.00507294	0.001	0.00263403	0.002	0	0.049
10/05/95	23:24:58	0	0.003	0	0.004	0.00507393	0.0011	0.00302484	0.002	0	0.049
10/05/95	23:29:59	0	0.003	0	0.004	0.00507195	0.0011	0.00282859	0.002	0	0.048
10/05/95	23:34:59	0	0.003	0	0.004	0.00497149	0.0011	0.00292441	0.002	0	0.049
10/05/95	23:39:59	0	0.003	0	0.004	0.00506798	0.0011	0.00311876	0.002	0	0.048
10/05/95	23:44:59	0	0.003	0	0.004	0.00506996	0.0011	0.00321748	0.002	0	0.048
10/05/95	23:50:00	0	0.003	0	0.004	0.00497246	0.0011	0.00311998	0.002	0	0.049
10/05/95	23:55:00	0	0.003	0	0.004	0.00506599	0.0011	0.00292269	0.002	0	0.049
10/06/95	00:00:00	0	0.003	0	0.004	0.00506203	0.0011	0.00301775	0.002	0	0.049
10/06/95	00:05:00	0	0.003	0	0.004	0.00496176	0.0011	0.00321055	0.002	0	0.049
10/06/95	00:10:01	0	0.003	0	0.004	0.00505806	0.0011	0.00301538	0.002	0	0.05
10/06/95	00:15:01	0	0.003	0	0.004	0.00495981	0.0011	0.00330654	0.002	0	0.05
10/06/95	00:20:01	0	0.003	0	0.004	0.00495787	0.0011	0.00349967	0.002	0	0.05
10/06/95	00:25:00	0	0.003	0	0.004	0.00495128	0.0011	0.00339794	0.002	0	0.049
10/06/95	00:30:00	0	0.003	0	0.004	0.00495517	0.0011	0.00330345	0.002	0	0.05
10/06/95	00:35:01	0	0.003	0	0.004	0.0050563	0.0011	0.00320881	0.002	0	0.05
10/06/95	00:40:01	0	0.003	0	0.004	0.00505233	0.0011	0.00330345	0.002	0	0.05
10/06/95	00:45:01	0	0.003	0	0.004	0.0048542	0.0011	0.00339794	0.002	0	0.05

Small town POTW

Site: POTW in small											
Upwind data in ppm											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
10/06/95	00:50:01	0	0.003	0	0.004	0.00495128	0.0011	0.00339794	0.002	0	0.051
10/06/95	00:55:01	0	0.004	0	0.005	0.00485515	0.0013	0.00407833	0.002	0	0.051
10/06/95	01:00:02	0	0.003	0	0.004	0.00485897	0.0011	0.0033041	0.002	0	0.05
10/06/95	01:05:02	0	0.003	0	0.004	0.00476179	0.0011	0.0028182	0.002	0	0.05
Run 28											
10/06/95	08:59:50	0	0.003	0	0.003	0.00322438	0.0009	0.00683959	0.002	0	0.041
10/06/95	09:04:49	0	0.003	0	0.003	0.00410694	0.001	0.00518257	0.002	0	0.044
10/06/95	09:09:49	0	0.003	0	0.003	0.00234783	0.0009	0.0089022	0.002	0	0.038
10/06/95	09:14:49	0	0.003	0	0.003	0.00215468	0.0009	0.00950019	0.002	0	0.037
10/06/95	09:19:50	0	0.003	0	0.003	0.00225349	0.0009	0.00940589	0.002	0	0.037
10/06/95	09:24:50	0	0.003	0	0.003	0.00225567	0.001	0.00961113	0.002	0	0.037
10/06/95	09:29:50	0	0.003	0	0.003	0.00206032	0.001	0.01020351	0.002	0	0.037
10/06/95	09:34:50	0	0.003	0	0.003	0.00176872	0.0009	0.01090711	0.002	0	0.039
10/06/95	09:39:50	0	0.003	0	0.003	0.00167175	0.0009	0.01091553	0.002	0	0.04
10/06/95	09:44:50	0	0.003	0	0.003	0.0021626	0.0009	0.01012492	0.002	0	0.038
10/06/95	09:49:51	0	0.003	0	0.003	0.0033417	0.001	0.00786282	0.002	0	0.04
10/06/95	09:54:51	0	0.003	0	0.004	0.00472315	0.0011	0.00551034	0.002	0	0.043
10/06/95	09:59:51	0	0.003	0	0.004	0.00462653	0.0011	0.0056109	0.002	0	0.043
10/06/95	10:04:51	0	0.003	0	0.004	0.00452809	0.001	0.0056109	0.002	0	0.041
10/06/95	10:09:50	0	0.003	0	0.004	0.00443477	0.001	0.00571593	0.002	0	0.042
10/06/95	10:14:50	0	0.003	0	0.004	0.00433705	0.001	0.00620987	0.002	0	0.041
10/06/95	10:20:18	0	0.003	0	0.004	0.00483528	0.0011	0.00434189	0.002	0	0.055
10/06/95	10:25:11	0	0.003	0	0.004	0.0049368	0.0011	0.00434439	0.002	0	0.056
10/06/95	10:30:11	0	0.003	0	0.004	0.00484271	0.0011	0.00484271	0.002	0	0.057
10/06/95	10:35:11	0	0.003	0	0.004	0.0046495	0.001	0.00494628	0.002	0	0.056
Run 29											
10/06/95	10:54:50	0	0.003	0	0.003	0.00326204	0.001	0.00850108	0.002	0	0.04
10/06/95	11:00:00	0	0.003	0	0.003	0.00346107	0.001	0.00751547	0.002	0	0.041
10/06/95	11:04:52	0	0.003	0	0.003	0.00366586	0.001	0.00723264	0.002	0	0.043
10/06/95	11:09:54	0	0.003	0	0.003	0.00327268	0.0009	0.00763624	0.002	0	0.045
10/06/95	11:14:52	0	0.002	0	0.003	0.00178441	0.0008	0.00981428	0.002	0	0.038
10/06/95	11:19:53	0	0.002	0	0.003	0.00119075	0.0008	0.01051826	0.002	0	0.037
10/06/95	11:24:53	0	0.002	0	0.003	0.00158796	0.0008	0.01032177	0.002	0	0.039
10/06/95	11:29:53	0	0.002	0	0.003	0.00169011	0.0009	0.01024009	0.002	0	0.038
10/06/95	11:34:53	0	0.003	0	0.003	0.00159337	0.0009	0.01105398	0.002	0	0.038
10/06/95	11:39:54	0	0.002	0	0.003	0.00089542	0.0009	0.01183938	0.002	0	0.041
10/06/95	11:44:54	0	0.003	0	0.003	0.0020909	0.0009	0.01035491	0.002	0	0.037
10/06/95	11:49:54	0	0.003	0	0.004	0.00348416	0.001	0.00915837	0.002	0	0.037
10/06/95	11:54:57	0	0.003	0	0.004	0.00389049	0.0011	0.00857902	0.002	0	0.036

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 1											
08/01/95	19:39:45	26358.5635	293.1	476.28	30.32	0.0819149	0.0004	2.1340	0.208	0.06539086	0.011
08/01/95	19:44:45	26409.3676	295.1	478.57	32.67	0.10936119	0.0004	2.2083	0.214	0.07700641	0.011
08/01/95	19:49:46	26533.6463	295.8	479.17	35.19	0.14705805	0.0004	2.2093	0.212	0.08335641	0.012
08/01/95	19:54:46	27010.732	285.6	481.40	32.53	0.0859611	0.0004	2.1193	0.21	0.06207742	0.011
08/01/95	19:59:46	26980.9662	284.8	482.53	32.32	0.09539855	0.0004	2.1588	0.216	0.06537873	0.011
08/01/95	20:04:47	26996.9835	289.3	484.95	41.39	0.14365188	0.0005	2.3308	0.212	0.08512331	0.014
08/01/95	20:09:47	27175.0806	285	488.39	37.54	0.16950999	0.0004	2.3535	0.214	0.09064706	0.013
08/01/95	20:14:48	27038.2201	279.6	488.70	32.02	0.04823542	0.0004	2.2072	0.224	0.06605937	0.011
08/01/95	20:19:47	27199.2074	280.3	503.31	136.8	0.17142886	0.0016	2.3582	0.222	0.08858332	0.047
08/01/95	20:24:48	27180.066	266.3	491.34	30.37	0.02667071	0.0004	2.1135	0.233	0.04840985	0.011
08/01/95	20:29:47	27203.1926	259.7	493.67	25.71	0.00100625	0.0003	2.0770	0.237	0.03783518	0.009
08/01/95	20:34:49	27220.4449	256.2	491.78	25.41	0.00100588	0.0003	2.0722	0.245	0.03922936	0.009
08/01/95	20:39:47	27141.6844	259.1	489.26	25.44	0.00090529	0.0003	2.0772	0.243	0.03731818	0.009
08/01/95	20:44:47	27193.8642	252.6	495.81	26.1	0.00080456	0.0003	2.0979	0.244	0.04294313	0.009
08/01/95	20:49:48	27152.0273	252.8	492.79	25.81	0.00100569	0.0003	2.0839	0.261	0.02675146	0.009
08/01/95	20:54:47	27161.682	257	491.28	25.79	0.00070399	0.0003	2.1371	0.269	0.04958071	0.009
08/01/95	20:59:47	27200.5737	257.7	497.22	26.68	0.0071391	0.0003	2.2290	0.262	0.07782624	0.009
08/01/95	21:04:47	27289.1119	261.6	495.52	27.41	0.025133	0.0003	2.2397	0.252	0.08565327	0.01
08/01/95	21:09:48	27286.4497	258.8	502.16	28.69	0.03206375	0.0003	2.2463	0.245	0.08995942	0.01
Run 2											
08/02/95	10:54:38	28191.3834	237.4	530.25	38.51	0.05613853	0.0005	2.0248	0.265	0.04720055	0.013
08/02/95	10:59:39	28412.114	239.5	534.87	39.28	0.06180829	0.0005	2.0193	0.269	0.05135615	0.014
08/02/95	11:04:39	28141.1938	239	531.34	38.9	0.05684642	0.0005	1.9793	0.273	0.0505078	0.014
08/02/95	11:09:38	28541.033	239.9	540.89	39.25	0.05434102	0.0005	1.9743	0.275	0.0542402	0.014
08/02/95	11:14:38	28362.6162	238.4	540.87	38.22	0.05017002	0.0005	1.9647	0.277	0.05239083	0.013
08/02/95	11:19:39	27487.4996	244.6	529.88	36.44	0.0486019	0.0004	1.9474	0.273	0.04769439	0.013
08/02/95	11:24:39	27699.7558	239.2	532.81	37.25	0.05218085	0.0004	1.9553	0.268	0.0526855	0.013
08/02/95	11:29:38	27941.5972	241.5	535.33	37.54	0.05350282	0.0004	1.9386	0.28	0.05400757	0.013
08/02/95	11:34:38	27458.7494	239.8	528.49	36.92	0.05635738	0.0004	1.9492	0.271	0.05222384	0.013
08/02/95	11:39:39	28276.8196	239.4	530.29	37.24	0.06174639	0.0004	1.9597	0.281	0.05861871	0.013
08/02/95	11:44:40	28288.6584	241.9	528.18	37.31	0.06202614	0.0004	1.9287	0.288	0.05779021	0.013
MET DATA LOSS - CONTINUE											
08/02/95	11:59:39	27215.0626	254.1	519.81	35.19	0.05374605	0.0004	1.8982	0.275	0.04991425	0.012
08/02/95	12:04:39	27615.2219	250.9	525.14	35.44	0.05570311	0.0004	1.9298	0.273	0.05257486	0.012
08/02/95	12:09:39	27759.2611	253	522.41	34.9	0.0532098	0.0004	1.9208	0.274	0.05543108	0.012
08/02/95	12:14:40	28019.8053	253.4	523.47	35.13	0.05745536	0.0004	1.9072	0.284	0.05755651	0.012
08/02/95	12:19:40	27750.6301	252.7	517.63	34.8	0.05730135	0.0004	1.9024	0.286	0.06073741	0.012
08/02/95	12:24:39	27674.4224	253	510.53	34.43	0.06422083	0.0004	1.9452	0.272	0.06513104	0.012
08/02/95	12:29:39	27980.7552	266.1	513.13	34.41	0.05918416	0.0004	1.9115	0.284	0.06687305	0.012
08/02/95	12:34:40	27529.4074	270	506.90	33.83	0.05750178	0.0004	1.9013	0.28	0.06568745	0.012
08/02/95	12:39:40	27812.1952	272.8	508.60	34.41	0.06349932	0.0004	1.9145	0.269	0.06430823	0.012
08/02/95	12:44:40	28262.0557	281.1	509.58	33.71	0.06516518	0.0004	1.9240	0.271	0.06779607	0.012
08/02/95	12:49:41	27943.626	281.2	507.37	31.99	0.05847598	0.0004	1.8883	0.274	0.06292744	0.011
08/02/95	12:54:41	27999.775	278	508.67	32.86	0.06214098	0.0004	1.8941	0.28	0.06295064	0.011
08/02/95	12:59:41	27970.8116	272.4	509.56	32.24	0.0626701	0.0004	1.8988	0.271	0.06509996	0.011
08/02/95	13:04:42	28290.9586	269.8	514.08	32.75	0.06333585	0.0004	1.9107	0.275	0.06566661	0.011
08/02/95	13:09:41	27729.1434	251.1	513.66	33.26	0.05708443	0.0004	1.8793	0.278	0.06762934	0.012
08/02/95	13:20:16	27916.7257	267.2	517.06	32.1	0.05289393	0.0004	1.8453	0.283	0.06984841	0.011
08/02/95	13:25:16	27624.9467	266.6	510.27	31.85	0.05511733	0.0004	1.8480	0.28	0.06973408	0.011
08/02/95	13:30:15	27278.9279	258.3	508.43	31.38	0.04942258	0.0004	1.8223	0.282	0.06109321	0.011
08/02/95	13:35:15	27723.6474	255.5	507.65	32.26	0.05346376	0.0004	1.8126	0.294	0.06442028	0.011
08/02/95	13:40:16	29106.3195	258.1	514.29	32.14	0.05179476	0.0004	1.8479	0.291	0.07190331	0.011
08/02/95	13:45:15	29043.8926	266.1	510.56	33.28	0.06130744	0.0004	1.8611	0.294	0.0765328	0.012
08/02/95	13:50:15	29011.5133	262.5	509.95	32.9	0.06090143	0.0004	1.8469	0.294	0.07572078	0.011
08/02/95	13:55:16	28970.4887	262.5	509.90	33.1	0.06185869	0.0004	1.8391	0.302	0.07963418	0.012
08/02/95	14:00:16	28640.982	265.2	508.18	31.79	0.05921777	0.0004	1.8432	0.287	0.07536806	0.011
08/02/95	14:05:18	27902.8327	269.9	506.03	31.77	0.05669924	0.0004	1.8591	0.277	0.07427803	0.011
08/02/95	14:10:19	27900.342	267.9	505.36	32.11	0.06051275	0.0004	1.8495	0.286	0.0775987	0.011
08/02/95	14:15:15	27880.8151	264.1	509.63	31.8	0.05776679	0.0004	1.8495	0.284	0.08115827	0.011
08/02/95	14:20:16	28200.9344	273.7	510.01	32.86	0.06787265	0.0004	1.8323	0.3	0.08395043	0.011
08/02/95	14:35:41	28226.3618	292.1	501.86	29.93	0.04702087	0.0004	1.7819	0.301	0.08223563	0.01

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/02/95	14:40:42	27280.9179	272.3	494.89	30.52	0.05001823	0.0004	1.7733	0.305	0.07416144	0.011
08/02/95	14:45:42	27460.8205	254.7	498.65	30.66	0.05144441	0.0004	1.7977	0.301	0.07589323	0.011
08/02/95	14:50:44	28035.0741	254.8	505.31	32.05	0.05955033	0.0004	1.7751	0.32	0.08102917	0.011
08/02/95	14:55:42	27765.0121	248.4	507.14	30.29	0.05314696	0.0004	1.7825	0.308	0.0787023	0.011
08/02/95	15:00:42	28302.5867	255	506.62	32.15	0.06140516	0.0004	1.7788	0.321	0.08798352	0.011
08/02/95	15:05:43	28249.0025	255.8	500.65	31.38	0.05433657	0.0004	1.7828	0.311	0.09022114	0.011
08/02/95	15:10:43	28044.7677	265.2	499.34	31.48	0.05677285	0.0004	1.7896	0.311	0.08887958	0.011
08/02/95	15:15:42	27693.5533	267	495.68	32.01	0.06094066	0.0004	1.7821	0.313	0.08876139	0.011
08/02/95	15:20:42	27995.6393	272.2	496.38	31.01	0.05514203	0.0004	1.7662	0.313	0.08755454	0.011
08/02/95	15:25:43	28144.0881	275.2	500.31	30.65	0.05323328	0.0004	1.7895	0.307	0.09167954	0.011
08/02/95	15:30:43	27984.0489	272.2	499.87	31.66	0.06213961	0.0004	1.8057	0.303	0.08846477	0.011
08/02/95	15:35:43	27164.4403	256.2	499.03	30.87	0.05522141	0.0004	1.7809	0.301	0.08921166	0.011
08/02/95	15:40:43	28013.1134	257.5	503.51	30.61	0.05861125	0.0004	1.7969	0.311	0.09332871	0.011
08/02/95	15:45:44	29065.4699	261.6	510.62	30	0.04986623	0.0004	1.7727	0.321	0.09707564	0.01
08/02/95	15:50:46	28855.8489	259.2	513.37	30.04	0.05129628	0.0004	1.7823	0.322	0.0948111	0.01
08/02/95	15:55:43	29242.381	267.1	515.39	28.58	0.04148117	0.0003	1.7615	0.325	0.09924754	0.01
08/02/95	16:00:43	27999.4367	262.4	508.60	28.18	0.03627746	0.0003	1.7390	0.325	0.08925895	0.01
08/02/95	16:05:44	28861.792	269.9	509.06	29.37	0.04771153	0.0004	1.7404	0.336	0.08979188	0.01
08/02/95	16:10:44	29498.1856	284.9	506.06	29.8	0.04179606	0.0004	1.7526	0.34	0.09895832	0.01
08/02/95	16:15:45	29968.6133	292.9	504.24	27.15	0.01042831	0.0003	1.7481	0.327	0.0802571	0.009
08/02/95	16:20:45	29053.2251	290.7	498.44	26.33	0.00397855	0.0003	1.7718	0.299	0.07630659	0.009
08/02/95	16:25:45	29090.384	287.8	500.10	26.53	0.01417218	0.0003	1.7820	0.298	0.08024104	0.009
08/02/95	16:30:45	28643.2459	283.2	500.85	26.38	0.00570652	0.0003	1.7749	0.297	0.07550944	0.009
08/02/95	16:35:46	28635.3563	286.3	501.85	26.44	0.0004076	0.0003	1.7312	0.302	0.0320983	0.009
08/02/95	16:40:46	28682.3688	299.3	501.89	26.58	0.00539671	0.0003	1.7593	0.304	0.05712362	0.009
08/02/95	16:45:45	28763.6638	300.8	502.43	26.6	0.00936271	0.0003	1.7675	0.302	0.06004345	0.009
08/02/95	16:50:45	28657.2526	303.5	498.14	27.11	0.02484065	0.0003	1.8088	0.294	0.08622963	0.009
08/02/95	16:55:46	29373.0783	301.8	501.89	26.57	0.01608491	0.0003	1.8097	0.289	0.0821552	0.009
08/02/95	17:00:45	28954.8637	296	496.47	25.75	0.00223679	0.0003	1.8094	0.276	0.06334188	0.009
08/02/95	17:05:45	29108.7468	295	498.13	26.41	0.02053083	0.0003	1.8392	0.281	0.07714305	0.009
08/02/95	17:10:46	28634.3672	286.1	493.90	26.3	0.01614852	0.0003	1.8288	0.276	0.07779726	0.009
08/02/95	17:19:54	29417.6772	325.7	511.56	31.29	0.03921774	0.0004	1.8274	0.282	0.09875556	0.011
08/02/95	17:26:58	29495.2738	330.5	512.64	30.9	0.02847427	0.0004	1.8240	0.282	0.0952871	0.011
08/02/95	17:32:18	29008.4218	331.3	514.78	40.35	0.12506041	0.0005	17.2000	0.282	0.09211766	0.014
Run 3											
08/02/95	17:56:31	28774.3033	280.4	498.58	25.42	0.00791878	0.0003	1.8574	0.265	0.05776647	0.009
08/02/95	18:01:31	28797.5746	285.6	501.72	25.51	0.00568632	0.0003	1.8568	0.267	0.06062027	0.009
08/02/95	18:06:32	29217.4487	289.3	501.01	25.97	0.01177881	0.0003	1.8476	0.284	0.06650968	0.009
08/02/95	18:11:32	29403.965	294	501.08	26.01	0.01036295	0.0003	1.8416	0.288	0.0713215	0.009
08/02/95	18:16:31	28869.9853	297.8	497.13	26.53	0.01888619	0.0003	1.8638	0.277	0.0727017	0.009
08/02/95	18:21:31	29316.2486	299.3	497.25	28.68	0.04041352	0.0003	1.8790	0.278	0.07503917	0.01
08/02/95	18:26:37	29138.3783	298.9	494.22	26.98	0.03106026	0.0003	1.8773	0.273	0.07034235	0.009
08/02/95	18:31:31	29191.2619	295.5	495.95	25.45	0.01116545	0.0003	1.8824	0.267	0.0667897	0.009
08/02/95	18:36:31	29284.0367	295.5	496.56	26.74	0.02547753	0.0003	1.8895	0.276	0.07267694	0.009
08/02/95	18:41:32	29236.4313	296.4	493.92	27.65	0.03349636	0.0003	1.8682	0.284	0.06942881	0.01
08/02/95	18:46:32	29224.5517	294.9	493.12	26.32	0.02861889	0.0003	1.8831	0.275	0.0730695	0.009
08/02/95	18:51:31	29284.9355	294.6	492.61	27.18	0.03978228	0.0003	1.9145	0.271	0.07449029	0.009
08/02/95	18:56:32	29363.5867	293.2	495.45	30.71	0.06687889	0.0004	1.9388	0.264	0.08413141	0.011
08/02/95	19:01:32	29074.4135	291.2	491.22	30.75	0.06207475	0.0004	1.9478	0.26	0.08662065	0.011
08/02/95	19:06:31	28933.9145	292	489.82	26.73	0.03133011	0.0003	1.9178	0.265	0.07817319	0.009
08/02/95	19:11:31	28750.5684	288.8	488.21	26.6	0.03842046	0.0003	1.9295	0.257	0.07582719	0.009
08/02/95	19:16:32	28722.6126	285.5	489.00	29.94	0.05698066	0.0004	1.9541	0.252	0.0788807	0.01
08/02/95	19:21:32	28438.3436	281.2	486.58	25.56	0.02108504	0.0003	1.9406	0.247	0.07136474	0.009
08/02/95	19:26:32	28251.0265	278.8	488.27	25.24	0.01419971	0.0003	1.9063	0.256	0.0670429	0.009
08/02/95	19:31:33	28189.4607	274	487.96	24.98	0.01004122	0.0003	1.9133	0.252	0.06460867	0.009
08/02/95	19:36:32	28168.038	273.5	485.95	25.67	0.02291816	0.0003	1.9221	0.252	0.06358268	0.009
08/02/95	19:41:32	28309.2906	275.3	485.58	27.25	0.04713856	0.0003	1.9660	0.255	0.07075853	0.009
08/02/95	19:46:33	28385.9984	269.8	485.70	25	0.01631507	0.0003	1.9410	0.25	0.06931373	0.009
08/02/95	19:51:32	28266.882	269.6	483.51	25.02	0.0100267	0.0003	1.9237	0.252	0.06218578	0.009
08/02/95	19:56:32	28192.7781	268.7	484.27	25.7	0.03319524	0.0003	2.0001	0.239	0.07458809	0.009
08/02/95	20:01:33	28107.6658	266.7	485.92	26.11	0.03914463	0.0003	2.0141	0.23	0.07596284	0.009
08/02/95	20:06:33	27766.4613	261.2	486.46	26.53	0.03790981	0.0003	1.9948	0.23	0.06995624	0.009

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/02/95	20:11:32	27683.9691	259.9	487.00	26.95	0.0472852	0.0003	2.0260	0.226	0.07082676	0.009
08/02/95	20:16:33	27612.8611	259.9	487.64	29.16	0.05917467	0.0003	2.0551	0.222	0.07139333	0.01
08/02/95	20:21:33	27612.7317	260.3	487.86	28.48	0.05511503	0.0003	2.0362	0.226	0.07116501	0.01
08/02/95	20:26:32	27578.121	258.1	487.08	27.31	0.04842586	0.0003	2.0602	0.219	0.07082281	0.009
08/02/95	20:31:32	27613.989	255.8	487.41	25.67	0.0245065	0.0003	2.0565	0.224	0.07069572	0.009
08/02/95	20:36:33	27600.9067	257.4	489.18	29.49	0.05905597	0.0004	2.0812	0.219	0.07296335	0.01
08/02/95	20:41:33	27616.0411	254	488.58	25.82	0.02922023	0.0003	2.0687	0.22	0.06619894	0.009
08/02/95	20:46:34	27639.1362	251.3	489.51	26.46	0.0356556	0.0003	2.0800	0.218	0.06869243	0.009
08/02/95	20:51:34	27645.5963	254.8	491.85	31.53	0.08868673	0.0004	2.1311	0.22	0.07700948	0.011
08/02/95	20:56:33	27676.2945	254.2	492.27	33.06	0.08796573	0.0004	2.1417	0.222	0.07377447	0.011
08/02/95	21:01:33	27723.0627	257.3	492.18	34.71	0.1308935	0.0004	2.1962	0.224	0.07978366	0.012
08/02/95	21:06:33	27793.5534	260.3	492.83	34.87	0.13364026	0.0004	2.2161	0.227	0.08647902	0.012
08/02/95	21:11:34	27832.3334	259	493.26	36.21	0.14874142	0.0004	2.2440	0.227	0.08663183	0.013
08/02/95	21:16:34	27906.8046	260.2	494.87	38.7	0.18582627	0.0005	2.3223	0.239	0.0944709	0.013
08/02/95	21:21:33	27903.1396	259.6	494.20	36.12	0.14808803	0.0004	2.2824	0.244	0.08881263	0.013
08/02/95	21:26:33	27950.1858	257.9	495.81	37.55	0.16604071	0.0004	2.3221	0.25	0.09241225	0.013
08/02/95	21:31:34	28029.4394	257.1	497.32	40.05	0.14685512	0.0005	2.2970	0.24	0.09170911	0.014
08/02/95	21:36:33	28081.3676	254.1	500.83	35.58	0.12498067	0.0004	2.3004	0.252	0.0952425	0.012
08/02/95	21:41:33	28105.2747	250.4	503.85	35.01	0.10766034	0.0004	2.2835	0.254	0.09279679	0.012
08/02/95	21:46:34	28130.3725	251.7	501.05	37.88	0.17421265	0.0005	2.3623	0.253	0.08926516	0.013
08/02/95	21:51:34	28107.2781	253.9	499.95	38.41	0.10141486	0.0005	2.3122	0.259	0.09287994	0.013
08/02/95	21:56:34	28127.0481	251.8	501.16	36.19	0.05300701	0.0004	2.2937	0.263	0.09035287	0.013
08/02/95	22:01:35	28126.318	250.8	502.58	36.63	0.14441045	0.0004	2.3490	0.254	0.09543734	0.013
08/02/95	22:06:34	28123.6766	252.1	502.61	38.31	0.17696554	0.0005	2.3812	0.29	0.09359912	0.013
08/02/95	22:11:34	28112.9086	251.2	504.93	39.45	0.18652687	0.0005	2.4284	0.283	0.09376485	0.014
08/02/95	22:16:35	28076.593	251.3	507.54	40.28	0.18779559	0.0005	2.5181	0.269	0.09755745	0.014
08/02/95	22:21:35	28063.8323	253.6	510.96	56.62	0.26199405	0.0007	2.5793	0.266	0.10503816	0.02
08/02/95	22:26:34	28046.5648	252.1	513.47	61	0,26710632	0.0007	2.5713	0.286	0.10700283	0.021
08/02/95	22:31:35	27973.2258	247.5	517.58	44.79	0.21330434	0.0005	2.5253	0.278	0.10790454	0.016
08/02/95	22:36:35	27937.5613	248.8	521.29	65.2	0.29009594	0.0008	2.5668	0.288	0.10898632	0.023
08/02/95	22:41:34	27874.077	247.7	524.40	40.91	0.18074171	0.0005	2.4388	0.274	0.11265065	0.014
08/02/95	22:46:34	27882.3881	245.8	535.42	42.82	0.17473368	0.0005	2.4548	0.291	0.11735695	0.015
08/02/95	22:51:35	27803.432	246.5	528.80	53.61	0.25223121	0.0006	2.4888	0.281	0.10838529	0.019
08/02/95	22:56:35	27755.9943	240.4	526.22	31.52	0.05168043	0.0004	2.3813	0.288	0.10306038	0.011
08/02/95	23:01:34	27563.1942	228.8	521.21	27.41	0.00110171	0.0003	2.1983	0.273	0.04997778	0.01
08/02/95	23:06:34	27771.7187	231.7	516.40	27.87	0.00130203	0.0003	2.2253	0.289	0.06810599	0.01
08/02/95	23:11:35	27880.0874	241.1	518.11	36.63	0.08893841	0.0004	2.4504	0.302	0.10336085	0.013
08/02/95	23:16:35	27834.8875	235.5	524.43	39.27	0.12460111	0.0005	2.4715	0.303	0.0953774	0.014
08/02/95	23:21:35	27799.037	241.6	529.93	86.58	0.18088048	0.001	2.4920	0.298	0.11091066	0.03
08/02/95	23:26:35	27745.9625	240.5	530.55	64.45	0.20023179	0.0008	2.5261	0.303	0.10767087	0.022
08/02/95	23:31:36	27371.416	221	530.35	28.5	0.0044029	0.0003	2.1873	0.272	0.0413272	0.01
08/02/95	23:36:35	27435.4455	225.9	517.74	28.19	0.00050024	0.0003	2.2089	0.292	0.06232941	0.01
08/02/95	23:41:36	27525.6235	226.9	521.25	28.95	0.01260125	0.0003	2.2490	0.287	0.07830775	0.01
08/02/95	23:46:35	27556.7266	233.4	522.25	42.24	0.13151301	0.0005	2.3649	0.272	0.09680958	0.015
08/02/95	23:51:35	27489.8915	234.8	531.05	79.4	0.14248752	0.0009	2.4294	0.29	0.10009123	0.028
08/02/95	23:56:36	27326.9057	229.3	524.95	28.75	0.0079993	0.0003	2.2975	0.277	0.08819227	0.01
08/03/95	00:01:35	27286.8223	228.9	522.16	30.76	0.04567894	0.0004	2.3146	0.283	0.08715982	0.011
08/03/95	00:06:35	27247.2517	231	528.66	32.51	0.05106692	0.0004	2.3761	0.284	0.10073475	0.011
08/03/95	00:11:36	27222.4815	234.2	531.06	60.57	0.23640271	0.0007	2.5623	0.28	0.10601153	0.021
08/03/95	00:16:36	27192.5065	235	534.05	77.51	0.28156502	0.0009	2.5334	0.275	0.1046127	0.027
08/03/95	00:21:35	27088.8979	231.8	540.45	42.81	0.19972129	0.0005	2.4791	0.279	0.10964699	0.015
08/03/95	00:26:35	26823.186	224.4	538.15	29.33	0.01837779	0.0003	2.3538	0.267	0.08619584	0.01
08/03/95	00:31:36	26918.8353	229.9	541.84	105.5	0.17096143	0.0013	2.5589	0.275	0.10265674	0.037
08/03/95	00:36:36	26818.2575	228.1	539.85	62.44	0.26707732	0.0007	2.5355	0.284	0.09854404	0.022
08/03/95	00:41:36	26706.036	228.7	541.34	47.46	0.23069173	0.0006	2.5240	0.276	0.09872528	0.016
08/03/95	00:46:36	26535.2054	226.4	537.45	43.37	0.21396139	0.0005	2.5085	0.267	0.09115574	0.015
08/03/95	00:51:36	26491.8152	225.3	534.25	43.79	0.22789667	0.0005	2.5071	0.277	0.09433305	0.015
08/03/95	00:56:37	26467.7577	225.5	534.05	45.79	0.24047441	0.0005	2.6078	0.27	0.09982333	0.016
08/03/95	01:01:37	26440.3551	224.7	530.56	64.16	0.28843552	0.0008	2.6642	0.267	0.09461483	0.022
08/03/95	01:06:36	26365.5625	224.4	534.75	64.69	0.2462719	0.0008	2.5520	0.27	0.09729137	0.022
08/03/95	01:11:37	26292.0202	222.3	536.25	57.41	0.26353488	0.0007	2.5370	0.275	0.09499629	0.02
08/03/95	01:16:37	26166.7851	220.9	543.93	45.19	0.1898573	0.0005	2.4578	0.275	0.09687411	0.016

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	01:21:38	25984.9646	215.9	546.22	40.81	0.12067336	0.0005	2.4290	0.271	0.08267621	0.014
08/03/95	01:26:38	25942.9783	214.8	542.63	65.96	0.2219991	0.0008	2.5565	0.256	0.07808863	0.023
08/03/95	01:31:38	25934.7007	219.3	541.83	82.68	0.27216332	0.001	2.5336	0.265	0.08556839	0.029
08/03/95	01:36:39	25872.3694	217.8	547.52	42.38	0.15238752	0.0005	2.4539	0.27	0.09364652	0.015
08/03/95	01:41:39	25541.1741	209.2	569.95	32.52	0.03250592	0.0004	2.2961	0.26	0.04736291	0.011
08/03/95	01:46:39	25444.0552	206	566.56	29.73	0.0034899	0.0004	2.2493	0.256	0.04138023	0.01
08/03/95	01:51:40	25594.1225	208.4	551.31	39.79	0.07649295	0.0005	2.4190	0.266	0.06233128	0.014
08/03/95	01:56:40	25566.7003	208.8	551.60	40.89	0.13112049	0.0005	2.4614	0.27	0.07268961	0.014
08/03/95	02:01:40	25517.829	208	553.20	44.58	0.20494526	0.0005	2.4977	0.264	0.0730024	0.015
08/03/95	02:06:41	25481.3278	210.1	545.92	44.33	0.2077377	0.0005	2.5824	0.257	0.07509673	0.015
08/03/95	02:11:41	25389.9467	208.5	541.93	40.8	0.1579133	0.0005	2.5048	0.253	0.06759168	0.014
08/03/95	02:16:41	25214.281	207.3	537.34	34.47	0.0598817	0.0004	2.3521	0.255	0.0501173	0.012
08/03/95	02:21:40	25270.6754	207.7	538.54	54.69	0.18412876	0.0007	2.5083	0.255	0.06277117	0.019
08/03/95	02:26:40	25218.0421	209.2	546.90	84.1	0.13423492	0.001	2.6701	0.268	0.07398854	0.029
08/03/95	02:31:41	25164.8659	210.8	558.05	58.05	0.17675593	0.0007	2.7179	0.271	0.08374746	0.02
08/03/95	02:36:41	25185.7156	212.2	583.85	109.2	0.33047101	0.0013	2.8230	0.256	0.07928117	0.038
08/03/95	02:41:41	25192.9073	217.3	607.43	127.7	0.39108012	0.0015	2.8707	0.254	0.08213877	0.044
08/03/95	02:46:42	25175.8822	212.2	597.77	87.56	0.3348275	0.001	2.7702	0.266	0.08223833	0.03
08/03/95	02:51:42	25164.8993	209.7	606.66	47.62	0.23525393	0.0006	2.7145	0.262	0.08884272	0.017
08/03/95	02:56:42	25186.0162	208.2	588.27	55.07	0.27584623	0.0007	2.6831	0.264	0.08510574	0.019
08/03/95	03:01:43	25144.9808	204.8	576.91	87.32	0.10714964	0.001	2.5123	0.277	0.06877512	0.03
08/03/95	03:06:43	24941.0476	201.8	575.82	31.5	0.0022925	0.0004	2.2146	0.265	0.02063254	0.011
08/03/95	03:11:43	25054.7757	202.9	566.25	31.43	0.00189381	0.0004	2.2723	0.263	0.04784356	0.011
08/03/95	03:16:44	25099.031	201.4	548.01	31.01	0.00279087	0.0004	2.2514	0.262	0.03588267	0.011
08/03/95	03:21:44	25187.8406	202.2	543.92	56.65	0.06279467	0.0007	2.4207	0.267	0.05492042	0.02
08/03/95	03:26:44	25191.8276	204.7	546.51	46.03	0.15080689	0.0005	2.5372	0.26	0.06927349	0.016
08/03/95	03:31:45	25168.2775	205.9	549.10	42.23	0.16463077	0.0005	2.4919	0.262	0.07434295	0.015
08/03/95	03:36:45	25202.247	206.2	550.08	38.41	0.10192488	0.0005	2.4237	0.266	0.06874699	0.013
08/03/95	03:41:45	25244.4368	204.9	547.09	35.9	0.0703543	0.0004	2.4161	0.271	0.06706578	0.012
08/03/95	03:46:45	25222.9885	205.8	544.10	39.25	0.11234984	0.0005	2.4370	0.264	0.07307226	0.014
08/03/95	03:51:46	25274.5279	205.9	549.69	42.91	0.17375845	0.0005	2.5186	0.262	0.08194461	0.015
08/03/95	03:56:46	25344.7487	207	553.17	43.05	0.17093515	0.0005	2.5610	0.271	0.08820852	0.015
08/03/95	04:01:45	25317.9924	208.7	551.78	43.82	0.20396431	0.0005	2.5983	0.262	0.08842441	0.015
08/03/95	04:06:45	25255.0885	207.9	548.59	42.44	0.17415721	0.0005	2.5346	0.25	0.08712845	0.015
08/03/95	04:11:46	25288.1357	206.7	545.10	43.67	0.18289562	0.0005	2.5122	0.254	0.08551741	0.015
08/03/95	04:16:46	25306.5794	208.4	547.00	43.07	0.18595535	0.0005	2.5669	0.248	0.08814184	0.015
08/03/95	04:21:46	25300.9455	208.7	549.19	43.12	0.18243142	0.0005	2.5874	0.252	0.08772659	0.015
08/03/95	04:26:47	25337.9431	207.1	551.09	44.04	0.18928114	0.0005	2.5256	0.265	0.09085096	0.015
08/03/95	04:31:47	25346.0819	208.9	552.40	44.15	0.19948518	0.0005	2.5456	0.26	0.09091978	0.015
08/03/95	04:36:47	25394.1638	209.8	555.90	46.46	0.20344931	0.0006	2.5605	0.27	0.09374625	0.016
08/03/95	04:41:48	25371.6032	209.6	552.90	45.74	0.17894847	0.0005	2.5516	0.263	0.08942439	0.016
08/03/95	04:46:48	25337.1453	207.9	551.09	44.13	0.18150246	0.0005	2.5574	0.262	0.08506681	0.015
08/03/95	04:51:48	25298.5511	203.9	549.89	43.18	0.12565555	0.0005	2.4668	0.265	0.07359825	0.015
08/03/95	04:56:49	25343.9814	204.9	551.69	49.02	0.17405553	0.0006	2.5619	0.264	0.08358655	0.017
08/03/95	05:01:49	25319.5934	207.1	548.50	42.08	0.14889185	0.0005	2.5684	0.255	0.08556545	0.015
08/03/95	05:06:48	25355.8352	208	549.09	49.88	0.19044221	0.0006	2.6795	0.258	0.09003629	0.017
08/03/95	05:11:48	25429.0519	208.6	552.29	45.25	0.20702307	0.0005	2.7155	0.262	0.09449103	0.016
08/03/95	05:16:49	25357.0249	211.9	548.20	51.37	0.23747889	0.0006	2.6343	0.26	0.09138403	0.018
08/03/95	05:21:49	25360.3485	209.1	553.18	48.07	0.23504315	0.0006	2.6487	0.256	0.09595021	0.017
08/03/95	05:26:49	25291.0756	209.2	555.26	52.4	0.2417369	0.0006	2.6746	0.251	0.09478317	0.018
08/03/95	05:31:50	25237.7524	211.1	555.54	51.28	0.23393903	0.0006	2.7248	0.249	0.09652099	0.018
08/03/95	05:36:50	25191.6811	210.6	556.74	71.54	0.24538224	0.0009	2.6870	0.25	0.08965507	0.025
08/03/95	05:41:50	25155.5603	210.5	557.53	71.02	0.25702446	0.0008	2.8054	0.254	0.09393383	0.025
08/03/95	05:46:51	25007.3956	211.1	561.51	46.72	0.12388519	0.0006	2.7636	0.26	0.08985408	0.016
08/03/95	05:51:51	25165.0134	210.3	558.83	108.4	0.31225039	0.0013	2.7040	0.256	0.08597334	0.038
08/03/95	05:56:50	25145.2834	209.6	567.30	78.66	0.31624967	0.0009	2.7408	0.259	0.09148047	0.027
08/03/95	06:01:50	24708.832	207.6	625.22	137.9	0.14381339	0.0016	2.6826	0.279	0.08310324	0.048
08/03/95	06:06:51	24680.9158	213	606.79	41.46	0.05363383	0.0005	2.5279	0.273	0.09920766	0.014
08/03/95	06:11:51	24854.6838	213.7	586.47	53.11	0.26737232	0.0006	2.5727	0.283	0.10792372	0.018
08/03/95	06:16:51	24796.4008	216.2	572.95	63.57	0.29179725	0.0008	2.6508	0.269	0.10154226	0.022
08/03/95	06:21:52	24613.0859	215.3	583.61	69.42	0.30852168	0.0008	2.7801	0.262	0.10376914	0.024
08/03/95	06:26:52	24417.6832	207.5	602.84	39.71	0.06598728	0.0005	2.8628	0.266	0.09076984	0.014

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	06:31:52	24178.269	198.1	607.63	34.85	0.0097556	0.0004	2.3350	0.268	0.03125775	0.012
08/03/95	06:36:53	24314.9674	200.2	609.07	35.47	0.00249007	0.0004	2.2399	0.265	0.020319	0.012
08/03/95	06:41:52	24339.5441	199.8	630.90	38.86	0.06216387	0.0005	2.2502	0.28	0.02659896	0.013
08/03/95	06:46:52	24253.3284	201.6	641.68	41.89	0.06197622	0.0005	2.2646	0.267	0.02939387	0.015
08/03/95	06:51:53	24424.0844	200.5	642.12	40.54	0.04206392	0.0005	2.2644	0.28	0.02810906	0.014
08/03/95	06:56:53	24742.4977	203.3	657.40	40.61	0.03260065	0.0005	2.2708	0.309	0.02562192	0.014
08/03/95	07:01:52	25015.8576	206.9	662.11	41.87	0.02263527	0.0005	2.4037	0.427	0.02752129	0.015
08/03/95	07:06:52	25120.6688	203.7	634.40	40.7	0.01077122	0.0005	2.3045	0.376	0.02613017	0.014
08/03/95	07:11:53	25355.5295	203.7	627.09	81.03	0.04087543	0.001	2.4212	0.367	0.05523168	0.028
08/03/95	07:16:53	25504.9843	204.6	650.60	57.86	0.10893092	0.0007	2.8367	0.509	0.08271973	0.02
08/03/95	07:21:52	25558.5937	201.1	642.36	51.93	0.07198312	0.0006	2.6185	0.526	0.06261136	0.018
08/03/95	07:26:52	25394.0515	202.2	601.80	47.97	0.09562981	0.0006	2.5303	0.388	0.06152616	0.017
08/03/95	07:31:53	25379.6781	201.6	577.22	44.15	0.08432781	0.0005	2.3668	0.29	0.05129526	0.015
08/03/95	07:36:53	25567.9773	200.9	582.52	39.64	0.04312002	0.0005	2.2616	0.286	0.03044353	0.014
08/03/95	07:41:52	25724.6867	203.8	576.03	36.48	0.0093826	0.0004	2.2137	0.287	0.01666908	0.013
08/03/95	07:46:52	25571.8128	203.6	565.07	35.61	0.00788979	0.0004	2.2688	0.284	0.01987428	0.012
08/03/95	07:51:53	25788.3327	202.8	568.86	36.28	0.00838915	0.0004	2.1870	0.3	0.01667842	0.013
08/03/95	07:56:53	25888.3743	199.5	566.98	35.85	0.00109899	0.0004	2.1899	0.293	0.02687527	0.012
08/03/95	08:01:52	26052.9229	201.8	571.97	35.95	0.0011989	0.0004	2.2637	0.298	0.05155255	0.012
08/03/95	08:06:52	26313.914	205	581.09	36.51	0.01189571	0.0004	2.3738	0.311	0.07207402	0.013
08/03/95	08:11:53	26388.787	201.2	574.59	36.8	0.02709023	0.0004	2.4137	0.31	0.05637968	0.013
08/03/95	08:16:53	26333.1071	214.1	559.60	40.9	0.08526926	0.0005	2.4966	0.303	0.11185968	0.014
08/03/95	08:21:51	26450.3274	220.8	557.71	40.31	0.07770096	0.0005	2.4766	0.301	0.12800158	0.014
08/03/95	08:26:52	26808.5018	225	557.52	44.8	0.08336313	0.0005	2.4964	0.294	0.13139951	0.016
08/03/95	08:31:52	26737.7358	220.7	555.93	41.93	0.06900358	0.0005	2.4452	0.285	0.1207813	0.015
08/03/95	08:36:53	26808.1247	216.7	563.37	41.97	0.10335107	0.0005	2.5076	0.295	0.12039247	0.015
08/03/95	08:41:51	26669.1314	220	557.27	45.13	0.10707915	0.0005	2.4583	0.269	0.11410403	0.016
08/03/95	08:46:52	27013.8238	223.6	563.72	43.77	0.12686649	0.0005	2.6221	0.275	0.13058309	0.015
08/03/95	08:51:53	26994.5881	218.8	558.80	44.62	0.08462474	0.0005	2.5382	0.274	0.11447456	0.015
08/03/95	08:56:52	27132.0809	222	563.55	46.52	0.11983397	0.0006	2.5692	0.275	0.12426108	0.016
08/03/95	09:01:52	27214.3063	222.8	557.22	40.96	0.10802124	0.0005	2.4861	0.286	0.11748443	0.014
08/03/95	09:06:52	27392.2584	224.6	556.43	42.02	0.12036306	0.0005	2.4772	0.288	0.11885349	0.015
08/03/95	09:11:52	27474.5093	218.5	552.90	39.55	0.09655884	0.0005	2.4507	0.281	0.10450482	0.014
08/03/95	09:16:52	27711.1442	221.3	559.96	42.24	0.12228764	0.0005	2.4735	0.281	0.11725108	0.015
08/03/95	09:21:55	28359.6548	221.4	554.94	38.85	0.07393154	0.0005	2.4686	0.329	0.10792189	0.013
08/03/95	09:26:51	28514.0739	221.9	549.59	40.9	0.09823918	0.0005	2.3961	0.326	0.10207192	0.014
08/03/95	09:31:52	28631.0567	221.4	543.12	39.81	0.09662864	0.0005	2.2908	0.298	0.09046945	0.014
08/03/95	09:36:52	28662.2114	221.1	537.96	39.94	0.08686162	0.0005	2.2618	0.3	0.08645714	0.014
08/03/95	09:41:52	28774.3784	221	535.22	37.49	0.07679211	0.0004	2.2146	0.293	0.0805356	0.013
08/03/95	09:46:53	28667.9487	220.7	533.51	40.61	0.09928101	0.0005	2.2049	0.294	0.08077956	0.014
08/03/95	09:51:53	28809.8901	221.6	530.42	38	0.0824648	0.0005	2.2184	0.279	0.08276761	0.013
08/03/95	09:56:53	28432.4627	222.5	526.77	38.28	0.09153251	0.0005	2.1579	0.273	0.08284399	0.013
08/03/95	10:01:52	28626.314	224.1	527.64	37.12	0.08008662	0.0004	2.1387	0.262	0.07776087	0.013
08/03/95	10:06:52	28871.8691	223.8	531.89	37.96	0.07956635	0.0005	2.0858	0.272	0.07582562	0.013
08/03/95	10:11:53	28871.8691	226.5	531.89	38.44	0.07956635	0.0005	2.0861	0.272	0.07582562	0.013
08/03/95	10:16:52	28498.5037	230.8	529.06	36.33	0.08350928	0.0004	2.0654	0.272	0.07916195	0.013
08/03/95	10:21:52	28627.5084	231.4	531.59	35.69	0.07623002	0.0004	2.0704	0.279	0.08108286	0.012
08/03/95	10:26:54	28931.6197	236.4	530.27	34.66	0.07016397	0.0004	2.0328	0.286	0.08886763	0.012
08/03/95	10:31:54	29193.9763	243.6	528.56	34.79	0.06581664	0.0004	2.0370	0.291	0.09078854	0.012
08/03/95	10:41:50	29062.5453	309.9	520.26	34.64	0.08047626	0.0004	1.9916	0.297	0.09159735	0.012
08/03/95	10:45:57	28223.1051	302.1	501.36	29.52	0.0736014	0.0004	2.0229	0.306	0.11252522	0.01
08/03/95	10:51:58	29465.331	304.1	505.50	41.96	0.02345539	0.0005	1.9920	0.325	0.10787458	0.015
Run 4											
08/03/95	11:11:31	28590.8788	261.5	491.72	30.21	0.06647555	0.0004	1.9925	0.316	0.10341768	0.011
08/03/95	11:16:32	27896.6303	261.7	490.16	30.73	0.06539518	0.0004	1.9429	0.317	0.10469322	0.011
08/03/95	11:21:32	27266.3757	263.2	485.11	32.53	0.07633404	0.0004	1.8845	0.315	0.11094827	0.011
08/03/95	11:26:32	27496.6202	263.8	487.25	30.43	0.06799789	0.0004	1.9267	0.316	0.10950705	0.011
08/03/95	11:31:33	27735.4209	266.4	486.35	32.68	0.07672302	0.0004	1.8987	0.326	0.10619278	0.011
08/03/95	11:36:33	28240.8758	275.3	488.17	32.76	0.0775502	0.0004	1.8585	0.328	0.12410065	0.011
08/03/95	11:41:33	27723.5374	269.3	487.32	30.44	0.06101668	0.0004	1.8636	0.317	0.12366047	0.011
08/03/95	11:46:32	27306.8157	270.8	484.36	30.73	0.06407926	0.0004	1.8487	0.323	0.12368314	0.011
08/03/95	11:51:33	26636.9299	270.8	482.20	30.13	0.05942223	0.0004	1.8514	0.317	0.13258076	0.01

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	11:56:34	27057.4867	279.1	482.60	30.86	0.06511381	0.0004	1.8359	0.33	0.13787008	0.011
08/03/95	12:01:33	27710.2376	272.5	485.56	28.3	0.03764909	0.0003	1.8290	0.324	0.11917109	0.01
08/03/95	12:06:33	28296.6437	288.2	486.24	30.09	0.0487258	0.0004	1.8447	0.339	0.14189606	0.01
08/03/95	12:11:34	28030.2615	289	489.67	30.92	0.06160363	0.0004	1.8528	0.333	0.15360109	0.011
08/03/95	12:16:34	27706.4521	297.7	487.32	30.91	0.06507807	0.0004	1.8501	0.334	0.16834749	0.011
08/03/95	12:21:34	28233.9124	295.7	489.12	30.84	0.06010668	0.0004	1.8518	0.346	0.14909313	0.011
08/03/95	12:26:35	28103.3423	291.3	489.90	30.55	0.04910209	0.0004	1.8768	0.337	0.14301877	0.011
08/03/95	12:31:34	28136.0881	295.5	488.43	29.32	0.02301491	0.0003	1.6796	0.38	0.12325764	0.01
08/03/95	12:36:34	27985.2126	297.9	493.64	30.18	0.05390604	0.0004	1.7663	0.344	0.14535196	0.01
08/03/95	12:41:35	27401.7039	308.2	493.35	30.74	0.0575595	0.0004	1.7829	0.342	0.16837691	0.011
08/03/95	12:46:35	27564.7944	306	495.66	30.35	0.05466448	0.0004	1.7899	0.349	0.15949767	0.011
08/03/95	12:51:34	26904.4841	316.4	490.08	32.09	0.07027363	0.0004	1.8086	0.327	0.19488675	0.011
08/03/95	12:56:34	27268.2903	297.7	491.88	29.11	0.03325588	0.0003	1.7384	0.336	0.13906076	0.01
08/03/95	13:01:35	27309.8995	313.5	494.94	30.67	0.05547069	0.0004	1.7734	0.332	0.17787465	0.011
08/03/95	13:06:35	27036.8469	318.7	493.02	32.59	0.06965593	0.0004	1.7832	0.34	0.17967133	0.011
08/03/95	13:11:34	27322.4363	318.1	494.15	33.51	0.07488013	0.0004	1.7770	0.353	0.17137408	0.012
08/03/95	13:16:34	28128.0785	312.7	494.51	29.54	0.03280314	0.0004	1.7558	0.351	0.15673751	0.01
08/03/95	13:21:35	28333.4933	333.8	499.70	31.02	0.04976537	0.0004	1.7437	0.36	0.19445357	0.011
08/03/95	13:26:34	27487.7061	329.6	496.20	33.51	0.07601507	0.0004	1.7888	0.356	0.19019155	0.012
08/03/95	13:31:34	27484.5297	328.3	496.16	31.07	0.04843631	0.0004	1.8191	0.354	0.18851167	0.011
08/03/95	13:36:35	28060.9692	322.7	498.23	31.3	0.0477093	0.0004	1.7472	0.368	0.16251943	0.011
08/03/95	13:41:35	28247.3748	341.8	500.61	32.55	0.06410208	0.0004	1.8048	0.366	0.20266512	0.011
08/03/95	13:46:35	28540.0373	348.7	501.96	31.52	0.04765866	0.0004	1.7255	0.364	0.21374497	0.011
08/03/95	13:51:36	28428.0333	342.2	500.49	31.86	0.04459348	0.0004	1.7907	0.369	0.19779365	0.011
08/03/95	13:56:35	28491.7991	341.3	504.25	32.72	0.06342979	0.0004	1.7988	0.373	0.18782209	0.011
08/03/95	14:01:35	28465.4573	330.6	505.55	31.82	0.05132692	0.0004	1.7177	0.369	0.16385528	0.011
08/03/95	14:06:36	28790.7187	327	505.26	30.42	0.02272784	0.0004	1.7030	0.378	0.1524102	0.011
08/03/95	14:11:36	28038.2203	344.5	500.99	33.48	0.06659251	0.0004	1.7531	0.372	0.18847324	0.012
08/03/95	14:16:37	27988.5319	301.6	499.48	30.52	0.00729242	0.0004	1.6363	0.367	0.05556622	0.011
08/03/95	14:21:37	27995.4596	356.9	500.83	35.29	0.08040748	0.0004	1.7559	0.376	0.20897728	0.012
08/03/95	14:26:36	28647.1401	352.3	501.13	34.66	0.06777642	0.0004	1.7313	0.373	0.19675699	0.012
08/03/95	14:31:37	27899.4151	344	496.94	34.65	0.0530454	0.0004	1.7854	0.358	0.18802334	0.012
08/03/95	14:36:37	28720.7781	359.5	504.26	36.36	0.07565494	0.0004	1.7959	0.373	0.20802536	0.013
08/03/95	14:41:36	28457.3234	352.7	504.94	33.4	0.05222434	0.0004	1.7623	0.381	0.19107724	0.012
08/03/95	14:46:36	28370.9125	344.7	506.41	32.07	0.0358268	0.0004	1.7644	0.382	0.16801533	0.011
08/03/95	14:51:37	29065.6446	356.4	514.76	32.36	0.04764944	0.0004	1.7717	0.383	0.1887413	0.011
08/03/95	14:56:36	28529.9401	368.3	513.20	32.15	0.04496688	0.0004	1.7974	0.385	0.21678988	0.011
08/03/95	15:01:36	29429.0715	361.4	518.98	33.97	0.05909638	0.0004	1.7408	0.395	0.18853088	0.012
08/03/95	15:06:37	29135.2815	317.8	513.64	32.07	0.00268005	0.0004	1.5847	0.388	0.0545288	0.011
08/03/95	15:11:36	29542.7483	323.3	515.32	33.12	0	0.0004	1.5191	0.4	0	0.012
08/03/95	15:16:36	30064.9759	338.5	521.84	32.85	0.01356236	0.0004	1.6072	0.399	0.10428632	0.011
08/03/95	15:21:37	27857.7078	309.2	501.33	33.92	0	0.0004	1.5596	0.383	0	0.012
08/03/95	15:26:36	28716.9349	320.5	501.92	34.86	0.00185172	0.0004	1.6143	0.398	0.07437755	0.012
08/03/95	15:31:36	28302.1533	328.5	497.62	35.26	0.00411345	0.0004	1.5932	0.4	0.07219098	0.012
08/03/95	15:36:37	28812.3639	361	504.03	39.43	0.05887945	0.0005	1.7138	0.394	0.16962643	0.014
08/03/95	15:41:38	28756.6517	383.3	497.65	38.25	0.07947215	0.0005	1.7892	0.377	0.22831493	0.013
08/03/95	15:46:36	28985.1727	341.9	502.71	37.17	0.03751992	0.0004	1.7265	0.359	0.13729819	0.013
08/03/95	15:51:37	27900.6624	319.5	496.33	33.99	0.00216108	0.0004	1.6180	0.358	0.02757948	0.012
08/03/95	15:56:36	29079.8227	330.1	500.22	34.5	0	0.0004	1.5513	0.374	0	0.012
08/03/95	16:01:37	29412.4806	336.6	507.02	34.03	0	0.0004	1.5464	0.378	0	0.012
08/03/95	16:06:37	28823.8131	384.3	499.95	38.56	0.04894369	0.0005	1.7413	0.374	0.21710389	0.013
08/03/95	16:11:36	28359.0894	340.4	491.49	35.59	0	0.0004	1.6570	0.362	0.10684941	0.012
08/03/95	16:16:37	28441.1451	330.7	493.72	35.85	0	0.0004	1.6000	0.363	0	0.012
08/03/95	16:21:37	28737.4117	334.3	500.14	35.67	0	0.0004	1.5564	0.382	0	0.012
08/03/95	16:26:36	29215.3608	333.2	505.02	35.49	0	0.0004	1.5837	0.381	0.04497305	0.012
08/03/95	16:31:37	28061.9026	321.5	499.63	34.38	0	0.0004	1.6213	0.356	0.04839451	0.012
08/03/95	16:36:37	28611.9692	328.2	499.06	35.53	0	0.0004	1.6420	0.359	0.08570693	0.012
08/03/95	16:41:38	28859.8998	326.9	502.37	35	0	0.0004	1.5895	0.358	0	0.012
08/03/95	16:46:38	29021.6448	329.3	505.52	34.84	0	0.0004	1.6179	0.359	0.05086177	0.012
08/03/95	16:51:37	29229.4923	356.4	509.45	34.59	0.03362664	0.0004	1.7081	0.353	0.15957181	0.012
08/03/95	16:56:38	29098.1833	341.4	507.70	34.5	0.01763851	0.0004	1.6763	0.355	0.10768777	0.012
08/03/95	17:01:38	29346.6289	359.2	502.63	35.7	0.01318635	0.0004	1.6752	0.369	0.16441727	0.012

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 5											
08/03/95	18:14:14	27543.3398	287.4	537.20	27.06	0.00030933	0.0003	1.6283	0.309	0.02309654	0.009
08/03/95	18:19:14	27711.8462	290	542.57	27.43	0	0.0003	1.6136	0.321	0.02762834	0.01
08/03/95	18:24:15	27637.5069	295.9	530.44	27.48	0	0.0003	1.6293	0.326	0.07064334	0.01
08/03/95	18:29:14	27109.8481	282.1	511.38	27.28	0	0.0003	1.6523	0.295	0.03063748	0.009
08/03/95	18:34:14	27022.1867	278.4	511.60	27.03	0	0.0003	1.6486	0.29	0	0.009
08/03/95	18:39:15	27027.8054	278.5	511.69	26.86	0	0.0003	1.6656	0.288	0.02868408	0.009
08/03/95	18:44:15	27461.6853	295.1	517.19	26.8	0.00195553	0.0003	1.7208	0.298	0.11115633	0.009
08/03/95	18:49:15	28027.1416	291	524.18	27.37	0.0009263	0.0003	1.6387	0.319	0.05310802	0.01
08/03/95	18:54:16	28163.439	304.5	522.03	27.14	0.00216098	0.0003	1.6856	0.315	0.11154775	0.009
08/03/95	18:59:16	27812.9356	288.8	522.86	26.89	0	0.0003	1.6350	0.306	0	0.009
08/03/95	19:04:16	27721.9868	293.1	520.61	27.18	0	0.0003	1.6388	0.313	0.02808253	0.009
08/03/95	19:09:17	27777.9358	293.4	516.50	27.09	0	0.0003	1.6591	0.311	0.02396352	0.009
08/03/95	19:14:16	27690.6236	289.9	515.70	27.01	0	0.0003	1.6461	0.305	0	0.009
08/03/95	19:19:17	27511.5447	295.5	507.92	26.67	0	0.0003	1.6583	0.299	0	0.009
08/03/95	19:24:18	27583.6294	297.2	508.38	26.97	0	0.0003	1.6461	0.307	0	0.009
08/03/95	19:29:18	27789.9276	295.2	507.69	26.69	0	0.0003	1.6606	0.301	0	0.009
08/03/95	19:34:17	28097.8466	298.7	504.36	26.57	0	0.0003	1.6857	0.298	0	0.009
08/03/95	19:39:17	27722.7493	308.8	500.71	26.6	0	0.0003	1.6865	0.297	0	0.009
08/03/95	19:44:18	27694.5696	305.7	501.26	26.21	0	0.0003	1.7090	0.286	0	0.009
08/03/95	19:49:17	27763.0633	311.8	498.74	26.11	0	0.0003	1.7088	0.286	0	0.009
08/03/95	19:54:17	27841.7762	307.4	499.20	25.93	0	0.0003	1.7327	0.281	0	0.009
08/03/95	19:59:18	27749.4923	306.6	498.94	25.45	0	0.0003	1.7631	0.268	0	0.009
08/03/95	20:04:18	27466.0089	303.7	499.50	25.26	0	0.0003	1.7628	0.265	0	0.009
08/03/95	20:09:18	27368.549	296.4	502.30	24.85	0	0.0003	1.7693	0.254	0	0.009
08/03/95	20:14:18	27318.6218	292.3	503.46	24.75	0	0.0003	1.7782	0.252	0	0.009
08/03/95	20:19:19	27199.2831	305.5	500.04	24.58	0	0.0003	1.7942	0.245	0	0.009
08/03/95	20:24:18	27235.3674	306.1	502.22	24.36	0	0.0003	1.8087	0.24	0	0.008
08/03/95	20:29:18	27182.8313	298.3	504.08	24.39	0	0.0003	1.8149	0.24	0	0.008
08/03/95	20:34:19	27232.8928	284.4	510.43	24.2	0	0.0003	1.8281	0.236	0	0.008
08/03/95	20:39:19	27333.6487	289.6	513.53	24.06	0	0.0003	1.8601	0.232	0	0.008
08/03/95	20:44:19	27394.9197	285.9	513.66	24.05	0	0.0003	1.8776	0.231	0	0.008
08/03/95	20:49:19	27521.9975	267.8	525.73	24.05	0	0.0003	1.8820	0.23	0	0.008
08/03/95	20:54:20	27504.4597	265.8	523.21	23.98	0	0.0003	1.9018	0.229	0	0.008
08/03/95	20:59:19	27484.6052	268.3	525.13	23.93	0	0.0003	1.9160	0.226	0	0.008
08/03/95	21:04:19	27457.9286	276.5	523.43	23.96	0	0.0003	1.9243	0.227	0	0.008
08/03/95	21:09:20	27598.3222	276.9	531.64	24.05	0	0.0003	1.9468	0.228	0	0.008
08/03/95	21:14:20	27523.1812	269.6	535.68	23.88	0	0.0003	1.9613	0.224	0	0.008
08/03/95	21:19:19	27597.088	265.9	541.54	24.01	0	0.0003	1.9931	0.227	0	0.008
08/03/95	21:24:19	27348.0104	269.7	535.88	24.13	0	0.0003	1.9802	0.229	0	0.008
08/03/95	21:29:20	27388.5838	277.2	541.44	24.07	0	0.0003	1.9874	0.228	0	0.008
08/03/95	21:34:19	27197.4961	277.4	540.03	24.04	0	0.0003	1.9801	0.227	0	0.008
08/03/95	21:39:19	27137.8759	274.3	548.74	24.24	0	0.0003	1.9613	0.229	0	0.008
08/03/95	21:44:20	27136.485	263	552.68	24.28	0	0.0003	1.9657	0.229	0	0.008
08/03/95	21:49:20	27837.3594	273.3	577.12	25.22	0	0.0003	2.0014	0.243	0	0.009
08/03/95	21:54:20	27658.0491	269.5	574.77	25.27	0	0.0003	2.0170	0.24	0	0.009
08/03/95	21:59:21	27361.1508	262.8	569.41	24.89	0	0.0003	2.0068	0.235	0	0.009
08/03/95	22:04:20	27256.3817	256.9	576.74	24.93	0	0.0003	2.0210	0.235	0	0.009
08/03/95	22:09:20	26891.0504	252.3	579.33	25.11	0	0.0003	1.9864	0.233	0	0.009
08/03/95	22:14:21	27010.9317	246.2	586.52	25.58	0.00161105	0.0003	2.1678	0.237	0.02688446	0.009
08/03/95	22:19:21	26744.7306	245.3	579.99	25.15	0.00050355	0.0003	2.0275	0.23	0	0.009
08/03/95	22:24:20	26752.7207	246.1	601.45	26.45	0.00040224	0.0003	1.9672	0.242	0	0.009
08/03/95	22:29:20	26346.2923	241.3	591.11	26.02	0.0003019	0.0003	1.9676	0.235	0	0.009
08/03/95	22:34:21	26167.5517	242	588.42	26.13	0.00030139	0.0003	1.9333	0.238	0	0.009
08/03/95	22:39:21	26186.32	234.3	607.79	26.44	0.00080329	0.0003	1.9964	0.239	0	0.009
08/03/95	22:44:21	25936.7034	230	610.94	26.61	0.0006028	0.0003	1.9845	0.233	0	0.009
08/03/95	22:49:22	26398.5107	215.5	663.85	27.2	0.00341206	0.0003	2.2838	0.25	0.05037807	0.009
08/03/95	22:54:22	26121.894	215.5	680.51	28.12	0.00351503	0.0003	2.1421	0.249	0	0.01
08/03/95	22:59:22	25898.9188	221.6	642.81	27.51	0.00090437	0.0003	1.9979	0.245	0	0.01
08/03/95	23:04:23	25935.5983	227.9	624.90	27.67	0.00050233	0.0003	2.0025	0.241	0	0.01
08/03/95	23:09:23	25575.602	235	586.07	28.21	0.00040142	0.0003	1.9232	0.252	0	0.01
08/03/95	23:14:23	25535.5243	231.2	584.56	27.59	0.00040134	0.0003	1.9248	0.248	0	0.01

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	23:19:23	25381.6209	226.3	581.06	27.24	0.00040136	0.0003	1.9359	0.242	0	0.009
08/03/95	23:24:24	25477.1188	217.3	600.52	27.65	0.0005016	0.0003	2.0016	0.243	0.01284104	0.01
08/03/95	23:29:24	25330.9474	209.9	658.84	28.75	0.00090238	0.0003	2.0515	0.246	0	0.01
08/03/95	23:34:24	25349.3775	211.5	676.83	29.16	0.00090205	0.0003	2.0218	0.255	0	0.01
08/03/95	23:39:24	25207.155	206.8	628.93	28.62	0.00050114	0.0003	2.0878	0.254	0.01964454	0.01
08/03/95	23:44:25	25566.9085	210.1	618.66	28.51	0.00050086	0.0003	2.3467	0.253	0.07522861	0.01
08/03/95	23:49:24	25713.5992	206.4	641.64	29.03	0.00050058	0.0003	2.3654	0.254	0.07839024	0.01
08/03/95	23:54:25	25845.7513	221.5	646.84	28.89	0.00060069	0.0003	2.6615	0.254	0.12013829	0.01
08/03/95	23:59:24	25878.341	207.3	660.63	29.1	0.00060103	0.0003	2.4487	0.254	0.08023717	0.01
08/04/95	00:04:24	25589.7567	202.6	698.00	29.53	0.00070081	0.0004	2.2724	0.255	0.02032339	0.01
08/04/95	00:09:25	25544.8726	215.6	755.47	30.5	0.00060125	0.0004	2.1054	0.263	0	0.011
08/04/95	00:14:25	25395.4327	206.9	684.33	30.8	0.0006017	0.0004	2.0399	0.269	0	0.011
08/04/95	00:19:24	25522.9299	207.4	698.30	30.87	0.00060181	0.0004	2.4850	0.269	0.07241799	0.011
08/04/95	00:24:24	25265.2926	211.6	733.69	31.41	0.00050095	0.0004	2.1190	0.272	0.01813438	0.011
08/04/95	00:29:25	25106.7218	225.6	666.24	31.28	0.00050086	0.0004	1.9596	0.269	0	0.011
08/04/95	00:34:25	24941.5143	222.9	644.06	30.76	0.0005002	0.0004	1.9621	0.267	0	0.011
08/04/95	00:39:24	24868.8848	224	639.56	30.82	0.0005002	0.0004	1.9511	0.266	0	0.011
08/04/95	00:44:24	24988.6334	219.4	668.07	31.2	0.0005002	0.0004	1.9980	0.266	0.01730702	0.011
08/04/95	00:49:25	24905.2546	222.1	669.00	31.52	0.00049992	0.0004	1.9630	0.264	0	0.011
08/04/95	00:54:25	25075.6925	219.6	681.36	31.36	0.00049946	0.0004	2.3052	0.26	0.06383049	0.011
08/04/95	00:59:25	24777.2168	217.4	685.44	31.81	0.00049974	0.0004	1.9632	0.26	0	0.011
08/04/95	01:04:24	24751.1041	225.7	675.52	31.66	0.00049964	0.0004	1.9689	0.26	0	0.011
08/04/95	01:09:24	24969.6446	231	689.49	31.92	0.00049992	0.0004	1.9809	0.265	0	0.011
08/04/95	01:14:25	24987.5073	213.9	735.12	32.05	0.00050002	0.0004	2.1191	0.266	0.02700087	0.011
08/04/95	01:19:25	24744.9995	210.8	715.72	32.02	0.00050002	0.0004	2.1700	0.266	0.03070099	0.011
08/04/95	01:24:24	24936.8599	214.8	716.56	32.33	0.00050011	0.0004	2.3821	0.272	0.05321165	0.011
08/04/95	01:29:24	25035.4514	218.6	719.98	32.41	0.00059924	0.0004	2.7818	0.272	0.0938802	0.011
08/04/95	01:34:25	24643.492	213.8	684.87	32.46	0.00049983	0.0004	2.0823	0.267	0.01879359	0.011
08/04/95	01:39:25	25000.6398	213.9	690.59	32.53	0.00059991	0.0004	2.5800	0.266	0.07178892	0.011
08/04/95	01:44:23	25319.3978	214.2	729.78	32.91	0.00059957	0.0004	2.6405	0.27	0.09543177	0.011
08/04/95	01:49:24	25087.0195	210.6	716.96	33.13	0.00059955	0.0004	2.5635	0.278	0.06704981	0.012
08/04/95	01:54:24	24524.5109	202.9	772.91	33.42	0.00059978	0.0004	2.3108	0.269	0.0170936	0.012
08/04/95	01:59:24	24589.355	203.6	734.97	32.93	0.00060022	0.0004	2.4195	0.268	0.05862183	0.011
08/04/95	02:04:23	24965.0949	215	715.77	32.78	0.00060022	0.0004	2.7274	0.264	0.10423881	0.011
08/04/95	02:09:24	24609.7543	220.5	691.29	32.78	0.00060034	0.0004	2.7659	0.261	0.11776582	0.011
08/04/95	02:14:24	24383.5784	215.6	663.25	32.77	0.00060022	0.0004	2.4794	0.263	0.10143777	0.011
08/04/95	02:19:25	23897.137	200.3	673.53	32.66	0.00060011	0.0004	2.1433	0.262	0.02680498	0.011
08/04/95	02:24:24	23438.0975	199.6	650.68	31.91	0.00049991	0.0004	2.0737	0.256	0.0329938	0.011
08/04/95	02:29:24	23533.3823	211.1	610.77	31.5	0.00049981	0.0004	2.2190	0.254	0.07937026	0.011
08/04/95	02:34:25	23733.8067	215.5	598.41	31.38	0.00050009	0.0004	2.4840	0.253	0.09421749	0.011
08/04/95	02:39:25	23738.3411	214.5	607.69	31.49	0.00049991	0.0004	2.5540	0.252	0.09168278	0.011
08/04/95	02:44:24	23817.1148	217	606.43	31.63	0.00049953	0.0004	2.6050	0.251	0.09601017	0.011
08/04/95	02:49:24	23771.4575	216.5	610.13	31.86	0.00049953	0.0004	2.6000	0.251	0.09760867	0.011
08/04/95	02:54:25	23725.6604	212.9	609.22	32	0.00059933	0.0004	2.5766	0.251	0.09159715	0.011
08/04/95	02:59:25	23712.0757	210.5	604.52	32.22	0.00059933	0.0004	2.5306	0.249	0.09029861	0.011
08/04/95	03:04:24	23581.3916	203	613.98	32.57	0.0005991	0.0004	2.4110	0.248	0.07239161	0.011
08/04/95	03:09:24	23565.4155	205.6	621.67	32.94	0.0005991	0.0004	2.5856	0.251	0.07978054	0.011
08/04/95	03:14:25	23826.5607	212.2	621.95	32.68	0.00059899	0.0004	2.7767	0.25	0.10043081	0.011
08/04/95	03:19:25	23864.6965	211.8	639.52	32.91	0.00059899	0.0004	2.8406	0.253	0.10532257	0.011
08/04/95	03:24:24	23906.3263	213.8	626.84	32.62	0.00059899	0.0004	2.7996	0.254	0.10562206	0.011
08/04/95	03:29:23	23911.4177	210.6	622.25	32.79	0.00059899	0.0004	2.7198	0.251	0.09314309	0.011
08/04/95	03:34:24	23931.9978	212.3	624.93	32.96	0.00059888	0.0004	2.8191	0.26	0.09851557	0.011
08/04/95	03:39:24	23970.0394	210.7	615.90	33.31	0.00059854	0.0004	2.7018	0.259	0.09696392	0.012
08/04/95	03:44:24	23972.9991	210.9	611.91	33.43	0.00059776	0.0004	2.7122	0.258	0.0951432	0.012
08/04/95	03:49:23	23539.8035	199.6	622.62	33.7	0.00059809	0.0004	2.2596	0.26	0.03827805	0.012
08/04/95	03:54:25	23700.1461	202.7	615.26	34.06	0.00059821	0.0004	2.3576	0.264	0.04915264	0.012
08/04/95	03:59:25	24111.5495	208.7	601.77	33.84	0.00059798	0.0004	2.6903	0.264	0.0895977	0.012
08/04/95	04:04:24	23889.8052	208.1	601.96	33.95	0.00059787	0.0004	2.5723	0.265	0.0838015	0.012
08/04/95	04:09:24	24023.0481	209.9	610.14	34.23	0.00059798	0.0004	2.6913	0.268	0.09348459	0.012
08/04/95	04:14:25	23956.5607	209.9	641.00	34.76	0.00059776	0.0004	2.7212	0.271	0.09683685	0.012
08/04/95	04:19:25	23954.2405	209.1	641.83	35.28	0.00059742	0.0004	2.6699	0.269	0.09767853	0.012
08/04/95	04:24:24	23949.0935	211.5	614.06	34.88	0.00059733	0.0004	2.5988	0.272	0.09567253	0.012

Very small town POTW

Site: POTW in very small town in SW U.S.											
Downwind data in ppmv											
Date	Time	H2O		CO2		SF6		CH4		NH3	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/04/95	04:29:24	23957.4427	209.6	621.11	35.12	0.00059722	0.0004	2.7227	0.269	0.09625181	0.012
08/04/95	04:34:25	24036.2865	208	623.31	35.48	0.00059742	0.0004	2.7346	0.265	0.09429314	0.012
08/04/95	04:39:25	23739.1316	201.9	631.18	35.82	0.00059733	0.0004	2.5152	0.269	0.0681953	0.012
08/04/95	04:44:24	23315.5039	198.5	649.97	36.11	0.00059731	0.0004	2.1771	0.272	0.0321552	0.013
08/04/95	04:49:24	23216.4375	203	642.62	36.45	0.00059686	0.0004	2.0275	0.274	0.01492155	0.013
08/04/95	04:54:24	23341.1759	205.7	641.01	36.86	0.00059675	0.0004	2.0539	0.278	0.01959329	0.013
08/04/95	04:59:25	23738.4124	203.2	638.12	37.57	0.00069621	0.0004	2.3936	0.281	0.0591777	0.013
08/04/95	05:04:24	23773.9761	199.9	653.61	37.82	0.0006966	0.0005	2.3591	0.279	0.05672317	0.013
08/04/95	05:09:24	23579.5251	201.4	681.47	37.73	0.0006966	0.0005	2.2677	0.28	0.04806543	0.013
08/04/95	05:14:25	23223.9227	206.6	726.31	37.6	0.00069636	0.0004	2.1328	0.276	0.0244722	0.013
08/04/95	05:19:25	23809.6909	202.6	666.27	38.95	0.00069673	0.0005	2.5764	0.286	0.07564509	0.014
08/04/95	05:24:24	23487.204	200.9	685.38	40.55	0.00069673	0.0005	2.4560	0.304	0.06469646	0.014
08/04/95	05:29:24	23127.0077	199.7	721.71	38.69	0.00069634	0.0005	2.2112	0.282	0.02775408	0.013
08/04/95	05:34:24	23001.2044	207.6	768.10	38.36	0.0006961	0.0005	2.0804	0.278	0.01760144	0.013
08/04/95	05:39:25	23200.1468	205.8	734.56	38.67	0.00069636	0.0005	2.0911	0.281	0.01900078	0.013
08/04/95	05:44:25	23042.6596	215.9	722.40	38.93	0.00069662	0.0005	2.0512	0.282	0.01970453	0.014
08/04/95	05:49:24	23056.8438	221.2	697.39	39.13	0.00069649	0.0005	2.0160	0.284	0.01989983	0.014
08/04/95	05:54:24	23167.4987	220.7	679.92	39.52	0.00069613	0.0005	2.0010	0.285	0.02018768	0.014
08/04/95	05:59:25	23410.3476	207.5	667.19	39.62	0.00069613	0.0005	2.1887	0.293	0.03420966	0.014
08/04/95	06:04:24	23603.0207	203.7	685.46	39.37	0.000696	0.0005	2.6074	0.29	0.05756883	0.014
08/04/95	06:09:24	23339.3007	204	676.60	39.74	0.00069547	0.0005	2.0319	0.289	0.02016874	0.014
08/04/95	06:14:24	23139.6472	206	675.35	39.93	0.00069521	0.0005	2.0103	0.286	0.02095569	0.014
08/04/95	06:19:25	23251.6742	205.2	659.78	40.48	0.00069534	0.0005	1.9998	0.291	0.02076096	0.014
08/04/95	06:24:25	23233.4959	208.5	658.89	40.89	0.00069534	0.0005	1.9978	0.293	0.02235031	0.014
08/04/95	06:29:24	23195.482	209.1	670.43	40.71	0.00069495	0.0005	2.0056	0.297	0.02124565	0.014
08/04/95	06:34:24	23170.2197	214.1	670.01	40.31	0.00069534	0.0005	2.0593	0.318	0.02125763	0.014
08/04/95	06:39:25	23175.9245	216.7	669.40	40.71	0.00069626	0.0005	2.0302	0.294	0.02188238	0.014
08/04/95	06:44:24	23406.2139	209.3	711.54	40.32	0.00069652	0.0005	2.5557	0.285	0.06507475	0.014
08/04/95	06:49:24	23442.4669	206.9	798.61	41.66	0.00069678	0.0005	2.8342	0.295	0.08530578	0.014
08/04/95	06:54:24	23524.942	203.4	749.48	42.04	0.00069756	0.0005	2.6352	0.301	0.06497309	0.015
08/04/95	06:59:25	23710.744	205.2	732.20	41.18	0.00069848	0.0005	2.7813	0.293	0.08112327	0.014
08/04/95	07:04:25	23362.0163	200.6	757.94	41.34	0.00069939	0.0005	2.3716	0.292	0.03197224	0.014
08/04/95	07:09:24	22952.9304	201.3	774.97	40.1	0.00070033	0.0005	2.1170	0.28	0.01880888	0.014
08/04/95	07:14:24	22970.2252	203.1	803.03	39.2	0.00070098	0.0005	2.1330	0.278	0.01542164	0.014
08/04/95	07:19:25	23326.6427	202.4	759.78	39.31	0.00070072	0.0005	2.1232	0.278	0.01501548	0.014
08/04/95	07:24:25	23738.3182	199.7	738.57	38.86	0.00070111	0.0005	2.2344	0.279	0.03365347	0.013
08/04/95	07:29:24	24054.3329	206.4	795.21	39.06	0.00080172	0.0005	2.7603	0.286	0.08107403	0.014
08/04/95	07:34:24	24113.2184	199.8	721.31	38.63	0.0008019	0.0005	2.5685	0.279	0.071469	0.013
08/04/95	07:39:25	24607.8198	198.9	725.28	38.13	0.00070192	0.0005	2.3821	0.282	0.05615362	0.013
08/04/95	07:44:24	24983.1186	198.7	737.84	37.96	0.0007027	0.0005	2.1753	0.285	0.01917377	0.013
08/04/95	07:49:23	25342.1278	199.1	696.52	37.8	0.00080384	0.0005	2.1984	0.292	0.03778028	0.013
08/04/95	07:54:24	25354.8213	202.2	655.61	37.48	0.00090485	0.0004	2.4316	0.296	0.06866784	0.013
08/04/95	07:59:25	25532.7993	205	655.13	37.2	0.0008052	0.0004	2.4846	0.298	0.07790343	0.013
08/04/95	08:04:25	25849.4277	204.8	644.43	36.38	0.00080491	0.0004	2.4565	0.296	0.0757617	0.013
08/04/95	08:09:25	26017.8615	210.7	633.44	36.76	0.00090535	0.0004	2.3646	0.299	0.09234575	0.013
08/04/95	08:14:25	26387.6074	204.9	624.61	36.35	0.00080491	0.0004	2.2555	0.305	0.06570038	0.013
08/04/95	08:19:25	26501.7371	207.5	616.60	36.36	0.00090602	0.0004	2.2226	0.297	0.08274998	0.013
08/04/95	08:24:26	26910.9448	208.3	607.99	35	0.00090669	0.0004	2.3420	0.29	0.0840202	0.012
08/04/95	08:29:26	27059.243	205.8	610.04	34.66	0.0009072	0.0004	2.2416	0.292	0.0721725	0.012
08/04/95	08:34:26	27632.8593	214.8	609.28	34.59	0.00100874	0.0004	2.2896	0.304	0.10258901	0.012
08/04/95	08:39:27	27604.9825	211.6	601.75	34.34	0.0010093	0.0004	2.2768	0.302	0.09406683	0.012
08/04/95	08:44:27	27734.1609	215.4	597.64	34.38	0.00101005	0.0004	2.3107	0.308	0.10221671	0.012

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 1											
08/01/95	19:39:45	0.50549455	0.058	0.12534089	0.024	0.01692706	0.016	0	1.947	0.03526472	0.012
08/01/95	19:44:45	0.50558133	0.058	0.12478263	0.024	0	0.017	0	2.005	0.03356431	0.013
08/01/95	19:49:46	0.50568213	0.058	0.12589137	0.024	0	0.018	0	1.986	0.03164923	0.014
08/01/95	19:54:46	0.50447981	0.058	0.12657344	0.023	0	0.017	0	1.964	0.03849606	0.013
08/01/95	19:59:46	0.50459486	0.058	0.12833976	0.023	0	0.017	0	2.02	0.04140317	0.013
08/01/95	20:04:47	0.50519929	0.058	0.13015304	0.023	0.04019432	0.021	0	1.98	0.04241055	0.017
08/01/95	20:09:47	0.50520625	0.058	0.13143823	0.023	0	0.019	0	2.002	0.0403883	0.015
08/01/95	20:14:48	0.50521318	0.058	0.13564324	0.023	0.04259621	0.017	0	2.099	0.04309971	0.013
08/01/95	20:19:47	0.50532759	0.058	0.13398228	0.023	0.2577976	0.07	0	2.075	0.06351827	0.056
08/01/95	20:24:48	0.50573697	0.058	0.14351859	0.023	0.04106282	0.016	0	2.182	0.04347828	0.012
08/01/95	20:29:47	0.50534116	0.058	0.15697575	0.023	0	0.013	0	2.216	0.04980961	0.011
08/01/95	20:34:49	0.50656162	0.061	0.26303786	0.023	0	0.013	0	2.293	0.04596876	0.01
08/01/95	20:39:47	0.50555574	0.059	0.17934857	0.023	0	0.013	0	2.276	0.04506346	0.01
08/01/95	20:44:47	0.50566292	0.058	0.15447459	0.023	0	0.013	0	2.285	0.05259779	0.011
08/01/95	20:49:48	0.50626634	0.059	0.16262071	0.023	0	0.013	0	2.443	0.0466642	0.011
08/01/95	20:54:47	0.5060652	0.058	0.1472336	0.023	0	0.013	0	2.514	0.04565851	0.011
08/01/95	20:59:47	0.50617223	0.058	0.14328475	0.023	0	0.014	0	2.451	0.05510178	0.011
08/01/95	21:04:47	0.50637972	0.058	0.14345918	0.023	0.02282077	0.014	0	2.356	0.05227664	0.011
08/01/95	21:09:48	0.5065871	0.058	0.14815662	0.023	0.02633449	0.015	0	2.297	0.05779516	0.012
Run 2											
08/02/95	10:54:38	0.50424249	0.057	0.12282186	0.024	0	0.02	0	2.481	0.10133055	0.016
08/02/95	10:59:39	0.50431543	0.057	0.12361658	0.024	0	0.02	0	2.519	0.10421983	0.016
08/02/95	11:04:39	0.50346816	0.057	0.120937	0.025	0	0.02	0	2.551	0.10232356	0.016
08/02/95	11:09:38	0.50257882	0.056	0.12168759	0.024	0	0.02	0	2.576	0.10646404	0.016
08/02/95	11:14:38	0.50270965	0.056	0.12295188	0.025	0	0.02	0	2.589	0.10508449	0.016
08/02/95	11:19:39	0.50326157	0.057	0.12089974	0.026	0	0.019	0	2.556	0.09327128	0.015
08/02/95	11:24:39	0.5026318	0.056	0.12030866	0.025	0	0.019	0	2.508	0.09659009	0.015
08/02/95	11:29:38	0.50171516	0.056	0.12376314	0.026	0	0.019	0	2.624	0.09701172	0.015
08/02/95	11:34:38	0.50278046	0.057	0.12330068	0.026	0	0.019	0	2.54	0.0907364	0.015
08/02/95	11:39:39	0.50224432	0.057	0.12672135	0.026	0	0.019	0	2.626	0.0924178	0.015
08/02/95	11:44:40	0.501857	0.057	0.13484381	0.026	0	0.019	0	2.697	0.08945883	0.015
MET DATA LOSS - (											
08/02/95	11:59:39	0.50247009	0.057	0.13169294	0.026	0	0.018	0	2.57	0.080972	0.014
08/02/95	12:04:39	0.50213531	0.057	0.136735	0.026	0	0.018	0	2.558	0.08395832	0.014
08/02/95	12:09:39	0.50170685	0.056	0.12863243	0.026	0	0.018	0	2.563	0.08077389	0.014
08/02/95	12:14:40	0.5016217	0.056	0.12775725	0.026	0	0.018	0	2.657	0.07920343	0.014
08/02/95	12:19:40	0.50136156	0.056	0.12531512	0.027	0	0.018	0	2.681	0.07498695	0.014
08/02/95	12:24:39	0.50173152	0.056	0.12510419	0.026	0	0.018	0	2.544	0.06786169	0.014
08/02/95	12:29:39	0.5003844	0.056	0.12737241	0.026	0	0.018	0	2.654	0.06889644	0.014
08/02/95	12:34:40	0.50124576	0.056	0.12551355	0.027	0	0.017	0	2.621	0.06396947	0.014
08/02/95	12:39:40	0.50152327	0.056	0.12366189	0.026	0	0.018	0	2.522	0.06521825	0.014
08/02/95	12:44:40	0.50067902	0.056	0.13144342	0.025	0	0.017	0	2.533	0.06395092	0.014
08/02/95	12:49:41	0.50099142	0.056	0.14224433	0.026	0	0.017	0	2.561	0.06161223	0.013
08/02/95	12:54:41	0.50056889	0.056	0.13845092	0.026	0	0.017	0	2.617	0.06112891	0.013
08/02/95	12:59:41	0.50044964	0.056	0.14336166	0.026	0	0.017	0	2.533	0.05983527	0.013
08/02/95	13:04:42	0.49999853	0.056	0.14795254	0.026	0	0.017	0	2.57	0.06272783	0.013
08/02/95	13:09:41	0.49986901	0.056	0.12633606	0.026	0	0.017	0	2.601	0.06184992	0.014
08/02/95	13:20:16	0.49838061	0.056	0.13614349	0.027	0	0.017	0	2.646	0.06081279	0.013
08/02/95	13:25:16	0.49920261	0.056	0.13287032	0.027	0	0.016	0	2.619	0.05532034	0.013
08/02/95	13:30:15	0.49919846	0.056	0.14288909	0.027	0	0.016	0	2.638	0.05185819	0.013
08/02/95	13:35:15	0.49852165	0.056	0.12772462	0.028	0	0.017	0	2.753	0.05214492	0.013
08/02/95	13:40:16	0.49794061	0.056	0.13222898	0.026	0	0.017	0	2.724	0.05910696	0.013
08/02/95	13:45:15	0.49847821	0.056	0.13276512	0.026	0	0.017	0	2.748	0.05755185	0.014
08/02/95	13:50:15	0.49817371	0.056	0.13976878	0.026	0	0.017	0	2.755	0.05704434	0.013
08/02/95	13:55:16	0.49832308	0.056	0.13682046	0.027	0	0.017	0	2.83	0.05617054	0.014
08/02/95	14:00:16	0.49811993	0.056	0.13996926	0.026	0	0.016	0	2.682	0.05292016	0.013
08/02/95	14:05:18	0.49921748	0.056	0.15363664	0.026	0	0.016	0	2.595	0.04806226	0.013
08/02/95	14:10:19	0.49925557	0.056	0.1309923	0.027	0	0.017	0	2.677	0.04535913	0.013
08/02/95	14:15:15	0.49874706	0.056	0.1309923	0.027	0	0.016	0	2.662	0.04952892	0.013
08/02/95	14:20:16	0.49820765	0.055	0.13360838	0.028	0	0.017	0	2.811	0.04965795	0.013
08/02/95	14:35:41	0.49585641	0.055	0.15805932	0.028	0	0.015	0	2.821	0.03511299	0.012

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/02/95	14:40:42	0.49804298	0.055	0.14710044	0.029	0	0.016	0	2.857	0.02831989	0.012
08/02/95	14:45:42	0.49845046	0.055	0.14231255	0.029	0	0.016	0	2.819	0.03402462	0.013
08/02/95	14:50:44	0.4973725	0.055	0.14801057	0.029	0	0.017	0	2.996	0.04092177	0.013
08/02/95	14:55:42	0.49746372	0.056	0.14956492	0.029	0	0.016	0	2.884	0.04194741	0.012
08/02/95	15:00:42	0.49602744	0.055	0.13757608	0.029	0	0.017	0	3.005	0.04215877	0.013
08/02/95	15:05:43	0.49738862	0.055	0.13059127	0.029	0	0.016	0	2.909	0.03741374	0.013
08/02/95	15:10:43	0.49709368	0.055	0.13403285	0.029	0	0.016	0	2.91	0.03577607	0.013
08/02/95	15:15:42	0.49690073	0.055	0.1340083	0.029	0	0.017	0	2.93	0.03138749	0.013
08/02/95	15:20:42	0.49668598	0.055	0.14514279	0.029	0	0.016	0	2.931	0.0315971	0.013
08/02/95	15:25:43	0.49602811	0.055	0.13777425	0.029	0	0.016	0	2.871	0.03406114	0.013
08/02/95	15:30:43	0.49640265	0.055	0.13519702	0.028	0	0.016	0	2.832	0.03203914	0.013
08/02/95	15:35:43	0.49709472	0.055	0.1405543	0.029	0	0.016	0	2.813	0.03041771	0.013
08/02/95	15:40:43	0.49564286	0.055	0.14867243	0.029	0	0.016	0	2.913	0.03287948	0.013
08/02/95	15:45:44	0.49426831	0.055	0.15409481	0.029	0	0.015	0	3.005	0.03678656	0.012
08/02/95	15:50:46	0.49473781	0.055	0.15225065	0.029	0	0.016	0	3.012	0.03645005	0.012
08/02/95	15:55:43	0.49357471	0.055	0.17678148	0.029	0	0.015	0	3.041	0.03441401	0.012
08/02/95	16:00:43	0.49568949	0.055	0.15330814	0.03	0	0.015	0	3.045	0.02797669	0.012
08/02/95	16:05:44	0.49400891	0.055	0.15449937	0.031	0	0.015	0	3.144	0.02958934	0.012
08/02/95	16:10:44	0.49581603	0.055	0.1707697	0.03	0	0.015	0	3.18	0.02909334	0.012
08/02/95	16:15:45	0.49616266	0.056	0.20457892	0.029	0	0.014	0	3.058	0.03148941	0.011
08/02/95	16:20:45	0.49762508	0.056	0.19209267	0.027	0	0.014	0	2.794	0.03091029	0.011
08/02/95	16:25:45	0.49735169	0.056	0.19229301	0.027	0	0.014	0	2.785	0.03415597	0.011
08/02/95	16:30:45	0.49758782	0.056	0.18923215	0.027	0	0.014	0	2.779	0.03413719	0.011
08/02/95	16:35:46	0.49767657	0.057	0.22315964	0.028	0	0.014	0	2.83	0.0325059	0.011
08/02/95	16:40:46	0.49843156	0.057	0.20212189	0.028	0	0.014	0	2.849	0.03523132	0.011
08/02/95	16:45:45	0.49815713	0.057	0.20567427	0.028	0	0.014	0	2.83	0.035619	0.011
08/02/95	16:50:45	0.49884911	0.056	0.18711932	0.027	0	0.014	0	2.749	0.03176345	0.011
08/02/95	16:55:46	0.49822494	0.057	0.20706774	0.026	0	0.014	0	2.705	0.03675096	0.011
08/02/95	17:00:45	0.4991096	0.057	0.20181963	0.025	0	0.013	0	2.581	0.03416191	0.011
08/02/95	17:05:45	0.4986348	0.057	0.19351828	0.026	0	0.014	0	2.625	0.0344552	0.011
08/02/95	17:10:46	0.49908058	0.057	0.19225876	0.025	0	0.014	0	2.579	0.03341423	0.011
08/02/95	17:19:54	0.49733383	0.057	0.1892815	0.025	0	0.016	0	2.64	0.05608341	0.013
08/02/95	17:26:58	0.49870646	0.057	0.1857946	0.025	0	0.016	0	2.635	0.06060951	0.013
08/02/95	17:32:18	0.49902152	0.056	0.17203431	0.025	0	0.021	0	2.64	0.06039502	0.016
Run 3											
08/02/95	17:56:31	0.49898457	0.057	0.20629433	0.024	0	0.013	0	2.478	0.03147207	0.01
08/02/95	18:01:31	0.49927954	0.057	0.20013829	0.024	0	0.013	0	2.503	0.03685956	0.01
08/02/95	18:06:32	0.49816258	0.057	0.20298145	0.025	0	0.013	0	2.654	0.03432103	0.011
08/02/95	18:11:32	0.49782814	0.056	0.20502392	0.025	0	0.013	0	2.699	0.03220643	0.011
08/02/95	18:16:31	0.49916415	0.056	0.1924158	0.025	0	0.014	0	2.593	0.02985237	0.011
08/02/95	18:21:31	0.49826412	0.056	0.19363963	0.025	0	0.015	0	2.606	0.02812699	0.012
08/02/95	18:26:37	0.49848667	0.056	0.18879764	0.025	0	0.014	0	2.556	0.02913168	0.011
08/02/95	18:31:31	0.49838517	0.057	0.19904956	0.024	0	0.013	0	2.499	0.02872566	0.01
08/02/95	18:36:31	0.49838517	0.057	0.20229769	0.025	0	0.014	0	2.586	0.02842115	0.011
08/02/95	18:41:32	0.49838517	0.056	0.1853465	0.025	0	0.014	0	2.656	0.02649257	0.011
08/02/95	18:46:32	0.49869932	0.057	0.19921587	0.024	0	0.014	0	2.573	0.02547284	0.011
08/02/95	18:51:31	0.49890229	0.057	0.19982478	0.024	0	0.014	0	2.539	0.02455947	0.011
08/02/95	18:56:32	0.49961269	0.057	0.1990129	0.024	0	0.016	0	2.47	0.03135899	0.013
08/02/95	19:01:32	0.49964089	0.057	0.19271573	0.024	0	0.016	0	2.431	0.03103738	0.013
08/02/95	19:06:31	0.50036924	0.057	0.206434	0.024	0	0.014	0	2.479	0.02920088	0.011
08/02/95	19:11:31	0.50027698	0.057	0.19777921	0.024	0	0.014	0	2.403	0.02899275	0.011
08/02/95	19:16:32	0.50076064	0.057	0.19527536	0.023	0	0.015	0	2.362	0.02838894	0.012
08/02/95	19:21:32	0.5012765	0.058	0.19655716	0.023	0	0.013	0	2.31	0.02716726	0.01
08/02/95	19:26:32	0.50114822	0.057	0.18926181	0.024	0	0.013	0	2.398	0.02728372	0.01
08/02/95	19:31:33	0.50084394	0.057	0.18855182	0.024	0	0.013	0	2.359	0.02596518	0.01
08/02/95	19:36:32	0.50115723	0.057	0.18020162	0.024	0	0.013	0	2.359	0.02393224	0.011
08/02/95	19:41:32	0.50118934	0.057	0.17578121	0.024	0	0.014	0	2.387	0.02382271	0.011
08/02/95	19:46:33	0.50120716	0.057	0.18534329	0.024	0	0.013	0	2.338	0.02168587	0.01
08/02/95	19:51:32	0.50153746	0.057	0.18199976	0.024	0	0.013	0	2.357	0.02177515	0.01
08/02/95	19:56:32	0.50207801	0.058	0.18297864	0.023	0	0.013	0	2.236	0.02651571	0.011
08/02/95	20:01:33	0.50271012	0.058	0.18429333	0.023	0	0.013	0	2.154	0.02953548	0.011
08/02/95	20:06:33	0.50293685	0.058	0.19500808	0.023	0	0.014	0	2.155	0.03113659	0.011

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/02/95	20:11:32	0.50316303	0.058	0.18924184	0.023	0	0.014	0	2.118	0.03344316	0.011
08/02/95	20:16:33	0.50338864	0.058	0.18166422	0.023	0	0.015	0	2.076	0.03281872	0.012
08/02/95	20:21:33	0.50340414	0.058	0.18492809	0.023	0	0.015	0	2.118	0.0331094	0.012
08/02/95	20:26:32	0.50362889	0.058	0.18210139	0.023	0	0.014	0	2.045	0.0338981	0.011
08/02/95	20:31:32	0.5039465	0.058	0.1834458	0.023	0	0.013	0	2.092	0.03378469	0.011
08/02/95	20:36:33	0.50399132	0.058	0.18654028	0.022	0	0.015	0	2.046	0.03587701	0.012
08/02/95	20:41:33	0.5043009	0.059	0.1978915	0.023	0	0.013	0	2.061	0.03627339	0.011
08/02/95	20:46:34	0.504416	0.058	0.18019174	0.022	0	0.014	0	2.038	0.03767004	0.011
08/02/95	20:51:34	0.50433656	0.058	0.17898411	0.022	0	0.016	0	2.06	0.03805174	0.013
08/02/95	20:56:33	0.50454488	0.058	0.1747237	0.022	0.03271037	0.017	0	2.074	0.0408628	0.014
08/02/95	21:01:33	0.50455873	0.058	0.16147892	0.022	0	0.018	0	2.098	0.04165251	0.014
08/02/95	21:06:33	0.50449448	0.058	0.16018731	0.022	0	0.018	0	2.126	0.04223394	0.014
08/02/95	21:11:34	0.50451481	0.058	0.15457047	0.022	0	0.019	0	2.126	0.0417079	0.015
08/02/95	21:16:34	0.50481631	0.058	0.1567815	0.022	0	0.02	0	2.239	0.04391892	0.016
08/02/95	21:21:33	0.50494601	0.058	0.15160436	0.022	0	0.019	0	2.281	0.04350211	0.015
08/02/95	21:26:33	0.50495259	0.058	0.15398694	0.022	0	0.019	0	2.342	0.04429761	0.015
08/02/95	21:31:34	0.50505304	0.058	0.15931069	0.022	0.04198731	0.021	0	2.249	0.04700971	0.016
08/02/95	21:36:33	0.50534788	0.058	0.16406224	0.022	0.02029429	0.018	0	2.363	0.04963059	0.015
08/02/95	21:41:33	0.50475829	0.058	0.16600984	0.022	0	0.018	0	2.375	0.05774692	0.014
08/02/95	21:46:34	0.50476483	0.058	0.16196254	0.022	0	0.02	0	2.368	0.052314	0.015
08/02/95	21:51:34	0.50526689	0.058	0.15995432	0.022	0.0532177	0.02	0	2.425	0.05100866	0.016
08/02/95	21:56:34	0.50597605	0.059	0.16484379	0.022	0.05712309	0.019	0	2.464	0.04989486	0.015
08/02/95	22:01:35	0.50508532	0.059	0.16699026	0.022	0	0.019	0	2.38	0.04957523	0.015
08/02/95	22:06:34	0.50551551	0.058	0.16231873	0.022	0	0.02	0	2.716	0.04855517	0.016
08/02/95	22:11:34	0.50552793	0.058	0.15523849	0.022	0	0.02	0	2.653	0.05405268	0.016
08/02/95	22:16:35	0.50543382	0.058	0.14899319	0.022	0.02376271	0.021	0	2.52	0.05765214	0.016
08/02/95	22:21:35	0.50554628	0.058	0.14733407	0.022	0.05231863	0.029	0	2.492	0.06244158	0.023
08/02/95	22:26:34	0.50605928	0.058	0.14647766	0.022	0.06482288	0.031	0	2.674	0.06181718	0.025
08/02/95	22:31:35	0.50666042	0.058	0.14767994	0.022	0.03917426	0.023	0	2.604	0.05971319	0.018
08/02/95	22:36:35	0.50736738	0.058	0.14725174	0.023	0.06180566	0.034	0	2.698	0.06370892	0.027
08/02/95	22:41:34	0.5075788	0.058	0.14919953	0.022	0.03604821	0.021	0	2.565	0.05777727	0.017
08/02/95	22:46:34	0.50837987	0.058	0.1497002	0.023	0.04886535	0.022	0	2.727	0.06558771	0.017
08/02/95	22:51:35	0.50876978	0.058	0.14855396	0.023	0.0589007	0.028	0	2.632	0.06170549	0.022
08/02/95	22:56:35	0.50829101	0.058	0.15303816	0.023	0.03255066	0.016	0	2.699	0.06329851	0.013
08/02/95	23:01:34	0.50869163	0.059	0.1656578	0.023	0	0.014	0	2.559	0.05789009	0.011
08/02/95	23:06:34	0.50738961	0.058	0.16145125	0.023	0	0.014	0	2.704	0.06249726	0.011
08/02/95	23:11:35	0.50738961	0.058	0.15784564	0.023	0.04807481	0.019	0	2.83	0.06209664	0.015
08/02/95	23:16:35	0.50731167	0.059	0.15582645	0.022	0.04363541	0.02	0	2.837	0.06705441	0.016
08/02/95	23:21:35	0.50780667	0.058	0.15445411	0.023	0.16766729	0.045	0	2.793	0.07247231	0.035
08/02/95	23:26:35	0.50803439	0.058	0.15400136	0.023	0.10957212	0.033	0	2.839	0.06964584	0.026
08/02/95	23:31:36	0.50913511	0.058	0.16070578	0.023	0	0.015	0	2.55	0.06514288	0.012
08/02/95	23:36:35	0.50823981	0.058	0.16347714	0.023	0	0.015	0	2.729	0.0610288	0.012
08/02/95	23:41:36	0.50765023	0.059	0.17151697	0.023	0	0.015	0	2.682	0.06660659	0.012
08/02/95	23:46:35	0.50775024	0.059	0.16611644	0.023	0.06000594	0.022	0	2.55	0.06700663	0.017
08/02/95	23:51:35	0.50815548	0.059	0.15808615	0.023	0.15858611	0.041	0	2.714	0.07719324	0.032
08/02/95	23:56:36	0.50875543	0.059	0.16288573	0.023	0	0.015	0	2.595	0.06579424	0.012
08/03/95	00:01:35	0.50846563	0.059	0.15972638	0.023	0.02009074	0.016	0	2.653	0.06367065	0.013
08/03/95	00:06:35	0.50897033	0.059	0.15949669	0.023	0.02878136	0.017	0	2.655	0.0688554	0.013
08/03/95	00:11:36	0.50887532	0.059	0.15467092	0.023	0.09791828	0.031	0	2.619	0.07114063	0.025
08/03/95	00:16:36	0.50907515	0.059	0.15596984	0.023	0.12719385	0.04	0	2.57	0.07423804	0.032
08/03/95	00:21:35	0.50958888	0.059	0.1613748	0.023	0.04403855	0.022	0	2.608	0.07269855	0.017
08/03/95	00:26:35	0.51088263	0.059	0.16849638	0.024	0.02157393	0.015	0	2.502	0.06731865	0.012
08/03/95	00:31:36	0.50998832	0.059	0.16187411	0.024	0.21979328	0.054	0	2.576	0.08158615	0.043
08/03/95	00:36:36	0.50969336	0.059	0.1595475	0.024	0.09634752	0.032	0	2.656	0.07657881	0.025
08/03/95	00:41:36	0.50989759	0.059	0.1570221	0.024	0.05909541	0.024	0	2.585	0.07237192	0.019
08/03/95	00:46:36	0.51009273	0.058	0.15355698	0.024	0.04582747	0.022	0	2.501	0.0703886	0.018
08/03/95	00:51:36	0.5094983	0.058	0.15362811	0.024	0.03284188	0.023	0	2.593	0.07297086	0.018
08/03/95	00:56:37	0.50969794	0.059	0.15292935	0.024	0.04112721	0.024	0	2.528	0.07426856	0.019
08/03/95	01:01:37	0.50960269	0.058	0.15290077	0.024	0.08802773	0.033	0	2.5	0.0746539	0.026
08/03/95	01:06:36	0.509707	0.059	0.15307176	0.024	0.11764772	0.033	0	2.529	0.07683524	0.026
08/03/95	01:11:37	0.51010614	0.059	0.15367047	0.024	0.08302197	0.03	0	2.573	0.07643609	0.023
08/03/95	01:16:37	0.51070915	0.059	0.15404081	0.024	0.06245437	0.023	0	2.572	0.07502506	0.018

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	01:21:38	0.51161517	0.059	0.1539832	0.024	0.05485153	0.021	0	2.538	0.0730024	0.017
08/03/95	01:26:38	0.51111652	0.059	0.15338482	0.025	0.12905069	0.034	0	2.399	0.07719106	0.027
08/03/95	01:31:38	0.51081733	0.059	0.15268671	0.024	0.15547915	0.043	0	2.481	0.07958458	0.034
08/03/95	01:36:39	0.51151544	0.059	0.15328509	0.024	0.05704559	0.022	0	2.528	0.07619376	0.017
08/03/95	01:41:39	0.51490966	0.059	0.15295728	0.025	0.03818947	0.017	0	2.434	0.07308845	0.013
08/03/95	01:46:39	0.51461052	0.059	0.15345584	0.025	0	0.015	0	2.392	0.07039625	0.012
08/03/95	01:51:40	0.51251274	0.059	0.15508023	0.025	0.06661968	0.021	0	2.494	0.07449835	0.016
08/03/95	01:56:40	0.51241687	0.059	0.1548518	0.025	0.05723434	0.021	0	2.523	0.07598008	0.017
08/03/95	02:01:40	0.51261247	0.059	0.15438212	0.025	0.06233128	0.023	0	2.469	0.07639322	0.018
08/03/95	02:06:41	0.51201409	0.059	0.15438212	0.025	0.06013722	0.023	0	2.405	0.07479754	0.018
08/03/95	02:11:41	0.51242069	0.059	0.15472313	0.025	0.05323592	0.021	0	2.366	0.0741714	0.017
08/03/95	02:16:41	0.51153519	0.059	0.154437	0.025	0.04284381	0.018	0	2.382	0.07363158	0.014
08/03/95	02:21:40	0.51153519	0.059	0.15493518	0.025	0.10910227	0.028	0	2.383	0.0772185	0.022
08/03/95	02:26:40	0.51214408	0.059	0.15375276	0.025	0.17834922	0.043	0	2.51	0.08384704	0.034
08/03/95	02:31:41	0.51393653	0.059	0.15086492	0.025	0.1218869	0.03	0	2.537	0.08006297	0.024
08/03/95	02:36:41	0.5174192	0.059	0.14890119	0.025	0.21642963	0.056	0	2.4	0.08246835	0.045
08/03/95	02:41:41	0.51891792	0.059	0.14317037	0.025	0.18528516	0.066	0	2.373	0.08054578	0.052
08/03/95	02:46:42	0.51702624	0.059	0.14526117	0.025	0.14715286	0.045	0	2.489	0.08164096	0.036
08/03/95	02:51:42	0.5176184	0.059	0.14362242	0.025	0.07679118	0.025	0	2.451	0.07908197	0.019
08/03/95	02:56:42	0.51611547	0.059	0.14420141	0.025	0.08560401	0.028	0	2.467	0.08052159	0.022
08/03/95	03:01:43	0.515016	0.059	0.1473183	0.025	0.18629087	0.045	0	2.59	0.08950733	0.036
08/03/95	03:06:43	0.51611241	0.059	0.15399646	0.025	0	0.016	0	2.478	0.07824416	0.013
08/03/95	03:11:43	0.51521535	0.059	0.15349809	0.025	0	0.016	0	2.463	0.07804481	0.013
08/03/95	03:16:44	0.51362056	0.059	0.15628897	0.025	0	0.016	0	2.457	0.07625068	0.013
08/03/95	03:21:44	0.51292284	0.059	0.15449483	0.025	0.11293074	0.029	0	2.5	0.08512167	0.023
08/03/95	03:26:44	0.51252415	0.059	0.15309939	0.025	0.08243047	0.024	0	2.432	0.08352688	0.019
08/03/95	03:31:45	0.5122289	0.059	0.15277177	0.025	0.04614046	0.022	0	2.449	0.08211607	0.017
08/03/95	03:36:45	0.51231451	0.059	0.1534353	0.025	0.03945479	0.02	0	2.491	0.08199822	0.016
08/03/95	03:41:45	0.51231082	0.059	0.15366335	0.025	0.02790255	0.019	0	2.535	0.08151532	0.015
08/03/95	03:46:45	0.51180488	0.059	0.15322246	0.025	0.04884776	0.02	0	2.467	0.08094771	0.016
08/03/95	03:51:46	0.51230332	0.059	0.15312277	0.025	0.0475518	0.022	0	2.455	0.08334026	0.018
08/03/95	03:56:46	0.51240676	0.059	0.15289476	0.025	0.04943664	0.022	0	2.536	0.0845207	0.018
08/03/95	04:01:45	0.51240301	0.059	0.15152774	0.025	0.04914683	0.023	0	2.452	0.0829415	0.018
08/03/95	04:06:45	0.51210395	0.059	0.14963364	0.025	0.0428664	0.022	0	2.337	0.08403808	0.017
08/03/95	04:11:46	0.51170906	0.059	0.15120036	0.025	0.02521667	0.023	0	2.373	0.0828263	0.018
08/03/95	04:16:46	0.51210011	0.059	0.15115727	0.025	0.02991239	0.022	0	2.326	0.08305673	0.018
08/03/95	04:21:46	0.51180488	0.059	0.1519265	0.025	0.0428664	0.022	0	2.363	0.08593218	0.018
08/03/95	04:26:47	0.51229568	0.059	0.15357901	0.025	0.03320897	0.023	0	2.479	0.08686189	0.018
08/03/95	04:31:47	0.5122213	0.059	0.15572006	0.025	0.04695528	0.023	0	2.435	0.08703176	0.018
08/03/95	04:36:47	0.51261247	0.059	0.1569751	0.025	0.07320186	0.024	0	2.528	0.08736353	0.019
08/03/95	04:41:48	0.51212161	0.059	0.15801299	0.025	0.07566679	0.024	0	2.465	0.0878293	0.019
08/03/95	04:46:48	0.51149787	0.059	0.15387819	0.025	0.05943707	0.023	0	2.449	0.08696162	0.018
08/03/95	04:51:48	0.51189678	0.059	0.15437682	0.025	0.06502176	0.022	0	2.476	0.08935506	0.018
08/03/95	04:56:49	0.51179308	0.059	0.153508	0.025	0.08877331	0.025	0	2.467	0.09066847	0.02
08/03/95	05:01:49	0.51169732	0.059	0.15078666	0.025	0.0400901	0.022	0	2.39	0.08755998	0.017
08/03/95	05:06:48	0.51150186	0.059	0.15095786	0.025	0.09063454	0.026	0	2.416	0.08933834	0.02
08/03/95	05:11:48	0.51182643	0.059	0.15280037	0.025	0.06179793	0.023	0	2.452	0.08761352	0.018
08/03/95	05:16:49	0.51063442	0.059	0.1522735	0.025	0.0845078	0.026	0	2.43	0.08919161	0.021
08/03/95	05:21:49	0.51163483	0.059	0.15154753	0.025	0.06974574	0.025	0	2.395	0.08977273	0.02
08/03/95	05:26:49	0.51135119	0.059	0.15193184	0.025	0.09050199	0.027	0	2.35	0.09119893	0.021
08/03/95	05:31:50	0.51106374	0.059	0.15254297	0.025	0.08716741	0.026	0	2.333	0.09084914	0.021
08/03/95	05:36:50	0.51126275	0.059	0.15214495	0.025	0.15443359	0.037	0	2.343	0.0950284	0.029
08/03/95	05:41:50	0.5119593	0.059	0.15154791	0.025	0.15035384	0.037	0	2.382	0.09363532	0.029
08/03/95	05:46:51	0.51275535	0.059	0.15174692	0.025	0.08438124	0.024	0	2.432	0.09104815	0.019
08/03/95	05:51:51	0.5119593	0.059	0.15363754	0.025	0.23861582	0.056	0	2.401	0.09861062	0.044
08/03/95	05:56:50	0.51304716	0.059	0.15349606	0.025	0.16414722	0.041	0	2.428	0.09586038	0.032
08/03/95	06:01:50	0.51902202	0.059	0.14610246	0.026	0.30663602	0.071	0	2.614	0.10788492	0.056
08/03/95	06:06:51	0.5184272	0.059	0.14955779	0.026	0.06348494	0.021	0	2.559	0.09622248	0.017
08/03/95	06:11:51	0.51564661	0.059	0.15109321	0.026	0.07579528	0.027	0	2.652	0.09449542	0.022
08/03/95	06:16:51	0.51377797	0.059	0.15027459	0.026	0.10721112	0.033	0	2.521	0.09497831	0.026
08/03/95	06:21:52	0.51586099	0.059	0.14893807	0.026	0.12595564	0.036	0	2.448	0.09342208	0.028
08/03/95	06:26:52	0.51943835	0.059	0.1472024	0.026	0.059717	0.02	0	2.487	0.09166559	0.016

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	06:31:52	0.5206307	0.059	0.1466327	0.027	0	0.018	0	2.505	0.08929364	0.014
08/03/95	06:36:53	0.52012649	0.059	0.14900598	0.026	0	0.018	0	2.48	0.09422437	0.014
08/03/95	06:41:52	0.52191745	0.059	0.14813729	0.026	0.03685998	0.02	0	2.622	0.09483974	0.016
08/03/95	06:46:52	0.52171624	0.059	0.14756718	0.026	0	0.022	0	2.5	0.09366181	0.017
08/03/95	06:51:53	0.52211089	0.06	0.15210791	0.026	0	0.021	0	2.618	0.09588978	0.017
08/03/95	06:56:53	0.52220858	0.06	0.15143849	0.026	0	0.021	0	2.889	0.0991977	0.017
08/03/95	07:01:52	0.52081054	0.06	0.15475741	0.026	0	0.022	0	3.992	0.10310513	0.017
08/03/95	07:06:52	0.51881355	0.059	0.16665464	0.025	0	0.021	0	3.521	0.10103001	0.017
08/03/95	07:11:53	0.5164262	0.059	0.15961358	0.025	0.13060199	0.042	0	3.439	0.11325486	0.033
08/03/95	07:16:53	0.51884206	0.059	0.14949349	0.025	0.08760318	0.03	0	4.766	0.11182113	0.024
08/03/95	07:21:52	0.51883678	0.059	0.14944972	0.025	0	0.027	0	4.923	0.10947017	0.021
08/03/95	07:26:52	0.51574282	0.059	0.15177118	0.025	0.05813574	0.025	0	3.633	0.10400614	0.02
08/03/95	07:31:53	0.51415017	0.059	0.15328701	0.025	0	0.023	0	2.711	0.09670255	0.018
08/03/95	07:36:53	0.51424619	0.059	0.15181841	0.025	0	0.02	0	2.674	0.09881672	0.016
08/03/95	07:41:52	0.51344767	0.059	0.15221767	0.025	0	0.019	0	2.685	0.09831764	0.015
08/03/95	07:46:52	0.51303619	0.059	0.15260255	0.025	0	0.018	0	2.654	0.09687465	0.015
08/03/95	07:51:53	0.5126367	0.059	0.18985435	0.025	0	0.019	0	2.807	0.09917168	0.015
08/03/95	07:56:53	0.51232849	0.059	0.17583817	0.025	0	0.018	0	2.745	0.09860925	0.015
08/03/95	08:01:52	0.51212868	0.059	0.16494819	0.025	0	0.019	0	2.793	0.09860925	0.015
08/03/95	08:06:52	0.51251524	0.059	0.16154177	0.024	0.02019272	0.019	0	2.911	0.10116353	0.015
08/03/95	08:11:53	0.51181549	0.058	0.15924259	0.024	0.02699027	0.019	0	2.904	0.10106357	0.015
08/03/95	08:16:53	0.51051596	0.058	0.15684346	0.024	0.0257907	0.021	0	2.834	0.09926422	0.017
08/03/95	08:21:51	0.51010631	0.056	0.15720195	0.024	0.03390042	0.021	0	2.821	0.10260127	0.016
08/03/95	08:26:52	0.50978606	0.058	0.16722664	0.023	0.07285517	0.023	0	2.754	0.10007579	0.018
08/03/95	08:31:52	0.51076671	0.059	0.17065617	0.024	0.06289441	0.022	0	2.67	0.09864808	0.017
08/03/95	08:36:53	0.51094122	0.058	0.17151666	0.024	0.03759132	0.022	0	2.76	0.10164693	0.017
08/03/95	08:41:51	0.51201296	0.058	0.16167246	0.024	0.07185443	0.023	0	2.514	0.09925143	0.018
08/03/95	08:46:52	0.51168481	0.058	0.1606172	0.024	0.05142965	0.023	0	2.578	0.10275885	0.018
08/03/95	08:51:53	0.5115676	0.058	0.15779197	0.024	0.07155916	0.023	0	2.564	0.10160999	0.018
08/03/95	08:56:52	0.51213678	0.058	0.15494905	0.024	0.07073323	0.024	0	2.576	0.10504338	0.019
08/03/95	09:01:52	0.51171666	0.058	0.15151162	0.024	0.03020165	0.021	0	2.673	0.09815537	0.017
08/03/95	09:06:52	0.51134175	0.058	0.15125893	0.024	0.04126159	0.022	0	2.694	0.09731696	0.017
08/03/95	09:11:52	0.5102531	0.058	0.14986736	0.023	0.02534669	0.02	0	2.63	0.09444661	0.016
08/03/95	09:16:52	0.5103041	0.058	0.14908213	0.023	0.02699595	0.022	0	2.626	0.10123482	0.017
08/03/95	09:21:55	0.50834238	0.057	0.14503896	0.022	0.02360161	0.02	0	3.079	0.10106331	0.016
08/03/95	09:26:51	0.50662773	0.057	0.13596141	0.022	0	0.021	0	3.048	0.10176934	0.017
08/03/95	09:31:52	0.50596252	0.057	0.13287701	0.023	0	0.021	0	2.793	0.09683058	0.016
08/03/95	09:36:52	0.50600181	0.056	0.12862396	0.023	0	0.021	0	2.812	0.09353551	0.016
08/03/95	09:41:52	0.50496631	0.056	0.12808803	0.023	0	0.019	0	2.738	0.09196842	0.015
08/03/95	09:46:53	0.50429093	0.056	0.12597163	0.023	0	0.021	0	2.75	0.08977754	0.017
08/03/95	09:51:53	0.50336836	0.056	0.12556452	0.022	0	0.02	0	2.611	0.08842003	0.016
08/03/95	09:56:53	0.50363086	0.056	0.12244746	0.023	0	0.02	0	2.555	0.08678413	0.016
08/03/95	10:01:52	0.50296822	0.056	0.12296127	0.023	0	0.019	0	2.452	0.08615378	0.015
08/03/95	10:06:52	0.50146011	0.056	0.12526393	0.023	0	0.02	0	2.547	0.08775552	0.016
08/03/95	10:11:53	0.50146011	0.056	0.12526393	0.024	0	0.02	0	2.545	0.08775552	0.016
08/03/95	10:16:52	0.50186451	0.056	0.12384851	0.024	0	0.019	0	2.545	0.08654231	0.015
08/03/95	10:21:52	0.50176341	0.055	0.12809475	0.024	0	0.018	0	2.616	0.08613791	0.015
08/03/95	10:26:54	0.5000447	0.056	0.12880246	0.024	0	0.018	0	2.678	0.08371149	0.014
08/03/95	10:31:54	0.49964029	0.056	0.12930796	0.025	0	0.018	0	2.723	0.07895975	0.014
08/03/95	10:41:50	0.49943809	0.057	0.13143108	0.026	0	0.018	0	2.779	0.06915297	0.014
08/03/95	10:45:57	0.50226892	0.056	0.11909678	0.026	0	0.015	0	2.864	0.0483262	0.012
08/03/95	10:51:58	0.5000447	0.057	0.11292963	0.027	0	0.022	0	3.04	0.05378564	0.017
Run 4											
08/03/95	11:11:31	0.50044415	0.056	0.11387109	0.028	0	0.016	0	2.957	0.02669171	0.012
08/03/95	11:16:32	0.50071994	0.056	0.11535548	0.029	0	0.016	0	2.965	0.02030906	0.013
08/03/95	11:21:32	0.50165267	0.056	0.11176034	0.029	0	0.017	0	2.949	0.01451565	0.013
08/03/95	11:26:32	0.50085011	0.056	0.11214577	0.029	0	0.016	0	2.956	0.01522341	0.012
08/03/95	11:31:33	0.50098605	0.056	0.11310294	0.03	0	0.017	0	3.047	0	0.013
08/03/95	11:36:33	0.50006157	0.056	0.11251385	0.03	0	0.017	0	3.074	0	0.013
08/03/95	11:41:33	0.49962489	0.056	0.11460966	0.029	0	0.016	0	2.969	0.01261011	0.012
08/03/95	11:46:32	0.49971649	0.056	0.11239298	0.03	0	0.016	0	3.021	0	0.013
08/03/95	11:51:33	0.49918742	0.056	0.11864096	0.03	0	0.016	0	2.972	0	0.012

Site: POTW in very s											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	11:56:34	0.49961344	0.056	0.11932436	0.031	0	0.016	0	3.092	0	0.013
08/03/95	12:01:33	0.49974316	0.056	0.13008831	0.03	0	0.015	0	3.037	0	0.012
08/03/95	12:06:33	0.49857302	0.055	0.1156983	0.031	0	0.016	0	3.176	0	0.012
08/03/95	12:11:34	0.49823462	0.055	0.11637374	0.031	0	0.016	0	3.119	0	0.013
08/03/95	12:16:34	0.49852447	0.055	0.113963	0.031	0	0.016	0	3.127	0	0.013
08/03/95	12:21:34	0.49850784	0.055	0.11541707	0.031	0	0.016	0	3.243	0	0.013
08/03/95	12:26:35	0.49918759	0.055	0.11555835	0.031	0	0.016	0	3.157	0	0.012
08/03/95	12:31:34	0.49967931	0.055	0.11251735	0.035	0	0.015	0	3.559	0	0.012
08/03/95	12:36:34	0.49732668	0.055	0.12243933	0.032	0	0.016	0	3.217	0	0.012
08/03/95	12:41:35	0.49960011	0.056	0.13457863	0.032	0	0.016	0	3.205	0	0.013
08/03/95	12:46:35	0.49749786	0.056	0.12935558	0.033	0	0.016	0	3.27	0	0.012
08/03/95	12:51:34	0.49937177	0.056	0.12522598	0.031	0	0.017	0	3.063	0	0.013
08/03/95	12:56:34	0.49822431	0.056	0.13353517	0.032	0	0.015	0	3.147	0	0.012
08/03/95	13:01:35	0.49749636	0.056	0.13110324	0.032	0	0.016	0	3.106	0	0.013
08/03/95	13:06:35	0.49793747	0.055	0.12056622	0.033	0	0.017	0	3.181	0	0.013
08/03/95	13:11:34	0.49824477	0.055	0.12476606	0.033	0	0.017	0	3.301	0	0.014
08/03/95	13:16:34	0.49799269	0.055	0.12813727	0.033	0	0.015	0	3.282	0	0.012
08/03/95	13:21:35	0.49509375	0.055	0.13741795	0.033	0	0.016	0	3.366	0	0.013
08/03/95	13:26:34	0.49804746	0.055	0.11920312	0.033	0	0.017	0	3.337	0	0.014
08/03/95	13:31:34	0.49760103	0.055	0.12047507	0.033	0	0.016	0	3.314	0	0.013
08/03/95	13:36:35	0.49689493	0.055	0.126917	0.034	0	0.016	0	3.441	0	0.013
08/03/95	13:41:35	0.49599623	0.055	0.12215292	0.034	0	0.017	0	3.427	0	0.013
08/03/95	13:46:35	0.49599925	0.055	0.13876475	0.034	0	0.016	0	3.412	0	0.013
08/03/95	13:51:36	0.49638499	0.055	0.13583543	0.034	0	0.016	0	3.451	0	0.013
08/03/95	13:56:35	0.49633555	0.055	0.12398108	0.034	0	0.017	0	3.492	0	0.013
08/03/95	14:01:35	0.49640023	0.055	0.12528294	0.034	0	0.016	3.55585496	3.457	0	0.013
08/03/95	14:06:36	0.49497321	0.055	0.14695963	0.035	0	0.016	3.64468116	3.542	0	0.012
08/03/95	14:11:36	0.49687465	0.055	0.12116137	0.034	0	0.017	3.64203467	3.485	0	0.014
08/03/95	14:16:37	0.49475508	0.055	0.12099263	0.034	0	0.016	3.69243201	3.437	0	0.012
08/03/95	14:21:37	0.49661629	0.055	0.12117602	0.035	0	0.018	3.83142136	3.523	0	0.014
08/03/95	14:26:36	0.49466515	0.055	0.12672136	0.034	0	0.018	3.82525986	3.494	0	0.014
08/03/95	14:31:37	0.49735206	0.055	0.12829586	0.033	0	0.018	3.83037158	3.347	0	0.014
08/03/95	14:36:37	0.4963376	0.055	0.12248896	0.034	0	0.019	3.97317118	3.493	0	0.015
08/03/95	14:41:36	0.49577075	0.055	0.12144478	0.035	0	0.017	3.92558139	3.569	0	0.014
08/03/95	14:46:36	0.4950893	0.055	0.12230528	0.035	0	0.017	3.75254831	3.573	0	0.013
08/03/95	14:51:37	0.49444032	0.055	0.12283655	0.035	0	0.017	4.00791636	3.588	0	0.013
08/03/95	14:56:36	0.4960796	0.055	0.12200877	0.035	0	0.017	3.92944549	3.599	0	0.013
08/03/95	15:01:36	0.49339809	0.054	0.13902605	0.036	0	0.018	4.01917299	3.698	0	0.014
08/03/95	15:06:37	0.49312997	0.055	0.15523699	0.036	0	0.017	4.18088455	3.632	0	0.013
08/03/95	15:11:36	0.48910269	0.055	0.1548431	0.037	0	0.017	4.17438914	3.742	0	0.014
08/03/95	15:16:36	0.48855316	0.055	0.17158439	0.036	0	0.017	4.32248822	3.735	0	0.013
08/03/95	15:21:37	0.49453685	0.055	0.13192455	0.036	0	0.017	4.2903801	3.586	0	0.014
08/03/95	15:26:36	0.49327849	0.055	0.16120279	0.036	0	0.018	4.30319897	3.721	0	0.014
08/03/95	15:31:36	0.49361351	0.055	0.14242806	0.037	0	0.018	4.18645959	3.739	0	0.014
08/03/95	15:36:37	0.49495858	0.055	0.1379697	0.036	0	0.02	4.42162998	3.686	0	0.016
08/03/95	15:41:38	0.49528362	0.055	0.13853511	0.035	0	0.02	4.56320625	3.531	0	0.016
08/03/95	15:46:36	0.49322209	0.055	0.15904737	0.033	0	0.019	4.61062154	3.364	0	0.015
08/03/95	15:51:37	0.49447547	0.055	0.13419272	0.034	0	0.018	4.77083926	3.354	0	0.014
08/03/95	15:56:36	0.49035246	0.054	0.13597491	0.035	0	0.018	5.02069117	3.502	0	0.014
08/03/95	16:01:37	0.48972768	0.054	0.14492152	0.035	0	0.018	4.98373569	3.542	0	0.014
08/03/95	16:06:37	0.49520707	0.055	0.1555894	0.034	0	0.02	4.74290087	3.499	0	0.016
08/03/95	16:11:36	0.49540207	0.055	0.15641022	0.034	0	0.018	4.69436735	3.385	0	0.015
08/03/95	16:16:37	0.4934085	0.055	0.15060643	0.034	0	0.018	4.87026004	3.4	0	0.015
08/03/95	16:21:37	0.49200566	0.055	0.15714132	0.035	0	0.018	4.81611901	3.579	0	0.015
08/03/95	16:26:36	0.49305318	0.056	0.18989768	0.035	0	0.018	4.67162732	3.566	0	0.015
08/03/95	16:31:37	0.49560519	0.055	0.1700515	0.033	0	0.018	4.54330554	3.333	0	0.014
08/03/95	16:36:37	0.4960676	0.056	0.19206614	0.033	0	0.018	4.61475047	3.357	0	0.015
08/03/95	16:41:38	0.49327955	0.055	0.16243013	0.034	0	0.018	4.85431684	3.35	0	0.014
08/03/95	16:46:38	0.49149185	0.055	0.16919535	0.033	0	0.018	5.15839477	3.357	0	0.014
08/03/95	16:51:37	0.49171224	0.055	0.16276944	0.033	0	0.018	5.07597219	3.308	0	0.014
08/03/95	16:56:38	0.49088705	0.055	0.1738064	0.033	0	0.018	5.0615313	3.325	0	0.014
08/03/95	17:01:38	0.49170654	0.055	0.1802821	0.034	0	0.018	5.14473597	3.453	0	0.015

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 5											
08/03/95	18:14:14	0.48430547	0.052	0.19178373	0.03	0	0.014	0	2.89	0	0.011
08/03/95	18:19:14	0.48328981	0.051	0.16133715	0.031	0	0.014	0	3.006	0	0.011
08/03/95	18:24:15	0.48451444	0.052	0.19102535	0.031	0	0.014	0	3.047	0	0.011
08/03/95	18:29:14	0.48896589	0.054	0.21466795	0.029	0	0.014	3.05449465	2.763	0	0.011
08/03/95	18:34:14	0.49002128	0.055	0.2360694	0.028	0	0.014	3.1181304	2.712	0	0.011
08/03/95	18:39:15	0.49019961	0.054	0.22227592	0.028	0	0.014	3.1665579	2.692	0	0.011
08/03/95	18:44:15	0.48795569	0.053	0.18227579	0.029	0	0.014	3.12472787	2.789	0	0.011
08/03/95	18:49:15	0.48630893	0.053	0.22817924	0.03	0	0.014	0	2.983	0	0.011
08/03/95	18:54:16	0.48622057	0.053	0.20035375	0.03	0	0.014	0	2.947	0	0.011
08/03/95	18:59:16	0.48644087	0.053	0.22470111	0.029	0	0.014	0	2.866	0	0.011
08/03/95	19:04:16	0.48707251	0.054	0.22939212	0.03	0	0.014	0	2.931	0	0.011
08/03/95	19:09:17	0.48718966	0.053	0.19407365	0.03	0	0.014	0	2.911	0	0.011
08/03/95	19:14:16	0.4880406	0.054	0.22392088	0.029	0	0.014	0	2.859	0	0.011
08/03/95	19:19:17	0.48861013	0.052	0.15471969	0.029	0	0.014	0	2.798	0	0.011
08/03/95	19:24:18	0.48927899	0.053	0.16408559	0.029	0	0.014	0	2.873	0	0.011
08/03/95	19:29:18	0.48901176	0.053	0.17743994	0.029	0	0.014	0	2.821	0	0.011
08/03/95	19:34:17	0.48979676	0.053	0.15913012	0.028	0	0.014	0	2.788	0	0.011
08/03/95	19:39:17	0.49056658	0.053	0.15204695	0.028	0	0.014	0	2.78	0	0.011
08/03/95	19:44:18	0.49111727	0.053	0.15247573	0.027	0	0.014	0	2.678	0	0.011
08/03/95	19:49:17	0.4913726	0.053	0.14417826	0.027	0	0.013	0	2.681	0	0.011
08/03/95	19:54:17	0.49215055	0.053	0.14568229	0.027	0	0.013	0	2.628	0	0.011
08/03/95	19:59:18	0.49301647	0.054	0.15056149	0.026	0	0.013	2.50315442	2.509	0	0.01
08/03/95	20:04:18	0.4932681	0.054	0.17701301	0.026	0	0.013	0	2.478	0	0.01
08/03/95	20:09:18	0.49393834	0.055	0.19633105	0.025	0	0.013	0	2.38	0	0.01
08/03/95	20:14:18	0.49469726	0.055	0.21616252	0.025	0	0.013	2.41743285	2.357	0	0.01
08/03/95	20:19:19	0.49514902	0.054	0.15021489	0.024	0	0.013	2.50120524	2.295	0	0.01
08/03/95	20:24:18	0.49561029	0.054	0.14702461	0.024	0	0.013	2.46126315	2.245	0	0.01
08/03/95	20:29:18	0.49564218	0.054	0.15375687	0.024	0	0.013	2.38872278	2.243	0	0.01
08/03/95	20:34:19	0.49702548	0.056	0.22001987	0.023	0	0.012	2.28755649	2.204	0	0.01
08/03/95	20:39:19	0.49760256	0.056	0.21993932	0.022	0	0.012	2.3322901	2.176	0	0.01
08/03/95	20:44:19	0.49704273	0.055	0.16297812	0.022	0	0.012	2.24905756	2.16	0.01064223	0.01
08/03/95	20:49:19	0.49827782	0.056	0.22624123	0.022	0	0.012	0	2.155	0.01347518	0.01
08/03/95	20:54:20	0.49930017	0.058	0.28242014	0.022	0	0.012	0	2.141	0.01529607	0.01
08/03/95	20:59:19	0.49909757	0.056	0.22164106	0.021	0	0.012	0	2.111	0.01620776	0.01
08/03/95	21:04:19	0.49853583	0.055	0.16162439	0.022	0	0.012	0	2.121	0.01720485	0.01
08/03/95	21:09:20	0.499768	0.055	0.15812498	0.022	0	0.012	0	2.137	0.01993002	0.01
08/03/95	21:14:20	0.50066984	0.057	0.25994762	0.021	0	0.012	0	2.1	0.02064201	0.01
08/03/95	21:19:19	0.50184993	0.059	0.29942902	0.021	0	0.012	0	2.126	0.02065726	0.01
08/03/95	21:24:19	0.50125974	0.056	0.19536173	0.022	0	0.012	0	2.14	0.02115575	0.01
08/03/95	21:29:20	0.50143618	0.055	0.15921181	0.022	0	0.012	0	2.135	0.02167387	0.01
08/03/95	21:34:19	0.50047618	0.055	0.16298102	0.022	0	0.012	0	2.122	0.02084053	0.01
08/03/95	21:39:19	0.50012113	0.055	0.16431975	0.022	0	0.013	0	2.148	0.02219174	0.01
08/03/95	21:44:20	0.5032173	0.062	0.37824578	0.021	0	0.013	0	2.142	0.02150156	0.01
08/03/95	21:49:20	0.50633941	0.059	0.30521715	0.022	0	0.013	0	2.274	0.02514028	0.01
08/03/95	21:54:20	0.50505652	0.057	0.23537692	0.022	0	0.013	0	2.249	0.02744214	0.01
08/03/95	21:59:21	0.50356585	0.056	0.20529837	0.022	0	0.013	0	2.197	0.02672106	0.01
08/03/95	22:04:20	0.50293543	0.056	0.19241434	0.022	0	0.013	0	2.198	0.02839395	0.01
08/03/95	22:09:20	0.50467505	0.06	0.33745616	0.022	0	0.013	0	2.177	0.02907717	0.01
08/03/95	22:14:21	0.50556889	0.058	0.25917832	0.022	0	0.013	0	2.215	0.03413421	0.01
08/03/95	22:19:21	0.50445414	0.056	0.1939666	0.022	0	0.013	0	2.155	0.03101854	0.01
08/03/95	22:24:20	0.50551587	0.056	0.19900854	0.023	0	0.014	0	2.261	0.04052574	0.011
08/03/95	22:29:20	0.50627823	0.057	0.2445351	0.023	0	0.013	0	2.199	0.03693184	0.011
08/03/95	22:34:21	0.50543235	0.056	0.19479891	0.023	0	0.013	0	2.226	0.03606643	0.011
08/03/95	22:39:21	0.50617059	0.06	0.31498852	0.023	0	0.014	0	2.236	0.04056594	0.011
08/03/95	22:44:21	0.50615161	0.056	0.18345233	0.023	0	0.014	0	2.179	0.04340165	0.011
08/03/95	22:49:22	0.50980199	0.057	0.20221477	0.023	0	0.014	0	2.339	0.0436543	0.011
08/03/95	22:54:22	0.5119892	0.056	0.17595235	0.024	0	0.015	0	2.334	0.04900956	0.012
08/03/95	22:59:22	0.51046608	0.056	0.15977186	0.024	0	0.014	0	2.29	0.04461554	0.011
08/03/95	23:04:23	0.51006981	0.056	0.17270239	0.024	0	0.014	0	2.258	0.04701845	0.011
08/03/95	23:09:23	0.50709242	0.056	0.17371403	0.024	0	0.015	0	2.354	0.04907346	0.012
08/03/95	23:14:23	0.5073994	0.056	0.17639077	0.024	0	0.014	0	2.323	0.04444887	0.011

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	23:19:23	0.50671331	0.056	0.17920594	0.024	0	0.014	0	2.269	0.04455064	0.011
08/03/95	23:24:24	0.50722096	0.057	0.18268381	0.024	0	0.014	0	2.279	0.04865549	0.011
08/03/95	23:29:24	0.51235208	0.057	0.16944716	0.024	0	0.015	0	2.303	0.0518368	0.012
08/03/95	23:34:24	0.51376492	0.057	0.16567566	0.025	0	0.015	0	2.384	0.05241886	0.012
08/03/95	23:39:24	0.51045742	0.057	0.18070974	0.025	0	0.015	0	2.379	0.04911136	0.012
08/03/95	23:44:25	0.50876978	0.057	0.19603514	0.024	0	0.015	0	2.368	0.05178854	0.012
08/03/95	23:49:24	0.51038751	0.057	0.19282196	0.024	0	0.015	0	2.381	0.05566408	0.012
08/03/95	23:54:25	0.51118843	0.057	0.18741574	0.024	0	0.015	0	2.381	0.05566408	0.012
08/03/95	23:59:24	0.51187509	0.057	0.18120979	0.024	0	0.015	0	2.373	0.05669693	0.012
08/04/95	00:04:24	0.51499281	0.057	0.16428912	0.024	0	0.015	0	2.387	0.05626477	0.012
08/04/95	00:09:25	0.51948132	0.057	0.16534417	0.025	0	0.016	0	2.465	0.05892265	0.012
08/04/95	00:14:25	0.51455342	0.057	0.18271611	0.025	0	0.016	0	2.516	0.06137336	0.013
08/04/95	00:19:24	0.51655495	0.057	0.18014227	0.025	0	0.016	0	2.518	0.0622875	0.013
08/04/95	00:24:24	0.52018606	0.058	0.17032286	0.026	0	0.016	0	2.544	0.06231813	0.013
08/04/95	00:29:25	0.5156816	0.058	0.18902315	0.026	0	0.016	0	2.516	0.06220635	0.013
08/04/95	00:34:25	0.51400844	0.057	0.1866757	0.026	0	0.016	0	2.499	0.05882385	0.013
08/04/95	00:39:24	0.51350824	0.057	0.18577534	0.026	0	0.016	0	2.492	0.0599243	0.013
08/04/95	00:44:24	0.51610929	0.058	0.18377452	0.026	0	0.016	0	2.49	0.06112479	0.013
08/04/95	00:49:25	0.51592034	0.058	0.1858713	0.026	0	0.016	0	2.469	0.0634902	0.013
08/04/95	00:54:25	0.51663738	0.058	0.17650778	0.025	0	0.016	0	2.43	0.06413016	0.013
08/04/95	00:59:25	0.51722689	0.058	0.1727088	0.026	0	0.016	0	2.434	0.06516559	0.013
08/04/95	01:04:24	0.51733013	0.058	0.17447526	0.026	0	0.016	0	2.429	0.06455385	0.013
08/04/95	01:09:24	0.51802002	0.058	0.17807251	0.026	0	0.016	0	2.48	0.06479	0.013
08/04/95	01:14:25	0.51981679	0.058	0.17780574	0.026	0	0.017	0	2.49	0.06590213	0.013
08/04/95	01:19:25	0.51741672	0.058	0.17530566	0.026	0	0.017	0	2.488	0.06570212	0.013
08/04/95	01:24:24	0.51821346	0.058	0.17053734	0.026	0	0.017	0	2.542	0.06671461	0.013
08/04/95	01:29:24	0.51813879	0.058	0.16678716	0.026	0	0.017	0	2.548	0.0684127	0.013
08/04/95	01:34:25	0.51582401	0.057	0.16814263	0.026	0	0.017	0	2.496	0.06847664	0.013
08/04/95	01:39:25	0.5168202	0.058	0.16567442	0.026	0	0.017	0	2.486	0.07108902	0.013
08/04/95	01:44:23	0.51942863	0.058	0.15508912	0.026	0	0.017	0	2.525	0.07184863	0.013
08/04/95	01:49:24	0.51861176	0.057	0.15728226	0.026	0	0.017	0	2.598	0.07164636	0.014
08/04/95	01:54:24	0.52330392	0.058	0.15364243	0.026	0	0.017	0	2.519	0.07007374	0.014
08/04/95	01:59:24	0.52049379	0.058	0.16286064	0.026	0	0.017	0	2.506	0.07052626	0.013
08/04/95	02:04:23	0.51789282	0.058	0.16226041	0.025	0	0.017	0	2.473	0.07312723	0.013
08/04/95	02:09:24	0.51698894	0.058	0.16379154	0.026	0	0.017	0	2.441	0.07374121	0.013
08/04/95	02:14:24	0.51549193	0.057	0.16566168	0.026	0	0.017	0	2.464	0.07222689	0.013
08/04/95	02:19:25	0.51699599	0.057	0.16603083	0.026	0	0.017	0	2.453	0.06951291	0.013
08/04/95	02:24:24	0.51520323	0.057	0.17066794	0.026	0	0.016	0	2.393	0.06558768	0.013
08/04/95	02:29:24	0.51260793	0.057	0.17313513	0.026	0	0.016	0	2.379	0.06427592	0.013
08/04/95	02:34:25	0.51109489	0.057	0.16833125	0.026	0	0.016	0	2.364	0.06481203	0.013
08/04/95	02:39:25	0.51130396	0.057	0.16276943	0.026	0	0.016	0	2.36	0.06528774	0.013
08/04/95	02:44:24	0.51112175	0.057	0.16204837	0.026	0	0.016	0	2.345	0.06663765	0.013
08/04/95	02:49:24	0.51152138	0.057	0.16134903	0.026	0	0.016	0	2.352	0.06773662	0.013
08/04/95	02:54:25	0.51172543	0.057	0.15992044	0.026	0	0.017	0	2.352	0.06762407	0.013
08/04/95	02:59:25	0.51082644	0.057	0.15902145	0.026	0	0.017	0	2.33	0.0698216	0.013
08/04/95	03:04:24	0.51263244	0.057	0.15506782	0.026	0	0.017	0	2.325	0.07009505	0.013
08/04/95	03:09:24	0.51383064	0.057	0.15257155	0.026	0	0.017	0	2.35	0.070794	0.013
08/04/95	03:14:25	0.51343504	0.057	0.15194403	0.026	0	0.017	0	2.341	0.0705811	0.013
08/04/95	03:19:25	0.51543168	0.057	0.14864958	0.026	0	0.017	0	2.371	0.07127992	0.013
08/04/95	03:24:24	0.51363471	0.057	0.15044655	0.026	0	0.017	0	2.377	0.07018177	0.013
08/04/95	03:29:23	0.51313555	0.057	0.15024689	0.026	0	0.017	0	2.345	0.07137975	0.013
08/04/95	03:34:24	0.51353862	0.057	0.14422999	0.026	0	0.017	0	2.431	0.07186546	0.013
08/04/95	03:39:24	0.51325037	0.057	0.14375001	0.026	0	0.017	0	2.426	0.07322172	0.014
08/04/95	03:44:24	0.51217928	0.057	0.14336238	0.026	0	0.017	0	2.412	0.0732254	0.014
08/04/95	03:49:23	0.51545778	0.057	0.14095094	0.027	0	0.017	0	2.434	0.07226975	0.014
08/04/95	03:54:25	0.51336093	0.057	0.14237316	0.027	0	0.018	0	2.475	0.07567313	0.014
08/04/95	03:59:25	0.511275	0.057	0.14511041	0.026	0	0.017	0	2.468	0.07634243	0.014
08/04/95	04:04:24	0.51147813	0.057	0.14309032	0.027	0	0.018	0	2.481	0.07642777	0.014
08/04/95	04:09:24	0.51296928	0.057	0.14132319	0.027	0	0.018	0	2.508	0.07713974	0.014
08/04/95	04:14:25	0.51566621	0.057	0.1358904	0.027	0	0.018	0	2.54	0.07790784	0.014
08/04/95	04:19:25	0.51487837	0.057	0.13481828	0.027	0	0.018	0	2.52	0.08085114	0.014
08/04/95	04:24:24	0.51231095	0.057	0.13738615	0.027	0	0.018	0	2.546	0.08024147	0.014

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	N2O		CO		C2H4		H2S		DICLM	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/04/95	04:29:24	0.51340932	0.057	0.13716131	0.027	0	0.018	0	2.514	0.08052504	0.014
08/04/95	04:34:25	0.51388266	0.057	0.13760625	0.027	0	0.018	0	2.484	0.08274297	0.014
08/04/95	04:39:25	0.51479983	0.057	0.13509638	0.027	0	0.018	0	2.521	0.08312857	0.015
08/04/95	04:44:24	0.51776835	0.057	0.1323042	0.028	0	0.019	0	2.543	0.0824288	0.015
08/04/95	04:49:24	0.51737983	0.058	0.13399551	0.028	0	0.019	0	2.562	0.08336172	0.015
08/04/95	04:54:24	0.51658649	0.057	0.13536277	0.028	0	0.019	0	2.605	0.08523578	0.015
08/04/95	04:59:25	0.51499516	0.057	0.13516385	0.027	0	0.019	0	2.634	0.08941303	0.015
08/04/95	05:04:24	0.51747457	0.058	0.1332497	0.027	0	0.02	0	2.61	0.09015999	0.015
08/04/95	05:09:24	0.51916632	0.058	0.1290701	0.027	0	0.019	0	2.623	0.08856776	0.015
08/04/95	05:14:25	0.52267057	0.058	0.12445011	0.028	0	0.019	0	2.583	0.08764232	0.015
08/04/95	05:19:25	0.51796982	0.058	0.13048778	0.027	0	0.02	0	2.674	0.0934615	0.016
08/04/95	05:24:24	0.51946281	0.058	0.13048778	0.027	0	0.021	0	2.843	0.09356104	0.017
08/04/95	05:29:24	0.52245316	0.058	0.12613682	0.028	0	0.02	0	2.635	0.08913138	0.016
08/04/95	05:34:24	0.52496048	0.058	0.12092289	0.028	0	0.02	0	2.603	0.08900163	0.016
08/04/95	05:39:25	0.52316797	0.058	0.12564388	0.028	0	0.02	0	2.629	0.09152206	0.016
08/04/95	05:44:25	0.52416047	0.058	0.131065	0.028	0	0.02	0	2.642	0.09155641	0.016
08/04/95	05:49:24	0.52276865	0.058	0.13104041	0.028	0	0.02	0	2.66	0.09253423	0.016
08/04/95	05:54:24	0.52169734	0.058	0.13196576	0.028	0	0.02	0	2.669	0.09437491	0.016
08/04/95	05:59:25	0.51901228	0.058	0.13276133	0.028	0	0.02	0	2.738	0.09487214	0.016
08/04/95	06:04:24	0.52060515	0.058	0.130549	0.028	0	0.02	0	2.713	0.09475491	0.016
08/04/95	06:09:24	0.51932011	0.058	0.13174258	0.028	0	0.02	0	2.702	0.09438571	0.016
08/04/95	06:14:24	0.51922432	0.058	0.13328214	0.028	0	0.021	0	2.674	0.09504546	0.016
08/04/95	06:19:25	0.51603054	0.058	0.13658523	0.028	0	0.021	0	2.722	0.09724969	0.017
08/04/95	06:24:25	0.5176332	0.058	0.13618789	0.028	0	0.021	0	2.744	0.09863937	0.017
08/04/95	06:29:24	0.5180364	0.058	0.13462196	0.028	0	0.021	0	2.776	0.09759099	0.017
08/04/95	06:34:24	0.51902389	0.058	0.13549255	0.028	0	0.021	0	2.978	0.09416931	0.016
08/04/95	06:39:25	0.51980593	0.058	0.13726219	0.028	0	0.021	0	2.752	0.09737658	0.017
08/04/95	06:44:24	0.52199105	0.058	0.14298535	0.028	0	0.021	0	2.671	0.09721412	0.016
08/04/95	06:49:24	0.52885603	0.059	0.15040494	0.027	0	0.021	0	2.765	0.10073448	0.017
08/04/95	06:54:24	0.52586348	0.059	0.16024038	0.027	0	0.022	0	2.814	0.10184432	0.017
08/04/95	06:59:25	0.5251559	0.059	0.16274544	0.027	0	0.021	0	2.738	0.10107979	0.017
08/04/95	07:04:25	0.52864102	0.059	0.16385773	0.028	0	0.021	0	2.736	0.10001317	0.017
08/04/95	07:09:24	0.53115063	0.059	0.16527799	0.028	0	0.021	0	2.62	0.09634546	0.016
08/04/95	07:14:24	0.53314796	0.059	0.14991031	0.028	0	0.02	0	2.6	0.09463276	0.016
08/04/95	07:19:25	0.52924549	0.058	0.13043444	0.028	0	0.02	0	2.6	0.09720018	0.016
08/04/95	07:24:25	0.52653662	0.058	0.12910514	0.027	0	0.02	0	2.615	0.09815596	0.016
08/04/95	07:29:24	0.53023816	0.058	0.13378718	0.027	0	0.02	0	2.677	0.10201898	0.016
08/04/95	07:34:24	0.52484105	0.058	0.14514321	0.027	0	0.02	0	2.607	0.10093868	0.016
08/04/95	07:39:25	0.52323141	0.057	0.14529749	0.027	0	0.02	0	2.636	0.10117679	0.016
08/04/95	07:44:24	0.52351414	0.057	0.14315075	0.026	0	0.02	0	2.672	0.10088815	0.016
08/04/95	07:49:23	0.5192779	0.057	0.15202544	0.026	0	0.019	0	2.735	0.10238858	0.015
08/04/95	07:54:24	0.51676824	0.057	0.16860318	0.026	0	0.019	0	2.77	0.10073964	0.015
08/04/95	07:59:25	0.51704125	0.057	0.17442719	0.026	0	0.019	0	2.793	0.10024783	0.015
08/04/95	08:04:25	0.51544112	0.057	0.17466441	0.026	0	0.019	0	2.771	0.09739352	0.015
08/04/95	08:09:25	0.51353491	0.056	0.17040708	0.026	0	0.019	0	2.8	0.10009153	0.015
08/04/95	08:14:25	0.51161782	0.056	0.1699356	0.026	0	0.019	0	2.854	0.09819843	0.015
08/04/95	08:19:25	0.50998952	0.056	0.16821802	0.025	0	0.019	0	2.776	0.10006506	0.015
08/04/95	08:24:26	0.50825169	0.055	0.15756306	0.025	0	0.018	0	2.712	0.09429605	0.014
08/04/95	08:29:26	0.50772746	0.055	0.15472735	0.024	0	0.018	0	2.731	0.09293721	0.014
08/04/95	08:34:26	0.50628736	0.054	0.14757888	0.025	0	0.018	0	2.847	0.09260247	0.014
08/04/95	08:39:27	0.50545784	0.054	0.14210955	0.025	0	0.018	0	2.825	0.09164451	0.014
08/04/95	08:44:27	0.50522528	0.054	0.14029546	0.025	0	0.018	0	2.887	0.09050017	0.014

Very small town POTW

Site: POTW in very:											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 1											
08/01/95	19:39:45	0.0055416	0.003	0	0.004	0	0.001	0.00302269	0.002	0	0.072
08/01/95	19:44:45	0.00514048	0.003	0	0.004	0	0.001	0.00352778	0.002	0	0.073
08/01/95	19:49:46	0.00473731	0.003	0	0.004	0	0.001	0.00372937	0.002	0	0.072
08/01/95	19:54:46	0.00584495	0.003	0	0.004	0	0.001	0.00342635	0.002	0	0.07
08/01/95	19:59:46	0.00654795	0.003	0.00453319	0.004	0	0.001	0.00312287	0.002	0	0.071
08/01/95	20:04:47	0.00725311	0.004	0.00523836	0.005	0	0.001	0.00292139	0.003	0	0.071
08/01/95	20:09:47	0.00684889	0.004	0.00473379	0.004	0	0.001	0.00292085	0.002	0	0.07
08/01/95	20:14:48	0.00765322	0.003	0.00584061	0.004	0	0.001	0	0.002	0	0.07
08/01/95	20:19:47	0.01389148	0.013	0	0.016	0	0.005	0	0.009	0	0.069
08/01/95	20:24:48	0.00805153	0.003	0.00613929	0.004	0	0.001	0	0.002	0	0.069
08/01/95	20:29:47	0.00915692	0.002	0.00754691	0.003	0	9E-04	0	0.002	0	0.067
08/01/95	20:34:49	0.0084494	0.002	0.00653823	0.003	0	9E-04	0	0.002	0	0.068
08/01/95	20:39:47	0.00834881	0.002	0.00643764	0.003	0	9E-04	0	0.002	0	0.069
08/01/95	20:44:47	0.01005694	0.003	0.00824669	0.003	0	9E-04	0	0.002	0	0.068
08/01/95	20:49:48	0.00864897	0.003	0.00693929	0.003	0	9E-04	0	0.002	0	0.07
08/01/95	20:54:47	0.0085484	0.003	0.00693929	0.003	0	9E-04	0	0.002	0	0.07
08/01/95	20:59:47	0.01055782	0.003	0.00894901	0.003	0	9E-04	0	0.002	0	0.069
08/01/95	21:04:47	0.00965107	0.003	0.00814309	0.003	0	9E-04	0	0.002	0	0.071
08/01/95	21:09:48	0.01115698	0.003	0.00944825	0.003	0	0.001	0	0.002	0	0.07
Run 2											
08/02/95	10:54:38	0.01938235	0.004	0.01586742	0.004	0	0.001	0	0.002	0	0.074
08/02/95	10:59:39	0.01989925	0.004	0.01618071	0.005	0	0.001	0	0.003	0	0.076
08/02/95	11:04:39	0.01972018	0.004	0.01629933	0.005	0	0.001	0	0.002	0	0.079
08/02/95	11:09:38	0.02036528	0.004	0.01723992	0.005	0	0.001	0	0.003	0	0.079
08/02/95	11:14:38	0.01978536	0.004	0.0165551	0.004	0	0.001	0	0.002	0	0.081
08/02/95	11:19:39	0.01754508	0.004	0.01441924	0.004	0	0.001	0	0.002	0	0.084
08/02/95	11:24:39	0.01796555	0.004	0.01503858	0.004	0	0.001	0	0.002	0	0.081
08/02/95	11:29:38	0.01786792	0.004	0.01494041	0.004	0	0.001	0	0.002	0	0.085
08/02/95	11:34:38	0.01683664	0.004	0.01371128	0.004	0	0.001	0	0.002	0	0.084
08/02/95	11:39:39	0.0167482	0.004	0.01392321	0.004	0	0.001	0	0.002	0	0.085
08/02/95	11:44:40	0.01623774	0.004	0.01361549	0.004	0	0.001	0	0.002	0	0.087
MET DATA LOSS - (											
08/02/95	11:59:39	0.01452051	0.003	0.01169708	0.004	0	0.001	0	0.002	0	0.087
08/02/95	12:04:39	0.01483398	0.003	0.01200846	0.004	0	0.001	0	0.002	0	0.085
08/02/95	12:09:39	0.01433737	0.003	0.01191415	0.004	0	0.001	0	0.002	0	0.085
08/02/95	12:14:40	0.01375692	0.003	0.01143038	0.004	0	0.001	0	0.002	0	0.087
08/02/95	12:19:40	0.01293575	0.003	0.0110156	0.004	0	0.001	0	0.002	0	0.089
08/02/95	12:24:39	0.01163054	0.003	0.01001238	0.004	0	0.001	0	0.002	0	0.085
08/02/95	12:29:39	0.01153332	0.003	0.01021812	0.004	0	0.001	0	0.002	0	0.088
08/02/95	12:34:40	0.01081316	0.003	0.00919624	0.004	0	0.001	0	0.002	0	0.088
08/02/95	12:39:40	0.01092026	0.003	0.00930245	0.004	0	0.001	0	0.002	0	0.085
08/02/95	12:44:40	0.01001763	0.003	0.00880337	0.004	0	0.001	0	0.002	0	0.084
08/02/95	12:49:41	0.0093076	0.003	0.00799239	0.004	0	0.001	0.00242807	0.002	0	0.086
08/02/95	12:54:41	0.00910861	0.003	0.00759051	0.004	0	0.001	0.00263138	0.002	0	0.088
08/02/95	12:59:41	0.00870699	0.003	0.00728958	0.004	0	0.001	0.00273359	0.002	0	0.085
08/02/95	13:04:42	0.00942437	0.003	0.00810699	0.004	0	0.001	0.00222942	0.002	0	0.085
08/02/95	13:09:41	0.00963236	0.003	0.00841564	0.004	0	0.001	0	0.002	0	0.087
08/02/95	13:20:16	0.00923867	0.003	0.00822343	0.004	0	0.001	0	0.002	0	0.088
08/02/95	13:25:16	0.00812042	0.003	0.00730837	0.004	0	0.001	0	0.002	0	0.088
08/02/95	13:30:15	0.00740831	0.003	0.00629199	0.004	0	0.001	0.00202967	0.002	0	0.09
08/02/95	13:35:15	0.00781159	0.003	0.0065942	0.004	0	0.001	0	0.002	0	0.092
08/02/95	13:40:16	0.00832779	0.003	0.00761688	0.004	0	0.001	0	0.002	0	0.088
08/02/95	13:45:15	0.00822169	0.003	0.00761268	0.004	0	0.001	0	0.002	0	0.088
08/02/95	13:50:15	0.00791719	0.003	0.00730817	0.004	0	0.001	0	0.002	0	0.088
08/02/95	13:55:16	0.00771964	0.003	0.00711019	0.004	0	0.001	0	0.002	0	0.092
08/02/95	14:00:16	0.00690705	0.003	0.00650075	0.004	0	0.001	0	0.002	0	0.087
08/02/95	14:05:18	0.00629992	0.003	0.00538541	0.004	0	0.001	0.00203223	0.002	0	0.087
08/02/95	14:10:19	0.00559362	0.003	0.0046783	0.004	0	0.001	0.00223745	0.002	0	0.09
08/02/95	14:15:15	0.00640723	0.003	0.00559362	0.004	0	0.001	0.00213574	0.002	0	0.09
08/02/95	14:20:16	0.00651252	0.003	0.00580021	0.004	0	0.001	0	0.002	0	0.094
08/02/95	14:35:41	0	0.003	0	0.003	0	0.001	0.00244264	0.002	0	0.094

Site: POTW in very :											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/02/95	14:40:42	0	0.003	0	0.004	0	0.001	0.00264862	0.002	0	0.098
08/02/95	14:45:42	0	0.003	0	0.004	0	0.001	0.00275049	0.002	0	0.096
08/02/95	14:50:44	0.00356284	0.003	0	0.004	0	0.001	0.00315566	0.002	0	0.101
08/02/95	14:55:42	0.00397075	0.003	0	0.004	0	0.001	0.00285079	0.002	0	0.098
08/02/95	15:00:42	0.00386965	0.003	0	0.004	0	0.001	0.00264765	0.002	0	0.101
08/02/95	15:05:43	0.00305834	0.003	0	0.004	0	0.001	0.00254862	0.002	0	0.097
08/02/95	15:10:43	0	0.003	0	0.004	0	0.001	0.00275201	0.002	0	0.098
08/02/95	15:15:42	0	0.003	0	0.004	0	0.001	0.00264959	0.002	0	0.1
08/02/95	15:20:42	0	0.003	0	0.004	0	0.001	0.00265008	0.002	0	0.099
08/02/95	15:25:43	0	0.003	0	0.004	0	0.001	0.00275345	0.002	0	0.096
08/02/95	15:30:43	0	0.003	0	0.004	0	0.001	0.00295903	0.002	0	0.096
08/02/95	15:35:43	0	0.003	0	0.004	0	0.001	0.00316426	0.002	0	0.097
08/02/95	15:40:43	0	0.003	0	0.004	0	0.001	0.00285909	0.002	0	0.099
08/02/95	15:45:44	0	0.003	0	0.003	0	0.001	0.00255462	0.002	0	0.1
08/02/95	15:50:46	0	0.003	0	0.003	0	0.001	0.00255969	0.002	0	0.1
08/02/95	15:55:43	0	0.003	0	0.003	0	0.001	0.00256057	0.002	0	0.101
08/02/95	16:00:43	0	0.003	0	0.003	0	9E-04	0.00256197	0.002	0	0.104
08/02/95	16:05:44	0	0.003	0	0.003	0	0.001	0.00245725	0.002	0	0.106
08/02/95	16:10:44	0	0.003	0	0.003	0	0.001	0.00286836	0.002	0	0.106
08/02/95	16:15:45	0	0.003	0	0.003	0	9E-04	0.00276044	0.002	0	0.1
08/02/95	16:20:45	0	0.003	0	0.003	0	9E-04	0.00306042	0.002	0	0.093
08/02/95	16:25:45	0	0.003	0	0.003	0	9E-04	0.0031607	0.002	0	0.092
08/02/95	16:30:45	0	0.003	0	0.003	0	9E-04	0.00336277	0.002	0	0.093
08/02/95	16:35:46	0	0.003	0	0.003	0	9E-04	0.00336268	0.002	0	0.094
08/02/95	16:40:46	0	0.003	0	0.003	0	9E-04	0.00346204	0.002	0	0.095
08/02/95	16:45:45	0	0.003	0	0.003	0	9E-04	0.0035619	0.002	0	0.094
08/02/95	16:50:45	0	0.003	0	0.003	0	9E-04	0.0033596	0.002	0	0.091
08/02/95	16:55:46	0	0.003	0	0.003	0	9E-04	0.00274869	0.002	0	0.088
08/02/95	17:00:45	0	0.003	0	0.003	0	9E-04	0.00274515	0.002	0	0.083
08/02/95	17:05:45	0	0.003	0	0.003	0	9E-04	0.00294749	0.002	0	0.085
08/02/95	17:10:46	0	0.003	0	0.003	0	9E-04	0.00264064	0.002	0	0.084
08/02/95	17:19:54	0.00447042	0.003	0.01137924	0.004	0	0.001	0	0.002	0	0.085
08/02/95	17:26:58	0.00579655	0.003	0.01210156	0.004	0	0.001	0	0.002	0	0.084
08/02/95	17:32:18	0.00569381	0.004	0.01189599	0.005	0	0.001	0	0.003	0	0.209
Run 3											
08/02/95	17:56:31	0.00274112	0.002	0	0.003	0	9E-04	0.00314721	0.002	0	0.078
08/02/95	18:01:31	0.00365549	0.002	0	0.003	0	9E-04	0.00324933	0.002	0	0.078
08/02/95	18:06:32	0.00284316	0.003	0	0.003	0	9E-04	0.00314779	0.002	0	0.083
08/02/95	18:11:32	0	0.003	0	0.003	0	9E-04	0.00314952	0.002	0	0.084
08/02/95	18:16:31	0	0.003	0	0.003	0	9E-04	0.00335078	0.002	0	0.081
08/02/95	18:21:31	0	0.003	0	0.003	0	0.001	0.00345241	0.002	0	0.08
08/02/95	18:26:37	0	0.003	0	0.003	0	9E-04	0.00345114	0.002	0	0.079
08/02/95	18:31:31	0	0.002	0	0.003	0	9E-04	0.00324813	0.002	0	0.077
08/02/95	18:36:31	0	0.003	0	0.003	0	9E-04	0.00324813	0.002	0	0.08
08/02/95	18:41:32	0	0.003	0	0.003	0	9E-04	0.00334964	0.002	0	0.082
08/02/95	18:46:32	0	0.003	0	0.003	0	9E-04	0.0034505	0.002	0	0.079
08/02/95	18:51:31	0	0.003	0	0.003	0	9E-04	0.00365347	0.002	0	0.079
08/02/95	18:56:32	0	0.003	0	0.004	0	0.001	0.0034505	0.002	0	0.076
08/02/95	19:01:32	0	0.003	0	0.004	0	0.001	0.0034486	0.002	0	0.076
08/02/95	19:06:31	0	0.003	0	0.003	0	9E-04	0.00344733	0.002	0	0.079
08/02/95	19:11:31	0	0.003	0	0.003	0	9E-04	0.00334532	0.002	0	0.076
08/02/95	19:16:32	0	0.003	0	0.003	0	0.001	0.0037514	0.002	0	0.075
08/02/95	19:21:32	0	0.002	0	0.003	0	9E-04	0.00354796	0.002	0	0.075
08/02/95	19:26:32	0	0.002	0	0.003	0	8E-04	0.00334707	0.002	0	0.078
08/02/95	19:31:33	0	0.002	0	0.003	0	8E-04	0.00314422	0.002	0	0.076
08/02/95	19:36:32	0	0.002	0	0.003	0	9E-04	0.00334646	0.002	0	0.077
08/02/95	19:41:32	0	0.003	0	0.003	0	9E-04	0.00344669	0.002	0	0.078
08/02/95	19:46:33	0	0.002	0	0.003	0	8E-04	0.00344542	0.002	0	0.076
08/02/95	19:51:32	0	0.002	0	0.003	0	8E-04	0.00354479	0.002	0	0.078
08/02/95	19:56:32	0	0.002	0	0.003	0	9E-04	0.00374459	0.002	0	0.074
08/02/95	20:01:33	0.00273102	0.003	0	0.003	0	9E-04	0.00374251	0.002	0	0.072
08/02/95	20:06:33	0.00333606	0.003	0	0.003	0	9E-04	0.00394262	0.002	0	0.073

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/02/95	20:11:32	0.00373836	0.003	0	0.003	0	9E-04	0.0038394	0.002	0	0.072
08/02/95	20:16:33	0.00373628	0.003	0	0.003	0	0.001	0.00403923	0.002	0	0.071
08/02/95	20:21:33	0.00383584	0.003	0	0.003	0	0.001	0.00393679	0.002	0	0.072
08/02/95	20:26:32	0.00413638	0.003	0	0.003	0	9E-04	0.0039346	0.002	0	0.069
08/02/95	20:31:32	0.00433654	0.002	0	0.003	0	9E-04	0.00373144	0.002	0	0.071
08/02/95	20:36:33	0.00473657	0.003	0	0.003	0	0.001	0.00403112	0.002	0	0.07
08/02/95	20:41:33	0.00493721	0.003	0.00342582	0.003	0	9E-04	0.0037281	0.002	0	0.069
08/02/95	20:46:34	0.00523755	0.003	0.00362599	0.003	0	9E-04	0.00372672	0.002	0	0.068
08/02/95	20:51:34	0.00543596	0.003	0.00382531	0.004	0	0.001	0.00382531	0.002	0	0.069
08/02/95	20:56:33	0.00634078	0.003	0.00473042	0.004	0	0.001	0.00322071	0.002	0	0.069
08/02/95	21:01:33	0.00633842	0.003	0.00482928	0.004	0	0.001	0.00342074	0.002	0	0.068
08/02/95	21:06:33	0.00663676	0.003	0.00502785	0.004	0	0.001	0.00341894	0.002	0	0.068
08/02/95	21:11:34	0.00663306	0.003	0.00492455	0.004	0	0.001	0.00361803	0.002	0	0.068
08/02/95	21:16:34	0.00753757	0.004	0.00582906	0.004	0	0.001	0.00301503	0.002	0	0.068
08/02/95	21:21:33	0.00743454	0.003	0.00582707	0.004	0	0.001	0.00291354	0.002	0	0.067
08/02/95	21:26:33	0.00783495	0.004	0.00612733	0.004	0	0.001	0.00281255	0.002	0	0.068
08/02/95	21:31:34	0.0081363	0.004	0.00673002	0.005	0	0.001	0.00261165	0.003	0	0.066
08/02/95	21:36:33	0.00894154	0.003	0.00723361	0.004	0	0.001	0.00261214	0.002	0	0.065
08/02/95	21:41:33	0.01034423	0.003	0.00863693	0.004	0	0.001	0.00241031	0.002	0	0.065
08/02/95	21:46:34	0.00943861	0.004	0.00763122	0.004	0	0.001	0.00261068	0.002	0	0.066
08/02/95	21:51:34	0.00943861	0.004	0.00783204	0.004	0	0.001	0	0.002	0	0.067
08/02/95	21:56:34	0.00953725	0.003	0.00793097	0.004	0	0.001	0	0.002	0	0.066
08/02/95	22:01:35	0.00913228	0.004	0.00732589	0.004	0	0.001	0.00270958	0.002	0	0.065
08/02/95	22:06:34	0.00932982	0.004	0.00762437	0.004	0	0.001	0	0.002	0	0.069
08/02/95	22:11:34	0.01063003	0.004	0.00862436	0.005	0	0.001	0	0.003	0	0.072
08/02/95	22:16:35	0.01122963	0.004	0.00902381	0.005	0	0.001	0	0.003	0	0.066
08/02/95	22:21:35	0.01272886	0.005	0.01052386	0.007	0	0.002	0	0.004	0	0.066
08/02/95	22:26:34	0.01302469	0.006	0.01082051	0.007	0	0.002	0	0.004	0	0.067
08/02/95	22:31:35	0.01222317	0.004	0.01001899	0.005	0	0.002	0	0.003	0	0.067
08/02/95	22:36:35	0.01382363	0.006	0.01121918	0.008	0	0.002	0	0.004	0	0.067
08/02/95	22:41:34	0.01171567	0.004	0.00951272	0.005	0	0.001	0	0.003	0	0.066
08/02/95	22:46:34	0.01351808	0.004	0.0115154	0.005	0	0.001	0	0.003	0	0.067
08/02/95	22:51:35	0.01322261	0.005	0.01071832	0.006	0	0.002	0	0.003	0	0.069
08/02/95	22:56:35	0.01302026	0.003	0.01071668	0.004	0	0.001	0	0.002	0	0.068
08/02/95	23:01:34	0.01191855	0.003	0.00921434	0.003	0	9E-04	0	0.002	0	0.066
08/02/95	23:06:34	0.01271979	0.003	0.01031605	0.003	0	9E-04	0	0.002	0	0.067
08/02/95	23:11:35	0.01271979	0.004	0.01081683	0.004	0	0.001	0	0.002	0	0.066
08/02/95	23:16:35	0.01381121	0.004	0.01180958	0.005	0	0.001	0	0.003	0	0.067
08/02/95	23:21:35	0.01601598	0.008	0.01411408	0.01	0	0.003	0	0.005	0	0.066
08/02/95	23:26:35	0.01510995	0.006	0.01300856	0.007	0	0.002	0	0.004	0	0.068
08/02/95	23:31:36	0.01340883	0.003	0.01050692	0.003	0	0.001	0	0.002	0	0.068
08/02/95	23:36:35	0.012706	0.003	0.01000472	0.003	0	9E-04	0	0.002	0	0.07
08/02/95	23:41:36	0.01380137	0.003	0.01120111	0.003	0	0.001	0	0.002	0	0.069
08/02/95	23:46:35	0.01380137	0.004	0.01130112	0.005	0	0.001	0	0.003	0	0.069
08/02/95	23:51:35	0.01699851	0.008	0.0147987	0.009	0	0.003	0	0.005	0	0.069
08/02/95	23:56:36	0.0136988	0.003	0.01079905	0.003	0	0.001	0	0.002	0	0.069
08/03/95	00:01:35	0.01319392	0.003	0.01049516	0.004	0	0.001	0	0.002	0	0.069
08/03/95	00:06:35	0.01439068	0.003	0.01169243	0.004	0	0.001	0	0.002	0	0.069
08/03/95	00:11:36	0.01548708	0.006	0.01278933	0.007	0	0.002	0	0.004	0	0.069
08/03/95	00:16:36	0.01668607	0.007	0.01368858	0.009	0	0.003	0	0.005	0	0.068
08/03/95	00:21:35	0.0154784	0.004	0.01248258	0.005	0	0.001	0	0.003	0	0.068
08/03/95	00:26:35	0.01428274	0.003	0.0110866	0.003	0	0.001	0	0.002	0	0.069
08/03/95	00:31:36	0.01847422	0.01	0.0159777	0.012	0	0.004	0	0.007	0	0.07
08/03/95	00:36:36	0.01717282	0.006	0.01387804	0.007	0	0.002	0	0.004	0	0.069
08/03/95	00:41:36	0.01577209	0.005	0.01257774	0.005	0	0.002	0	0.003	0	0.071
08/03/95	00:46:36	0.01507614	0.004	0.01178135	0.005	0	0.002	0	0.003	0	0.072
08/03/95	00:51:36	0.01567226	0.004	0.01237809	0.005	0	0.002	0	0.003	0	0.072
08/03/95	00:56:37	0.01607156	0.004	0.01257774	0.005	0	0.002	0	0.003	0	0.073
08/03/95	01:01:37	0.01666738	0.006	0.01307441	0.007	0	0.002	0	0.004	0	0.071
08/03/95	01:06:36	0.0171632	0.006	0.01397004	0.007	0	0.002	0	0.004	0	0.07
08/03/95	01:11:37	0.0171632	0.006	0.01367068	0.007	0	0.002	0	0.004	0	0.071
08/03/95	01:16:37	0.01656138	0.004	0.01306952	0.005	0	0.002	0	0.003	0	0.071

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	01:21:38	0.01585708	0.004	0.01256599	0.005	0	0.001	0	0.003	0	0.071
08/03/95	01:26:38	0.0172533	0.006	0.01376275	0.008	0	0.002	0	0.004	0	0.072
08/03/95	01:31:38	0.01835033	0.008	0.01485978	0.01	0	0.003	0	0.005	0	0.072
08/03/95	01:36:39	0.01665492	0.004	0.01316437	0.005	0	0.001	0	0.003	0	0.071
08/03/95	01:41:39	0.01635267	0.003	0.01236421	0.004	0	0.001	0	0.002	0	0.071
08/03/95	01:46:39	0.01565469	0.003	0.01146681	0.003	0	0.001	0	0.002	0	0.071
08/03/95	01:51:40	0.01645546	0.004	0.01286518	0.005	0	0.001	0	0.003	0	0.071
08/03/95	01:56:40	0.0166518	0.004	0.01296248	0.005	0	0.001	0	0.003	0	0.071
08/03/95	02:01:40	0.01695411	0.004	0.01306464	0.005	0	0.002	0	0.003	0	0.072
08/03/95	02:06:41	0.01665492	0.004	0.01256599	0.005	0	0.002	0	0.003	0	0.073
08/03/95	02:11:41	0.01615022	0.004	0.01206282	0.005	0	0.001	0	0.003	0	0.073
08/03/95	02:16:41	0.01604152	0.003	0.01225532	0.004	0	0.001	0	0.002	0	0.073
08/03/95	02:21:40	0.01713752	0.005	0.01335133	0.006	0	0.002	0	0.003	0	0.074
08/03/95	02:26:40	0.01951784	0.008	0.01573377	0.01	0	0.003	0	0.005	0	0.075
08/03/95	02:31:41	0.01832287	0.006	0.01433964	0.007	0	0.002	0	0.004	0	0.074
08/03/95	02:36:41	0.02011909	0.01	0.01553752	0.013	0	0.004	0	0.007	0	0.075
08/03/95	02:41:41	0.01991243	0.012	0.01483476	0.015	0	0.004	0	0.008	0	0.075
08/03/95	02:46:42	0.01971331	0.008	0.01513345	0.01	0	0.003	0	0.006	0	0.074
08/03/95	02:51:42	0.0182267	0.005	0.01364513	0.006	0	0.002	0	0.003	0	0.073
08/03/95	02:56:42	0.01873522	0.005	0.01405142	0.006	0	0.002	0	0.003	0	0.074
08/03/95	03:01:43	0.02103123	0.008	0.01744296	0.01	0	0.003	0	0.006	0	0.073
08/03/95	03:06:43	0.01764231	0.003	0.01305731	0.004	0	0.001	0	0.002	0	0.072
08/03/95	03:11:43	0.01754264	0.003	0.01325665	0.004	0	0.001	0	0.002	0	0.072
08/03/95	03:16:44	0.01714394	0.003	0.01285796	0.004	0	0.001	0	0.002	0	0.072
08/03/95	03:21:44	0.01943645	0.005	0.01554916	0.007	0	0.002	0	0.004	0	0.072
08/03/95	03:26:44	0.01853938	0.004	0.01455242	0.005	0	0.002	0	0.003	0	0.072
08/03/95	03:31:45	0.01813729	0.004	0.01395176	0.005	0	0.001	0	0.003	0	0.072
08/03/95	03:36:45	0.01803363	0.004	0.0140483	0.004	0	0.001	0	0.002	0	0.072
08/03/95	03:41:45	0.0178377	0.003	0.01385162	0.004	0	0.001	0	0.002	0	0.072
08/03/95	03:46:45	0.01764501	0.004	0.01375712	0.005	0	0.001	0	0.003	0	0.071
08/03/95	03:51:46	0.01844252	0.004	0.01415588	0.005	0	0.001	0	0.003	0	0.072
08/03/95	03:56:46	0.01863841	0.004	0.01455191	0.005	0	0.001	0	0.003	0	0.072
08/03/95	04:01:45	0.01834283	0.004	0.01405619	0.005	0	0.002	0	0.003	0	0.072
08/03/95	04:06:45	0.01844252	0.004	0.01415588	0.005	0	0.001	0	0.003	0	0.072
08/03/95	04:11:46	0.01804039	0.004	0.01365488	0.005	0	0.002	0	0.003	0	0.072
08/03/95	04:16:46	0.01814685	0.004	0.01356028	0.005	0	0.001	0	0.003	0	0.072
08/03/95	04:21:46	0.01884128	0.004	0.01445495	0.005	0	0.002	0	0.003	0	0.071
08/03/95	04:26:47	0.01924724	0.004	0.01485927	0.005	0	0.002	0	0.003	0	0.071
08/03/95	04:31:47	0.01934039	0.004	0.0150536	0.005	0	0.002	0	0.003	0	0.072
08/03/95	04:36:47	0.01974655	0.004	0.01535843	0.005	0	0.002	0	0.003	0	0.071
08/03/95	04:41:48	0.01953978	0.004	0.01545237	0.005	0	0.002	0	0.003	0	0.071
08/03/95	04:46:48	0.01934697	0.004	0.01515845	0.005	0	0.002	0	0.003	0	0.07
08/03/95	04:51:48	0.01974587	0.004	0.01565708	0.005	0	0.002	0	0.003	0	0.071
08/03/95	04:56:49	0.02024829	0.005	0.01595925	0.006	0	0.002	0	0.003	0	0.071
08/03/95	05:01:49	0.01904779	0.004	0.01475954	0.005	0	0.001	0	0.003	0	0.071
08/03/95	05:06:48	0.01984188	0.005	0.01575386	0.006	0	0.002	0	0.003	0	0.071
08/03/95	05:11:48	0.01953612	0.004	0.01495111	0.005	0	0.002	0	0.003	0	0.07
08/03/95	05:16:49	0.02023005	0.005	0.01584521	0.006	0	0.002	0	0.003	0	0.07
08/03/95	05:21:49	0.02022626	0.005	0.01554334	0.006	0	0.002	0	0.003	0	0.071
08/03/95	05:26:49	0.02070893	0.005	0.01592994	0.006	0	0.002	0	0.003	0	0.071
08/03/95	05:31:50	0.02059778	0.005	0.01582148	0.006	0	0.002	0	0.003	0	0.071
08/03/95	05:36:50	0.02199087	0.007	0.01751309	0.008	0	0.002	0	0.005	0	0.071
08/03/95	05:41:50	0.02169235	0.007	0.01701556	0.008	0	0.002	0	0.004	0	0.071
08/03/95	05:46:51	0.02039877	0.004	0.01612	0.005	0	0.002	0	0.003	0	0.072
08/03/95	05:51:51	0.02368247	0.01	0.01890617	0.012	0	0.004	0	0.007	0	0.071
08/03/95	05:56:50	0.02309409	0.008	0.01771874	0.009	0	0.003	0	0.005	0	0.072
08/03/95	06:01:50	0.02667266	0.013	0.02249261	0.016	0	0.005	0	0.009	0	0.074
08/03/95	06:06:51	0.02228938	0.004	0.0177121	0.005	0	0.001	0	0.003	0	0.074
08/03/95	06:11:51	0.02247996	0.005	0.01750652	0.006	0	0.002	0	0.003	0	0.073
08/03/95	06:16:51	0.022576	0.006	0.01770276	0.007	0	0.002	0	0.004	0	0.073
08/03/95	06:21:52	0.02258446	0.007	0.01691348	0.008	0	0.002	0	0.004	0	0.076
08/03/95	06:26:52	0.02110001	0.004	0.015825	0.005	0	0.001	0	0.003	0	0.076

Site: POTW in very :											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	06:31:52	0.02070577	0.003	0.01542978	0.004	0	0.001	0	0.002	0	0.076
08/03/95	06:36:53	0.02181304	0.003	0.01643448	0.004	0	0.001	0	0.002	0	0.076
08/03/95	06:41:52	0.02191675	0.004	0.01673643	0.004	0	0.001	0	0.002	0	0.075
08/03/95	06:46:52	0.02132301	0.004	0.01624136	0.005	0	0.001	0	0.003	0	0.073
08/03/95	06:51:53	0.02212841	0.004	0.01714453	0.005	0	0.001	0	0.003	0	0.074
08/03/95	06:56:53	0.02312951	0.004	0.01874288	0.005	0	0.001	0	0.003	0	0.074
08/03/95	07:01:52	0.02482899	0.004	0.02123926	0.005	0	0.001	0	0.003	0	0.071
08/03/95	07:06:52	0.0244347	0.004	0.02134296	0.005	0	0.001	0	0.003	0	0.071
08/03/95	07:11:53	0.02841341	0.008	0.02562192	0.009	0	0.003	0	0.005	0	0.071
08/03/95	07:16:53	0.02800511	0.006	0.0267095	0.007	0	0.002	0	0.004	0	0.07
08/03/95	07:21:52	0.02721799	0.005	0.0260216	0.006	0	0.002	0	0.003	0	0.071
08/03/95	07:26:52	0.025129	0.005	0.0229352	0.006	0	0.002	0	0.003	0	0.071
08/03/95	07:31:53	0.02165578	0.004	0.01766393	0.005	0	0.002	0	0.003	0	0.07
08/03/95	07:36:53	0.02205909	0.004	0.01806649	0.005	0	0.001	0	0.003	0	0.07
08/03/95	07:41:52	0.02225872	0.004	0.01796668	0.004	0	0.001	0	0.002	0	0.07
08/03/95	07:46:52	0.02177183	0.003	0.01727764	0.004	0	0.001	0	0.002	0	0.07
08/03/95	07:51:53	0.02217131	0.004	0.01807661	0.004	0	0.001	0	0.002	0	0.069
08/03/95	07:56:53	0.02217959	0.003	0.01808336	0.004	0	0.001	0	0.002	0	0.07
08/03/95	08:01:52	0.02217959	0.003	0.01818327	0.004	0	0.001	0	0.002	0	0.069
08/03/95	08:06:52	0.02269182	0.004	0.01869326	0.004	0	0.001	0	0.002	0	0.069
08/03/95	08:11:53	0.02249189	0.004	0.01849333	0.004	0	0.001	0	0.002	0	0.069
08/03/95	08:16:53	0.02149225	0.004	0.01779359	0.005	0	0.001	0	0.003	0	0.068
08/03/95	08:21:51	0.02230028	0.004	0.01840023	0.005	0	0.001	0	0.003	0	0.068
08/03/95	08:26:52	0.02181652	0.004	0.01821379	0.005	0	0.002	0	0.003	0	0.066
08/03/95	08:31:52	0.02143217	0.004	0.01772661	0.005	0	0.001	0	0.003	0	0.067
08/03/95	08:36:53	0.02195333	0.004	0.01804383	0.005	0	0.001	0	0.003	0	0.068
08/03/95	08:41:51	0.02137569	0.004	0.01736147	0.005	0	0.002	0	0.003	0	0.069
08/03/95	08:46:52	0.02199823	0.004	0.01808074	0.005	0	0.002	0	0.003	0	0.068
08/03/95	08:51:53	0.02180946	0.004	0.0180908	0.005	0	0.002	0	0.003	0	0.067
08/03/95	08:56:52	0.02253804	0.004	0.01881524	0.005	0	0.002	0	0.003	0	0.069
08/03/95	09:01:52	0.02083914	0.004	0.01711427	0.005	0	0.001	0	0.003	0	0.069
08/03/95	09:06:52	0.02053015	0.004	0.01700782	0.005	0	0.001	0	0.003	0	0.068
08/03/95	09:11:52	0.0197141	0.004	0.0162943	0.005	0	0.001	0	0.003	0	0.067
08/03/95	09:16:52	0.02105281	0.004	0.01752722	0.005	0	0.001	0	0.003	0	0.066
08/03/95	09:21:55	0.02108007	0.004	0.01825595	0.004	0	0.001	0	0.002	0	0.064
08/03/95	09:26:51	0.02087835	0.004	0.01805422	0.005	0	0.001	0	0.003	0	0.064
08/03/95	09:31:52	0.01948728	0.004	0.01676108	0.005	0	0.001	0	0.003	0	0.066
08/03/95	09:36:52	0.0187071	0.004	0.01628023	0.005	0	0.001	0	0.003	0	0.066
08/03/95	09:41:52	0.01811039	0.004	0.01598571	0.004	0	0.001	0	0.002	0	0.069
08/03/95	09:46:53	0.01759154	0.004	0.01577173	0.005	0	0.001	0	0.003	0	0.067
08/03/95	09:51:53	0.01726007	0.004	0.01534229	0.004	0	0.001	0	0.002	0	0.066
08/03/95	09:56:53	0.01687189	0.004	0.01475027	0.004	0	0.001	0	0.002	0	0.069
08/03/95	10:01:52	0.01628023	0.004	0.01425784	0.004	0	0.001	0	0.002	0	0.067
08/03/95	10:06:52	0.01637833	0.004	0.01445742	0.004	0	0.001	0	0.002	0	0.07
08/03/95	10:11:53	0.01637833	0.004	0.01445742	0.004	0	0.001	0	0.002	0	0.073
08/03/95	10:16:52	0.01597393	0.004	0.01405302	0.004	0	0.001	0	0.002	0	0.073
08/03/95	10:21:52	0.01597393	0.003	0.01405302	0.004	0	0.001	0	0.002	0	0.076
08/03/95	10:26:54	0.01506402	0.003	0.01354751	0.004	0	0.001	0	0.002	0	0.079
08/03/95	10:31:54	0.01364861	0.003	0.0125365	0.004	0	0.001	0	0.002	0	0.082
08/03/95	10:41:50	0.0117277	0.003	0.01061559	0.004	0	0.001	0	0.002	0	0.091
08/03/95	10:45:57	0.00525724	0.003	0.01152549	0.003	0	0.001	0	0.002	0	0.088
08/03/95	10:51:58	0.00596495	0.004	0.0126376	0.005	0	0.001	0	0.003	0	0.218
Run 4											
08/03/95	11:11:31	0	0.003	0	0.004	0	0.001	0.00253723	0.002	0	0.097
08/03/95	11:16:32	0	0.003	0	0.004	0	0.001	0.00294481	0.002	0	0.1
08/03/95	11:21:32	0	0.003	0	0.004	0	0.001	0.00324826	0.002	0	0.102
08/03/95	11:26:32	0	0.003	0	0.004	0	0.001	0.00304468	0.002	0	0.102
08/03/95	11:31:33	0	0.003	0	0.004	0	0.001	0.00315022	0.002	0	0.104
08/03/95	11:36:33	0	0.003	0	0.004	0	0.001	0.00335407	0.002	0	0.104
08/03/95	11:41:33	0	0.003	0	0.004	0	0.001	0.00274575	0.002	0	0.101
08/03/95	11:46:32	0	0.003	0	0.004	0	0.001	0.00305139	0.002	0	0.104
08/03/95	11:51:33	0	0.003	0	0.004	0.00111925	0.001	0.00315426	0.002	0	0.104

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	11:56:34	0	0.003	0	0.004	0.00132469	0.001	0.00315889	0.002	0	0.107
08/03/95	12:01:33	0	0.003	0	0.003	0.00142842	0.001	0.00275481	0.002	0	0.104
08/03/95	12:06:33	0	0.003	0	0.003	0.00132518	0.001	0.00254842	0.002	0	0.107
08/03/95	12:11:34	0	0.003	0	0.004	0.00122391	0.001	0.00316178	0.002	0	0.106
08/03/95	12:16:34	0	0.003	0	0.004	0.00132397	0.001	0.00305531	0.002	0	0.107
08/03/95	12:21:34	0	0.003	0	0.004	0.00132663	0.001	0.00306146	0.002	0	0.11
08/03/95	12:26:35	0	0.003	0	0.004	0.00132708	0.001	0.00255208	0.002	0	0.107
08/03/95	12:31:34	0	0.003	0	0.003	0.00143204	0.001	0.00306865	0.002	0	0.124
08/03/95	12:36:34	0	0.003	0	0.004	0.00163662	0.001	0.00317094	0.002	0	0.111
08/03/95	12:41:35	0	0.003	0	0.004	0.00174112	0.001	0.00348225	0.002	0	0.113
08/03/95	12:46:35	0	0.003	0	0.004	0.00153265	0.001	0.00296312	0.002	0	0.115
08/03/95	12:51:34	0	0.003	0	0.004	0.00173641	0.001	0.00357497	0.002	0	0.109
08/03/95	12:56:34	0	0.003	0	0.003	0.00184186	0.001	0.00347908	0.002	0	0.112
08/03/95	13:01:35	0	0.003	0	0.004	0.00173986	0.001	0.00347971	0.002	0	0.11
08/03/95	13:06:35	0	0.003	0	0.004	0.00194627	0.001	0.0037901	0.002	0	0.114
08/03/95	13:11:34	0	0.003	0	0.004	0.0020487	0.001	0.00389254	0.002	0	0.117
08/03/95	13:16:34	0	0.003	0	0.003	0.0020502	0.001	0.00338282	0.002	0	0.115
08/03/95	13:21:35	0	0.003	0	0.004	0.00194556	0.001	0.00337913	0.002	0	0.117
08/03/95	13:26:34	0	0.003	0	0.004	0.00205169	0.001	0.00359046	0.002	0	0.118
08/03/95	13:31:34	0	0.003	0	0.004	0.00215501	0.001	0.00348906	0.002	0	0.117
08/03/95	13:36:35	0	0.003	0	0.004	0.00215461	0.001	0.00348842	0.002	0	0.121
08/03/95	13:41:35	0	0.003	0	0.004	0.00205127	0.001	0.00348715	0.002	0	0.119
08/03/95	13:46:35	0	0.003	0	0.004	0.00225968	0.001	0.0032868	0.002	0	0.119
08/03/95	13:51:36	0	0.003	0	0.004	0.0022605	0.001	0.0034935	0.002	0	0.12
08/03/95	13:56:35	0	0.003	0	0.004	0.00215887	0.001	0.00339252	0.002	0	0.122
08/03/95	14:01:35	0	0.003	0	0.004	0.00216005	0.001	0.00339437	0.002	0	0.121
08/03/95	14:06:36	0	0.003	0	0.004	0.00236534	0.001	0.00318807	0.002	0	0.123
08/03/95	14:11:36	0	0.003	0	0.004	0.00236362	0.001	0.00328852	0.002	0	0.123
08/03/95	14:16:37	0	0.003	0	0.004	0.00256776	0.001	0.00349215	0.002	0	0.122
08/03/95	14:21:37	0	0.003	0	0.004	0.0024646	0.001	0.00390228	0.002	0	0.125
08/03/95	14:26:36	0	0.003	0	0.004	0.00266998	0.001	0.00390228	0.002	0	0.122
08/03/95	14:31:37	0	0.003	0	0.004	0.00287843	0.001	0.00359804	0.002	0	0.119
08/03/95	14:36:37	0	0.004	0	0.004	0.0025733	0.001	0.00432314	0.002	0	0.122
08/03/95	14:41:36	0	0.003	0	0.004	0.00247216	0.001	0.00391425	0.002	0	0.126
08/03/95	14:46:36	0	0.003	0	0.004	0.00236786	0.001	0.00391212	0.002	0	0.126
08/03/95	14:51:37	0	0.003	0	0.004	0.00216588	0.001	0.00391922	0.002	0	0.125
08/03/95	14:56:36	0	0.003	0	0.004	0.00216584	0.001	0.003816	0.002	0	0.127
08/03/95	15:01:36	0	0.003	0	0.004	0.0020627	0.001	0.00391913	0.002	0	0.129
08/03/95	15:06:37	0	0.003	0	0.004	0.00257698	0.001	0.00381392	0.002	0	0.127
08/03/95	15:11:36	0	0.003	0	0.004	0.00267325	0.001	0.00400988	0.002	0	0.131
08/03/95	15:16:36	0	0.003	0	0.004	0.00256863	0.001	0.00390432	0.002	0	0.129
08/03/95	15:21:37	0	0.003	0	0.004	0.00298658	0.001	0.00453137	0.002	0	0.129
08/03/95	15:26:36	0	0.003	0	0.004	0.00318908	0.001	0.00473218	0.002	0	0.132
08/03/95	15:31:36	0	0.003	0	0.004	0.00329076	0.001	0.00473046	0.002	0	0.134
08/03/95	15:36:37	0	0.004	0	0.005	0.00329972	0.001	0.00391842	0.003	0	0.131
08/03/95	15:41:38	0	0.004	0	0.004	0.00329845	0.001	0.00474153	0.002	0	0.124
08/03/95	15:46:36	0	0.004	0	0.004	0.00340153	0.001	0.00371076	0.002	0	0.117
08/03/95	15:51:37	0	0.003	0	0.004	0.00339598	0.001	0.00421925	0.002	0	0.12
08/03/95	15:56:36	0	0.003	0	0.004	0.00339166	0.001	0.00431666	0.002	0	0.122
08/03/95	16:01:37	0	0.003	0	0.004	0.00319074	0.001	0.00411709	0.002	0	0.123
08/03/95	16:06:37	0	0.004	0	0.004	0.00329726	0.001	0.00412157	0.002	0	0.123
08/03/95	16:11:36	0	0.003	0	0.004	0.0036063	0.001	0.00484274	0.002	0	0.121
08/03/95	16:16:37	0	0.003	0	0.004	0.00370597	0.001	0.00494129	0.002	0	0.121
08/03/95	16:21:37	0	0.003	0	0.004	0.00339598	0.001	0.00504252	0.002	0	0.127
08/03/95	16:26:36	0	0.003	0	0.004	0.00330077	0.001	0.00484801	0.002	0	0.126
08/03/95	16:31:37	0	0.003	0	0.004	0.00350834	0.001	0.00443702	0.002	0	0.119
08/03/95	16:36:37	0	0.003	0	0.004	0.00371741	0.001	0.00475002	0.002	0	0.12
08/03/95	16:41:38	0	0.003	0	0.004	0.00361415	0.001	0.00444024	0.002	0	0.118
08/03/95	16:46:38	0	0.003	0	0.004	0.00350771	0.001	0.00453939	0.002	0	0.118
08/03/95	16:51:37	0	0.003	0	0.004	0.00330077	0.001	0.00412597	0.002	0	0.115
08/03/95	16:56:38	0	0.003	0	0.004	0.00350707	0.001	0.00412597	0.002	0	0.116
08/03/95	17:01:38	0	0.003	0	0.004	0.00360564	0.001	0.00463583	0.002	0	0.121

Site: POTW in very											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
Run 5											
08/03/95	18:14:14	0	0.003	0	0.003	0	9E-04	0	0.002	0	0.093
08/03/95	18:19:14	0	0.003	0	0.003	0	9E-04	0	0.002	0	0.096
08/03/95	18:24:15	0	0.003	0	0.003	0	9E-04	0	0.002	0	0.098
08/03/95	18:29:14	0	0.003	0	0.003	0.00174778	9E-04	0	0.002	0	0.091
08/03/95	18:34:14	0	0.003	0	0.003	0.00174714	9E-04	0	0.002	0	0.09
08/03/95	18:39:15	0	0.003	0	0.003	0.00164497	9E-04	0	0.002	0	0.089
08/03/95	18:44:15	0	0.003	0	0.003	0.00123507	9E-04	0	0.002	0	0.09
08/03/95	18:49:15	0	0.003	0	0.003	0.00113215	9E-04	0	0.002	0	0.095
08/03/95	18:54:16	0	0.003	0	0.003	0.00113194	9E-04	0	0.002	0	0.093
08/03/95	18:59:16	0	0.003	0	0.003	0.00113174	9E-04	0	0.002	0	0.091
08/03/95	19:04:16	0	0.003	0	0.003	0.0012344	9E-04	0	0.002	0	0.094
08/03/95	19:09:17	0	0.003	0	0.003	0.00133702	9E-04	0	0.002	0	0.093
08/03/95	19:14:16	0	0.003	0	0.003	0.00133653	9E-04	0	0.002	0	0.091
08/03/95	19:19:17	0	0.003	0	0.003	0.0014383	9E-04	0	0.002	0	0.09
08/03/95	19:24:18	0	0.003	0	0.003	0.00143755	9E-04	0	0.002	0	0.093
08/03/95	19:29:18	0	0.003	0	0.003	0.00143676	9E-04	0	0.002	0	0.09
08/03/95	19:34:17	0	0.003	0	0.003	0.00143545	9E-04	0	0.002	0	0.088
08/03/95	19:39:17	0	0.003	0	0.003	0.00153686	9E-04	0	0.002	0	0.09
08/03/95	19:44:18	0	0.003	0	0.003	0.00143362	9E-04	0	0.002	0	0.086
08/03/95	19:49:17	0	0.003	0	0.003	0.00143257	9E-04	0	0.002	0	0.086
08/03/95	19:54:17	0	0.003	0	0.003	0.00143126	9E-04	0	0.002	0	0.084
08/03/95	19:59:18	0	0.002	0	0.003	0.00132806	9E-04	0	0.002	0	0.08
08/03/95	20:04:18	0	0.002	0	0.003	0.001225	8E-04	0	0.002	0	0.079
08/03/95	20:09:18	0	0.002	0	0.003	0.00122388	8E-04	0	0.002	0	0.076
08/03/95	20:14:18	0	0.002	0	0.003	0.00112107	8E-04	0	0.002	0	0.075
08/03/95	20:19:19	0	0.002	0	0.003	0.00112025	8E-04	0.00162945	0.002	0	0.073
08/03/95	20:24:18	0	0.002	0	0.003	0.00101747	8E-04	0.00152621	0.002	0	0.07
08/03/95	20:29:18	0	0.002	0	0.003	0.00101691	8E-04	0.00152537	0.002	0	0.07
08/03/95	20:34:19	0	0.002	0	0.003	0.00081263	8E-04	0	0.002	0	0.068
08/03/95	20:39:19	0	0.002	0	0.003	0	8E-04	0	0.002	0	0.066
08/03/95	20:44:19	0	0.002	0	0.003	0	8E-04	0	0.002	0	0.064
08/03/95	20:49:19	0	0.002	0	0.003	0	8E-04	0	0.002	0	0.063
08/03/95	20:54:20	0	0.002	0	0.003	0	8E-04	0	0.002	0	0.062
08/03/95	20:59:19	0	0.002	0	0.003	0	8E-04	0	0.002	0	0.06
08/03/95	21:04:19	0	0.002	0	0.003	0	8E-04	0	0.002	0	0.06
08/03/95	21:09:20	0.00232686	0.002	0	0.003	0	8E-04	0	0.002	0	0.06
08/03/95	21:14:20	0.00252966	0.002	0	0.003	0	8E-04	0	0.002	0	0.058
08/03/95	21:19:19	0.00283531	0.002	0	0.003	0	8E-04	0	0.002	0	0.058
08/03/95	21:24:19	0.00283426	0.002	0	0.003	0	8E-04	0	0.002	0	0.06
08/03/95	21:29:20	0.00303839	0.002	0	0.003	0	8E-04	0	0.002	0	0.059
08/03/95	21:34:19	0.00303503	0.002	0	0.003	0	8E-04	0	0.002	0	0.059
08/03/95	21:39:19	0.00332876	0.002	0	0.003	0	8E-04	0	0.002	0	0.059
08/03/95	21:44:20	0.00353312	0.002	0	0.003	0	8E-04	0	0.002	0	0.058
08/03/95	21:49:20	0.00484632	0.002	0.00302895	0.003	0	8E-04	0	0.002	0	0.059
08/03/95	21:54:20	0.00554896	0.002	0.00373294	0.003	0	9E-04	0	0.002	0	0.058
08/03/95	21:59:21	0.00524338	0.002	0.00342836	0.003	0	8E-04	0	0.002	0	0.057
08/03/95	22:04:20	0.00563852	0.002	0.00382614	0.003	0	8E-04	0	0.002	0	0.057
08/03/95	22:09:20	0.00593617	0.002	0.0038233	0.003	0	8E-04	0	0.002	0	0.058
08/03/95	22:14:21	0.00704836	0.002	0.00503454	0.003	0	9E-04	0	0.002	0	0.058
08/03/95	22:19:21	0.00654612	0.002	0.00453193	0.003	0	8E-04	0	0.002	0	0.057
08/03/95	22:24:20	0.00884929	0.003	0.00653641	0.003	0	9E-04	0	0.002	0	0.059
08/03/95	22:29:20	0.00815117	0.003	0.00573601	0.003	0	9E-04	0	0.002	0	0.06
08/03/95	22:34:21	0.00803709	0.003	0.00542503	0.003	0	9E-04	0	0.002	0	0.062
08/03/95	22:39:21	0.00913738	0.003	0.00672752	0.003	0	9E-04	0	0.002	0	0.06
08/03/95	22:44:21	0.00964481	0.003	0.00713314	0.003	0	9E-04	0	0.002	0	0.06
08/03/95	22:49:22	0.00983476	0.003	0.00732589	0.003	0	9E-04	0	0.002	0	0.063
08/03/95	22:54:22	0.01134852	0.003	0.00833564	0.003	0	9E-04	0	0.002	0	0.064
08/03/95	22:59:22	0.01045049	0.003	0.00743592	0.003	0	9E-04	0	0.002	0	0.065
08/03/95	23:04:23	0.01095088	0.003	0.00793688	0.003	0	9E-04	0	0.002	0	0.063
08/03/95	23:09:23	0.01144044	0.003	0.0084298	0.003	0	9E-04	0	0.002	0	0.067
08/03/95	23:14:23	0.01043495	0.003	0.00732453	0.003	0	9E-04	0	0.002	0	0.067

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/03/95	23:19:23	0.01023461	0.003	0.00732477	0.003	0	9E-04	0	0.002	0	0.066
08/03/95	23:24:24	0.01113559	0.003	0.00832661	0.003	0	9E-04	0	0.002	0	0.065
08/03/95	23:29:24	0.01253307	0.003	0.00902381	0.003	0	0.001	0	0.002	0	0.066
08/03/95	23:34:24	0.01272886	0.003	0.00912068	0.003	0	0.001	0	0.002	0	0.069
08/03/95	23:39:24	0.01182682	0.003	0.00841909	0.003	0	0.001	0	0.002	0	0.07
08/03/95	23:44:25	0.01222089	0.003	0.00901541	0.003	0	0.001	0	0.002	0	0.068
08/03/95	23:49:24	0.0131151	0.003	0.00961106	0.003	0	0.001	0	0.002	0	0.068
08/03/95	23:54:25	0.01301498	0.003	0.00961106	0.003	0	0.001	0	0.002	0	0.068
08/03/95	23:59:24	0.01322261	0.003	0.00971661	0.003	0	0.001	0	0.002	0	0.068
08/04/95	00:04:24	0.01341544	0.003	0.00981129	0.003	0	0.001	0	0.002	0	0.067
08/04/95	00:09:25	0.01453025	0.003	0.01032148	0.004	0	0.001	0	0.002	0	0.07
08/04/95	00:14:25	0.01484192	0.003	0.01083059	0.004	0	0.001	0	0.002	0	0.073
08/04/95	00:19:24	0.01494499	0.003	0.01103321	0.004	0	0.001	0	0.002	0	0.073
08/04/95	00:24:24	0.01542925	0.003	0.01112108	0.004	0	0.001	0	0.002	0	0.074
08/04/95	00:29:25	0.01522603	0.003	0.01101884	0.004	0	0.001	0	0.002	0	0.073
08/04/95	00:34:25	0.01450588	0.003	0.01020414	0.004	0	0.001	0	0.002	0	0.073
08/04/95	00:39:24	0.01470596	0.003	0.01040422	0.004	0	0.001	0	0.002	0	0.073
08/04/95	00:44:24	0.01520617	0.003	0.01090442	0.004	0	0.001	0	0.002	0	0.073
08/04/95	00:49:25	0.01569758	0.003	0.01129826	0.004	0	0.001	0	0.002	0	0.072
08/04/95	00:54:25	0.01578281	0.003	0.0113876	0.004	0	0.001	0	0.002	0	0.071
08/04/95	00:59:25	0.01619145	0.003	0.01149393	0.004	0	0.001	0	0.002	0	0.071
08/04/95	01:04:24	0.01598857	0.003	0.01149178	0.004	0	0.001	0	0.002	0	0.071
08/04/95	01:09:24	0.01609751	0.003	0.01169819	0.004	0	0.001	0	0.002	0	0.072
08/04/95	01:14:25	0.01640053	0.003	0.01200039	0.004	0	0.001	0	0.002	0	0.072
08/04/95	01:19:25	0.01620052	0.003	0.01200039	0.004	0	0.001	0	0.002	0	0.073
08/04/95	01:24:24	0.01650361	0.003	0.01210265	0.004	0	0.001	0	0.002	0	0.075
08/04/95	01:29:24	0.01677859	0.003	0.01228432	0.004	0	0.001	0	0.002	0	0.076
08/04/95	01:34:25	0.01679427	0.003	0.0122958	0.004	0	0.001	0	0.002	0	0.075
08/04/95	01:39:25	0.01719734	0.003	0.01279802	0.004	0	0.001	0	0.002	0	0.074
08/04/95	01:44:23	0.0174875	0.003	0.01289078	0.004	0	0.001	0	0.002	0	0.074
08/04/95	01:49:24	0.01748691	0.003	0.01319013	0.004	0	0.001	0	0.002	0	0.077
08/04/95	01:54:24	0.01769337	0.003	0.01289517	0.004	0	0.001	0	0.002	0	0.074
08/04/95	01:59:24	0.01750652	0.003	0.01270473	0.004	0	0.001	0	0.002	0	0.075
08/04/95	02:04:23	0.01760656	0.003	0.01310488	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:09:24	0.0177099	0.003	0.01320738	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:14:24	0.01750652	0.003	0.01300484	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:19:25	0.01720319	0.003	0.0124023	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:24:24	0.01619696	0.003	0.01149784	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:29:24	0.01579408	0.003	0.01129577	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:34:25	0.01580293	0.003	0.01140212	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:39:25	0.01589701	0.003	0.01149784	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:44:24	0.01608495	0.003	0.01168906	0.004	0	0.001	0	0.002	0	0.073
08/04/95	02:49:24	0.01638467	0.003	0.01188888	0.004	0	0.001	0	0.002	0	0.073
08/04/95	02:54:25	0.01658138	0.003	0.01198654	0.004	0	0.001	0	0.002	0	0.074
08/04/95	02:59:25	0.01698093	0.003	0.0122862	0.004	0	0.001	0	0.002	0	0.074
08/04/95	03:04:24	0.01727414	0.003	0.01238146	0.004	0	0.001	0	0.002	0	0.074
08/04/95	03:09:24	0.01767354	0.003	0.01238146	0.004	0	0.001	0	0.002	0	0.074
08/04/95	03:14:25	0.01747057	0.003	0.01237915	0.004	0	0.001	0	0.002	0	0.074
08/04/95	03:19:25	0.0175704	0.003	0.01247898	0.004	0	0.001	0	0.002	0	0.075
08/04/95	03:24:24	0.01717107	0.003	0.01207965	0.004	0	0.001	0	0.002	0	0.075
08/04/95	03:29:23	0.0175704	0.003	0.01237915	0.004	0	0.001	0	0.002	0	0.074
08/04/95	03:34:24	0.01756711	0.003	0.01277608	0.004	0	0.001	0	0.002	0	0.077
08/04/95	03:39:24	0.01795628	0.003	0.01286867	0.004	0	0.001	0	0.002	0	0.076
08/04/95	03:44:24	0.018132	0.003	0.0128518	0.004	0	0.001	0	0.002	0	0.075
08/04/95	03:49:23	0.01824188	0.003	0.01275935	0.004	0	0.001	0	0.002	0	0.076
08/04/95	03:54:25	0.0186441	0.003	0.01335995	0.004	0	0.001	0	0.002	0	0.077
08/04/95	03:59:25	0.01873678	0.003	0.01355427	0.004	0	0.001	0	0.002	0	0.076
08/04/95	04:04:24	0.01873327	0.003	0.01375102	0.004	0	0.001	0	0.002	0	0.077
08/04/95	04:09:24	0.01903577	0.003	0.01365393	0.004	0	0.001	0	0.002	0	0.078
08/04/95	04:14:25	0.01942715	0.003	0.01384807	0.004	0	0.001	0	0.002	0	0.078
08/04/95	04:19:25	0.02001364	0.003	0.01473641	0.004	0	0.001	0	0.002	0	0.079
08/04/95	04:24:24	0.01971193	0.003	0.01453506	0.004	0	0.001	0	0.002	0	0.08

Very small town POTW

Site: POTW in very :											
Downwind data in pp											
Date	Time	CL3F		CCL4		TCFM		CL2F2		HCC	
		ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI	ppm	95% CI
08/04/95	04:29:24	0.0199073	0.003	0.01443279	0.004	0	0.001	0	0.002	0	0.079
08/04/95	04:34:25	0.0205115	0.003	0.01483598	0.004	0	0.001	0	0.002	0	0.077
08/04/95	04:39:25	0.02070748	0.003	0.01513239	0.004	0	0.001	0	0.002	0	0.078
08/04/95	04:44:24	0.0208063	0.003	0.01493275	0.004	0	0.001	0	0.002	0	0.079
08/04/95	04:49:24	0.02098965	0.004	0.01521998	0.004	0	0.001	0	0.002	0	0.08
08/04/95	04:54:24	0.02138354	0.004	0.01561496	0.004	0	0.001	0	0.002	0	0.08
08/04/95	04:59:25	0.0221792	0.004	0.01690791	0.004	0	0.001	0	0.002	0	0.079
08/04/95	05:04:24	0.02249024	0.004	0.01691744	0.004	0	0.001	0	0.002	0	0.079
08/04/95	05:09:24	0.02229121	0.004	0.01661889	0.004	0	0.001	0	0.002	0	0.078
08/04/95	05:14:25	0.02228363	0.004	0.01621532	0.004	0	0.001	0	0.002	0	0.078
08/04/95	05:19:25	0.02339026	0.004	0.01831407	0.005	0	0.001	0	0.002	0	0.078
08/04/95	05:24:24	0.02408699	0.004	0.01950847	0.005	0	0.001	0	0.003	0	0.078
08/04/95	05:29:24	0.02287971	0.004	0.01720952	0.004	0	0.001	0	0.002	0	0.08
08/04/95	05:34:24	0.02287193	0.004	0.01660701	0.004	0	0.001	0	0.002	0	0.08
08/04/95	05:39:25	0.02327844	0.004	0.01711065	0.004	0	0.001	0	0.002	0	0.08
08/04/95	05:44:25	0.02348621	0.004	0.0173161	0.005	0	0.001	0	0.002	0	0.081
08/04/95	05:49:24	0.0236808	0.004	0.01761135	0.005	0	0.001	0	0.002	0	0.081
08/04/95	05:54:24	0.02396665	0.004	0.01799985	0.005	0	0.001	0	0.003	0	0.08
08/04/95	05:59:25	0.02396665	0.004	0.01829819	0.005	0	0.001	0	0.003	0	0.08
08/04/95	06:04:24	0.02386273	0.004	0.01819533	0.005	0	0.001	0	0.003	0	0.08
08/04/95	06:09:24	0.02394416	0.004	0.01838037	0.005	0	0.001	0	0.003	0	0.079
08/04/95	06:14:24	0.02423312	0.004	0.01837347	0.005	0	0.001	0	0.003	0	0.079
08/04/95	06:19:25	0.02473434	0.004	0.01907227	0.005	0	0.001	0	0.003	0	0.079
08/04/95	06:24:25	0.02513168	0.004	0.0194696	0.005	0	0.001	0	0.003	0	0.079
08/04/95	06:29:24	0.02481968	0.004	0.01926007	0.005	0	0.001	0	0.003	0	0.08
08/04/95	06:34:24	0.02423767	0.004	0.01877426	0.005	0	0.001	0	0.003	0	0.08
08/04/95	06:39:25	0.02486634	0.004	0.01929628	0.005	0	0.001	0	0.003	0	0.079
08/04/95	06:44:24	0.02477617	0.004	0.01900501	0.005	0	0.001	0	0.003	0	0.078
08/04/95	06:49:24	0.02578086	0.004	0.02020662	0.005	0	0.001	0	0.003	0	0.078
08/04/95	06:54:24	0.02590951	0.004	0.02072761	0.005	0	0.001	0	0.003	0	0.078
08/04/95	06:59:25	0.02554435	0.004	0.01995652	0.005	0	0.001	0	0.003	0	0.078
08/04/95	07:04:25	0.02567771	0.004	0.01978282	0.005	0	0.001	0	0.003	0	0.078
08/04/95	07:09:24	0.02471166	0.004	0.01830864	0.005	0	0.001	0	0.003	0	0.078
08/04/95	07:14:24	0.024234	0.004	0.01722416	0.005	0	0.001	0	0.003	0	0.078
08/04/95	07:19:25	0.02452528	0.004	0.01761816	0.005	0	0.001	0	0.003	0	0.078
08/04/95	07:24:25	0.02433867	0.004	0.01742769	0.004	0	0.001	0	0.002	0	0.077
08/04/95	07:29:24	0.02495356	0.004	0.01773807	0.005	0	0.001	0	0.002	0	0.078
08/04/95	07:34:24	0.02465831	0.004	0.01744124	0.004	0	0.001	0	0.002	0	0.077
08/04/95	07:39:25	0.02426639	0.004	0.01724718	0.004	0	0.001	0	0.002	0	0.076
08/04/95	07:44:24	0.02419308	0.004	0.01716604	0.004	0	0.001	0	0.002	0	0.076
08/04/95	07:49:23	0.02411507	0.004	0.01738295	0.004	0	0.001	0	0.002	0	0.078
08/04/95	07:54:24	0.02362656	0.004	0.0171921	0.004	0	0.001	0	0.002	0	0.079
08/04/95	07:59:25	0.0233509	0.004	0.01721122	0.004	0	0.001	0	0.002	0	0.079
08/04/95	08:04:25	0.02253734	0.004	0.01650056	0.004	0	0.001	0	0.002	0	0.078
08/04/95	08:09:25	0.02283495	0.004	0.01710106	0.004	0	0.001	0	0.002	0	0.08
08/04/95	08:14:25	0.02243673	0.004	0.01680239	0.004	0	0.001	0	0.002	0	0.079
08/04/95	08:19:25	0.02265054	0.004	0.01701307	0.004	0	0.001	0	0.002	0	0.077
08/04/95	08:24:26	0.02125691	0.003	0.01611898	0.004	0	0.001	0	0.002	0	0.072
08/04/95	08:29:26	0.02076471	0.003	0.01572473	0.004	0	0.001	0	0.002	0	0.073
08/04/95	08:34:26	0.02047745	0.003	0.01593812	0.004	0	0.001	0	0.002	0	0.075
08/04/95	08:39:27	0.02018602	0.003	0.01554323	0.004	0	0.001	0	0.002	0	0.075
08/04/95	08:44:27	0.01999892	0.003	0.01595874	0.004	0	0.001	0	0.002	0	0.075

APPENDIX C

COMPLETE RESULTS OF OFF-SITE ANALYSIS OF CANISTER SAMPLES

C1 - Beef Processing Plant in Southwest U.S.
C2 - Beef Processing Plant in Midwest U.S.
C3 - Chicken Processing Plant in Southeast U.S.
C4 - POTW for Small Town in Southwest U.S.
C5 - POTW for Very Small Town in Southwest U.S.

Note: Data are given by field site. Results are shown both by sample ID and sorted by sampling location.

Project: EPA Greenhouse Gas

Site: Beef Processing Plant in Southwestern U.S.

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 036	8/23/95	upwind	0.130	2.0	360	NM
A 037	8/23/95	beam path	0.041	26	380	< 19
A 038	8/23/95	upwind	0.140	2.0	370	NM
A 041	8/23/95	beam path	0.048	18	370	< 20
A 042	8/24/95	vert.disp.	0.072	58	620	< 18
A 043	8/24/95	vert.disp.	0.061	61	630	< 23
A 044	8/24/95	vert.disp.	0.075	58	700	< 24
A 045	8/24/95	beam path	0.020	240	920	< 23
A 046	8/24/95	upwind	0.022	5.6	740	NM
A 052	8/24/95	beam path	0.037	63	760	< 19

NM = Not measured

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 036	8/23/95	upwind	0.13	2.0	360	NM
A 038	8/23/95	upwind	0.14	2.0	370	NM
A 046	8/24/95	upwind	0.022	5.6	740	NM
		n	3	3	3	n/a
		Avg.	0.097	3.20	490	n/a
		Std. Dev.	0.065	2.08	217	n/a
		Min	0.022	2.0	360	n/a
		Max	0.140	5.6	740	n/a
A 037	8/23/95	beam path	0.041	26	380	< 19
A 041	8/23/95	beam path	0.048	18	370	< 20
A 045	8/24/95	beam path	0.020	240	920	< 23
A 052	8/24/95	beam path	0.037	63	760	< 19
A 042	8/24/95	vert.disp.	0.072	58	620	< 18
A 043	8/24/95	vert.disp.	0.061	61	630	< 23
A 044	8/24/95	vert.disp.	0.075	58	700	< 24

NM = Not measured
n/a = Not applicable

Project: EPA Greenhouse Gas

Site: Beef Processing Plant in Midwestern U.S.

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 059	8/30/95	upwind	0.037	4.0	640	NM
A 060	8/30/95	beam path	0.027	67	600	< 24
A 064	8/30/95	upwind	< 0.031	2.8	510	NM
A 065	8/30/95	beam path	0.064	58	570	30
A 066	8/30/95	upwind	0.098	3.4	620	NM
A 067	8/30/95	beam path	0.029	140	680	38
A 068	8/31/95	upwind	140	4.8	640	NM
A 072	8/31/95	beam path	< 0.026	66	730	NM
A 073	8/31/95	upwind	< 0.024	4.0	630	NM
A 074	8/31/95	beam path	< 0.024	57	67	NM
A 075	9/01/95	upwind	< 0.021	4.7	680	NM
A 076	9/01/95	beam path	0.056	120	700	< 24

NM = Not measured

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 059	8/30/95	upwind	0.037	4.0	640	NM
A 064	8/30/95	upwind	0.031	2.8	510	NM
A 066	8/30/95	upwind	0.098	3.4	620	NM
A 068	8/31/95	upwind	140	4.8	640	NM
A 073	8/31/95	upwind	0.024	4.0	630	NM
A 075	9/01/95	upwind	0.021	4.7	680	NM
		n	6	6	6	n/a
		Avg.	23.4	3.95	620	n/a
		Std. Dev.	57.1	0.764	57.6	n/a
		Min	0.021	2.8	510	n/a
		Max	140	4.8	680	n/a
A 060	8/30/95	beam path	0.027	67	600	< 24
A 065	8/30/95	beam path	0.064	58	570	30
A 067	8/30/95	beam path	0.029	140	680	38
A 072	8/31/95	beam path	< 0.026	66	730	NM
A 074	8/31/95	beam path	< 0.024	57	67	NM
A 076	9/01/95	beam path	0.056	120	700	< 24

NM = Not measured
n/a = Not applicable

oject: EPA Greenhouse Gas

e: Chicken Processing Plant in Southeastern U.S.

Sample dentification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 082	9/06/95	upwind	< 0.019	2.0	51	< 25
A 083	9/06/95	beam path	< 0.018	3.1	640	< 24
A 087	9/07/95	upwind	0.036	2.7	470	< 20
A 088	9/07/95	beam path	< 0.010	5.8	530	< 21

Sample dentification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 082	9/06/95	upwind	0.019	2.0	51	25
A 087	9/07/95	upwind	0.036	2.7	470	20
		n	2	2	2	2
		Avg.	0.028	2.35	261	22.5
		Std. Dev.	0.012	0.495	296	3.54
		Min	0.019	2.0	51	20
		Max	0.036	2.7	470	25
A 083	9/06/95	beam path	< 0.018	3.1	640	< 24
A 088	9/07/95	beam path	< 0.010	5.8	530	< 21

a = Not applicable

Project: EPA Greenhouse Gas

Site: POTW for Small Town in Southwestern U.S.

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 095	10/04/95	upwind	0.078	2.0	360	< 21
A 096	10/04/95	beam path	0.190	2.2	420	< 29
A 099	10/04/95	upwind	0.036	2.1	350	< 22
A 100	10/04/95	beam path	0.072	2.1	370	< 22
A 104	10/05/95	upwind	0.027	2.0	350	< 14
A 105	10/05/95	beam path	< 0.019	1.9	350	< 19
A 106	10/06/95	upwind	0.022	1.9	360	< 19
A 111	10/06/95	beam path	0.018	1.8	360	< 16
A 112	10/06/95	upwind	< 0.022	2.1	350	< 17

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 095	10/04/95	upwind	0.078	2.0	360	21
A 099	10/04/95	upwind	0.036	2.1	350	22
A 104	10/05/95	upwind	0.027	2.0	350	14
A 106	10/06/95	upwind	0.022	1.9	360	19
A 112	10/06/95	upwind	0.022	2.1	350	17
		n	5	5	5	5
		Avg.	0.037	2.02	354	18.6
		Std. Dev.	0.024	0.08	5.48	3.21
		Min	0.022	1.9	350	14
		Max	0.078	2.1	360	22
A 096	10/04/95	beam path	0.190	2.2	420	< 29
A 100	10/04/95	beam path	0.072	2.1	370	< 22
A 105	10/05/95	beam path	< 0.019	1.9	350	< 19
A 111	10/06/95	beam path	0.018	1.8	360	< 16

Project: EPA Greenhouse Gas

Site: POTW for Very Small Town in Southwestern U.S.

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 007	8/1/95	upwind	0.054	< 3	440	NM
A 008	8/2/95	upwind	0.078	< 3	420	NM
A 012	8/2/95	beam path	< 0.022	< 2	430	38
A 013	8/2/95	beam path	0.470	< 2	420	22
A 014	8/2/95	upwind	0.520	< 3	410	NM
A 017	8/3/95	upwind	< 0.024	< 2	410	NM
A 018	8/3/95	beam path	0.010	< 2	420	46
A 021	8/3/95	upwind	0.160	< 3	420	NM
A 022	8/3/95	beam path	< 0.020	< 2	450	< 20

NM = Not measured

Sample Identification	Date Sampled	Sample Point	Total Non-methane Hydrocarbon (ppmv)	Methane (ppmv)	Carbon Dioxide (ppmv)	Sulfur Hexafluoride (ppbv)
A 007	8/1/95	upwind	0.054	3	440	NM
A 008	8/2/95	upwind	0.078	3	420	NM
A 014	8/2/95	upwind	0.520	3	410	NM
A 017	8/3/95	upwind	0.024	2	410	NM
A 021	8/3/95	upwind	0.160	3	420	NM
		n	5	5	5	n/a
		Avg.	0.167	2.80	420.00	n/a
		Std. Dev.	0.204	0.45	12.25	n/a
		Min	0.024	2	410.00	n/a
		Max	0.520	3	440.00	n/a
A 012	8/2/95	beam path	< 0.022	< 2	430	38
A 013	8/2/95	beam path	0.470	< 2	420	22
A 018	8/3/95	beam path	0.010	< 2	420	46
A 022	8/3/95	beam path	< 0.020	< 2	450	< 20

NM = Not measured
n/a = Not applicable

APPENDIX D

COMPLETE RESULTS OF METEROLOGICAL MONITORING

D1 - Beef Processing Plant in Southwest U.S.
D2 - Beef Processing Plant in Midwest U.S.
D3 - Chicken Processing Plant in Southeast U.S.
D4 - POTW for Small Town in Southwest U.S.
D5 - POTW for Very Small Town in Southwest U.S.

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
Run 6							
08/21/95	21:20	80.3	135.9	9.3	26.68	52.9	5
08/21/95	21:25	80	134.8	9.1	26.68	53.8	5.7
08/21/95	21:30	79.6	136.8	8.8	26.68	54.6	5.4
08/21/95	21:35	79.1	133.9	7.7	26.68	55.7	6.1
08/21/95	21:40	77.9	97	7.1	26.69	57.7	15.6
08/21/95	21:45	77.4	121.1	7.9	26.69	58.9	8
08/21/95	21:50	77.4	120.1	7.1	26.69	59.5	11.2
08/21/95	21:55	76.6	96.1	6.6	26.7	60.6	11
08/21/95	22:00	75.9	101	6.3	26.7	62.2	6
08/21/95	22:05	75.6	103	6.4	26.7	63.1	7.6
08/21/95	22:10	75.1	114.1	6.1	26.7	64.5	5.7
08/21/95	22:15	74.7	115	6.1	26.7	66.1	6.6
08/21/95	22:20	74.8	114.8	6.2	26.7	66.8	5.3
08/21/95	22:25	75.3	114.1	6.5	26.7	66.5	7.2
08/21/95	22:30	74.8	112.1	5.6	26.7	67.5	5
08/21/95	22:35	74.7	107.1	5.5	26.7	68.2	5.4
08/21/95	22:40	74.7	109.1	5.6	26.71	68.6	5.2
08/21/95	22:45	74.4	116.1	5.7	26.71	69.2	5.3
08/21/95	22:50	74	122	5.8	26.71	70.1	5.2
08/21/95	22:55	74	124.9	5.6	26.71	70.4	4.4
08/21/95	23:00	73.3	125.1	4.7	26.71	72.1	5.8
08/21/95	23:05	72.9	128	4.6	26.71	73.4	4.2
08/21/95	23:10	72.8	137.2	3.8	26.71	74.4	3.9
08/21/95	23:15	72.9	128.2	3.7	26.7	75.2	6.4
08/21/95	23:20	73.1	126.9	4.2	26.7	74.7	3.2
08/21/95	23:25	72.6	131.9	4.4	26.7	75.4	3.2
08/21/95	23:30	72.6	131.9	4.1	26.7	76.2	3.8
08/21/95	23:35	72.2	130	4	26.7	77	2.7
08/21/95	23:40	72.2	132.1	4.7	26.7	77.7	3.6
08/21/95	23:45	72.3	128	5.7	26.7	77.6	3.2
08/21/95	23:50	72.2	125.1	6.8	26.7	77.2	4.4
08/21/95	23:55	72.2	137.2	6.8	26.7	76.7	6.6
08/21/95	00:00	71.7	145.8	5.7	26.7	78.7	3.6
08/22/95	00:05	71.9	164.9	7.9	26.7	78.9	6.1
08/22/95	00:10	71.9	161.1	8.1	26.7	79.4	7
08/22/95	00:15	72.1	161.8	8.2	26.7	79.5	5.8
08/22/95	00:20	72.1	164.9	7.9	26.71	79.8	6
08/22/95	00:25	72.4	157.1	7.5	26.71	79.5	5.7
08/22/95	00:30	72.6	151.9	7.3	26.71	79.5	6.5
08/22/95	00:35	72.7	141.1	7.4	26.71	79.3	5.9
08/22/95	00:40	72.2	132.8	6.3	26.71	80.3	5.2
08/22/95	00:45	72	130	5.7	26.71	81	6.4
08/22/95	00:50	71.8	104	5.8	26.71	81.5	17.4
08/22/95	00:55	71.5	127.1	6.1	26.71	82.4	5.7
08/22/95	01:00	71.4	128.9	5.3	26.71	83	8.3
08/22/95	01:05	71.4	130	4.7	26.71	83.6	6.1
08/22/95	01:10	71	105.1	4.2	26.71	84.3	10.3
08/22/95	01:15	71.1	110.9	4.7	26.71	84.3	4.1
08/22/95	01:20	71.2	124	5.5	26.71	84.7	7.5
08/22/95	01:25	71.5	128.9	5.9	26.71	84	5.4
08/22/95	01:30	71.3	131.9	5.8	26.71	84	6.5
08/22/95	01:35	71.5	136.1	6.6	26.71	84.1	8.5
08/22/95	01:40	71.6	126.9	6.1	26.71	83.7	5.2
08/22/95	01:45	71.2	116.1	4.7	26.71	84.5	4.7
08/22/95	01:50	70.6	112.1	4.1	26.7	85.9	4.4
08/22/95	01:55	70.2	113.9	4.6	26.7	87.2	3.2

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/22/95	02:00	70.3	122	5.2	26.7	87.8	4.8
08/22/95	02:05	70.5	121.1	5.8	26.7	87.8	8.5
08/22/95	02:10	70.8	125.8	5.3	26.7	86.6	5.5
08/22/95	02:15	70	131	4.4	26.7	87.7	3.5
08/22/95	02:20	69.6	125.1	4.7	26.7	89.2	2.6
08/22/95	02:25	69.4	125.1	5.1	26.7	90.3	2.6
08/22/95	02:30	69.2	122.9	5.3	26.7	90.9	4.3
08/22/95	02:35	69.2	130.1	5.1	26.7	91.3	4.7
08/22/95	02:40	69.4	134.1	5.3	26.7	90.7	4.8
08/22/95	02:45	69.3	133.9	5	26.7	90.9	4.7
08/22/95	02:50	69.2	135	5	26.7	91	4.4
08/22/95	02:55	69.2	129.1	5.2	26.7	91.1	4.6
08/22/95	03:00	69.2	119	5.4	26.7	91.4	5.7
08/22/95	03:05	69	108	5.1	26.7	91.7	4.4
08/22/95	03:10	69.1	104	5.1	26.7	91.4	4.1
08/22/95	03:15	69.2	103	5.1	26.7	90.8	4.6
08/22/95	03:20	69.2	105.8	5.7	26.69	90.6	5.2
08/22/95	03:25	69.2	109.1	6.1	26.69	90.3	4.6
08/22/95	03:30	68.9	112	6.1	26.69	90.6	4.7
08/22/95	03:35	68.7	116.1	6.1	26.69	91.1	4.9
08/22/95	03:40	68.5	122	6.3	26.69	91.3	4.7
08/22/95	03:45	68.2	123.1	5.9	26.69	90.9	6.5
08/22/95	03:50	67.3	119	5	26.69	92.7	6.3
08/22/95	03:55	67.2	107.8	4.8	26.69	93.8	4.3
08/22/95	04:00	67.6	108.9	5.3	26.69	94.1	3.7
08/22/95	04:05	67.8	110	5.1	26.69	93.9	4.6
08/22/95	04:10	67.8	108	4.7	26.69	93.7	3.6
08/22/95	04:15	67.8	114.8	3.9	26.69	93.4	2.8
08/22/95	04:20	67.5	110.9	3.2	26.69	93.8	2.5
08/22/95	04:25	67.5	106	3.2	26.69	94.6	2.7
08/22/95	04:30	67.5	110	2.9	26.69	95.3	5.3
08/22/95	04:35	67.5	131	3.2	26.69	95.1	11.3
08/22/95	04:40	67.7	115	4.1	26.69	94.1	2.7
08/22/95	04:45	67.4	120.1	4.4	26.69	93.9	2.8
08/22/95	04:50	67.1	127.1	4.1	26.69	94.5	2.7
08/22/95	04:55	67.2	122	4.6	26.68	94.2	5
08/22/95	05:00	67.2	117	5	26.68	93.9	5.5
08/22/95	05:05	67.2	116.8	5	26.68	93.3	6.1
08/22/95	05:10	67.1	113.9	5.3	26.68	92.4	4.9
08/22/95	05:15	66.9	119	5.5	26.69	92.1	3.7
08/22/95	05:20	66.5	126.9	4.8	26.69	92.8	4.1
08/22/95	05:25	66	129.1	4.2	26.69	93.7	4.3
08/22/95	05:30	65.5	136.8	3.3	26.68	95	3.2
08/22/95	05:35	65.6	136.8	3.4	26.69	95.7	3.1
08/22/95	05:40	65.8	134.1	4.1	26.68	95.5	2.4
08/22/95	05:45	66	131.9	4.4	26.68	95.3	3
08/22/95	05:50	65.9	131	4.4	26.68	95	3.7
08/22/95	05:55	65.9	129.1	4.1	26.68	94.9	2.8
08/22/95	06:00	65.8	125.1	4.2	26.69	94.4	3.2
08/22/95	06:05	65.7	115	4.1	26.69	94.2	3.3
08/22/95	06:10	65.5	118.1	4.2	26.69	94.3	2.5
08/22/95	06:15	65.5	119	5	26.69	94.3	3.6
08/22/95	06:20	65.9	126.9	6.1	26.69	92.7	4.7
08/22/95	06:25	65.5	130	5.4	26.69	92.6	3.6
08/22/95	06:30	65.3	128.9	5.1	26.69	93.1	3.5
08/22/95	06:35	65.2	124.9	4.8	26.69	93.4	5.9
08/22/95	06:40	65.3	125.8	4.6	26.69	93.3	6.9

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/22/95	06:45	65.1	130.1	4.3	26.69	94	4.4
08/22/95	06:50	65.1	143.1	4.6	26.69	94.5	4.8
08/22/95	06:55	65.5	137.2	5.3	26.69	93.3	6.3
08/22/95	07:00	65.5	135.9	4.2	26.69	93.1	4.9
08/22/95	07:05	65.6	116.8	4.1	26.7	93.2	3.3
08/22/95	07:10	65.9	131.9	4.2	26.7	92.9	4.7
08/22/95	07:15	66.4	135	5.6	26.7	91.4	4.7
08/22/95	07:20	66.6	132.8	5.5	26.7	90.2	4.9
08/22/95	07:25	66.8	131.9	4.5	26.7	90	5.9
08/22/95	07:30	67.2	126	5.1	26.71	89.2	6.4
08/22/95	07:35	67.5	137.2	5.2	26.71	88.5	6.4
08/22/95	07:40	68	139	4.9	26.71	87.7	5.9
08/22/95	07:45	68.6	139	6.1	26.72	86.8	5.7
08/22/95	07:50	69.3	137.2	7.5	26.72	83.9	8.8
08/22/95	07:55	69.8	133	7.5	26.72	83	6.6
08/22/95	08:00	70.6	128.2	7.5	26.72	80.5	6.4
08/22/95	08:05	71.2	134.8	7.4	26.72	78.3	7.4
08/22/95	08:10	72	137.2	7.8	26.72	75.5	6.1
08/22/95	08:15	72.9	149	8.6	26.73	73	7.7
08/22/95	08:20	73.5	153.2	8.9	26.73	71.2	7
08/22/95	08:25	73.6	150.8	10.4	26.73	69.7	7.1
08/22/95	08:30	73.7	148.9	10.1	26.73	69.6	6
08/22/95	08:35	74	148.1	10.6	26.73	68.7	6.9
08/22/95	08:40	74.7	150.1	11.2	26.73	67.3	8.5
08/22/95	08:45	75.2	153.2	10.7	26.73	66	8.7

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
Downwind Data							
Run 7							
08/22/95	22:15	75.4	110.9	8.3	26.67	59.6	6.1
08/22/95	22:20	75.3	112.9	8.8	26.67	60	6.1
08/22/95	22:25	75	110	8.6	26.67	60.5	6.1
08/22/95	22:30	74.6	110.9	7.9	26.68	61.3	6.3
08/22/95	22:35	74.2	110	7.5	26.68	62.1	5.8
08/22/95	22:40	73.8	108.9	7	26.68	63	5.7
08/22/95	22:45	73.6	112	6.8	26.68	63.6	5.5
08/22/95	22:50	73.6	110	7.1	26.68	64	7
08/22/95	22:55	73.1	105.1	6.4	26.68	65	5.8
08/22/95	23:00	72.4	104.9	5.4	26.68	66.2	4.9
08/22/95	23:05	72.2	112.9	5.6	26.68	67	6.3
08/22/95	23:10	72	116.8	5.5	26.68	67.6	4.9
08/22/95	23:15	71.9	123.8	4.9	26.68	68.4	5.9
08/22/95	23:20	71.8	132.1	5.1	26.68	68.9	3.1
08/22/95	23:25	71.5	127.1	5.4	26.67	69.6	3.9
08/22/95	23:30	71.2	119	5.6	26.67	70.3	4.8
08/22/95	23:35	71.2	120.1	5.3	26.67	70.9	4.8
08/22/95	23:40	71	122	4.7	26.67	71.2	4.7
08/22/95	23:45	71.3	110	6	26.67	71.1	6.9
08/22/95	23:50	71	98.1	6.1	26.67	71.4	6.3
08/22/95	23:55	70.5	102.1	5.8	26.67	72.2	6.1
08/23/95	00:00	70.1	103.9	5.5	26.67	72.9	5
08/23/95	00:05	69.9	109.1	5.3	26.67	73.6	6.4
08/23/95	00:10	69.7	120.1	5.2	26.67	74.3	5.2
08/23/95	00:15	69.5	115	5	26.67	75.3	7.4
08/23/95	00:20	69.4	100.1	5.5	26.67	76.4	3.5
08/23/95	00:25	69.3	107.8	5.4	26.67	76.7	6.9
08/23/95	00:30	69.1	130	4.5	26.67	77.3	4.4
08/23/95	00:35	69	121	4.1	26.67	77.9	2
08/23/95	00:40	68.7	124.9	4.5	26.67	79.3	2.8
08/23/95	00:45	68.7	123.1	5	26.67	79.6	3.5
08/23/95	00:50	68.4	113	4.6	26.67	80.1	5
08/23/95	00:55	67.8	105.1	5	26.67	81.3	4.8
08/23/95	01:00	67.7	109.1	6.1	26.67	82.3	5.7
08/23/95	01:05	68.2	116.1	6.9	26.67	82.2	4.4
08/23/95	01:10	68.5	120.1	6.7	26.67	81.9	4.8
08/23/95	01:15	68.4	112.1	5.9	26.67	81.7	4.4
08/23/95	01:20	68	110	5.5	26.67	82.5	4.6
08/23/95	01:25	67.9	110	5.6	26.67	83.3	4.7
08/23/95	01:30	68.1	114.8	5.5	26.67	83.3	4.9
08/23/95	01:35	68.5	119	5.5	26.67	82.9	5.3
08/23/95	01:40	68.6	117	5.4	26.67	82.6	5.4
08/23/95	01:45	68.6	120.1	5.4	26.67	82.8	4.8
08/23/95	01:50	68.5	122.9	5.5	26.67	83.3	4.2
08/23/95	01:55	68.4	128.2	5.5	26.67	83.4	3.6
08/23/95	02:00	68.1	125.1	5.6	26.67	83.9	5.9
08/23/95	02:05	68	127.1	5	26.67	84.3	3.8
08/23/95	02:10	67.6	132.8	4.6	26.67	84.8	3.3
08/23/95	02:15	67.4	130.1	4.6	26.67	85.3	2.8
08/23/95	02:20	67.2	130.9	4.8	26.67	85.7	6.1
08/23/95	02:25	67.4	130	5.2	26.67	85.9	3.7
08/23/95	02:30	67.2	136.1	5.6	26.67	86.1	4.4
08/23/95	02:35	67.4	140	6	26.67	86.3	4.3
08/23/95	02:40	67.8	139.9	6.2	26.67	85.4	5.4
08/23/95	02:45	67.7	145.1	6	26.67	85.8	7.9

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/23/95	02:50	66.7	161.1	5.9	26.66	87.1	4.9
08/23/95	02:55	66.6	150.1	6.2	26.66	89.7	5.4
08/23/95	03:00	67.1	142	6.6	26.66	87.7	6.3
08/23/95	03:05	66.7	137.9	5.5	26.66	87.2	6.1
08/23/95	03:10	66.8	160.2	5.1	26.66	88.6	10.6
08/23/95	03:15	66.4	160.2	5	26.66	88.7	4.7
08/23/95	03:20	66.3	149.9	5.2	26.66	89.1	10.4
08/23/95	03:25	66	135	5.5	26.66	88.5	5.5
08/23/95	03:30	65.6	132.1	5.2	26.66	89.6	8.7
08/23/95	03:35	64.9	121	4.4	26.66	90.8	4.3
08/23/95	03:40	65.2	131	4.7	26.66	91.8	6.8
08/23/95	03:45	64.9	128.2	4.6	26.66	91.6	3.8
08/23/95	03:50	64.6	130.9	4.8	26.66	92.4	3.1
08/23/95	03:55	64.6	133.9	4.9	26.66	92.9	4.6
08/23/95	04:00	65.3	144.9	5.2	26.66	93.5	6.4
08/23/95	04:05	65.9	156.1	6	26.65	93.9	6.4
08/23/95	04:10	66	154.1	6.3	26.65	94.3	7.5
08/23/95	04:15	66.2	151	6.6	26.66	94.5	7.6
08/23/95	04:20	67	148.9	7.4	26.66	92.8	7.2
08/23/95	04:25	67.1	151	6.1	26.66	92.3	7.4
08/23/95	04:30	66.7	157	5	26.66	92.9	6.4
08/23/95	04:35	66.4	155.2	5	26.66	93.9	6.9
08/23/95	04:40	66.4	148	5.6	26.65	94.1	7.2
08/23/95	04:45	66	143.1	5.5	26.65	94	10.2
08/23/95	04:50	66.3	152.1	6.9	26.65	95.3	6.3
08/23/95	04:55	66.4	151	7.2	26.65	95.4	7.1
08/23/95	05:00	66.8	156.1	7.2	26.65	94.7	7.1
08/23/95	05:05	66.1	162.2	6.9	26.65	94.9	5
08/23/95	05:10	65.8	160.2	7.2	26.65	95.9	5.9
08/23/95	05:15	65.8	159.1	8	26.65	97.1	5.5
08/23/95	05:20	66	157	7.5	26.65	97.8	6.8
08/23/95	05:25	66.4	152.8	7.9	26.65	97.3	6
08/23/95	05:30	66.7	150.1	7.7	26.65	96.5	5.3
08/23/95	05:35	66.3	132.1	5.8	26.65	95.5	14.7
08/23/95	05:40	65.3	115	5	26.65	96.7	5.5
08/23/95	05:45	65.2	126	5.2	26.65	98.1	9.9
08/23/95	05:50	65.6	139	6	26.65	98.2	6.3
08/23/95	05:55	66.1	151	8	26.65	98.8	6.5
08/23/95	06:00	66.2	151	7.6	26.65	98.4	6.6
08/23/95	06:05	66.7	153.9	8.5	26.65	97.6	6.3
08/23/95	06:10	66.8	152.1	7.2	26.65	96.8	7.1
08/23/95	06:15	66.6	134.1	6.7	26.65	96.2	9.4
08/23/95	06:20	65.9	110.9	5.5	26.65	97	11.7
08/23/95	06:25	64.6	96.1	4.7	26.65	97.7	8.6
08/23/95	06:30	64	117.9	5.3	26.65	99.3	5.2
08/23/95	06:35	63.9	126.9	5.7	26.65	99.6	4.8
08/23/95	06:40	64	129.1	5.9	26.65	99.6	5.5
08/23/95	06:45	64.3	131	5.4	26.65	99.7	8
08/23/95	06:50	65.2	145.8	7	26.65	99.7	5.9
08/23/95	06:55	66.2	150.1	7.6	26.65	99.6	7.1
08/23/95	07:00	66.6	142	7.2	26.65	99.4	5.9
08/23/95	07:05	66.5	131.9	7.4	26.66	98.8	7.6
08/23/95	07:10	65.8	132.8	6	26.66	99.5	5.4
08/23/95	07:15	65.4	137.2	5.8	26.66	99.6	4.9
08/23/95	07:20	65.3	137.2	5.5	26.66	99.6	4.8
08/23/95	07:25	65.6	137.2	5.6	26.66	99.6	7.4
08/23/95	07:30	65.6	135	5.3	26.67	99.6	7.5

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/23/95	07:35	65.9	162.2	5.5	26.67	99.7	9.6
08/23/95	07:40	66.1	171.2	4.8	26.67	99.7	7.6
Run 8							
08/23/95	09:55	76.4	178.2	11.9	26.7	70.8	8.6
08/23/95	10:00	76.6	174.1	12.3	26.7	69.9	6
08/23/95	10:05	77.2	171.2	11.9	26.7	68.8	8.5
08/23/95	10:10	77.1	175.9	11.6	26.71	68.5	10.4
08/23/95	10:15	77.6	176.2	10.7	26.7	67.6	8.7
08/23/95	10:20	77.9	184.1	11	26.71	66.1	14.1
08/23/95	10:25	77.9	189.2	12.3	26.71	65.5	11.8
08/23/95	10:30	78.1	193.1	11.3	26.71	64.4	11.4
08/23/95	10:35	78.8	192.2	12.2	26.71	63.9	9
Run 9							
08/23/95	10:45	78.9	173.2	11.6	26.71	60.7	15.4
08/23/95	10:50	79.3	172.1	12.8	26.71	60.3	10.1
08/23/95	10:55	79.4	175.1	13.2	26.71	59.7	10.1
08/23/95	11:00	79.9	165.1	12.3	26.71	58	8.3
08/23/95	11:05	80	175.1	12.1	26.71	58.3	9.9
08/23/95	11:10	80.1	166	12.9	26.71	57.5	12.6
08/23/95	11:15	80.3	176.9	13.3	26.71	57.4	12.8
08/23/95	11:20	80	195.1	11.9	26.7	56.7	9.6
08/23/95	11:25	80.7	167	12.7	26.71	55.6	10.3
08/23/95	11:30	81	174.1	12.2	26.7	54.4	15.4
08/23/95	11:35	81.2	184.1	13.1	26.71	53.7	13.2
Run 10							
08/23/95	11:45	81.7	185.9	12.3	26.7	52.8	13.7
08/23/95	11:50	82.4	176	12.5	26.7	51.7	15.1
08/23/95	11:55	82	193.1	12.7	26.7	51.4	9.4
08/23/95	12:00	82	172.1	11.8	26.7	50.7	11.3
08/23/95	12:05	82.6	177.1	10.1	26.7	49.6	20.1
08/23/95	12:10	82.8	189.9	11.4	26.7	50.1	14.5
08/23/95	12:15	82.6	190.8	10.2	26.7	48.9	11.7
08/23/95	12:20	82.1	196.9	10.2	26.7	49.1	11.7
08/23/95	12:25	82.8	166.1	11	26.7	49.6	13.6
08/23/95	12:30	83.7	143.8	10.9	26.7	47	11.9
08/23/95	12:35	83.5	159.1	12.9	26.7	47.8	15.6
08/23/95	12:40	84.3	161.1	9.7	26.7	46.5	12.1
08/23/95	12:45	84.7	162.2	11.3	26.7	46.1	12.8
08/23/95	12:50	84.4	168.1	11.8	26.7	45.6	16.5
08/23/95	12:55	85.1	157.1	8.8	26.7	44.3	12.8
08/23/95	13:00	84.9	157	8.9	26.7	44.2	13.1
08/23/95	13:05	85	148.9	11.8	26.7	44.2	9.6
08/23/95	13:10	84.7	166.1	9.6	26.7	45.1	23.2
08/23/95	13:15	85.3	158	9.6	26.7	46.3	17.9
08/23/95	13:20	86.1	154.1	7.7	26.69	44.9	19.2
08/23/95	13:25	86.4	152.8	12.6	26.69	43.9	9.9
08/23/95	13:30	85.8	148.9	11.5	26.69	43.9	12
08/23/95	13:35	85.4	177.1	11.7	26.69	45.4	18
08/23/95	13:40	85.9	185.2	8.7	26.69	45.4	18.8
08/23/95	13:45	85.7	187.2	10	26.69	43.9	24
08/23/95	13:50	85.6	164.9	9.5	26.69	44.1	33.2
08/23/95	13:55	86.8	159.1	7.6	26.69	43.8	29.9
08/23/95	14:00	86.5	144	9.7	26.69	41.7	13.7
08/23/95	14:05	86.9	157	11.8	26.68	43.6	13.7
08/23/95	14:10	86	169.2	12.1	26.68	43	9.1
08/23/95	14:15	86.3	135.9	7.8	26.68	40.9	25.2
08/23/95	14:20	87.3	127.1	10.5	26.68	41	16.7

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/23/95	14:25	87.4	143.8	10.2	26.68	41.1	17.3
08/23/95	14:30	86.4	121	7.6	26.68	40.8	15.2
08/23/95	14:35	87	169.2	8.1	26.68	43.2	17.8
08/23/95	14:40	86.8	182.9	11.4	26.67	43.1	11.5
08/23/95	14:45	87.2	164.9	8.8	26.67	40.5	24.6
08/23/95	14:50	88.3	145.8	9.2	26.67	39.7	30.4
08/23/95	14:55	86.8	196.9	11.3	26.67	39.8	14.7
08/23/95	15:00	87.5	165.1	9.1	26.67	39.4	12.5
08/23/95	15:05	87.4	176.9	10.5	26.67	36.8	12.9
08/23/95	15:10	87.2	184.9	7.7	26.66	36.5	13.5
08/23/95	15:15	88	167.9	10.1	26.66	38.6	17.4
08/23/95	15:20	88.8	160.9	7.1	26.66	36.8	15.2
08/23/95	15:25	89.9	160.2	4.4	26.66	36.2	23.4
08/23/95	15:30	90.7	127.1	6.1	26.65	33.8	30.1
08/23/95	15:35	90.4	133.9	9.1	26.65	34.2	17.5
08/23/95	15:40	88.7	170.8	10.8	26.65	35.3	16.1
08/23/95	15:45	88.8	130.9	8.7	26.65	33.7	27.3
08/23/95	15:50	88.3	167.9	5.4	26.65	32.7	22.1
08/23/95	15:55	87.7	220.9	4.4	26.64	34.3	25.5
08/23/95	16:00	89.2	145.8	8.6	26.64	35.8	16.2
08/23/95	16:05	89.5	142.9	8.7	26.64	34	12
Run 11							
08/23/95	17:00	89.4	110.9	11.6	26.62	32.3	26.2
08/23/95	17:05	89	101	10	26.62	31.3	12.1
08/23/95	17:10	89	117.9	12.1	26.62	31.7	16.9
08/23/95	17:15	89.2	112.9	13.1	26.62	30.7	10.4
08/23/95	17:20	89	112.1	11.3	26.62	30.7	8.8
08/23/95	17:25	88.8	118.1	10.2	26.61	31.4	9.2
08/23/95	17:30	88.2	99.9	9.4	26.61	32	15.8
08/23/95	17:35	89.1	115	10.6	26.61	31.7	13
08/23/95	17:40	88.4	115	10.5	26.61	31.2	8.2
08/23/95	17:45	88.9	126.9	9.2	26.61	30.8	11.3
08/23/95	17:50	88.7	136.8	11.2	26.61	31.4	8.2
08/23/95	17:55	88.7	121.1	9.9	26.61	31.3	11.9
08/23/95	18:00	88.2	90.9	9	26.61	31.3	12.8
08/23/95	18:05	88.3	123.8	9.2	26.61	32.8	10.6
08/23/95	18:10	88.9	142.9	10.9	26.6	32.9	8.5
08/23/95	18:15	88.6	126.9	10.7	26.6	32.9	15.7
08/23/95	18:20	87.7	123.8	10.8	26.61	32.7	9.2
08/23/95	18:25	87.5	114.1	9.2	26.6	33.7	13.7
08/23/95	18:30	87.2	121	9.6	26.6	35	11.8
08/23/95	18:35	87	136.1	11	26.6	36.3	13
08/23/95	18:40	86.9	130	10.4	26.6	37.1	11.5
08/23/95	18:45	86.7	131	14.7	26.59	36.7	7
Run 12							
08/23/95	19:25	85.2	134.8	13.8	26.58	39.1	7.4
08/23/95	19:30	84.9	131	13.3	26.58	39.8	9.2
08/23/95	19:35	84.7	142.9	14	26.58	40.2	6.8
08/23/95	19:40	84.4	134.8	12.4	26.58	41	8.2
08/23/95	19:45	83.8	133	13.6	26.58	41.6	7.4
08/23/95	19:50	83.4	131	13.4	26.58	42.7	6.6
08/23/95	19:55	83	134.1	13.1	26.58	43.3	6.6
08/23/95	20:00	82.8	131	14.3	26.58	43.9	8.6
08/23/95	20:05	82.4	130.1	14.3	26.58	44.8	6.3
08/23/95	20:10	82	131	13.8	26.58	45.9	7
08/23/95	20:15	81.5	132.8	12.6	26.58	47	5.7
08/23/95	20:20	81.1	134.8	13.1	26.58	48	6.5

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/23/95	20:25	80.8	134.1	13.1	26.58	49	6.3
08/23/95	20:30	80.3	135	12.4	26.58	49.8	6.1
08/23/95	20:35	79.9	131.9	12.7	26.57	50.4	6.8
08/23/95	20:40	79.5	131	12	26.57	50.8	7.2
08/23/95	20:45	79	130.1	11.4	26.57	51.6	6.1
08/23/95	20:50	78.7	131	11.4	26.58	52.4	6.5
08/23/95	20:55	78.3	131.9	11.2	26.58	53.1	8.7
08/23/95	21:00	78.1	131	11.2	26.58	53.7	7.1
08/23/95	21:05	77.8	133	11.5	26.58	54	6.3
08/23/95	21:10	77.6	134.8	11.2	26.58	54.3	6.6
08/23/95	21:15	77.3	135	10.8	26.58	54.7	6
08/23/95	21:20	77.1	135	11.1	26.58	55.1	6.3
08/23/95	21:25	76.9	136.8	11.4	26.58	55.5	6.1
08/23/95	21:30	76.9	134.8	11.6	26.58	55.5	7.2
08/23/95	21:35	76.6	134.1	11.2	26.58	55.8	5.5
08/23/95	21:40	76.2	135.9	10.1	26.58	56.1	6.6
08/23/95	21:45	76.2	134.8	11	26.59	56.2	7.6
08/23/95	21:50	75.8	136.1	10.7	26.59	56.5	6.6
08/23/95	21:55	75.5	134.8	10	26.59	56.9	6.4
08/23/95	22:00	75.1	130.9	9.6	26.59	57.6	6.1
08/23/95	22:05	74.6	128.2	9.4	26.59	58.5	6.4
08/23/95	22:10	74.3	132.1	9	26.59	59.2	6.1
08/23/95	22:15	74.1	133	9.2	26.59	59.8	6.1
08/23/95	22:20	73.7	139	8.8	26.6	60.3	6.5
08/23/95	22:25	73.6	139.1	8.1	26.6	60.8	6.8
08/23/95	22:30	73.3	139.1	8.3	26.6	61.2	5
08/23/95	22:35	73.2	140	9	26.6	61.7	5.8
08/23/95	22:40	72.8	139.1	8.7	26.6	62.2	5.4
08/23/95	22:45	72.8	141.1	9.3	26.6	62.6	6.5
08/23/95	22:50	72.6	143.1	8.8	26.6	62.8	6.3
08/23/95	22:55	72.6	146.2	9.1	26.6	63	6.6
08/23/95	23:00	72.5	143.1	9.1	26.6	63.3	5.8
08/23/95	23:05	72.6	144.9	10	26.6	63.3	6.3
08/23/95	23:10	72.6	148.1	9.1	26.6	63.1	6
08/23/95	23:15	72.3	142.9	8.2	26.6	63.6	6
08/23/95	23:20	72.2	146.9	8.3	26.6	63.8	7.7
08/23/95	23:25	71.8	154.1	7.7	26.6	64.2	5.2
08/23/95	23:30	71.4	156.1	7.5	26.6	64.8	5.7
08/23/95	23:35	70.8	153.9	7.2	26.6	65.9	5.8
08/23/95	23:40	70.6	152.8	7.9	26.6	66.7	5.8
08/23/95	23:45	70.5	157.9	7.3	26.6	67.2	5.9
08/23/95	23:50	70.3	163.8	7.8	26.6	68.3	6.8
08/23/95	23:55	69.4	141.8	5.8	26.6	68.3	13.6
08/23/95	00:00	68.1	145.1	4.8	26.6	70.5	5.9
08/24/95	00:05	67.6	140.9	4.9	26.6	72.5	4.9
08/24/95	00:10	67.8	152.1	5.4	26.59	73.5	6.6
08/24/95	00:15	67.9	154.1	5.8	26.59	73.7	6.9
08/24/95	00:20	68	159.1	6	26.59	73.9	4.6
08/24/95	00:25	68.4	153.2	6.4	26.59	73.5	6.3
08/24/95	00:30	67.8	150.8	5.5	26.59	74	4.4
08/24/95	00:35	67.5	149.9	5.3	26.59	75.2	4.6
08/24/95	00:40	67.4	151.9	5	26.6	76.1	4.7
08/24/95	00:45	67.4	155.2	5.5	26.59	76.5	4.3
08/24/95	00:50	67.5	155.9	5.7	26.59	76.8	4.8
08/24/95	00:55	66.9	150.1	5.3	26.59	77.5	3.6
08/24/95	01:00	66.2	147.1	5.2	26.6	78.7	10.1
08/24/95	01:05	66	149.9	5.7	26.59	79.7	3.6

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/24/95	01:10	66.2	151.9	6.2	26.59	79.6	5
08/24/95	01:15	65.6	148.1	6	26.59	79.9	4.2
08/24/95	01:20	65.2	147.1	6	26.59	81	5
08/24/95	01:25	65.1	145.1	6.3	26.59	82	4.2
08/24/95	01:30	65.4	151	6.2	26.59	82.2	5
08/24/95	01:35	65.5	150.8	5.8	26.59	81.9	4.3
08/24/95	01:40	65.3	150.8	5.8	26.59	82.3	4.4
08/24/95	01:45	65.1	146.2	5.7	26.59	82.8	4.3
08/24/95	01:50	64.9	149	6	26.59	83.4	4.7
08/24/95	01:55	65	150.8	6.1	26.59	83.7	4.2
08/24/95	02:00	64.9	147.1	6.1	26.59	83.9	4.2
08/24/95	02:05	64.5	143.1	6	26.59	84.5	3.6
08/24/95	02:10	64.7	148	6.4	26.59	85.3	6.1
08/24/95	02:15	65.3	151	6.3	26.59	84.1	4.4
08/24/95	02:20	64.9	156.1	5.5	26.59	84.3	4.4
08/24/95	02:25	65.1	162.2	5.7	26.59	86	5.4
08/24/95	02:30	65.6	164.9	6.1	26.59	86.2	6.9
08/24/95	02:35	65.4	161.1	5.1	26.59	85.9	10.6
08/24/95	02:40	65.3	161.1	5.2	26.59	86	7.1
08/24/95	02:45	65.2	157.9	5.6	26.58	85.5	5.4
08/24/95	02:50	64.3	149.9	5.8	26.58	84.9	4.3
08/24/95	02:55	63.5	151	5.5	26.58	87.1	4.1
08/24/95	03:00	63.5	154.8	5.3	26.58	88.6	4.4
08/24/95	03:05	63.8	151	5.9	26.58	88.8	6
08/24/95	03:10	64	148.1	6.3	26.58	88.6	5.5
08/24/95	03:15	63.6	148	5.9	26.58	88.8	4.6
08/24/95	03:20	63.4	147.1	5.6	26.58	89.5	4.7
08/24/95	03:25	63.1	144.2	5.3	26.58	90.3	3.8
08/24/95	03:30	63.5	151	6.2	26.58	91.4	8.2
08/24/95	03:35	64.2	149	5.7	26.58	90	4.2
08/24/95	03:40	63.8	151	5.2	26.58	90	5
08/24/95	03:45	63.8	151.9	5.6	26.58	90.3	5.4
08/24/95	03:50	63.7	154.1	5.3	26.58	90.6	4.9
08/24/95	03:55	63.5	155.2	4.9	26.58	90.9	5.8
08/24/95	04:00	63.7	158.9	5.2	26.58	91.5	4.9
08/24/95	04:05	64.1	170.8	4.9	26.58	92.2	9.3
08/24/95	04:10	64.3	159.1	5.7	26.58	91	8.2
08/24/95	04:15	63.8	148.1	6.2	26.58	89.9	5.5
08/24/95	04:20	63.1	152.8	5.8	26.58	90.9	5.2
08/24/95	04:25	63.3	162.2	5.7	26.58	92.3	8.1
08/24/95	04:30	64.1	170.1	6.6	26.58	92.3	7.2
08/24/95	04:35	64.6	173.2	6.8	26.58	90.9	6.5
08/24/95	04:40	64.4	180.9	5.5	26.58	89.5	7.4
08/24/95	04:45	64.3	189.2	4.9	26.58	91.6	6.8
08/24/95	04:50	64.2	179.1	5.7	26.58	91.5	5.5
08/24/95	04:55	64.2	177.1	7.3	26.58	91	5.8
08/24/95	05:00	64.2	180.9	8.3	26.58	90.2	6.5
08/24/95	05:05	64.2	184.1	8.3	26.58	90.5	6
08/24/95	05:10	64.5	177.1	8	26.58	89.8	6.8
08/24/95	05:15	64.5	177.1	7.9	26.58	90	6.8
08/24/95	05:20	64.6	179.8	8	26.58	88.6	5.8
08/24/95	05:25	64.2	181.1	7	26.58	89	6.3
08/24/95	05:30	63.8	182	6.4	26.58	90.2	6.3
08/24/95	05:35	63.7	183.1	5.9	26.58	90.8	5.4
08/24/95	05:40	63.4	183.1	5	26.58	92.2	5.7
08/24/95	05:45	63.3	179.8	4.9	26.58	92.7	4.3
08/24/95	05:50	63.3	177.1	4.9	26.58	93.2	5.2

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/24/95	05:55	63.4	174.1	5.7	26.58	94.5	6.6
08/24/95	06:00	63.2	179.1	5.8	26.58	93.4	5.5
08/24/95	06:05	62.9	177.1	6.1	26.58	94.5	5
08/24/95	06:10	62.8	183.1	5.5	26.58	95	5.8
08/24/95	06:15	62.8	177.1	5.4	26.58	95.7	6.9
08/24/95	06:20	63.1	168.8	6.1	26.58	97.1	7.5
08/24/95	06:25	63.2	158.9	5.8	26.58	95.2	11.9
08/24/95	06:30	61.9	153.9	4.9	26.58	94.9	6.8
08/24/95	06:35	61.7	149	5.4	26.58	96.6	8.8
08/24/95	06:40	61.8	152.1	5.2	26.58	98.4	5.2
08/24/95	06:45	61.9	166	5.2	26.58	99.3	9.2
08/24/95	06:50	62.4	179.8	5.9	26.58	99.5	6.4
08/24/95	06:55	61.8	176.9	4.6	26.58	98.7	4.7
08/24/95	07:00	61.7	167	5.1	26.58	99.5	3.9
08/24/95	07:05	61.3	144.2	5.4	26.58	98.7	7.9
08/24/95	07:10	60.5	137.2	5.5	26.58	99.3	4.2
08/24/95	07:15	60.3	139.9	6	26.58	99.6	3.7
08/24/95	07:20	60.5	142	5.2	26.58	99.7	5.7
08/24/95	07:25	60.6	146.2	5	26.58	99.7	4.1
08/24/95	07:30	60.7	151	5.1	26.58	99.6	5.2
08/24/95	07:35	61.1	148	4.8	26.58	99.6	5.7
08/24/95	07:40	61.2	141.1	4.3	26.58	98.8	5.7
08/24/95	07:45	61.5	148	4.7	26.58	97.2	5.7
08/24/95	07:50	62	148.9	4.8	26.58	95.1	5.8
08/24/95	07:55	63.2	159.1	6.2	26.58	91.7	6
08/24/95	08:00	63.9	157.1	6.1	26.58	88.4	8.3
08/24/95	08:05	64.9	168.1	6.9	26.58	86.3	8.8
08/24/95	08:10	65.9	174.1	6.8	26.59	83.8	6
08/24/95	08:15	66.4	172.8	7.3	26.59	81.3	5.9
08/24/95	08:20	67.1	175	7.1	26.59	79.5	7
08/24/95	08:25	67.7	180.9	7.5	26.59	76.9	7.2
08/24/95	08:30	68.4	181.8	8.7	26.59	74.3	6.4
08/24/95	08:35	69	179.8	9.8	26.59	72.2	7.9
08/24/95	08:40	69.6	178.2	9.8	26.59	70.4	7.2
08/24/95	08:45	70.2	181.1	10	26.6	68.9	7.5
08/24/95	08:50	70.9	181.8	9.3	26.6	67.7	9.8
08/24/95	08:55	71.4	189.2	10.7	26.6	66.2	7.7
08/24/95	09:00	72	190.1	12	26.6	64.6	7.4
08/24/95	09:05	72.4	194.2	12	26.6	63.7	6.9
08/24/95	09:10	73	194.9	12.8	26.6	62.5	8.7
08/24/95	09:15	73.2	191.2	13.8	26.61	60.5	7.5
08/24/95	09:20	73.5	196.9	13.9	26.61	59.9	7
08/24/95	09:25	73.8	194.9	14.8	26.61	59.3	6.8
08/24/95	09:30	74	196.2	14.6	26.61	58.3	6.8
08/24/95	09:35	74.6	199.8	14	26.61	57.7	7.2
08/24/95	09:40	75.4	193.9	13.9	26.61	56.3	8
08/24/95	09:45	75.4	193	16	26.61	54.7	7.4
08/24/95	09:50	76.1	198.9	15	26.61	54.6	10.1
08/24/95	09:55	76.4	193.1	16.3	26.61	53.7	7.2
08/24/95	10:00	76.8	193.1	16.1	26.61	52.7	8.5
08/24/95	10:05	77.2	193	17.5	26.61	51.5	6.8
08/24/95	10:10	77.7	190.1	16.8	26.61	50.3	8.2
08/24/95	10:15	78.2	187.9	16.8	26.61	49.6	8.5
08/24/95	10:20	78.1	198.2	16.1	26.61	49.7	11.2
08/24/95	10:25	78.6	191.2	15.8	26.61	48.6	7.9
08/24/95	10:30	78.8	188.8	17.1	26.61	47.6	7.5
08/24/95	10:35	79.1	184.9	16.7	26.61	46.8	8.6

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/24/95	10:40	79.2	188.1	17.4	26.61	47.2	7.1
08/24/95	10:45	79.7	182.2	16.8	26.61	45.7	7
08/24/95	10:50	80	185.2	17.4	26.61	45.2	7
08/24/95	10:55	79.7	187.9	18.1	26.61	45	6.6
08/24/95	11:00	80.1	190.8	18.1	26.61	44.9	8.2
08/24/95	11:05	80.1	192.2	18.2	26.61	44.8	6.6
08/24/95	11:10	80.6	193.1	16.8	26.61	45.1	9.3
08/24/95	11:15	80.9	193	16.4	26.61	44.8	9.4
08/24/95	11:20	80.6	203.9	17.1	26.61	44.4	8.2
08/24/95	11:25	81.3	193	17.1	26.61	44.1	12.5
08/24/95	11:30	81.8	209	15.8	26.61	44.8	8.8
08/24/95	11:35	81.6	213.1	16	26.61	44.4	9.3
08/24/95	11:40	82.4	213.1	14.5	26.61	44.9	8.8
08/24/95	11:45	82.3	204.8	15.7	26.61	43.6	8.1
08/24/95	11:50	82.4	198.2	15.8	26.61	43.2	12.3
08/24/95	11:55	82.5	201.2	16.1	26.61	42.8	11.9
08/24/95	12:00	82.7	188.1	16.6	26.61	42.1	8.2
Run 13							
08/24/95	18:40	88.9	178.2	12	26.5	28.6	8.5
08/24/95	18:45	88.8	172.1	10.3	26.5	29	8.7
08/24/95	18:50	88.8	171.9	10.5	26.5	29.9	10.7
08/24/95	18:55	88.7	170.8	11.1	26.5	30.1	8.7
08/24/95	19:00	88.4	172.8	9.8	26.49	29.6	10.2
08/24/95	19:05	88.7	168.1	8.2	26.49	29.7	7.6
08/24/95	19:10	88.4	175.1	9.7	26.49	29.9	9.7
08/24/95	19:15	88.2	172.1	9.6	26.49	29.8	7.4
08/24/95	19:20	88.1	170.8	9.4	26.49	29.5	6.9
08/24/95	19:25	87.8	175.9	9.1	26.49	29.9	6.1
08/24/95	19:30	87.4	175	8.1	26.49	31	7.1
08/24/95	19:35	87.2	175	7.5	26.49	31.4	6.9
08/24/95	19:40	87	171.2	8.2	26.49	32.4	6.1
08/24/95	19:45	86.6	169.2	7.5	26.49	33.7	7.5
08/24/95	19:50	85.8	152.8	6.1	26.49	34.2	6.9
08/24/95	19:55	84.9	150.1	6.9	26.49	35.1	6.6
08/24/95	20:00	84.3	134.1	11.1	26.49	35.1	7.9
08/24/95	20:05	83.6	134.8	15.6	26.48	37.5	7
08/24/95	20:10	83	135	14.8	26.48	38.8	7.5
08/24/95	20:15	82.4	130.9	14.3	26.48	40.2	7.2
08/24/95	20:20	81.9	134.8	13.5	26.48	41.2	6.4
08/24/95	20:25	81.5	138.1	14.4	26.48	42	6.3
08/24/95	20:30	81.2	136.8	14.5	26.48	42.6	6.3
08/24/95	20:35	80.7	134.8	14.4	26.48	43.3	6
08/24/95	20:40	80.4	134.8	15.3	26.48	43.9	6.9
08/24/95	20:45	80.1	136.1	14.6	26.48	44.5	6.8
08/24/95	20:50	79.8	137.2	14.9	26.48	45.1	6.4
08/24/95	20:55	79.4	137.2	14.8	26.48	45.7	6.6
08/24/95	21:00	79.2	137.2	14.8	26.48	46.1	8.6
08/24/95	21:05	79	138.1	15.4	26.48	46.3	5.8
08/24/95	21:10	78.7	137.2	14.9	26.49	46.6	6.6
08/24/95	21:15	78.3	139.9	15.2	26.49	46.7	5.8
08/24/95	21:20	77.9	137.2	14.4	26.49	46.9	6.6
08/24/95	21:25	77.7	136.1	15.7	26.49	47.1	5.8
08/24/95	21:30	77.4	136.8	14.9	26.49	47.2	5.5
08/24/95	21:35	77	135	13.5	26.49	47.6	6.4
08/24/95	21:40	76.7	139	13.7	26.49	48.1	7.1
08/24/95	21:45	76.6	136.8	13.7	26.49	48.2	7
08/24/95	21:50	76.2	136.8	12.8	26.49	48.9	6.8

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/24/95	21:55	76	136.8	13.6	26.49	49.5	6.3
08/24/95	22:00	75.6	136.8	12.9	26.49	50.1	5.7
08/24/95	22:05	75.3	137.2	13.2	26.49	50.8	6.1
08/24/95	22:10	75.2	136.8	13.6	26.49	51.2	6.8
08/24/95	22:15	75	137.2	12.9	26.49	51.7	6
08/24/95	22:20	74.7	136.8	13	26.5	52.3	6
08/24/95	22:25	74.4	139	12.7	26.5	52.8	6.1
08/24/95	22:30	74.3	137.2	13	26.5	53.2	5.7
08/24/95	22:35	74.2	139.9	12.4	26.5	53.6	6.4
08/24/95	22:40	73.9	139.9	12.2	26.5	54.2	6.4
08/24/95	22:45	73.8	139.1	12.5	26.5	54.6	5.9
08/24/95	22:50	73.7	143.1	12.2	26.5	54.9	6.8
08/24/95	22:55	73.4	142	11.3	26.5	55.3	6.5
08/24/95	23:00	73.2	142	11.3	26.5	55.7	5.9
08/24/95	23:05	72.9	144.2	10.7	26.5	56.2	5.5
08/24/95	23:10	72.8	142.9	10.7	26.5	56.5	6.4
08/24/95	23:15	72.4	144.2	9.9	26.5	57.1	6.1
08/24/95	23:20	72.1	144.9	9.7	26.5	57.6	5.3
08/24/95	23:25	71.8	144.9	8.9	26.5	58.3	5.8
08/24/95	23:30	71.5	146.2	8.6	26.5	58.9	6.8
08/24/95	23:35	71.5	148.9	9.7	26.5	59.1	5
08/24/95	23:40	71.3	150.1	9.9	26.5	59.2	6.3
08/24/95	23:45	71.3	149	10.2	26.5	59.2	6
08/24/95	23:50	71	148.9	9.5	26.5	59.6	6
08/24/95	23:55	70.8	150.8	9.4	26.5	59.8	5.8
08/25/95	00:00	70.6	150.1	9.3	26.5	60.1	6.1
08/25/95	00:05	70.3	150.1	8.5	26.5	60.6	5.3
08/25/95	00:10	70.5	152.1	9	26.5	60.4	6.5
08/25/95	00:15	70.4	148.1	8.6	26.5	60.7	5.5
08/25/95	00:20	70.5	150.8	8.9	26.5	60.7	5.3
08/25/95	00:25	70.4	152.8	8.9	26.5	60.7	4.8
08/25/95	00:30	70.1	150.1	7.7	26.5	61.2	5
08/25/95	00:35	69.6	152.1	7.4	26.5	62.1	5.8
08/25/95	00:40	69.2	151.9	6.2	26.5	63	4.9
08/25/95	00:45	68.6	150.8	5.5	26.51	64.3	4.8
08/25/95	00:50	68	149.9	5.6	26.51	65.7	4.7
08/25/95	00:55	67.8	150.1	6.1	26.5	66.4	4.4
08/25/95	01:00	67.5	146.2	6.2	26.5	67.1	5.5
08/25/95	01:05	67.2	146.2	6	26.5	67.9	4.9
08/25/95	01:10	66.9	146.2	5.6	26.5	68.6	4.4
08/25/95	01:15	66.5	143.1	5.5	26.5	69.4	4.6
08/25/95	01:20	66.2	132.1	5.6	26.5	70.1	13.2
08/25/95	01:25	66.6	151	5.8	26.5	69.8	6.3
08/25/95	01:30	66.3	141.8	5.8	26.5	70.1	7
08/25/95	01:35	65.5	139.9	4.5	26.5	71	8
08/25/95	01:40	65.3	143.8	5.2	26.5	72	4.3
08/25/95	01:45	65.4	151.9	5.4	26.5	72.4	4.7
08/25/95	01:50	65.6	148	5.8	26.5	72.5	4.7
08/25/95	01:55	65.2	142	5.8	26.5	73.2	4.6
08/25/95	02:00	65.1	154.8	6.1	26.5	73.8	4.7
08/25/95	02:05	65.3	150.1	6.2	26.5	73.8	5.7
08/25/95	02:10	64.8	145.1	5.9	26.5	74.6	5.3
08/25/95	02:15	65	144.2	5.8	26.5	75	7.6
08/25/95	02:20	64.8	137.2	6.4	26.5	75.3	10.4
08/25/95	02:25	65.6	153.2	6.9	26.5	74.1	5.9
08/25/95	02:30	65.1	143.1	6.1	26.5	74	5.4
08/25/95	02:35	65.1	149	6.4	26.5	74.6	5.7

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/25/95	02:40	65.2	148.1	6.2	26.5	74.5	5.5
08/25/95	02:45	65.4	145.1	6.5	26.49	74.5	4.9
08/25/95	02:50	64.8	141.8	5.9	26.5	74.9	4.2
08/25/95	02:55	64.9	147.1	6.3	26.5	75.1	4.9
08/25/95	03:00	64.6	140	6.5	26.5	75.2	6
08/25/95	03:05	64.7	144.2	7.2	26.49	75.4	5.4
08/25/95	03:10	64.8	149.9	7.4	26.49	75.2	5.7
08/25/95	03:15	64.8	149.9	7	26.49	75	5.2
08/25/95	03:20	64.5	150.8	6.8	26.49	75.3	5.8
08/25/95	03:25	64.4	148.1	6.7	26.49	75.5	5.5
08/25/95	03:30	64.2	150.1	6.3	26.49	75.6	5.4
08/25/95	03:35	64.4	149	6.2	26.49	75.4	5.7
08/25/95	03:40	64.4	144.2	5.9	26.49	75.8	5
08/25/95	03:45	64	146.2	5.8	26.49	76.7	6.9
08/25/95	03:50	64	145.8	6.1	26.49	77.1	6
08/25/95	03:55	63.9	152.1	5.6	26.49	77.2	4.7
08/25/95	04:00	63.5	149	5.2	26.49	77.9	4.7
08/25/95	04:05	63.1	149.9	4.7	26.49	79	4.3
08/25/95	04:10	63.2	157.1	5.1	26.49	79.9	5.7
08/25/95	04:15	63.4	148.1	5.3	26.49	79.5	4.1
08/25/95	04:20	63.2	148.9	5.3	26.49	80	3.9
08/25/95	04:25	63.1	147.1	5.3	26.49	80.6	3.8
08/25/95	04:30	63.2	149	5.5	26.49	81	4.7
08/25/95	04:35	63.9	153.9	6.8	26.49	79.7	6.3
08/25/95	04:40	64.7	153.2	6.8	26.49	77.1	6.6
08/25/95	04:45	65.3	160.9	8.1	26.49	75.1	7.2
08/25/95	04:50	66.8	166.1	9.6	26.49	72.1	5.4
08/25/95	04:55	67.3	165.1	9	26.49	69.4	6.5
08/25/95	05:00	67.4	166	8.9	26.49	68.3	4.2
08/25/95	05:05	67.2	167	8.6	26.49	67.9	6.4
08/25/95	05:10	66.9	171.9	9.3	26.49	67.5	5.8
08/25/95	05:15	66.9	171.2	10	26.49	67	5.5
08/25/95	05:20	66.8	173.2	9.3	26.49	66.9	7.2
08/25/95	05:25	66.4	177.1	8.4	26.49	67.1	6.9
08/25/95	05:30	66.4	175.1	8.6	26.49	67.5	7.1
08/25/95	05:35	66.5	172.8	9.6	26.49	67.2	6.8
08/25/95	05:40	66.6	172.1	10.1	26.49	66.5	5.3
08/25/95	05:45	66.4	174.1	9.2	26.49	66.7	6.6
08/25/95	05:50	66.1	182	9.2	26.49	66.6	6.3
08/25/95	05:55	65.8	183.1	8.4	26.49	67.6	6.3
08/25/95	06:00	65.3	177.8	8.3	26.49	68.9	5.7
08/25/95	06:05	65	177.1	7.5	26.49	70.7	6.6
08/25/95	06:10	64.9	182.2	8.4	26.49	69.7	5.2
08/25/95	06:15	64.8	182.9	7.8	26.49	70.9	5.9
08/25/95	06:20	65.2	186.8	8.4	26.49	71.5	6
08/25/95	06:25	65.4	188.1	8.4	26.49	71.2	6.1
08/25/95	06:30	65.1	186.8	8.5	26.49	71.5	6.5
08/25/95	06:35	65.1	182.9	9.2	26.49	70.6	5.9
08/25/95	06:40	65.5	184.1	9.7	26.49	69.7	5.9
08/25/95	06:45	66.1	183.1	9.9	26.49	68.5	7
08/25/95	06:50	66.4	187.2	9.3	26.49	69	6.3
08/25/95	06:55	66.3	186.8	9.6	26.49	68.8	5.8
08/25/95	07:00	66.2	182.9	9.8	26.49	68	6
08/25/95	07:05	66.2	179.8	9.5	26.5	67.5	6.6
08/25/95	07:10	66.3	185.2	8.8	26.5	68.2	7.2
08/25/95	07:15	65.8	192.2	8.6	26.5	69.9	7
08/25/95	07:20	65	188.8	8.4	26.5	70.8	5.7

SW Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp(F)	(deg)	(mph)	(in Hg)	(%)	Theta
08/25/95	07:25	64.5	180.9	8.6	26.5	70.7	6.9
08/25/95	07:30	64.5	172.8	9	26.5	71.7	6.3
08/25/95	07:35	64.9	166.1	9.1	26.5	71.4	6.5
08/25/95	07:40	64.8	159.1	8.2	26.5	70.3	4.8
08/25/95	07:45	64.7	157.9	7.3	26.5	70.6	6.1
08/25/95	07:50	64.8	161.8	7	26.5	71.4	5.9
08/25/95	07:55	65.5	171.2	8.8	26.5	70.9	6.1
08/25/95	08:00	66.2	175.1	8.4	26.5	69.4	7
08/25/95	08:05	67	178.9	8.6	26.51	66.6	7.7
08/25/95	08:10	68	178.2	8.8	26.51	64.8	8.2
08/25/95	08:15	68.5	170.8	8.7	26.51	64.2	5.9
08/25/95	08:20	68.9	175.1	9.1	26.51	62.6	7.1
08/25/95	08:25	69.4	175.1	9	26.52	61.2	8.1
08/25/95	08:30	69.7	179.8	9.2	26.52	60	7
08/25/95	08:35	70.2	176	8.7	26.52	59.8	7.9
08/25/95	08:40	70.7	175.9	9.4	26.52	59	7.5
08/25/95	08:45	71.2	176.2	9.5	26.52	59.1	7.7
08/25/95	08:50	71.6	182	10.9	26.52	58	9.2
08/25/95	08:55	72.2	184.1	12	26.52	58.3	6.5
08/25/95	09:00	72.8	184	12.2	26.53	58.1	7.1

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
Run 14							
08/28/95	21:05	80	135	12	27.08	47.5	5.9
08/28/95	21:10	79.5	135	11.6	27.08	48.3	5.9
08/28/95	21:15	79.7	136.8	13.5	27.08	48.5	5.5
08/28/95	21:20	80.2	137.2	15.3	27.08	48.2	6.6
08/28/95	21:25	80.5	139.9	16.2	27.08	48.1	5.7
08/28/95	21:30	80.4	137.2	16.2	27.08	47.7	5.8
08/28/95	21:35	80.7	138.1	16.7	27.08	47.2	6
08/28/95	21:40	80.9	137.2	16.9	27.08	46.3	5.7
08/28/95	21:45	81	139	17.7	27.08	45.5	5.9
08/28/95	21:50	81.1	140	18.2	27.08	44.9	6.8
08/28/95	21:55	81.3	142	18.7	27.08	44.3	7.7
08/28/95	22:00	81.2	141.1	18.1	27.08	43.9	7.1
08/28/95	22:05	81.1	142	18.3	27.08	43.7	7.2
08/28/95	22:10	80.9	141.1	17.7	27.09	43.8	6.9
08/28/95	22:15	80.8	144.2	17.7	27.08	43.9	6.6
08/28/95	22:20	80.6	143.8	18.1	27.09	43.8	6.8
08/28/95	22:25	80.4	145.8	17.8	27.09	44.1	6.9
08/28/95	22:30	80.1	145.8	18.1	27.09	44.5	7.2
08/28/95	22:35	80	145.1	18.2	27.09	44.5	8.3
08/28/95	22:40	79.9	144.2	18.1	27.09	44.4	6.6
Run 15							
08/29/95	09:45	78.4	170.1	19	27.09	52.9	10.1
08/29/95	09:50	78.7	169.9	20.9	27.09	52.2	9
08/29/95	09:55	79	170.1	20.2	27.09	52.4	10.4
08/29/95	10:00	79.5	171.2	20.3	27.09	51.7	0
08/29/95	10:05	80	171.2	19.6	27.09	51.3	10.7
08/29/95	10:10	80.5	171.2	19.9	27.09	49.8	11.8
08/29/95	10:15	81.1	172.8	20.3	27.09	48.1	10.2
08/29/95	10:20	81.6	172.1	18.7	27.09	48	10.4
08/29/95	10:25	82	173.2	19.4	27.09	47	10.4
08/29/95	10:30	82.3	174.1	18.6	27.09	47.3	10.8
08/29/95	10:35	82.9	174.1	19.3	27.09	46.1	10.3
08/29/95	10:40	83.5	174.1	18.6	27.09	45	11.3
08/29/95	10:45	84.1	179.1	17.5	27.1	44.9	10.8
08/29/95	10:50	84.5	179.1	18.4	27.1	44	9.9
08/29/95	10:55	84.8	177.1	19.2	27.1	43.3	10.7
08/29/95	11:00	85.4	178.2	18.7	27.1	42.9	10.7
08/29/95	11:05	85.9	182.9	21.4	27.1	41.6	11.5
08/29/95	11:10	86.4	180.2	19.7	27.1	41.8	8.7
08/29/95	11:15	86.9	180.9	21.1	27.1	40.1	10.7
08/29/95	11:20	87.3	188.1	21.7	27.1	39.3	9.3
08/29/95	11:25	87.7	181.1	18.8	27.1	39.6	11.4
08/29/95	11:30	88	181.8	20.7	27.1	38.8	9.8
08/29/95	11:35	88.3	180.9	19.3	27.1	38.6	10.3
08/29/95	11:40	88.8	189.2	21.3	27.09	37.2	9.1
Downwind Data							
Run 16							
08/29/95	22:15	81.6	188.8	13.3	27.03	52.5	9.7
08/29/95	22:20	81.9	181.8	13.9	27.03	52.1	7.5
08/29/95	22:25	82.2	175.1	13.4	27.03	52	8.3
08/29/95	22:30	82.7	177.1	14.3	27.03	50.7	7.2
08/29/95	22:35	82.4	171.2	13.1	27.03	51.2	8.3
08/29/95	22:40	82.5	168.1	13.3	27.03	51	8.8
08/29/95	22:45	82.4	160.2	13.2	27.03	51.1	6.3
08/29/95	22:50	82.3	158	14.3	27.03	51.5	6.4
08/29/95	22:55	82.2	159.8	14.8	27.03	51.1	6.6

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/29/95	23:00	82	161.8	14.9	27.03	51.2	27.6
08/29/95	23:05	81.3	163.8	13.9	27.03	52.4	6.9
08/29/95	23:10	80.5	163.1	12.7	27.03	53.9	6.3
08/29/95	23:15	80.2	161.1	12.1	27.03	54.8	6.5
08/29/95	23:20	80.3	163.1	12.5	27.03	54.7	7.1
08/29/95	23:25	80.4	162.9	13.1	27.03	54.1	7.2
08/29/95	23:30	80.4	162.2	13.8	27.03	53.9	7
08/29/95	23:35	80.7	162.9	14.4	27.03	53.2	7.9
08/29/95	23:40	80.5	163.8	14.1	27.03	53.6	7
08/29/95	23:45	80.3	164.2	14.9	27.03	53.6	7.2
08/29/95	23:50	80.1	163.8	14.7	27.03	53.9	6.9
08/29/95	23:55	79.8	164.2	14.8	27.03	54.2	6.8
08/29/95	00:00	79.6	163.1	15.5	27.03	54.3	6.9
08/30/95	00:05	79.4	164.9	15	27.03	55	6.5
08/30/95	00:10	79.2	164.2	15.2	27.03	54.6	7.9
08/30/95	00:15	79.1	163.8	15.3	27.03	54.6	6.4
08/30/95	00:20	79.3	165.1	14.7	27.03	54.4	7.2
08/30/95	00:25	79.1	166.1	14.9	27.03	54.4	7.5
08/30/95	00:30	79.1	166.1	15.4	27.03	54.3	7.4
08/30/95	00:35	79.1	164.9	15.7	27.03	54	7.5
08/30/95	00:40	79	167	14.5	27.03	54.3	8
08/30/95	00:45	79	167.9	14.9	27.03	54.1	7.7
08/30/95	00:50	78.9	169.2	14.6	27.03	55	7.4
08/30/95	00:55	79	167	15	27.03	54.7	8
08/30/95	01:00	78.9	167	14.5	27.03	54.3	7.2
08/30/95	01:05	78.6	174.1	13.7	27.03	55.1	8.3
08/30/95	01:10	78.5	175	13.8	27.03	55.8	7.4
08/30/95	01:15	78.2	175	13.7	27.03	56.2	7.1
08/30/95	01:20	78.2	176.2	15.2	27.03	56.3	7.5
08/30/95	01:25	78.2	177.1	14.7	27.03	56.1	6.9
08/30/95	01:30	78.3	179.1	15.6	27.03	56.3	7.7
08/30/95	01:35	78.4	179.1	16.1	27.03	55.7	7.2
08/30/95	01:40	78.3	179.1	16.1	27.03	55.8	7.7
08/30/95	01:45	78.2	179.8	15.6	27.03	56.1	7.2
08/30/95	01:50	78	182.2	15.2	27.03	56.7	6.9
08/30/95	01:55	77.9	183.1	15.5	27.03	57.1	6.6
08/30/95	02:00	77.9	181.1	15.4	27.03	57.2	8.6
08/30/95	02:05	77.7	182.2	14.8	27.03	57.8	7.1
08/30/95	02:10	77.5	182.9	14.4	27.03	58.1	6.9
08/30/95	02:15	77.3	185.2	14.3	27.03	59	7.1
08/30/95	02:20	77	185.9	13.6	27.03	59.6	6.9
08/30/95	02:25	77	184.9	13.7	27.02	60.4	6.3
08/30/95	02:30	76.8	187.2	12.6	27.02	60.9	7.1
08/30/95	02:35	76.5	187.2	13	27.02	61.1	7
08/30/95	02:40	76.2	187.2	12.2	27.02	61.8	7.6
08/30/95	02:45	75.9	187.2	11.7	27.02	62.6	7.1
08/30/95	02:50	75.7	184	12.3	27.02	63	7
08/30/95	02:55	75.7	185.9	12.7	27.02	63.3	7.1
08/30/95	03:00	75.9	187.2	14	27.01	62.9	7.4
08/30/95	03:05	76	185.9	13.7	27.01	62.9	6.8
08/30/95	03:10	76	185.9	14	27.01	63.1	7.1
08/30/95	03:15	76	184.9	14.3	27.01	62.8	5.8
08/30/95	03:20	76.1	184.1	14.2	27.01	62.9	7.9
08/30/95	03:25	76.1	183.1	14.6	27.01	62.7	6.9
08/30/95	03:30	76.1	180.9	14.4	27.01	62.9	7.2
08/30/95	03:35	76.3	180.9	15.2	27.01	62.5	7.9
08/30/95	03:40	76.4	182.9	16.1	27.01	62.1	7.5

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/30/95	03:45	76.3	182	15.2	27.01	62.4	7.2
08/30/95	03:50	76.1	181.1	15.7	27.01	62.1	7.5
08/30/95	03:55	75.8	179.1	15.3	27.01	62.8	7.1
08/30/95	04:00	75.6	179.1	15.3	27	63.1	7.1
08/30/95	04:05	75.4	179.1	14.8	27	63.3	8
08/30/95	04:10	75.2	178.9	14.1	27	64	7.7
08/30/95	04:15	74.9	178.9	14.7	27	64.2	6.6
08/30/95	04:20	74.7	175.1	15	27	64.9	8.7
08/30/95	04:25	74.4	175	15.3	27	65.1	8.1
08/30/95	04:30	74.2	173.2	15.3	27	65.6	6.9
08/30/95	04:35	74	178.9	15.2	27	65.8	6.6
08/30/95	04:40	74	179.1	16.2	27	66.2	7.6
08/30/95	04:45	74	179.8	16.5	27	66.3	8.2
08/30/95	04:50	74.1	181.1	15.9	27	66	7.1
08/30/95	04:55	74	182.9	16.8	27	65.6	7.5
08/30/95	05:00	73.9	184.9	15.8	27	66.5	8.3
08/30/95	05:05	73.7	182.9	15.3	27	66.9	7.2
08/30/95	05:10	73.7	184.1	16.1	26.99	66.6	6.5
08/30/95	05:15	73.8	184	16.2	26.99	66.5	6.9
08/30/95	05:20	73.9	184.9	15.6	27	66.4	6.5
08/30/95	05:25	73.9	187.2	16.2	27	65.6	6.8
08/30/95	05:30	73.7	186.8	14.7	27	65.9	7.1
08/30/95	05:35	73.6	188.1	13.8	27	66.6	7.1
08/30/95	05:40	73.6	187.2	15.2	27	66.4	6.5
08/30/95	05:45	73.6	185.2	15.7	27	66.7	6.8
08/30/95	05:50	73.5	185.2	15.7	27	66.3	8
08/30/95	05:55	73.3	184	15.1	27	66.8	6.6
08/30/95	06:00	73	184	15	27	67.4	7.9
08/30/95	06:05	72.8	184.1	15.5	27	68.2	6.1
08/30/95	06:10	72.7	182.9	15.5	27	68.3	6.9
08/30/95	06:15	72.4	179.1	14.4	27	69	7.7
08/30/95	06:20	72	179.8	14.8	27	68.9	6.4
08/30/95	06:25	71.8	179.1	14.3	27	69.9	7.2
08/30/95	06:30	71.5	179.1	13.6	27	70.2	7.7
08/30/95	06:35	71.4	181.1	14	27	71	7.1
08/30/95	06:40	71.2	179.1	13.7	27	71.6	7.9
08/30/95	06:45	70.9	181.1	12.5	27	72.4	7.1
08/30/95	06:50	70.7	178.9	13.1	27	72.5	7
08/30/95	06:55	70.3	178	13.5	27	73.2	6.6
08/30/95	07:00	70.1	177.1	13.7	27	73.9	6.8
08/30/95	07:05	70.1	176.2	13.8	27	74.5	8.5
08/30/95	07:10	70	176.2	14.5	27	74.4	6.8
08/30/95	07:15	70	175.1	15.1	27	74.3	7
08/30/95	07:20	70	174.1	14.6	27	75.3	7.9
08/30/95	07:25	69.9	174.1	14.5	27	75	8.5
08/30/95	07:30	69.9	171.2	15.3	27	74.3	7.5
08/30/95	07:35	69.9	175.1	15.1	27	73.9	7.6
08/30/95	07:40	69.7	176.9	14.6	27	74.7	8.1
08/30/95	07:45	69.8	175.1	14.9	27	74.8	8
08/30/95	07:50	69.9	177.1	14.6	27	74.3	7.6
08/30/95	07:55	70	179.1	14.8	27	73.4	7.7
08/30/95	08:00	70.2	181.1	14.3	27	73.6	7.7
08/30/95	08:05	70.4	177.8	13.3	27.01	73.3	8.6
08/30/95	08:10	70.7	183.1	13.3	27.01	71.6	7.9
08/30/95	08:15	71	183.1	12.7	27.01	69.7	8.6
08/30/95	08:20	71.5	184	11.8	27.01	67.3	7.9
08/30/95	08:25	72	185.9	12.3	27.02	65.7	8.3

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/30/95	08:30	72.1	188.8	12.6	27.02	64.9	7.9
08/30/95	08:35	72.2	185.9	12.5	27.02	65.2	7.2
08/30/95	08:40	72.6	185.2	13.3	27.02	64.5	7.9
08/30/95	08:45	73.2	186.1	13.2	27.02	62.6	8
08/30/95	08:50	73.7	187.9	13.4	27.02	61.4	7.1
08/30/95	08:55	74.1	190.1	12.6	27.02	59.8	8.1
08/30/95	09:00	74.5	189.2	12.8	27.02	59.4	7.5
08/30/95	09:05	74.8	190.1	13.6	27.02	58.6	7
08/30/95	09:10	75.3	191.2	13.4	27.02	57.7	8.2
08/30/95	09:15	75.7	193	13.3	27.02	56	8
08/30/95	09:20	76.1	191.2	13.1	27.02	56.2	8.2
08/30/95	09:25	76.4	191.9	12.6	27.02	55.3	8.2
08/30/95	09:30	77	195.1	12.6	27.02	53.9	7.6
08/30/95	09:35	77.3	196.9	12.7	27.03	52.2	8.6
08/30/95	09:40	77.8	195.8	11.4	27.03	51.9	7.9
08/30/95	09:45	78.2	194.9	12.2	27.03	51	8.8
08/30/95	09:50	78.8	193	11	27.03	50.9	9.3
08/30/95	09:55	79.3	206.8	10.8	27.03	48.3	16.2
08/30/95	10:00	79.3	214.9	11.8	27.04	46.9	7.9
08/30/95	10:05	79.3	206.1	10.7	27.04	48.4	11.7
08/30/95	10:10	79.5	199.1	11.3	27.04	48.6	10.4
08/30/95	10:15	79.9	202	11.9	27.04	47.4	10.6
08/30/95	10:20	80.3	206.1	11.7	27.04	46.1	12.1
08/30/95	10:25	80.4	202.9	12.2	27.04	46.7	10.7
08/30/95	10:30	80.7	205.2	12.7	27.04	45.2	12
08/30/95	10:35	81.1	205.2	11.1	27.04	45.8	11.2
08/30/95	10:40	81.7	203.9	12.1	27.04	45.1	12.3
08/30/95	10:45	81.6	197.8	12.2	27.04	45.7	11.5
08/30/95	10:50	82.3	199.8	10.7	27.04	45.7	11.7
08/30/95	10:55	82.7	204.8	10.4	27.04	44.6	11
08/30/95	11:00	82.7	202.1	12.7	27.04	43.2	12.1
08/30/95	11:05	82.5	197.1	12.9	27.04	43.8	8.6
08/30/95	11:10	82.9	197.8	12.3	27.05	44	9.4
08/30/95	11:15	83.5	207.2	11.5	27.05	42.3	12.9
08/30/95	11:20	83.7	209.2	12.1	27.05	41.1	13
08/30/95	11:25	83.9	207.9	11.3	27.05	41.1	11.3
08/30/95	11:30	84.1	204.1	11.4	27.05	41.9	12.5
08/30/95	11:35	84.7	203.2	11.1	27.05	42.1	10.9
08/30/95	11:40	84.7	195.1	12.5	27.05	41.4	9.3
08/30/95	11:45	84.7	193.9	12.6	27.05	42.2	9.9
08/30/95	11:50	85.5	195.1	11.3	27.06	41.8	10.3
08/30/95	11:55	85.9	196.9	11.5	27.06	40.6	10.8
08/30/95	12:00	86.1	194.2	12	27.06	41.6	11
08/30/95	12:05	86.9	198.9	11.1	27.06	40.4	14.7
08/30/95	12:10	87.7	210.2	10.1	27.06	38.3	12.5
08/30/95	12:15	87.5	190.8	11.1	27.06	39.4	11.5
08/30/95	12:20	87.5	188.8	10.8	27.06	40.1	10.3
08/30/95	12:25	87.7	190.1	10	27.06	38.7	8.7
08/30/95	12:30	88.3	193.1	9.2	27.06	38.1	9.1
08/30/95	12:35	89.2	203.2	8.3	27.06	36.5	19
08/30/95	12:40	89.8	205.9	8	27.06	35.6	13.4
08/30/95	12:45	89.9	203.9	8.8	27.06	35.2	15.7
08/30/95	12:50	90.2	196.2	10.6	27.06	35.8	11.7
08/30/95	12:55	89.9	184.9	10.4	27.06	36.5	13.2
08/30/95	13:00	90.4	193	10.7	27.06	36.3	10.1
08/30/95	13:05	91.7	206.1	9	27.06	35.3	14.2
08/30/95	13:10	91.5	209.2	10	27.06	34.2	20.5

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/30/95	13:15	92.2	204.1	9.4	27.06	34.7	17.9
08/30/95	13:20	92.3	215.8	9.2	27.06	32.4	16.5
08/30/95	13:25	92.6	200.9	10.1	27.06	33.6	14.3
08/30/95	13:30	93	210.2	11.1	27.06	32.9	13.7
08/30/95	13:35	92.9	201.2	10.3	27.06	33.4	10.8
08/30/95	13:40	93.7	206.1	10.2	27.06	33	16.5
08/30/95	13:45	93.8	207.2	12.4	27.05	31.9	11.3
08/30/95	13:50	93.7	190.1	10	27.05	34.8	9.1
08/30/95	13:55	93.8	195.1	11.4	27.05	34.7	11.5
08/30/95	14:00	94.8	208.8	8.4	27.05	32.6	13.4
08/30/95	14:05	94.8	221.2	8.7	27.05	30.8	16.1
08/30/95	14:10	95.1	217.3	8.8	27.05	31.2	17
08/30/95	14:15	95.2	217.3	10.9	27.05	31.4	13.5
08/30/95	14:20	95.3	218.2	11	27.05	30.4	14.3
08/30/95	14:25	95.7	205.2	12.5	27.04	30.9	13.1
08/30/95	14:30	95.3	208.8	11.3	27.04	32.6	14.7
08/30/95	14:35	95.9	211.9	11.7	27.04	31.7	14.5
08/30/95	14:40	95.2	211.1	11.9	27.04	32.8	12.9
08/30/95	14:45	95.6	207.2	12	27.04	32.2	13.1
08/30/95	14:50	95.9	200.2	12.2	27.04	32.3	12.3
08/30/95	14:55	96.1	206.1	11	27.03	32.6	13.1
08/30/95	15:00	96.9	203.9	12.6	27.03	31.2	17.5
08/30/95	15:05	97.2	207.2	12	27.03	30.5	12.4
Run 17							
08/30/95	17:25	100	197.8	7.9	27	25.5	13.5
08/30/95	17:30	99.2	218.2	5.8	27	25.6	16.4
08/30/95	17:35	98.8	220.1	6.1	27	26.4	15.2
08/30/95	17:40	98.6	208.8	5.3	27	27.8	21.3
08/30/95	17:45	98.4	190.1	5.1	27	30.4	11.4
08/30/95	17:50	97.8	178.9	5.1	27	32.8	6.8
08/30/95	17:55	97.2	185.2	6.1	27	34.2	5.4
08/30/95	18:00	96.8	187.2	5.2	27	35.7	14.2
08/30/95	18:05	96.7	183.1	4.5	26.99	36.9	8
08/30/95	18:10	96	151	5.2	26.99	39.4	8.8
08/30/95	18:15	94.9	149.9	6.2	26.99	40.6	8.5
08/30/95	18:20	95	144.2	5.6	26.99	43	4.3
08/30/95	18:25	94.4	145.8	4.7	26.99	45.2	4.8
08/30/95	18:30	94.4	162.2	5.6	26.98	43	11
08/30/95	18:35	94.2	169.9	4.8	26.98	43.2	7.4
08/30/95	18:40	93.2	175.1	3.9	26.98	46.3	9.7
08/30/95	18:45	93.6	178.9	4.5	26.98	44	9.1
08/30/95	18:50	93.5	164.2	5.1	26.98	44.7	8
08/30/95	18:55	93.7	166.9	4.8	26.98	44.8	12.3
08/30/95	19:00	93.6	130.1	6.6	26.98	46.5	5.5
08/30/95	19:05	90.7	127.1	15.2	26.98	42.7	6.5
08/30/95	19:10	89.8	139.9	16.1	26.99	42.8	6.9
08/30/95	19:15	89.1	139.9	13.5	26.99	44.2	6.4
08/30/95	19:20	88.1	143.1	16.2	26.99	44.7	8.3
08/30/95	19:25	87.1	145.8	17.8	26.99	46.1	6.8
08/30/95	19:30	86.4	146.9	17	26.99	47.5	8.5
08/30/95	19:35	85.8	145.8	16.5	26.99	48.4	6.4
08/30/95	19:40	85.5	148	15.1	26.99	49.2	6.1
08/30/95	19:45	85.3	152.8	15.6	26.99	48.4	7.7
08/30/95	19:50	85	162.9	14	27	48.4	8.6
08/30/95	19:55	84.2	184	13.7	27	49.4	15
08/30/95	20:00	82.8	188.8	11.7	26.99	52.4	20.7
08/30/95	20:05	83.4	174.1	13.2	26.99	52.4	9.1

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/30/95	20:10	83.9	172.1	15.1	26.99	51.2	8.7
08/30/95	20:15	84.1	166.1	14.2	26.99	51.1	7.2
08/30/95	20:20	83.9	172.1	13.8	26.99	51	8.6
08/30/95	20:25	84	181.1	14	26.99	49.9	7.4
08/30/95	20:30	83.6	174.1	12.6	26.99	51.3	7.7
08/30/95	20:35	83.3	182.2	12.1	27	51.6	9
08/30/95	20:40	83.2	191.2	9.4	27	51.3	8
08/30/95	20:45	83	191.2	8	27	52.2	9.4
08/30/95	20:50	82.6	197.8	7.1	27.01	52.5	8.8
08/30/95	20:55	82.4	199.8	5.5	27.01	52.5	10.6
08/30/95	21:00	82.3	203.9	5.5	27.01	52	9.4
08/30/95	21:05	81.4	302.2	4.4	27.02	52.7	24.7
08/30/95	21:10	80.6	294.8	3.2	27.03	54.2	27.7
08/30/95	21:15	81.4	222.8	4.3	27.03	53.2	17.5
08/30/95	21:20	81.2	202	6.5	27.03	55.4	14.8
08/30/95	21:25	81.3	183.1	7.8	27.03	57.6	13.6
08/30/95	21:30	80.6	142	8.4	27.03	60.6	8.5
08/30/95	21:35	79.9	157.9	7.4	27.03	61.1	7.9
08/30/95	21:40	80.8	165.1	8.9	27.03	59.4	7.6
08/30/95	21:45	80.9	151.9	8	27.03	59.8	7.7
08/30/95	21:50	79.4	137.2	7.7	27.03	62.7	6.3
08/30/95	21:55	78.8	148	8	27.03	63.7	8.8
08/30/95	22:00	79	142.9	9.4	27.03	64.4	13.9
08/30/95	22:05	79.3	157.1	9.1	27.03	63.8	9.3
08/30/95	22:10	80	155.2	10.1	27.03	62	7.4
08/30/95	22:15	79	140.9	10.3	27.03	63	6.4
08/30/95	22:20	78.9	149	9.3	27.03	63.4	6.6
08/30/95	22:25	78.3	122.9	8.1	27.04	64.8	10.7
08/30/95	22:30	76.9	107.8	9.9	27.05	66.4	5.8
08/30/95	22:35	77	103	14.1	27.06	65.8	6.5
08/30/95	22:40	78.4	103.9	16.3	27.06	63.9	7.5
08/30/95	22:45	78.9	117	14.8	27.06	64.5	6
08/30/95	22:50	79	119	15.6	27.06	63.9	5.7
08/30/95	22:55	79.6	122	16.9	27.06	62.6	5.4
08/30/95	23:00	79.8	123.1	16.5	27.06	62.2	7.1
08/30/95	23:05	79.7	126.9	15.3	27.07	62.1	6
08/30/95	23:10	79.6	131	15.8	27.07	62.1	6.4
08/30/95	23:15	79.3	136.8	16.4	27.07	63.2	6.3
08/30/95	23:20	78.9	134.8	16.5	27.07	63.4	5.9
08/30/95	23:25	78.6	130	15.1	27.08	65	5.9
08/30/95	23:30	78.3	123.1	15.5	27.08	65.1	6.4
08/30/95	23:35	77.9	130	13.7	27.07	66.3	6.6
08/30/95	23:40	77.2	135.9	13.8	27.07	67.7	6.1
08/30/95	23:45	76.9	136.1	14.3	27.08	68.5	5.5
08/30/95	23:50	76.8	133.9	14.1	27.07	69.4	6.4
08/30/95	23:55	77	135.9	15.8	27.07	69.1	6.6
08/30/95	00:00	77.4	140.9	17.2	27.07	67.8	5.3
08/31/95	00:05	77.5	141.1	17.5	27.07	67.2	6.5
08/31/95	00:10	77.6	142	17.8	27.07	66.8	5.7
08/31/95	00:15	77.9	144	18.5	27.08	65.9	5.3
08/31/95	00:20	77.9	146.2	18.9	27.08	66.2	6.3
08/31/95	00:25	77.9	146.2	20.8	27.08	66.2	5.4
08/31/95	00:30	77.6	144.9	21.3	27.08	67.2	6.3
08/31/95	00:35	77.5	144.2	19.4	27.08	68.3	6
08/31/95	00:40	77.3	144.9	18	27.09	69.4	6.4
08/31/95	00:45	77.3	146.9	17.8	27.09	69.4	6.6
08/31/95	00:50	77.2	148.1	17.6	27.09	70.7	6

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/31/95	00:55	76.8	148.1	17	27.09	71.5	6.1
08/31/95	01:00	76.3	146.9	16.4	27.09	72.5	5.5
08/31/95	01:05	75.9	145.8	15.6	27.09	73.6	5.4
08/31/95	01:10	75.6	144.2	15.3	27.09	74.6	5.9
08/31/95	01:15	75.3	145.1	14.1	27.1	75.2	5.9
08/31/95	01:20	75.2	145.8	15.2	27.09	75.7	6
08/31/95	01:25	75.4	150.8	15.4	27.09	75	6.5
08/31/95	01:30	75.5	151.9	15.4	27.09	74.6	6.9
08/31/95	01:35	75.3	149	15.3	27.09	75.3	5.2
08/31/95	01:40	75.3	150.1	16.7	27.09	74.9	6.4
08/31/95	01:45	75.4	151.9	17	27.09	74.3	6.6
08/31/95	01:50	75.5	154.1	16.3	27.09	73.9	6.8
08/31/95	01:55	75.4	150.1	15.6	27.09	74.6	6.1
08/31/95	02:00	75.3	150.1	15.3	27.09	74.7	6.8
08/31/95	02:05	75.2	148	15	27.09	75.1	5.8
08/31/95	02:10	75.3	148.1	17.8	27.09	74.6	5.9
08/31/95	02:15	75.4	150.1	18.3	27.09	74.5	6.3
08/31/95	02:20	75.3	151.9	17.4	27.09	74.2	6.3
08/31/95	02:25	75.2	152.1	17	27.09	74.6	7.2
08/31/95	02:30	75.2	154.1	16.7	27.09	74.3	7
08/31/95	02:35	75.3	155.9	17.7	27.09	73.9	7
08/31/95	02:40	75.2	155.9	15.9	27.09	74.2	6.8
08/31/95	02:45	75	157.9	15.8	27.09	74.3	6.6
08/31/95	02:50	74.9	158	16.5	27.09	74.5	6.1
08/31/95	02:55	74.7	160.2	15.3	27.08	75	7.2
Run 18							
08/31/95	10:20	78.6	170.1	4.8	27.15	52.4	15.4
08/31/95	10:25	79	169.9	3.5	27.15	50.5	17.5
08/31/95	10:30	79.3	130	6	27.15	51.9	17.3
08/31/95	10:35	79.7	186.1	3.5	27.15	49.1	27
08/31/95	10:40	80.3	149.9	4.9	27.15	48.8	38.5
08/31/95	10:45	80.7	100.1	3.7	27.15	48.8	27.8
08/31/95	10:50	81.6	83.9	3.6	27.16	45.1	21.4
08/31/95	10:55	82	96.9	4.4	27.16	45.6	22.5
08/31/95	11:00	82.1	108	5.1	27.16	46.4	41.6
08/31/95	11:05	82.2	115.9	4.3	27.16	45.5	20.6
08/31/95	11:10	81.7	117	7.1	27.16	47.5	13.2
08/31/95	11:15	82.3	90	6.7	27.16	47.4	16.9
08/31/95	11:20	82.6	80.1	8.1	27.16	45.2	9.2
08/31/95	11:25	82.7	65	6.9	27.16	44.3	20.7
08/31/95	11:30	83	74	7.1	27.16	43.5	17.5
08/31/95	11:35	83.5	70.9	5.6	27.17	42.4	24.3
08/31/95	11:40	83	95.1	6.7	27.17	43.1	17.2
08/31/95	11:45	83	106.9	8	27.17	46.8	11.5
08/31/95	11:50	83.3	107.1	5.4	27.17	44.2	14.2
08/31/95	11:55	83.8	101.9	6.3	27.17	44.7	12.5
08/31/95	12:00	84.1	101.9	8	27.17	45.8	18
08/31/95	12:05	84.3	117	6.4	27.17	44.3	21.6
08/31/95	12:10	85.5	92.9	7.8	27.17	43.1	18.8
08/31/95	12:15	84.8	142	9.5	27.17	46.4	14.1
08/31/95	12:20	85	109.1	9	27.17	45.6	18
08/31/95	12:25	85.7	105.8	8.9	27.17	44.2	16.1
08/31/95	12:30	85.2	130	8.9	27.17	45.6	15.4
08/31/95	12:35	85.3	116.8	10.7	27.16	47	10.2
08/31/95	12:40	85.4	133.9	10	27.16	48.6	12.6
08/31/95	12:45	85.6	136.8	9.9	27.16	48.2	12.1
08/31/95	12:50	85.8	125.8	10.1	27.16	47.3	13.5

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/31/95	12:55	86	127.1	9.6	27.16	47.2	15.7
08/31/95	13:00	86.3	123.1	9.6	27.16	47	10.4
08/31/95	13:05	86.7	103	9.6	27.16	44.3	12
08/31/95	13:10	86.6	114.8	10	27.16	47	15.3
08/31/95	13:15	86.7	128	10.6	27.16	46.7	12.5
08/31/95	13:20	86.6	131	8.5	27.16	45.4	17
08/31/95	13:25	87.5	126	10.9	27.15	48.2	12.1
08/31/95	13:30	87.1	125.8	10.6	27.15	47.2	10.8
08/31/95	13:35	87.5	126.9	10.4	27.15	47	14.2
08/31/95	13:40	87.4	117	11.4	27.15	48.1	9.4
08/31/95	13:45	87.3	132.8	11.2	27.15	47.4	11.4
08/31/95	13:50	87.5	130.1	11.8	27.15	48.3	11.4
08/31/95	13:55	87.8	119	10.6	27.15	48.2	15.4
08/31/95	14:00	88.1	134.8	12	27.15	49.6	15.1
08/31/95	14:05	88.4	137.2	14.6	27.15	48.7	14
08/31/95	14:10	88.8	163.8	12.2	27.15	49.6	13.6
08/31/95	14:15	88.8	151.9	11.2	27.15	48.1	10.8
08/31/95	14:20	89.1	141.8	12.8	27.14	49	14
08/31/95	14:25	89.3	167	12.3	27.14	47.1	15.2
08/31/95	14:30	89.1	157.1	12.7	27.14	47	9.1
08/31/95	14:35	89.3	156.1	11.6	27.14	45.8	13.1
08/31/95	14:40	89.5	150.1	13.4	27.14	47.9	9.8
08/31/95	14:45	89.7	158	10.6	27.14	47.5	23.5
08/31/95	14:50	89.8	159.1	12.7	27.14	45	12.4
08/31/95	14:55	89.9	157.1	10.8	27.14	45.1	15.1
08/31/95	15:00	89.9	151	12	27.14	46.6	14.1
08/31/95	15:05	90.1	159.1	15.8	27.13	45	18
08/31/95	15:10	90.1	157.1	12.4	27.13	46.6	15
08/31/95	15:15	90.5	159.8	14.6	27.13	44.8	15
08/31/95	15:20	90.7	148	14.2	27.12	44.7	9.2
08/31/95	15:25	90.8	156.1	14.5	27.12	42.8	8.6
08/31/95	15:30	90.7	148.1	12.8	27.12	43.6	15.9
08/31/95	15:35	90.9	152.8	15.7	27.12	42.9	11.8
08/31/95	15:40	91.1	164.2	12.6	27.12	41.8	9.7
08/31/95	15:45	91.7	156.1	13.6	27.12	41.1	12.9
08/31/95	15:50	91.6	160.9	11.8	27.12	41.2	9.6
08/31/95	15:55	91.5	156.1	12.5	27.12	42.1	11.7
08/31/95	16:00	91.6	159.8	11	27.12	41.1	12.4
08/31/95	16:05	91.7	149.9	12.6	27.12	41.3	13.9
08/31/95	16:10	92	154.1	13.1	27.11	41.1	13.1
08/31/95	16:15	91.7	161.8	10.5	27.12	40	11.9
08/31/95	16:20	92.1	143.1	12.5	27.12	41.6	9.6
08/31/95	16:25	92.1	146.2	12.4	27.11	40.6	16.2
08/31/95	16:30	91.8	130.1	12.5	27.11	39.9	15.7
08/31/95	16:35	92.3	160.2	8.7	27.11	39.9	13.5
08/31/95	16:40	92.2	146.2	13.3	27.11	39	15.4
08/31/95	16:45	92.3	131	11.5	27.11	38.7	12.5
08/31/95	16:50	92.5	134.8	12.1	27.11	39.2	9.1
08/31/95	16:55	92.6	134.8	11.7	27.11	38.4	15.7
08/31/95	17:00	92.6	141.8	10.9	27.11	37.4	11.5
08/31/95	17:05	92.6	146.2	11.2	27.11	37.3	12.8
08/31/95	17:10	92.5	119.9	11.4	27.11	36.8	7.4
08/31/95	17:15	92.6	135	10.2	27.11	37.4	10.8
08/31/95	17:20	92.5	122	11.2	27.11	38.2	8.1
08/31/95	17:25	92.4	114.1	11	27.11	37.6	9.1
08/31/95	17:30	92.4	127.1	10.6	27.11	38.9	12
08/31/95	17:35	92.4	123.1	10.2	27.1	37.7	6.6

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/31/95	17:40	92.6	128	10.9	27.1	39.1	9.7
08/31/95	17:45	92.7	139.1	10.6	27.1	39.8	13.5
08/31/95	17:50	92.4	125.1	10.6	27.1	40.1	9.2
08/31/95	17:55	92.1	127.1	11.8	27.1	40.2	7.5
08/31/95	18:00	91.4	119.9	13	27.1	41.9	8.7
08/31/95	18:05	91.2	116.8	13.7	27.1	42.4	6.8
08/31/95	18:10	91.1	124	13.6	27.09	43.1	7
08/31/95	18:15	90.9	125.1	14.2	27.09	43.3	8.3
08/31/95	18:20	89.9	132.8	12.7	27.1	45.2	6.9
08/31/95	18:25	89.3	130	12	27.1	46.6	7.4
08/31/95	18:30	88.7	127.1	11.8	27.09	47.6	5.5
08/31/95	18:35	88.3	125.1	11.1	27.09	48.5	5.7
08/31/95	18:40	88.1	123.1	10.4	27.09	49.4	5.5
08/31/95	18:45	87.8	126.9	8.9	27.1	49.9	5.9
08/31/95	18:50	87.4	124	8.8	27.1	51.1	4.9
08/31/95	18:55	87.2	123.1	8.5	27.1	52.2	4.9
08/31/95	19:00	87	123.8	8.3	27.1	52.5	4.9
08/31/95	19:05	86.6	125.8	7.2	27.1	52.9	5.2
08/31/95	19:10	86.1	125.8	6.5	27.11	54.7	5.3
08/31/95	19:15	85.6	125.8	7.4	27.1	56	4.6
08/31/95	19:20	85.3	124.9	8.6	27.1	56.7	4.8
08/31/95	19:25	84.9	122.9	8.8	27.1	57.7	4.7
08/31/95	19:30	84.7	126.9	7.7	27.1	57.1	4.9
08/31/95	19:35	84.7	123.8	6.9	27.1	57.3	4.9
08/31/95	19:40	84.6	126.9	7.2	27.1	57.7	4.8
08/31/95	19:45	84.4	125.8	7.6	27.1	58.1	5.8
08/31/95	19:50	84.3	120.1	7.6	27.1	58.7	4.1
08/31/95	19:55	84.1	121	7.3	27.1	59.7	4.9
Run 19							
08/31/95	20:50	81.7	139.9	8.9	27.1	63.1	5.4
08/31/95	20:55	81.3	141.8	8.3	27.1	64.6	4.7
08/31/95	21:00	81	145.1	8.6	27.1	66.1	4.2
08/31/95	21:05	80.8	144.9	9.4	27.1	65.9	4.6
08/31/95	21:10	81	140	9.9	27.1	65.1	5.4
08/31/95	21:15	81	137.2	9.6	27.1	65.1	5.5
08/31/95	21:20	80.6	140	9.5	27.1	66	5.3
08/31/95	21:25	80.3	145.1	9.8	27.1	66.3	4.7
08/31/95	21:30	80.3	144.9	10.1	27.1	65.9	5
08/31/95	21:35	80.3	142	10.2	27.1	65	5.7
08/31/95	21:40	80.6	142	10.8	27.1	64.4	5.9
08/31/95	21:45	80.5	141.1	10.3	27.11	64.3	5.4
08/31/95	21:50	80.2	139.1	10.6	27.11	63.7	5.4
08/31/95	21:55	79.9	138.1	10.1	27.11	64.6	5
08/31/95	22:00	79.1	137.2	9.7	27.12	66.1	4.9
08/31/95	22:05	78.6	136.8	9.7	27.12	67.1	5
08/31/95	22:10	78.1	136.8	10	27.12	67.9	4.8
08/31/95	22:15	77.6	136.8	9.8	27.12	69.3	5.3
08/31/95	22:20	77	130.1	9.3	27.12	71.2	5.8
08/31/95	22:25	76.7	129.1	10.2	27.12	72.9	4.9
08/31/95	22:30	76.3	132.8	11.4	27.12	73.7	5.5
08/31/95	22:35	76.5	136.1	12.9	27.12	73.2	4.9
08/31/95	22:40	76.8	142	13.7	27.12	72.1	5.5
08/31/95	22:45	76.9	147.1	13.5	27.11	71.5	5.8
08/31/95	22:50	76.8	150.1	13	27.11	71.9	5.7
08/31/95	22:55	76.8	148.9	12.7	27.11	71.6	5
08/31/95	23:00	76.8	145.1	11.7	27.11	71.4	5
08/31/95	23:05	76.6	142.9	10.9	27.12	71.4	5.4

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/31/95	23:10	76.3	141.1	10.4	27.12	71.7	5.7
08/31/95	23:15	75.9	142	10.1	27.12	72.5	4.9
08/31/95	23:20	75.4	140.9	9.9	27.12	73.6	4.7
08/31/95	23:25	75.2	140	10	27.12	73.7	5.2
08/31/95	23:30	74.7	139.9	9.3	27.12	74.9	5.4
08/31/95	23:35	74.4	143.1	8.8	27.12	76.2	5.5
08/31/95	23:40	74.1	148.1	8.2	27.12	77.6	5.7
08/31/95	23:45	74.1	151	8.7	27.12	77.6	6.8
08/31/95	23:50	74.5	157	9.3	27.12	76	7.2
08/31/95	23:55	75.3	163.1	10.8	27.12	74.4	7.4
08/31/95	00:00	75.2	163.1	11.1	27.12	74.1	5.3
09/01/95	00:05	74.9	162.9	11	27.12	74.1	5.9
09/01/95	00:10	74.6	163.8	10.5	27.13	75.4	6.8
09/01/95	00:15	74.3	166	11.3	27.13	75.5	6.6
09/01/95	00:20	73.9	167	10.7	27.12	76.3	6.6
09/01/95	00:25	73.5	171.2	10.2	27.12	76.9	6.8
09/01/95	00:30	73.2	172.1	10.5	27.12	77.9	7.4
09/01/95	00:35	72.8	170.1	10.8	27.12	78.3	6.9
09/01/95	00:40	72.4	174.1	9.2	27.12	80	7.2
09/01/95	00:45	72.3	179.1	10.4	27.12	80	6.9
09/01/95	00:50	72.6	179.1	11.1	27.12	80.3	7
09/01/95	00:55	72.5	175.1	10.3	27.12	80.6	8
09/01/95	01:00	72.4	175.1	10.4	27.13	80.8	6.5
09/01/95	01:05	72.5	178.9	10.3	27.13	80.7	7.1
09/01/95	01:10	72.7	179.8	11.4	27.13	80.3	8
09/01/95	01:15	73.1	181.1	11.4	27.13	79.5	6.9
09/01/95	01:20	73.2	184	10.8	27.13	78.9	6.9
09/01/95	01:25	72.9	185.2	10.1	27.13	79.3	6.9
09/01/95	01:30	72.1	187.2	9.7	27.13	81.4	5.4
09/01/95	01:35	71.8	184.1	9.2	27.13	82.3	6.8
09/01/95	01:40	71.8	182.2	8.6	27.13	82.5	7.7
09/01/95	01:45	71.8	185.2	7.9	27.14	82.6	7.6
09/01/95	01:50	72	184	8.6	27.14	82	7.2
09/01/95	01:55	71.9	185.2	8.4	27.14	81.9	7.4
09/01/95	02:00	72	184	8.7	27.14	81.7	7.7
09/01/95	02:05	72	182.2	8.7	27.14	81	7.4
09/01/95	02:10	71.8	179.8	8.3	27.14	81.2	7.1
09/01/95	02:15	71.4	179.8	8.4	27.14	81.7	7.9
09/01/95	02:20	71.3	181.1	8	27.13	82.3	6.8
09/01/95	02:25	71	186.8	8.2	27.13	82.6	7.6
09/01/95	02:30	71	194.2	8.8	27.13	81.6	7.5
09/01/95	02:35	70.8	197.1	8.1	27.13	81.7	7.9
09/01/95	02:40	70.2	203.2	6.6	27.13	82.1	9.2
09/01/95	02:45	69.9	204.1	6.8	27.13	83.5	8.3
09/01/95	02:50	70.2	200.9	7.8	27.13	83.6	8.1
09/01/95	02:55	70.6	202.1	8.9	27.13	82.7	7.5
09/01/95	03:00	70.6	202.9	8.7	27.13	82.5	8.1
09/01/95	03:05	70.2	203.2	8.1	27.13	82.9	7.6
09/01/95	03:10	70.1	200.9	8.1	27.13	83.7	7.4
09/01/95	03:15	70.3	196.9	9.1	27.13	83.6	8.3
09/01/95	03:20	70.2	198.2	8.5	27.13	83.7	7.9
09/01/95	03:25	70.2	198.2	8.4	27.13	83.8	7.4
09/01/95	03:30	70.4	197.1	8.3	27.13	83.7	7.6
09/01/95	03:35	70.6	191.9	7.7	27.13	84.5	8.1
09/01/95	03:40	70.6	187.2	7.2	27.13	85.5	7.7
09/01/95	03:45	70.4	182.9	6.5	27.13	86.6	8.5
09/01/95	03:50	70.2	175.1	5.6	27.13	86	9.1

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/01/95	03:55	70	175	5.1	27.13	86.4	8.8
09/01/95	04:00	70	176.2	4.8	27.13	86.9	8.2
09/01/95	04:05	69.6	164.2	4.3	27.13	87.2	9.7
09/01/95	04:10	69.5	180.9	4.3	27.13	86.8	12.8
09/01/95	04:15	69.5	190.1	4.3	27.13	87.2	8.5
09/01/95	04:20	69.7	185.2	5.3	27.13	88.7	8.2
09/01/95	04:25	69.5	179.8	5.7	27.13	88.7	8.1
09/01/95	04:30	69.2	169.2	5.5	27.13	88.9	6.4
09/01/95	04:35	68.9	178.2	6.1	27.13	89.4	7.9
09/01/95	04:40	69.1	180.9	6.5	27.13	89.2	6.5
09/01/95	04:45	68.9	182.9	6.5	27.13	89.5	6
09/01/95	04:50	69	183.1	6.6	27.13	89.9	6.9
09/01/95	04:55	69.3	181.1	6.7	27.13	88.4	6.6
09/01/95	05:00	69.3	179.8	6.3	27.13	88.1	9.9
09/01/95	05:05	69.1	182	6.3	27.13	89.1	7.5
09/01/95	05:10	69	181.1	6.8	27.13	89.1	7.4
09/01/95	05:15	68.8	183.1	7	27.13	89.7	7.1
09/01/95	05:20	68.8	185.9	7.3	27.13	89.7	6.3
09/01/95	05:25	68.9	185.9	7.6	27.13	89.1	6.6
09/01/95	05:30	68.8	185.9	7.5	27.13	89.2	6.4
09/01/95	05:35	68.7	184	6.9	27.13	89.4	6.6
09/01/95	05:40	68.6	184.9	7.2	27.13	89.5	5.3
09/01/95	05:45	68.7	187.2	7.4	27.13	89.5	6
09/01/95	05:50	68.6	185.2	7.4	27.13	89.4	6.4
09/01/95	05:55	68.4	188.1	7.4	27.13	89.4	7.2
09/01/95	06:00	68.4	188.1	7.6	27.13	89.3	6.6
09/01/95	06:05	68.3	179.8	7.7	27.13	90.1	6.4
09/01/95	06:10	67.9	175.9	7.6	27.13	90.5	6.4
09/01/95	06:15	67.5	176.2	7.5	27.13	92	6.5
09/01/95	06:20	67.4	178.9	7.8	27.13	91.8	6.4
09/01/95	06:25	67.7	179.1	8	27.13	91.6	7
09/01/95	06:30	67.8	183.1	7.7	27.13	91.6	6
09/01/95	06:35	67.7	181.8	7.5	27.13	92.1	6.6
09/01/95	06:40	67.3	179.1	7.3	27.13	92.5	6.8
09/01/95	06:45	67.1	183.1	7.6	27.13	92.9	7.4
09/01/95	06:50	67.1	191.2	6.9	27.13	92.5	6.9
09/01/95	06:55	67	190.1	6.5	27.13	93.5	8.1
09/01/95	07:00	66.8	191.2	6.7	27.13	94.1	7.1
09/01/95	07:05	66.8	188.8	6.5	27.13	94	6.4
09/01/95	07:10	67.1	186.8	6.2	27.13	94.5	7
09/01/95	07:15	67.2	186.1	6.1	27.13	94.5	6.1
09/01/95	07:20	67.2	178	5.7	27.13	94.5	7.6
09/01/95	07:25	66.8	174.1	5.2	27.14	94.3	7.4
09/01/95	07:30	66.7	176	5.6	27.14	94.2	5.5
09/01/95	07:35	66.8	176	5.6	27.14	94	5.8
09/01/95	07:40	67.2	175.1	5.2	27.14	94	7.7
09/01/95	07:45	67.1	170.8	4.9	27.14	93.6	7.2
09/01/95	07:50	67.2	172.1	4.6	27.14	92.7	7.2
09/01/95	07:55	67.4	187.2	4.1	27.14	91.5	8.2
09/01/95	08:00	67.8	189.2	4.5	27.14	91.3	6
09/01/95	08:05	68.2	177.1	4.7	27.14	90.6	8.1
09/01/95	08:10	68.5	175	4.4	27.14	87.1	7.6
09/01/95	08:15	68.7	182.2	4.5	27.15	82.5	8.6
09/01/95	08:20	68.9	171.2	4.5	27.15	80.7	8.1
09/01/95	08:25	68.9	169.2	3.7	27.15	78.3	8.2
09/01/95	08:30	69.4	178.9	3.3	27.15	75.3	10.7
09/01/95	08:35	70.2	169.2	2.7	27.15	72.1	17.7

Midwest Beef

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/01/95	08:40	70.8	160.9	2.4	27.16	69.2	17.7
09/01/95	08:45	71.5	124	1.3	27.16	67.3	52.9
09/01/95	08:50	72.1	153.9	2	27.16	65.3	20.7
09/01/95	08:55	71.9	159.1	2.9	27.17	66.2	14.7
09/01/95	09:00	71.8	150.1	2.6	27.17	66.8	8.1
09/01/95	09:05	72.3	192.2	2.5	27.17	63.8	17.3
09/01/95	09:10	72.9	208.3	3.7	27.17	60.6	12.6
09/01/95	09:15	73.5	217.3	3	27.18	59	20.5
09/01/95	09:20	74.1	211.1	3.8	27.18	58.9	14.1
09/01/95	09:25	74.5	207.2	4.9	27.18	59.5	11.2
09/01/95	09:30	74.8	209.2	5.4	27.18	59.3	12
09/01/95	09:35	75.3	220	5.6	27.18	57.9	14.1
09/01/95	09:40	76.3	225.9	6.3	27.18	56.7	15.1
09/01/95	09:45	77	227.9	7.1	27.18	55.8	13.6
09/01/95	09:50	77.9	227.2	7.5	27.18	55.8	15.6
09/01/95	09:55	78.6	220.1	7.1	27.18	55.9	15.1
09/01/95	10:00	79.6	213.1	6.9	27.18	56	12.1
09/01/95	10:05	80.4	213.8	7.8	27.18	54.9	12.8
09/01/95	10:10	80.9	205.9	8.6	27.18	54	10.4
09/01/95	10:15	80.9	210.1	9.5	27.18	53.7	11.4
09/01/95	10:20	81.3	208.8	9.1	27.18	53	10.3
09/01/95	10:25	81.5	208.8	8.9	27.18	53.2	13
09/01/95	10:30	82.2	206.1	8.5	27.18	52.8	10.4
09/01/95	10:35	82.6	206.1	8.2	27.18	51.2	10.8

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
Run 20							
09/05/95	20:50	63.8	336.4	1.1	29.3	99.6	0
09/05/95	20:55	63.7	336.4	1.1	29.3	99.7	0
09/05/95	21:00	63.5	336.4	1.1	29.31	99.7	0
09/05/95	21:05	63.2	336.4	1.1	29.3	99.7	0
09/05/95	21:10	63.1	336.4	1.1	29.3	99.7	0
09/05/95	21:15	62.8	336.4	1.1	29.3	99.7	0
09/05/95	21:20	62.4	336.4	1.1	29.3	99.7	0
09/05/95	21:25	62.5	336.4	1.1	29.3	99.7	0
09/05/95	21:30	62.3	336.4	1.1	29.3	99.7	0
09/05/95	21:35	62.1	336.4	1.1	29.3	99.7	0
09/05/95	21:40	62	336.4	1.1	29.3	99.7	0
09/05/95	21:45	61.7	336.4	1.1	29.3	99.7	0
09/05/95	21:50	61.6	336.4	1.1	29.3	99.7	0
09/05/95	21:55	61.4	336.4	1.1	29.3	99.7	0
09/05/95	22:00	61.2	336.4	1.1	29.3	99.7	0
09/05/95	22:05	61.1	336.4	1.1	29.3	99.7	0
09/05/95	22:10	61	336.4	1.1	29.3	99.7	0
09/05/95	22:15	60.9	336.4	1.1	29.3	99.7	0
09/05/95	22:20	60.6	336.4	1.1	29.3	99.7	0
09/05/95	22:25	60.4	336.4	1.1	29.29	99.7	0
09/05/95	22:30	60.3	336.4	1.1	29.29	99.7	0
09/05/95	22:35	60.4	311.2	1.1	29.3	99.7	25.4
09/05/95	22:40	60.3	292.3	1.1	29.3	99.7	5.4
09/05/95	22:45	59.9	316.8	1.1	29.3	99.7	3.6
09/05/95	22:50	59.6	316.8	1.1	29.3	99.7	2.5
09/05/95	22:55	59.5	325.3	1.1	29.3	99.7	6.9
09/05/95	23:00	59.8	344.3	1.1	29.3	99.7	0
09/05/95	23:05	59.5	347.4	1.1	29.3	99.7	0
09/05/95	23:10	59.3	347.4	1.1	29.29	99.7	0
09/05/95	23:15	59.4	346.3	1.1	29.29	99.7	0.6
09/05/95	23:20	59.3	332.3	1.1	29.29	99.7	12.5
09/05/95	23:25	59.3	317.3	1.1	29.29	99.7	8
09/05/95	23:30	59.1	241.2	1.1	29.29	99.7	36.1
09/05/95	23:35	59.1	299.3	1.1	29.29	99.7	10.9
09/05/95	23:40	58.9	293.2	1.1	29.29	99.7	5.5
09/05/95	23:45	58.6	294.8	1.1	29.28	99.7	1.4
09/05/95	23:50	58.4	298.3	1.1	29.28	99.7	2.6
09/05/95	23:55	58.4	305.3	1.1	29.28	99.7	0
09/05/95	00:00	58.2	308.3	1.1	29.28	99.7	4.1
09/06/95	00:05	58	312.1	1.1	29.28	99.7	0.3
09/06/95	00:10	57.7	311.2	1.1	29.28	99.7	0.1
09/06/95	00:15	57.6	311.9	1.1	29.28	99.7	0.9
09/06/95	00:20	57.5	312.1	1.1	29.28	99.7	0
09/06/95	00:25	57.3	313.4	1.1	29.27	99.7	1.5
09/06/95	00:30	57.2	314.3	1.1	29.27	99.7	0.3
09/06/95	00:35	57.2	314.3	1.1	29.27	99.7	0
09/06/95	00:40	57.1	314.3	1.1	29.27	99.7	0
09/06/95	00:45	57.1	313.9	1.1	29.27	99.7	2.4
09/06/95	00:50	57.1	302.2	1.1	29.27	99.7	8.5
09/06/95	00:55	57	288.4	1.1	29.27	99.7	5.8
09/06/95	01:00	56.8	292.9	1.1	29.27	99.7	2.5
09/06/95	01:05	56.7	303.8	1.1	29.27	99.7	12
09/06/95	01:10	56.5	314.3	1.1	29.27	99.7	0
09/06/95	01:15	56.1	314.3	1.1	29.27	99.7	0
09/06/95	01:20	56	314.3	1.1	29.26	99.7	0
09/06/95	01:25	56.3	314.3	1.1	29.26	99.7	0

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/06/95	01:30	56.3	315.4	1.1	29.26	99.7	0
09/06/95	01:35	56	315.4	1.1	29.26	99.7	0
09/06/95	01:40	56	315.4	1.1	29.25	99.7	0
09/06/95	01:45	56	315.4	1.1	29.25	99.7	0
09/06/95	01:50	55.8	315.4	1.1	29.26	99.7	0
09/06/95	01:55	55.9	311.2	1.2	29.26	99.7	8
09/06/95	02:00	55.8	327.2	1.1	29.26	99.7	6.9
09/06/95	02:05	55.5	339.3	1.1	29.26	99.7	0
09/06/95	02:10	55.3	339.3	1.1	29.25	99.7	0
09/06/95	02:15	55.5	327.2	1.1	29.25	99.7	8.5
09/06/95	02:20	55.5	321.8	1.1	29.25	99.7	3.9
09/06/95	02:25	55.2	317.3	1.1	29.25	99.7	2
09/06/95	02:30	55.3	317.3	1.1	29.25	99.7	2
09/06/95	02:35	55.4	317.3	1.1	29.25	99.7	2
09/06/95	02:40	55.1	317.3	1.1	29.25	99.7	2
09/06/95	02:45	55	317.3	1.1	29.25	99.7	2
09/06/95	02:50	55	317.3	1.1	29.25	99.7	2
09/06/95	02:55	54.7	317.3	1.1	29.25	99.7	2
09/06/95	03:00	54.7	317.3	1.1	29.25	99.7	9.2
09/06/95	03:05	54.6	319.3	1.1	29.25	99.7	3.8
09/06/95	03:10	54.7	333.4	1.1	29.25	99.7	0
09/06/95	03:15	54.3	333.4	1.1	29.25	99.7	0
09/06/95	03:20	54.5	333.4	1.1	29.25	99.7	0
09/06/95	03:25	54.5	333.4	1.1	29.25	99.7	0
09/06/95	03:30	54.4	333.4	1.1	29.25	99.7	0
09/06/95	03:35	54.5	333.4	1.1	29.25	99.7	0
09/06/95	03:40	54.3	320.9	1.1	29.25	99.7	9.2
09/06/95	03:45	54.1	315.4	1.1	29.25	99.7	0
09/06/95	03:50	54	322.4	1.1	29.25	99.7	4.7
09/06/95	03:55	54	320.9	1.1	29.25	99.7	0.8
09/06/95	04:00	54	317.3	1.1	29.25	99.7	2
09/06/95	04:05	53.9	317.3	1.1	29.25	99.7	2
09/06/95	04:10	53.5	317.3	1.1	29.25	99.7	2
09/06/95	04:15	53.6	317.3	1.1	29.25	99.7	2
09/06/95	04:20	53.7	321.8	1.1	29.26	99.7	5.3
09/06/95	04:25	53.8	324.9	1.1	29.26	99.7	2.2
09/06/95	04:30	53.7	325.3	1.1	29.26	99.7	0.1
09/06/95	04:35	53.6	329.4	1.1	29.26	99.7	2.5
09/06/95	04:40	53.7	325.8	1.1	29.26	99.6	4.2
09/06/95	04:45	53.6	318.8	1.1	29.26	99.7	0
09/06/95	04:50	53.4	319.3	1.1	29.26	99.7	0
09/06/95	04:55	53.1	319.3	1.1	29.27	99.7	0
09/06/95	05:00	53.4	319.3	1.1	29.26	99.7	2
09/06/95	05:05	53.3	319.3	1.1	29.27	99.6	0
09/06/95	05:10	53.3	319.3	1.1	29.26	99.7	0
09/06/95	05:15	53	319.3	1.1	29.26	99.6	0
09/06/95	05:20	53	319.9	1.1	29.26	99.6	2.1
09/06/95	05:25	53.1	319.3	1.1	29.26	99.7	0
09/06/95	05:30	52.9	319.3	1.1	29.26	99.6	0
09/06/95	05:35	52.9	319.3	1.1	29.26	99.6	0
09/06/95	05:40	52.9	319.3	1.1	29.26	99.6	0
09/06/95	05:45	53	299.9	1.1	29.27	99.6	9.2
09/06/95	05:50	52.9	278.8	1.1	29.26	99.6	7
09/06/95	05:55	52.6	284.9	1.1	29.27	99.6	1.2
09/06/95	06:00	52.6	304.9	1.1	29.27	99.6	0
09/06/95	06:05	52.7	309.2	1.1	29.27	99.6	2.2
09/06/95	06:10	52.6	307.3	1.1	29.27	99.6	0

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/06/95	06:15	52.5	307.3	1.1	29.27	99.6	0
09/06/95	06:20	52.6	307.3	1.1	29.27	99.6	0
09/06/95	06:25	52.5	307.3	1.1	29.28	99.6	0
09/06/95	06:30	52.6	307.3	1.1	29.28	99.6	0
09/06/95	06:35	52.5	307.3	1.1	29.28	99.6	0
09/06/95	06:40	52.6	307.3	1.1	29.28	99.6	0.9
09/06/95	06:45	52.7	308.3	1.1	29.28	99.6	0
09/06/95	06:50	52.7	308.3	1.1	29.28	99.6	0
09/06/95	06:55	52.8	328.9	1.1	29.28	99.6	18.5
09/06/95	07:00	53.4	346.3	1.1	29.28	99.6	5.9
09/06/95	07:05	54	346.3	1.1	29.29	99.6	0
09/06/95	07:10	54.9	346.3	1.1	29.29	99.7	0
09/06/95	07:15	55.7	346.3	1.1	29.29	99.7	0
09/06/95	07:20	56.4	346.3	1.1	29.29	99.7	0
09/06/95	07:25	57.3	346.3	1.1	29.29	99.7	0
09/06/95	07:30	57.8	346.3	1.1	29.29	99.7	0
09/06/95	07:35	58.4	346.3	1.1	29.29	99.1	0
09/06/95	07:40	59.2	346.3	1.1	29.29	93	0
09/06/95	07:45	60.2	346.3	1.1	29.29	90.3	0
09/06/95	07:50	60.8	346.3	1.1	29.29	91.3	8.3
09/06/95	07:55	61.1	340.9	1.2	29.3	88.1	12.8
09/06/95	08:00	61.2	354.8	1.6	29.3	85.4	0
09/06/95	08:05	61.8	29	1.1	29.3	83.1	14.6
09/06/95	08:10	62.2	70	1.1	29.3	79.9	17.5
09/06/95	08:15	62.7	52	1.1	29.3	79.1	23.2
09/06/95	08:20	62.9	34.9	1.7	29.3	78.5	23.6
09/06/95	08:25	63.4	44.8	2.4	29.31	79.7	17.7
09/06/95	08:30	64.2	82.1	1.4	29.31	76.4	47
09/06/95	08:35	65.2	25.9	2	29.31	76.5	38.5
09/06/95	08:40	65.9	0.9	1.6	29.31	72.5	27.9
09/06/95	08:45	67.2	11	1.6	29.31	69.3	54.4
09/06/95	08:50	67.9	15	1.8	29.31	68.9	34.3
09/06/95	08:55	68.8	33.9	1.1	29.31	66.3	46.8
09/06/95	09:00	70.3	103.9	1.2	29.32	64.2	22.9
09/06/95	09:05	70.5	11.9	2.1	29.32	65.8	28.7
09/06/95	09:10	71.2	9.9	1.8	29.32	64.6	63.2
09/06/95	09:15	71.4	13.9	3	29.32	61.2	32.7
09/06/95	09:20	71.9	7.9	2.8	29.32	59.5	39.3
09/06/95	09:25	72.8	69	2.5	29.33	58.8	59.9
09/06/95	09:30	73.9	354.8	2	29.33	58.7	43.4
09/06/95	09:35	74.3	32.1	3	29.33	56.3	37.1
09/06/95	09:40	75	38	3.2	29.33	56	39.3
09/06/95	09:45	75.2	33	2.9	29.33	54.4	20.3
09/06/95	09:50	76.4	58	2.2	29.32	54.3	61.3
09/06/95	09:55	76.7	71.8	4.1	29.33	50.8	44.1
09/06/95	10:00	76.8	87.9	4.1	29.33	49.9	48.7
09/06/95	10:05	77.7	70.9	3.5	29.32	48.6	50.7
09/06/95	10:10	77.2	65	6.9	29.32	46.5	24.3
09/06/95	10:15	77.4	87.9	5.1	29.32	47.5	34.4
09/06/95	10:20	77.4	106	6.4	29.32	47	23.9
09/06/95	10:25	78.2	49.9	4.5	29.31	48.4	28.4
09/06/95	10:30	78.7	56	4.3	29.31	46.9	31.6
09/06/95	10:35	79.4	76	4.4	29.31	49.3	54.6
09/06/95	10:40	80	101	3.9	29.31	46.2	50.3
09/06/95	10:45	79.8	70.9	4	29.31	46.8	44.5
09/06/95	10:50	80	96.9	4.2	29.31	46.7	42.5
09/06/95	10:55	80.4	54.9	3.4	29.31	46.9	44.3

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/06/95	11:00	80.6	29	5.6	29.31	45.9	31.5
09/06/95	11:05	80.2	18	5.1	29.31	46.2	43.8
09/06/95	11:10	80.8	69	4.6	29.31	45.5	28.5
09/06/95	11:15	80.6	105.8	4	29.31	45.7	43.6
09/06/95	11:20	81.5	222.8	3.8	29.3	48.4	92.1
09/06/95	11:25	81.6	68.1	5.2	29.3	45.7	37.4
09/06/95	11:30	81.6	77.1	5.5	29.3	45	35.8
09/06/95	11:35	81.5	83	6.1	29.3	45.5	28.1
09/06/95	11:40	81.2	94	5.4	29.3	45.3	26.1
09/06/95	11:45	81.9	56.9	5.2	29.3	46	40.2
09/06/95	11:50	82.2	72	6.5	29.3	45.3	42.7
09/06/95	11:55	81.7	115	7.1	29.29	45.4	31.5
09/06/95	12:00	82.4	60.9	4.8	29.29	46.5	37.2
09/06/95	12:05	82.3	85.9	6.6	29.29	45.1	30.3
09/06/95	12:10	82.1	54.9	5.5	29.29	45.6	24.4
09/06/95	12:15	82.9	108	6.1	29.28	45.7	57.1
09/06/95	12:20	82.8	60	6.3	29.28	45.2	30.3
09/06/95	12:25	83.4	42.9	3.7	29.28	45.8	31.6
09/06/95	12:30	83.7	54	5.3	29.28	45.2	53.5
09/06/95	12:35	83.8	87	6.4	29.28	46	40.7
09/06/95	12:40	83.2	85	6.4	29.28	44.2	26
09/06/95	12:45	83.3	56	5.3	29.27	44.3	42.3
09/06/95	12:50	83.6	38.9	6.1	29.27	43.7	30.3
09/06/95	12:55	83.9	121.1	4	29.27	44.1	72.2
09/06/95	13:00	83.4	9	5.5	29.27	43.7	40.3
09/06/95	13:05	83.5	65	5.5	29.27	44.6	38.1
09/06/95	13:10	84.3	47.9	7.2	29.26	43	59.5
09/06/95	13:15	84	78	6.6	29.26	41.2	23.8
09/06/95	13:20	84.8	79	4.4	29.26	42.5	58.4
09/06/95	13:25	85.7	81	6.3	29.25	41.2	23.6
09/06/95	13:30	85.2	56	5.7	29.25	40.7	38.3
09/06/95	13:35	83.5	24.9	7.2	29.25	40.5	36.9
09/06/95	13:40	84.2	18	6.1	29.25	41.5	44.8
09/06/95	13:45	83.7	67.9	7.5	29.25	39.7	27.2
09/06/95	13:50	83.7	52	5.9	29.25	41.4	45.1
09/06/95	13:55	84.7	45.9	6.1	29.24	39	39.3
09/06/95	14:00	84.6	33.9	7.1	29.24	39.8	40.4
09/06/95	14:05	84	67.9	6.3	29.24	39.9	40
09/06/95	14:10	84.9	77.1	5.5	29.23	40.1	29.6
09/06/95	14:15	85.5	38.9	6.1	29.22	38.7	37.2
09/06/95	14:20	85.1	57.1	6.4	29.22	37.9	33.2
09/06/95	14:25	85.3	78.9	7	29.22	38.7	38.2
09/06/95	14:30	85.4	77.1	6.5	29.22	38.7	33.1
09/06/95	14:35	84.7	85.9	5.8	29.22	38.5	35.3
09/06/95	14:40	84.4	77.1	6.9	29.22	38.6	25.2
09/06/95	14:45	85	70.9	4.4	29.21	38.4	43.6
09/06/95	14:50	84.4	42	6	29.21	38.7	37.5
09/06/95	14:55	84.4	25	5.6	29.21	39.8	37
09/06/95	15:00	84.9	85	5.2	29.21	36.9	41.3
09/06/95	15:05	85.2	76	6	29.21	38.4	49.8
09/06/95	15:10	85.3	56	6.9	29.2	37.3	37.7
09/06/95	15:15	85.2	51.9	6.6	29.2	35.7	50.5
09/06/95	15:20	85.1	58	5.5	29.2	35.1	37.5
09/06/95	15:25	85.5	42	5.8	29.2	34.7	31.5
09/06/95	15:30	85.3	94	6.6	29.19	35.6	39.3
09/06/95	15:35	85.2	103	5.2	29.19	36.8	34.1
09/06/95	15:40	85	76	6	29.19	36.2	27.9

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/06/95	15:45	84.8	75.1	6.3	29.19	35.3	32
09/06/95	15:50	84.5	76	7.4	29.19	36.4	27.7
09/06/95	15:55	84.8	97.9	4.2	29.19	36.8	34.3
09/06/95	16:00	84.9	110	5.6	29.19	37.8	29
09/06/95	16:05	85.3	80.1	5.1	29.19	37.4	34.5
09/06/95	16:10	85.5	58	4.2	29.18	37.2	33.4
09/06/95	16:15	85.4	78.9	5.9	29.18	36.7	21.7
09/06/95	16:20	85	88	5	29.18	37.4	37.7
09/06/95	16:25	84.3	71.8	5.6	29.19	37.3	23.6
09/06/95	16:30	83.5	60	3.7	29.19	39.2	29.5
Run 21							
09/06/95	16:50	85.1	31.9	4.2	29.18	39.6	23
09/06/95	16:55	84.8	74.9	6.6	29.18	40.5	29.6
09/06/95	17:00	84.1	61.9	5.1	29.19	40.2	29.5
09/06/95	17:05	83.6	78.9	5.1	29.18	40.6	21.2
09/06/95	17:10	83.7	57.1	5.1	29.18	41.9	38.3
09/06/95	17:15	83.6	56	5.5	29.18	42.4	32.2
09/06/95	17:20	83.5	87.9	3.6	29.19	43.3	40
09/06/95	17:25	83.5	38.9	4.5	29.19	43.7	39.7
09/06/95	17:30	83.1	60	4.8	29.18	42.4	34.5
09/06/95	17:35	82.8	29.9	5.2	29.18	42.8	33.1
09/06/95	17:40	82.5	63	5.3	29.18	42.9	34.9
09/06/95	17:45	82.5	52	2.6	29.18	44.2	19
09/06/95	17:50	82.3	58	4.3	29.18	44.4	26.5
09/06/95	17:55	82.1	69	3.5	29.18	45.8	25.5
09/06/95	18:00	81.7	84.1	3	29.18	46.4	31.8
09/06/95	18:05	81.5	74.9	4	29.19	47.8	31.5
09/06/95	18:10	81	54	3.2	29.19	49	44.1
09/06/95	18:15	80.5	80.1	3.1	29.18	49.1	33.2
09/06/95	18:20	80.1	74.9	2.6	29.18	50.4	28.7
09/06/95	18:25	79.7	70.9	2.9	29.18	51.9	18
09/06/95	18:30	79.4	80.8	2.6	29.18	52.4	25.5
09/06/95	18:35	78.9	63	1.3	29.18	53.5	16.7
09/06/95	18:40	78.3	61.9	1.1	29.17	56.7	28.1
09/06/95	18:45	77.6	36.9	1.1	29.17	60.3	30.1
09/06/95	18:50	77.1	356.4	1.1	29.17	63.6	21.2
09/06/95	18:55	76.7	8.8	1.1	29.17	63.9	14
09/06/95	19:00	75.8	347.4	1.1	29.17	70.6	23.9
09/06/95	19:05	74.2	334.1	1.1	29.17	71.8	7.4
09/06/95	19:10	73.6	342.4	1.1	29.17	73.1	9.1
09/06/95	19:15	73.5	345.4	1.1	29.17	77.8	9.1
09/06/95	19:20	72.5	333.9	1.1	29.17	78.4	6.9
09/06/95	19:25	71.4	325.3	1.1	29.17	80.2	9.4
09/06/95	19:30	70.7	329.4	1.1	29.17	81.1	5.3
09/06/95	19:35	70.4	329.9	1.1	29.17	82.5	7.2
09/06/95	19:40	69.9	336.4	1.1	29.17	85.7	7.5
09/06/95	19:45	69.6	331.4	1.1	29.17	85.5	8.6
09/06/95	19:50	70	347.4	1.1	29.17	87.9	16.8
09/06/95	19:55	69.1	354.4	1.1	29.17	88	6.8
09/06/95	20:00	68.9	329.4	1.1	29.17	89.3	10.3
09/06/95	20:05	68.9	331	1.1	29.17	90.8	9.9
09/06/95	20:10	68.5	321.3	1.1	29.17	93	9.7
09/06/95	20:15	68.2	341.3	1.1	29.17	93.6	39.9
09/06/95	20:20	67.7	331	1.1	29.17	93.1	22.9
09/06/95	20:25	68.2	338.4	1.1	29.17	94.9	14.8
09/06/95	20:30	68.9	350.8	1.1	29.17	93.5	10.6
09/06/95	20:35	69.3	15	1.2	29.17	91.4	35.5

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/06/95	20:40	70	9	1.7	29.17	88.5	35.2
09/06/95	20:45	70.2	0.9	2	29.17	85.9	25.9
09/06/95	20:50	69.8	6.9	1.4	29.18	84.8	19.4
09/06/95	20:55	69.1	355.3	1.1	29.18	87.4	9.9
09/06/95	21:00	68.6	0.9	1.1	29.18	90.1	14.5
09/06/95	21:05	68.9	353.3	1.1	29.18	89.6	25.1
09/06/95	21:10	68.6	335.3	1.1	29.18	90.2	14.5
09/06/95	21:15	68.5	345.8	1.6	29.18	90.6	17.2
09/06/95	21:20	68.6	343.3	1.1	29.18	89.5	18.5
09/06/95	21:25	67.7	344.3	1.1	29.19	89.8	13.4
09/06/95	21:30	66.8	343.8	1.1	29.19	92.8	5.7
09/06/95	21:35	66	327.8	1.1	29.19	94.3	15
09/06/95	21:40	65.4	326.3	1.1	29.19	95.8	10.6
09/06/95	21:45	64.8	323.3	1.1	29.19	95.9	13.2
09/06/95	21:50	64.7	309.2	1.1	29.19	96.7	7.4
09/06/95	21:55	64.1	322.4	1.1	29.19	98.7	13.6
09/06/95	22:00	63.8	310.3	1.1	29.19	98.6	21.7
09/06/95	22:05	63.5	307.8	1.1	29.19	99.5	5.3
09/06/95	22:10	63.4	330.3	1.1	29.19	98.8	6.9
09/06/95	22:15	63.2	325.3	1.1	29.19	99.3	9.1
09/06/95	22:20	63.1	319.9	1.1	29.19	99.3	5.3
09/06/95	22:25	62.8	322.9	1.1	29.19	99.6	3.6
09/06/95	22:30	62.3	331.9	1.1	29.19	99.7	6
09/06/95	22:35	61.9	332.8	1.1	29.19	99.7	5.4
09/06/95	22:40	61.7	317.3	1.1	29.19	99.7	10.8
09/06/95	22:45	61.7	306.4	1.1	29.19	99.7	5.5
09/06/95	22:50	61.5	308.3	1.1	29.19	99.7	3.9
09/06/95	22:55	61.2	319.9	1.1	29.19	99.7	12.4
09/06/95	23:00	61.1	312.8	1.1	29.19	99.7	1.6
09/06/95	23:05	61	316.3	1.1	29.19	99.7	1.9
09/06/95	23:10	60.5	319.9	1.1	29.19	99.7	6
09/06/95	23:15	60.3	325.8	1.1	29.19	99.7	4.4
09/06/95	23:20	60.1	312.8	1.1	29.19	99.7	8.6
09/06/95	23:25	60	331.4	1.1	29.19	99.7	9.3
09/06/95	23:30	59.8	324.4	1.1	29.19	99.7	0
09/06/95	23:35	59.7	323.8	1.1	29.19	99.7	4.7
09/06/95	23:40	59.7	316.8	1.1	29.19	99.7	10.8
09/06/95	23:45	59.3	328.3	1.1	29.19	99.7	0.3
09/06/95	23:50	59.3	350.1	1.1	29.19	99.7	11
09/06/95	23:55	59.1	348.3	1.1	29.19	99.7	9
09/06/95	00:00	58.9	324.4	1.1	29.19	99.7	11.7
09/07/95	00:05	58.7	320.4	1.1	29.19	99.7	2.6
09/07/95	00:10	58.5	335.3	1.1	29.19	99.7	4.9
09/07/95	00:15	58.6	317.3	1.1	29.18	99.7	12.5
09/07/95	00:20	58.4	306.4	1.1	29.18	99.7	8.1
09/07/95	00:25	58	306.9	1.1	29.19	99.7	5.8
09/07/95	00:30	57.8	314.8	1.1	29.19	99.7	10.1
09/07/95	00:35	57.7	306.9	1.1	29.19	99.7	15.4
09/07/95	00:40	57.5	306.9	1.1	29.18	99.7	8.1
09/07/95	00:45	57.3	311.2	1.1	29.18	99.7	1.6
09/07/95	00:50	57.3	309.2	1.1	29.18	99.7	5.5
09/07/95	00:55	57.3	328.9	1.1	29.18	99.7	15
09/07/95	01:00	57.3	311.9	1.1	29.18	99.7	4.9
09/07/95	01:05	57.1	319.3	1.1	29.17	99.7	19.1
09/07/95	01:10	57.1	11	1.1	29.17	99.7	21.1
09/07/95	01:15	56.9	350.3	1.1	29.17	99.7	1
09/07/95	01:20	56.6	330.8	1.1	29.17	99.7	10.3

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/07/95	01:25	56.5	302.2	1.1	29.17	99.7	14.7
09/07/95	01:30	56.1	314.3	1.1	29.16	99.7	16.1
09/07/95	01:35	56.1	332.3	1.1	29.16	99.7	0.1
09/07/95	01:40	56.1	315.4	1.1	29.16	99.7	11
09/07/95	01:45	55.9	325.8	1.1	29.16	99.7	1.2
09/07/95	01:50	55.6	326.9	1.1	29.16	99.7	1
09/07/95	01:55	55.9	312.3	1.1	29.16	99.7	17.7
09/07/95	02:00	56	317.3	1.1	29.16	99.7	12.6
09/07/95	02:05	56.3	310.3	1.1	29.16	99.7	11.7
09/07/95	02:10	56.4	308.3	1.1	29.16	99.7	9.3
09/07/95	02:15	55.8	310.9	1.1	29.16	99.7	14.2
09/07/95	02:20	55.4	332.8	1.1	29.16	99.7	22.2
09/07/95	02:25	55.2	294.3	1.1	29.16	99.7	35.3
09/07/95	02:30	55.1	190.1	1.1	29.16	99.7	35.3
09/07/95	02:35	55.3	341.3	1.1	29.16	99.7	24
09/07/95	02:40	55	359.8	1.1	29.15	99.7	1.9
09/07/95	02:45	55	334.3	1.1	29.15	99.7	15
09/07/95	02:50	55.4	338.4	1.1	29.15	99.7	6.9
09/07/95	02:55	55.1	337.3	1.1	29.15	99.7	0
09/07/95	03:00	54.8	323.3	1.1	29.15	99.7	12.8
09/07/95	03:05	55	306.9	1.1	29.15	99.7	10.7
09/07/95	03:10	55	288.4	1.1	29.15	99.7	5.7
09/07/95	03:15	55	283.3	1.1	29.15	99.7	17.5
09/07/95	03:20	54.6	317.3	1.1	29.15	99.7	15.2
09/07/95	03:25	54.4	301.9	1.1	29.15	99.7	11.4
09/07/95	03:30	54.4	308.3	1.1	29.14	99.7	25.6
09/07/95	03:35	54	341.3	1.1	29.14	99.7	27.7
09/07/95	03:40	54.1	329.4	1.1	29.14	99.7	9.4
09/07/95	03:45	54	308.3	1.1	29.14	99.7	8.7
09/07/95	03:50	53.8	303.3	1.1	29.14	99.7	9.4
09/07/95	03:55	53.6	306.4	1.1	29.14	99.7	9.4
09/07/95	04:00	53.7	321.3	1.1	29.14	99.7	12
09/07/95	04:05	53.6	334.1	1.1	29.14	99.7	17.7
09/07/95	04:10	53.3	305.3	1.1	29.14	99.7	10.4
09/07/95	04:15	53.3	314.3	1.1	29.14	99.7	13.6
09/07/95	04:20	53.3	308.3	1.1	29.14	99.7	6.4
09/07/95	04:25	53.4	340.4	1.1	29.13	99.7	11.5
09/07/95	04:30	53.4	334.3	1.1	29.13	99.7	6
09/07/95	04:35	53.4	308.3	1.1	29.13	99.7	5.8
09/07/95	04:40	53.6	314.3	1.1	29.13	99.7	22.5
09/07/95	04:45	53.6	308.3	1.1	29.13	99.7	14
09/07/95	04:50	53.6	290.9	1.1	29.13	99.7	9.7
09/07/95	04:55	53.7	311.2	1.1	29.14	99.7	10.4
09/07/95	05:00	53.2	303.3	1.1	29.14	99.7	9.7
09/07/95	05:05	53	304.9	1.1	29.14	99.7	10.6
09/07/95	05:10	53	305.3	1.1	29.14	99.7	12.6
09/07/95	05:15	52.9	293.9	1.1	29.14	99.7	26.6
09/07/95	05:20	52.7	295.9	1.1	29.13	99.7	16.1
09/07/95	05:25	52.7	306.4	1.1	29.13	99.7	3.2
09/07/95	05:30	52.9	316.3	1.1	29.13	99.7	11.5
09/07/95	05:35	52.9	314.3	1.1	29.14	99.7	5.3
09/07/95	05:40	52.8	312.3	1.1	29.14	99.7	7.4
09/07/95	05:45	52.7	320.4	1.1	29.14	99.6	10.7
09/07/95	05:50	52.7	286.2	1.1	29.14	99.6	7.9
09/07/95	05:55	52.4	317.3	1.1	29.14	99.7	7.2
09/07/95	06:00	52.1	327.1	1.1	29.14	99.7	0
09/07/95	06:05	52.2	323.3	1.1	29.14	99.7	4.9

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/07/95	06:10	52.1	317.3	1.1	29.14	99.7	6.5
09/07/95	06:15	52	312.3	1.1	29.14	99.7	2.7
09/07/95	06:20	52	319.3	1.1	29.14	99.6	19
09/07/95	06:25	51.9	347	1.1	29.14	99.6	0.9
09/07/95	06:30	51.7	347.4	1.1	29.14	99.6	0
09/07/95	06:35	51.8	347.4	1.1	29.14	99.7	0
09/07/95	06:40	51.7	347.4	1.1	29.14	99.6	0.3
09/07/95	06:45	52.2	345.8	1.1	29.14	99.6	7
Run 22							
09/07/95	12:20	83.5	85.9	6.6	29.13	44.6	28.2
09/07/95	12:25	83.1	113	4.8	29.13	45.9	45.1
09/07/95	12:30	83.9	57.1	5.3	29.13	45.4	42.5
09/07/95	12:35	83.4	130.1	5.1	29.13	44.7	36.1
09/07/95	12:40	84.3	94	4.4	29.14	43.6	29.6
09/07/95	12:45	84.4	119	5.1	29.13	44.4	16.8
09/07/95	12:50	84.2	11.9	4	29.13	44.7	37.5
09/07/95	12:55	84.7	342.4	6.4	29.13	41.4	55.5
Run 23							
09/07/95	16:50	86.8	20.9	2.4	29.07	31.8	50
09/07/95	16:55	86.2	112	1.2	29.07	33.7	51.6
09/07/95	17:00	85.2	79.9	1.1	29.08	35.5	51.8
09/07/95	17:05	85.4	65	1.1	29.07	35.5	84.2
09/07/95	17:10	86.1	200.9	1.1	29.07	34.1	83.3
09/07/95	17:15	86.9	216.9	1.2	29.07	32.6	61.6
09/07/95	17:20	87	143.8	1.5	29.07	32.7	80.2
09/07/95	17:25	86.8	88	1.3	29.07	33	67.8
09/07/95	17:30	85.7	117	1.3	29.07	34.9	76.9
09/07/95	17:35	85.5	67	1.3	29.07	34.8	54.7
09/07/95	17:40	85.5	110	1.3	29.07	34.7	63.8
09/07/95	17:45	85.5	117	1.1	29.07	33.8	45.9
09/07/95	17:50	84.8	58	1.1	29.07	35.6	33.3
09/07/95	17:55	83.4	42.9	1.1	29.07	40.1	0
09/07/95	18:00	81.5	42.9	1.1	29.08	45.3	56.5
09/07/95	18:05	79.8	42.9	1.1	29.08	49.5	0.6
09/07/95	18:10	78.7	54.9	1.1	29.08	53.8	11.4
09/07/95	18:15	77.9	57.1	1.1	29.08	57.2	2.7
09/07/95	18:20	77.5	31.9	1.1	29.07	58.4	10.7
09/07/95	18:25	78	27.9	1.1	29.07	58.4	0.8
09/07/95	18:30	78.5	27.9	1.1	29.07	57.7	0.8
09/07/95	18:35	78.1	27	1.1	29.07	57.5	0.1
09/07/95	18:40	77.3	26.8	1.1	29.07	60.7	1
09/07/95	18:45	76.1	27.9	1.1	29.08	64.4	0
09/07/95	18:50	75.1	27.9	1.1	29.08	68.1	0
09/07/95	18:55	74.1	26.8	1.1	29.08	72.2	1.1
09/07/95	19:00	73.3	27	1.1	29.08	74.6	0
09/07/95	19:05	72.6	27	1.1	29.07	72	0
09/07/95	19:10	71.9	27	1.1	29.07	73.9	0
09/07/95	19:15	71.4	27	1.1	29.07	76.4	0
09/07/95	19:20	70.8	26.8	1.1	29.07	76.2	1
09/07/95	19:25	70.3	27.9	1.1	29.07	78.3	0
09/07/95	19:30	69.8	27	1.1	29.07	80.7	0.5
09/07/95	19:35	69.3	27	1.1	29.07	83.4	0
09/07/95	19:40	68.9	27	1.1	29.07	84.2	0
09/07/95	19:45	68.5	27	1.1	29.07	85.9	0
09/07/95	19:50	68	27	1.1	29.07	87.6	0
09/07/95	19:55	67.6	27	1.1	29.07	88.8	0
09/07/95	20:00	67.3	27	1.1	29.08	89.6	0

SE Chicken

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
09/07/95	20:05	67	27	1.1	29.08	90.7	0
09/07/95	20:10	66.7	27	1.1	29.08	91.4	0
09/07/95	20:15	66.5	27	1.1	29.08	93.4	0
09/07/95	20:20	66.2	27	1.1	29.08	94.3	0
09/07/95	20:25	65.9	27	1.1	29.08	94.8	0
09/07/95	20:30	65.6	27	1.1	29.09	94.9	0.1
09/07/95	20:35	65.4	27	1.1	29.09	95.3	0
09/07/95	20:40	65.3	27	1.1	29.09	96.4	0
09/07/95	20:45	65	27	1.1	29.09	97.6	0
09/07/95	20:50	64.8	26.8	1.1	29.09	99.1	0.8
09/07/95	20:55	64.6	34.9	1.1	29.09	99.6	4.1
09/07/95	21:00	64.4	38	1.1	29.09	99.6	0
09/07/95	21:05	64.1	38	1.1	29.09	99.7	0
09/07/95	21:10	63.9	38.9	1.1	29.09	99.7	0
09/07/95	21:15	63.7	38.9	1.1	29.1	99.7	0
09/07/95	21:20	63.5	38	1.1	29.1	99.7	0
09/07/95	21:25	63.4	38	1.1	29.1	99.7	1.2
09/07/95	21:30	63.2	36	1.1	29.1	99.7	0
09/07/95	21:35	62.9	36	1.1	29.1	99.7	0
09/07/95	21:40	62.7	33	1.1	29.1	99.7	3
09/07/95	21:45	62.6	29.9	1.1	29.1	99.7	0.6
09/07/95	21:50	62.5	32.1	1.1	29.1	99.7	0
09/07/95	21:55	62.4	32.1	1.1	29.1	99.7	0
09/07/95	22:00	62.1	31.9	1.1	29.1	99.7	0
09/07/95	22:05	62	34.9	1.1	29.1	99.7	0
09/07/95	22:10	61.8	27.9	1.1	29.1	99.7	1.4
09/07/95	22:15	61.7	27.9	1.1	29.1	99.7	0
09/07/95	22:20	61.5	27.9	1.1	29.1	99.7	0
09/07/95	22:25	61.3	27.9	1.1	29.1	99.7	0
09/07/95	22:30	61.2	27.9	1.1	29.1	99.7	0
09/07/95	22:35	61	29.9	1.1	29.1	99.7	6
09/07/95	22:40	61.1	67	1.1	29.1	99.7	0
09/07/95	22:45	61	11.9	1.1	29.1	99.7	41
09/07/95	22:50	60.8	340.4	1.1	29.1	99.7	0
09/07/95	22:55	60.7	20	1.1	29.1	99.7	37.5
09/07/95	23:00	60.7	57.1	1.1	29.1	99.7	0.8
09/07/95	23:05	60.7	319.3	1.1	29.1	99.7	21.3
09/07/95	23:10	60.5	9.9	1.1	29.1	99.7	0
09/07/95	23:15	60.4	9.9	1.1	29.1	99.7	0
09/07/95	23:20	60.2	9	1.1	29.1	99.7	3
09/07/95	23:25	60.1	2.9	1.1	29.1	99.7	3.2
09/07/95	23:30	60	6.9	1.1	29.1	99.7	6.4
09/07/95	23:35	59.9	358.4	1.1	29.1	99.7	0
09/07/95	23:40	59.8	358.4	1.1	29.1	99.7	0
09/07/95	23:45	59.7	358.4	1.1	29.1	99.7	0.9
09/07/95	23:50	59.7	355.9	1.1	29.1	99.7	1.4
09/07/95	23:55	59.5	353.9	1.1	29.1	99.7	2.5
09/07/95	00:00	59.5	359.3	1.1	29.1	99.7	26.1
09/08/95	00:05	59.4	29	1.1	29.1	99.7	5.8
09/08/95	00:10	59.2	20	1.1	29.1	99.7	4.4
09/08/95	00:15	59.1	18	1.1	29.1	99.7	0

Small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
Run 24	Met Data Lost for Run 24						
Run 25							
10/04/95	14:40	86.4	217.3	1.1	28.47	25.4	29
10/04/95	14:45	86.8	202.9	1.1	28.47	25.3	19.7
10/04/95	14:50	87	217.3	1.1	28.47	25.8	28.7
10/04/95	14:55	86.7	163.8	1.1	28.47	25.9	22.3
10/04/95	15:00	86.4	181.1	1.1	28.47	25.7	0
10/04/95	15:05	86.8	201.2	1.1	28.47	26.7	30.1
10/04/95	15:10	86.8	218.2	1.1	28.46	26.9	15.3
10/04/95	15:15	87.6	172.8	1.1	28.46	27.3	27.2
10/04/95	15:20	87.7	185.2	1.1	28.46	26.2	17.8
10/04/95	15:25	87.2	194.2	1.1	28.46	27.7	19.4
10/04/95	15:30	87	191.2	1.1	28.45	27.6	17.8
10/04/95	15:35	86.5	178	1.1	28.45	27.6	23.8
10/04/95	15:40	87.1	189.2	1.1	28.45	27	17.3
10/04/95	15:45	86.8	212.2	1.1	28.44	27.8	25
10/04/95	15:50	87.3	192.2	1.1	28.44	27.2	23.4
10/04/95	15:55	86.4	214.2	1.1	28.44	28.2	32.6
10/04/95	16:00	87	174.1	1.1	28.44	28.5	15.2
10/04/95	16:05	86.7	217.8	1.1	28.44	28.1	13.4
10/04/95	16:10	87.2	204.1	1.1	28.44	28.2	36.1
10/04/95	16:15	87.3	168.1	1.1	28.44	28.3	24.6
10/04/95	16:20	86.8	171.2	1.1	28.44	29.3	22.2
10/04/95	16:25	86.9	190.8	1.1	28.44	29.8	19.9
Run 26							
10/04/95	17:20	87.6	178.2	3.1	28.42	27.2	14.1
10/04/95	17:25	88.1	188.8	3.3	28.41	26.9	20
10/04/95	17:30	87.8	180.9	2.7	28.41	26.7	15.8
10/04/95	17:35	88	170.1	3.2	28.41	26.9	13.7
10/04/95	17:40	88.2	191.2	3.5	28.41	25.7	14.6
10/04/95	17:45	88.2	205.2	2.2	28.41	25.9	21.7
10/04/95	17:50	88.6	195.1	1.5	28.41	25.6	14.1
10/04/95	17:55	88.4	202	3.4	28.41	26	15.8
10/04/95	18:00	88	196.2	2.2	28.41	26.3	0
10/04/95	18:05	88	192.2	3.1	28.41	26.8	15
10/04/95	18:10	87.7	184	2.8	28.41	27.3	13.5
10/04/95	18:15	87.6	200.9	1.7	28.41	27.7	17.7
10/04/95	18:20	87.6	203.2	1.7	28.41	27.7	16.1
10/04/95	18:25	87.4	204.1	1.5	28.41	27.6	10.7
10/04/95	18:30	87	191.9	2.4	28.41	28.1	13.2
10/04/95	18:35	86.7	183.1	2.7	28.41	29.5	9.4
10/04/95	18:40	86.5	190.1	2.2	28.41	30.1	11.7
10/04/95	18:45	86.2	184.9	3.1	28.4	30.9	10.7
10/04/95	18:50	85.6	185.9	1.2	28.4	31.7	10.6
10/04/95	18:55	84.9	184.9	1.1	28.4	32.5	9.2
10/04/95	19:00	84.2	176.9	1.1	28.39	33.3	12.4
10/04/95	19:05	83.8	179.8	1.1	28.39	34.2	6.6
10/04/95	19:10	83.1	175.1	1.1	28.39	36.2	5.9
10/04/95	19:15	82.4	177.1	1.1	28.39	37.6	3.8
10/04/95	19:20	81.8	180.9	1.1	28.39	38.8	2.7
10/04/95	19:25	80.9	187.2	1.1	28.39	40.8	0
10/04/95	19:30	80.2	187.2	1.1	28.39	43.1	0
10/04/95	19:35	79.6	187.2	1.1	28.39	46.6	0
10/04/95	19:40	79	187.2	1.1	28.39	48.3	0
10/04/95	19:45	78.2	187.2	1.1	28.39	52.9	0
10/04/95	19:50	77.4	187.2	1.1	28.39	56	0

Small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
10/04/95	19:55	77.2	187.2	1.1	28.38	56.8	0
10/04/95	20:00	76.8	187.2	1.1	28.38	60.3	5.3
10/04/95	20:05	76.4	187.2	1.1	28.38	61	0
10/04/95	20:10	76.1	187.2	1.1	28.38	62.3	0
10/04/95	20:15	75.7	187.2	1.1	28.38	59.1	2.2
10/04/95	20:20	75.5	190.1	1.1	28.38	57.8	1.4
10/04/95	20:25	75.3	189.9	1.1	28.38	57.6	0.8
10/04/95	20:30	75	191.9	1.1	28.38	57.5	1.7
10/04/95	20:35	74.7	202.1	1.1	28.38	59	1.6
10/04/95	20:40	74.3	203.9	1.1	28.38	59.1	2.1
10/04/95	20:45	74.1	207.2	1.1	28.38	59	0.8
10/04/95	20:50	74.2	207.2	1.1	28.39	59.5	13.4
10/04/95	20:55	74.5	193.9	1.1	28.39	59.3	5.5
10/04/95	21:00	74.3	197.1	1.1	28.39	58.9	0
10/04/95	21:05	74	204.1	1.1	28.39	59.1	1.6
10/04/95	21:10	74	193.9	1.1	28.39	59.1	7.6
10/04/95	21:15	73.9	202.9	1.1	28.39	58.7	8.8
10/04/95	21:20	73.6	202.9	1.1	28.39	59	3.9
10/04/95	21:25	73.5	203.9	1.1	28.4	59.5	6.6
10/04/95	21:30	73.3	209.9	1.1	28.4	59.8	5
10/04/95	21:35	73.5	201.2	1.1	28.4	59.7	5.7
10/04/95	21:40	73.7	200.9	1.1	28.4	58.3	7.2
10/04/95	21:45	73.7	192.2	1.1	28.4	57.4	10.9
10/04/95	21:50	73.7	196.9	1.1	28.4	57.1	11.4
10/04/95	21:55	73.6	197.1	1.1	28.4	56.8	9.8
10/04/95	22:00	73.4	197.1	1.1	28.4	57.3	3.8
10/04/95	22:05	73.4	196.9	1.1	28.4	57.6	8.3
10/04/95	22:10	73.1	202.9	1.1	28.4	57.8	5.5
10/04/95	22:15	72.8	209.2	1.1	28.4	58.7	3.2
10/04/95	22:20	72.5	207.9	1.1	28.41	59.8	4.7
10/04/95	22:25	72.8	197.1	1.1	28.41	59.7	12
10/04/95	22:30	72.9	202.1	1.1	28.41	59.6	9.9
10/04/95	22:35	73.2	198.2	1.1	28.41	58.9	12.4
10/04/95	22:40	73.4	193.1	1.1	28.41	58.1	15.3
10/04/95	22:45	73.4	199.1	1.1	28.41	58.1	11
10/04/95	22:50	73.3	195.1	1.1	28.41	58	7.2
10/04/95	22:55	72.9	195.1	1.1	28.41	58.9	7.2
10/04/95	23:00	72.7	186.8	1.1	28.41	60	11.5
10/04/95	23:05	72.6	198.2	1.1	28.41	60.9	5.5
10/04/95	23:10	72.2	207.2	1.1	28.41	61.8	0
10/04/95	23:15	72.1	204.1	1.1	28.42	62.9	3.9
10/04/95	23:20	72	198.2	1.1	28.42	64	0
10/04/95	23:25	71.6	198.2	1.1	28.42	65.1	0
10/04/95	23:30	71.5	206.1	1.1	28.42	66.8	7.9
10/04/95	23:35	71.5	214.9	1.1	28.42	66	0.6
10/04/95	23:40	71.6	212.2	1.1	28.41	66.5	3
10/04/95	23:45	71.6	204.1	1.1	28.41	66.2	6.1
10/04/95	23:50	72.1	209.9	1.1	28.41	65.3	6.9
10/04/95	23:55	72.2	198.9	1.1	28.41	64.4	11.3
10/04/95	00:00	72	190.8	1.1	28.41	64.8	10.8
10/05/95	00:05	71.9	200.2	1.1	28.41	64.4	6.8
10/05/95	00:10	71.9	202.1	1.1	28.41	64.9	9.2
10/05/95	00:15	72.6	210.1	1.1	28.41	64	15.7
10/05/95	00:20	72.9	223.9	1.1	28.41	62.3	13.7
10/05/95	00:25	73.2	240.3	1.3	28.41	60.1	15.6
10/05/95	00:30	73.1	243.2	1.1	28.41	59.9	9.8
10/05/95	00:35	72.9	218.9	1.1	28.41	60.9	19.6

Small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
10/05/95	00:40	72.6	229.1	1.1	28.41	61.3	0
10/05/95	00:45	72.3	190.1	1.1	28.41	62.7	24.5
10/05/95	00:50	72.2	241.2	1.1	28.41	63.7	9
10/05/95	00:55	71.7	188.1	1.1	28.4	65.3	12
10/05/95	01:00	72	238.9	1.1	28.4	64.2	11
10/05/95	01:05	71.8	231.8	1.1	28.4	65.2	15.4
10/05/95	01:10	71.4	202.1	1.1	28.4	66.5	19.1
10/05/95	01:15	71.3	234.2	1.1	28.4	66.5	26.7
10/05/95	01:20	70.5	288.4	1.1	28.4	67.4	1.2
10/05/95	01:25	69.4	289.3	1.1	28.4	69.6	0
10/05/95	01:30	69.9	321.8	1.1	28.4	70.1	30.7
10/05/95	01:35	70.7	238	1.1	28.4	68.2	24.6
10/05/95	01:40	71.1	233.3	1.1	28.4	68.3	5.9
10/05/95	01:45	71	231.8	1.1	28.4	69.1	1
10/05/95	01:50	71.2	242.8	1.1	28.4	68.8	7.7
10/05/95	01:55	70.7	238.1	1.1	28.4	69.6	0.8
10/05/95	02:00	70.5	240.3	1.1	28.4	71	5.4
10/05/95	02:05	69.9	244.3	1.1	28.4	73.2	2.8
10/05/95	02:10	69.7	267.3	1.1	28.4	74.7	26.5
10/05/95	02:15	70.3	259.9	1.1	28.4	74.4	25.2
10/05/95	02:20	70.7	252.2	1.1	28.4	72.8	19.2
10/05/95	02:25	70.5	265.3	1.1	28.4	70.8	19.7
10/05/95	02:30	70.1	274.3	1.1	28.4	71.7	2
10/05/95	02:35	69.9	266.2	1.1	28.4	72.4	6.1
10/05/95	02:40	69.8	256.3	1.1	28.4	73.5	0.6
10/05/95	02:45	69.8	257.2	1.1	28.4	73.6	4.4
10/05/95	02:50	70.6	256.3	1.1	28.4	71.2	14.6
10/05/95	02:55	70.8	265.9	1.1	28.4	68.9	8.7
10/05/95	03:00	69.8	273.2	1.1	28.41	71.3	1
10/05/95	03:05	69.2	282.8	1.1	28.42	73.7	20.2
10/05/95	03:10	68.9	317.3	1.1	28.43	75.6	2
10/05/95	03:15	68.3	317.9	1.1	28.43	77.3	0.1
10/05/95	03:20	68.2	349.9	3.4	28.47	75.2	35.6
10/05/95	03:25	68.7	337.3	2.2	28.48	71.1	54.1
10/05/95	03:30	68.8	318.8	1.2	28.48	70.6	33.1
10/05/95	03:35	69.2	321.8	1.5	28.49	69.9	45.6
10/05/95	03:40	69.2	318.8	1.1	28.48	69.8	32.7
10/05/95	03:45	68.8	315.9	1.1	28.49	70.6	37.4
10/05/95	03:50	68.5	308.3	1.1	28.49	71.8	28.7
10/05/95	03:55	68.2	275.9	1.1	28.49	72.5	10.8
10/05/95	04:00	68.1	283.3	1.1	28.49	73.4	0
10/05/95	04:05	68.2	289.3	1.1	28.49	73.7	17
10/05/95	04:10	68.1	302.9	1.1	28.49	74.2	19.1
10/05/95	04:15	68.1	309.8	1.1	28.49	74.8	27.9
10/05/95	04:20	67.9	320.9	1.1	28.5	75	34.5
10/05/95	04:25	67.7	298.3	1.1	28.5	75	34.2
10/05/95	04:30	67.4	300.8	1.1	28.5	75.2	24.4
10/05/95	04:35	67.1	298.3	1.1	28.5	74.3	21.3
10/05/95	04:40	66.7	305.3	1.2	28.5	71.2	28.4
10/05/95	04:45	66.4	318.1	1.4	28.51	64.4	50.5
10/05/95	04:50	66.1	312.8	1.3	28.51	59.8	33.9
10/05/95	04:55	65.8	305.8	1.3	28.52	58.8	35.2
10/05/95	05:00	65.4	320.4	1.3	28.52	57	17.9
10/05/95	05:05	65.2	319.9	1.6	28.52	55.7	41.9
10/05/95	05:10	64.9	326.9	1.1	28.52	55.3	37.2
10/05/95	05:15	64.7	317.3	1.2	28.53	54.4	33.1
10/05/95	05:20	64.5	338.4	1.2	28.53	54.1	34.5

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
10/05/95	05:25	64.2	325.8	1.3	28.53	54.6	26
10/05/95	05:30	64	330.3	1.2	28.54	54.4	23.2
10/05/95	05:35	63.9	319.3	1.6	28.54	53.9	44.8
10/05/95	05:40	63.8	336.8	1.1	28.54	53.8	40.4
10/05/95	05:45	63.4	333.4	1.1	28.55	54.2	34.5
10/05/95	05:50	63.3	334.8	1.4	28.55	54.2	58.5
10/05/95	05:55	63.1	328.1	1.1	28.55	54.5	28.7
10/05/95	06:00	62.7	320.4	1.3	28.56	54.9	58.9
10/05/95	06:05	62.5	321.8	1.1	28.56	54.8	35
10/05/95	06:10	62.3	320.9	1.1	28.56	55.5	28.2
10/05/95	06:15	62.2	331.4	1.2	28.56	56.1	29.9
10/05/95	06:20	62	322.9	1.1	28.56	56.6	20.3
10/05/95	06:25	62	323.3	1.3	28.56	56.1	23.3
10/05/95	06:30	61.8	337.3	1.1	28.56	56.5	23.6
10/05/95	06:35	61.5	307.8	1.1	28.57	57.3	24.4
10/05/95	06:40	61.2	288.4	1.1	28.57	58.7	15.8
10/05/95	06:45	60.8	304.4	1.1	28.57	60	31.5
10/05/95	06:50	60.6	310.9	1.1	28.58	60.4	28.1
10/05/95	06:55	60.5	329.4	1.1	28.58	60.3	26.6
10/05/95	07:00	60.2	308.3	1.1	28.58	61.4	32.6
10/05/95	07:05	60.1	318.2	1.1	28.58	61.5	15.9
10/05/95	07:10	60.1	332.3	1.1	28.59	61.2	20.1
10/05/95	07:15	60.1	291.8	1.2	28.59	61.1	20
10/05/95	07:20	60	325.8	1.1	28.59	61.1	25.1
10/05/95	07:25	60	327.8	1.1	28.6	60.8	30.4
10/05/95	07:30	60	317.3	1.1	28.6	61.1	15.6
10/05/95	07:35	59.7	323.3	1.1	28.6	62	5.7
10/05/95	07:40	59.6	318.8	1.1	28.61	62.1	10.8
10/05/95	07:45	59.7	312.8	1.1	28.61	61.5	25.4
10/05/95	07:50	59.9	318.2	1.1	28.61	61.1	16.1
10/05/95	07:55	60.1	314.3	1	28.61	59.8	12.5
10/05/95	08:00	60.4	304.4	1.1	28.62	58.7	21.3
10/05/95	08:05	60.7	309.2	1.1	28.62	57.2	21.2
10/05/95	08:10	61.2	309.2	1.1	28.62	55.1	21.6
10/05/95	08:15	61.5	321.3	1.1	28.62	54.4	23.3
10/05/95	08:20	61.8	330.8	1.1	28.63	52.7	20.8
10/05/95	08:25	62.1	332.1	1.1	28.63	51.7	19.7
10/05/95	08:30	62.5	325.3	1.1	28.63	50.3	22.3
10/05/95	08:35	62.7	332.3	1.1	28.63	49.5	27.7
10/05/95	08:40	63	324	1.1	28.64	48.4	25.4
10/05/95	08:45	63.2	332.3	1.4	28.64	47.3	28.1
10/05/95	08:50	63.4	337.9	1.2	28.64	46.7	31.1
10/05/95	08:55	63.7	333.4	1.1	28.65	46.4	32.7
10/05/95	09:00	63.8	333.4	1.9	28.65	45.7	21.6
10/05/95	09:05	64	343.3	1.6	28.66	45.6	29.9
10/05/95	09:10	64.2	348.8	1.5	28.66	45	25.5
Downwind							
Run 27							
10/05/95	15:35	76.1	337.3	9.9	28.7	25.6	34.7
10/05/95	15:40	76.1	358	10	28.69	25.6	31.5
10/05/95	15:45	76.3	356.9	11	28.69	25.3	34.3
10/05/95	15:50	76.6	315.4	10.4	28.69	25.5	24.1
10/05/95	15:55	75.9	328.9	11.3	28.69	25.1	20.2
10/05/95	16:00	76.2	335.9	9.9	28.69	25.4	25
10/05/95	16:05	76.5	350.8	10.8	28.68	25	28.5
10/05/95	16:10	76.5	347.9	10.4	28.68	26.4	31.6
10/05/95	16:15	76.7	329.4	7.6	28.68	26	17.8

Small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
10/05/95	16:20	76.7	13	7.3	28.68	25.8	29.9
10/05/95	16:25	76.2	324	11.7	28.68	26.6	33.4
10/05/95	16:30	76.9	344.3	7.6	28.68	25.4	29.4
10/05/95	16:35	77.1	352.1	9.5	28.68	25.4	20
10/05/95	16:40	77.2	344.3	9.4	28.68	25.3	28.1
10/05/95	16:45	76.8	335.3	10.4	28.68	25.8	18.6
10/05/95	16:50	76.4	323.3	8.4	28.68	26	10.3
10/05/95	16:55	76.9	344.3	8.5	28.68	25.6	22.1
10/05/95	17:00	76.8	344.9	10.3	28.68	25.2	25.2
10/05/95	17:05	76.8	338.4	8.8	28.69	26.1	18.3
10/05/95	17:10	76.9	328.9	6.9	28.68	25.7	13
10/05/95	17:15	77	337.3	10	28.68	25.4	15.8
10/05/95	17:20	76.3	318.2	9.8	28.68	26.5	11.5
10/05/95	17:25	76.5	340.4	9.6	28.69	26.9	25.1
10/05/95	17:30	76.7	357.3	7.5	28.69	28.2	25.5
10/05/95	17:35	76.4	16.9	8.6	28.69	28.6	15
10/05/95	17:40	76.3	13	8.6	28.69	30.5	24.1
10/05/95	17:45	76.5	338.4	9.4	28.69	28.5	20.2
10/05/95	17:50	76.6	337.3	6.9	28.69	28.2	10.1
10/05/95	17:55	76.4	346.3	11	28.69	27.1	21.1
10/05/95	18:00	76.3	336.4	8.6	28.69	27.8	21.4
10/05/95	18:05	75.9	359.3	8.2	28.69	31	21.4
10/05/95	18:10	75.4	4.9	6.5	28.69	31.2	17.4
10/05/95	18:15	75	6.9	8.1	28.69	31.2	21.2
10/05/95	18:20	75.2	355.3	8.1	28.69	29.9	20
10/05/95	18:25	75	357.3	10.5	28.69	29.4	32.8
10/05/95	18:30	74.7	350.8	8	28.7	29.5	18.6
10/05/95	18:35	74.5	355.3	7.4	28.7	30	14.5
10/05/95	18:40	74.2	4.9	6.6	28.7	32.8	24.9
10/05/95	18:45	73.6	11.9	7.2	28.7	34	15.7
10/05/95	18:50	73.2	6.9	6.7	28.7	35.1	11.4
10/05/95	18:55	72.9	6.9	7.5	28.7	34.9	27.7
10/05/95	19:00	72.7	4	7.8	28.71	35.2	19.5
10/05/95	19:05	72.4	8.8	6.6	28.71	35.9	25.2
10/05/95	19:10	71.8	11	5.6	28.71	37.6	12.6
10/05/95	19:15	71.2	6	4.4	28.71	39.2	5.5
10/05/95	19:20	70.7	7.9	5.5	28.71	39.2	16.8
10/05/95	19:25	70.3	359.8	4.8	28.71	39.7	9.9
10/05/95	19:30	69.8	357.8	4.3	28.71	41.1	1.5
10/05/95	19:35	69.3	358.9	3.8	28.71	43.1	1.6
10/05/95	19:40	68.7	358.9	3.8	28.72	43.7	4.3
10/05/95	19:45	68.3	358.4	3.6	28.72	44.5	2.5
10/05/95	19:50	68	357.8	3.7	28.72	46.1	5.9
10/05/95	19:55	67.7	357.8	3.3	28.72	47.2	1.4
10/05/95	20:00	67.3	358.4	3	28.72	47.9	21.6
10/05/95	20:05	67	4	3.5	28.72	48.9	5.9
10/05/95	20:10	66.6	7.9	2.9	28.72	49	4.9
10/05/95	20:15	66.2	4.9	2.5	28.73	51.6	0
10/05/95	20:20	66.2	4.9	2.3	28.73	52.8	0
10/05/95	20:25	66.1	4.9	2.3	28.73	52.3	0
10/05/95	20:30	65.6	4.9	1.7	28.73	53.1	0
10/05/95	20:35	65.3	4.9	2.2	28.73	53.1	1.4
10/05/95	20:40	65.1	6	1.9	28.74	53.6	0
10/05/95	20:45	63.3	6	1.5	28.74	54.1	0
10/05/95	20:50	61.8	6	2.6	28.74	56.5	0
10/05/95	20:55	61.6	6	1.6	28.74	58	0
10/05/95	21:00	61.2	6	1.1	28.74	59	1

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
10/05/95	21:05	61	6	1.1	28.74	59.7	0
10/05/95	21:10	60.6	6	1.1	28.74	60.9	0
10/05/95	21:15	59.8	6	1.1	28.74	62.3	0
10/05/95	21:20	59.1	6	1.1	28.75	64.8	0
10/05/95	21:25	58.4	6	1.1	28.75	67	0
10/05/95	21:30	57.9	6	1.1	28.75	67.7	0
10/05/95	21:35	57	6	1.1	28.75	68.7	0
10/05/95	21:40	56.6	6	1.1	28.75	70	0
10/05/95	21:45	56.2	6	1	28.76	71.2	0
10/05/95	21:50	56.2	6	1.1	28.76	72.9	0
10/05/95	21:55	55.9	6	1	28.76	75.2	0
10/05/95	22:00	56	6	1	28.76	75.5	0
10/05/95	22:05	55.9	6	1.1	28.76	74.5	0
10/05/95	22:10	55.7	6	1	28.76	74.6	0
10/05/95	22:15	55.4	6	1	28.77	76.3	0
10/05/95	22:20	55.2	6	1	28.77	76	0
10/05/95	22:25	55.1	6	1	28.77	79.1	0
10/05/95	22:30	54.8	6	1	28.77	79.6	0
10/05/95	22:35	54.1	6	1	28.77	79.1	0
10/05/95	22:40	53.6	6	1	28.77	79.9	0
10/05/95	22:45	53.4	6	1	28.77	80.9	0
10/05/95	22:50	53.3	6	1	28.77	84.3	0
10/05/95	22:55	53.3	6	1	28.78	83.3	0
10/05/95	23:00	52.4	6	1	28.78	80.7	0
10/05/95	23:05	52.1	6	1	28.78	83	0
10/05/95	23:10	52.1	6	1	28.78	85.8	0
10/05/95	23:15	51.7	6	1	28.78	86.3	0
10/05/95	23:20	51.7	6	1	28.78	86.6	0
10/05/95	23:25	51.8	6	1	28.78	87.3	0
10/05/95	23:30	51.6	6	1	28.78	87.3	0
10/05/95	23:35	51.3	6	1	28.78	88.9	0
10/05/95	23:40	51.2	6	1	28.78	88.6	0
10/05/95	23:45	51.4	6	1	28.78	89.3	0
10/05/95	23:50	51.4	6	1	28.78	95.4	0
10/05/95	23:55	51	6	1	28.78	95.1	0
10/06/95	00:00	50.6	6	1	28.78	92.1	0
10/06/95	00:05	50.3	6	1	28.78	93.7	0
10/06/95	00:10	50.2	6	1	28.78	94.3	0
10/06/95	00:15	50.1	6	1	28.78	95.2	0
10/06/95	00:20	49.9	6	1	28.78	95.5	0
10/06/95	00:25	49.4	6	1	28.79	93.4	0
10/06/95	00:30	49.8	6	1	28.79	94	0
10/06/95	00:35	50.2	6	1	28.79	98.4	0
10/06/95	00:40	49.8	6	1	28.79	98.9	0
10/06/95	00:45	49.4	6	1	28.79	95.7	0
10/06/95	00:50	49.4	6	1	28.79	97.4	0
10/06/95	00:55	49.5	6	1.7	28.79	99.6	0
10/06/95	01:00	49.9	6	2.1	28.79	99.6	0
10/06/95	01:05	49.9	16.9	3	28.79	99.6	2.1
Run 28							
10/06/95	09:00	55.7	287.3	5.2	28.96	70.3	0
10/06/95	09:05	56.1	294.3	5.6	28.96	68.1	12.5
10/06/95	09:10	56.5	304.9	6.7	28.97	65.1	12.3
10/06/95	09:15	57.1	306.4	5.5	28.97	64.7	12.6
10/06/95	09:20	57.3	313.4	5.9	28.97	63.4	13.5
10/06/95	09:25	57.8	323.3	5.7	28.97	62.2	8.7
10/06/95	09:30	58	320.9	7.2	28.97	61.5	9.4

Small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
10/06/95	09:35	58.8	338.9	8.4	28.97	57.7	19.2
10/06/95	09:40	59.2	331.4	11.4	28.97	54.7	23.4
10/06/95	09:45	59	329.9	12.4	28.97	53.5	10.2
10/06/95	09:50	59.1	332.3	11.3	28.98	52.3	16.1
10/06/95	09:55	59.7	347.4	10.4	28.98	51.5	30
10/06/95	10:00	59.9	326.9	10.8	28.98	51.7	5.4
10/06/95	10:05	59.9	335.3	11.2	28.98	50.7	9.9
10/06/95	10:10	60.5	340.4	10.6	28.98	49.6	28.5
10/06/95	10:15	60.6	343.3	10.8	28.98	48.8	26.2
10/06/95	10:20	61	347.9	10.4	28.97	49.1	16.9
10/06/95	10:25	61.3	339.8	10.7	28.97	47.9	21.2
10/06/95	10:30	61.8	351.4	9.5	28.97	48.1	25.2
10/06/95	10:35	62.3	346.3	10.3	28.97	47	26.2
Run 29							
10/06/95	10:55	61.9	13.9	12.7	28.97	48.1	29.4
10/06/95	11:00	62.1	2.9	12.2	28.97	47.2	12.3
10/06/95	11:05	63.1	356.9	9.3	28.97	47	25.9
10/06/95	11:10	63.6	4.9	11.7	28.97	44.6	27
10/06/95	11:15	63.4	18.9	11.5	28.97	45.3	18.9
10/06/95	11:20	63.9	13	11.5	28.97	44.1	22.1
10/06/95	11:25	64	15	10.4	28.97	43.9	25.7
10/06/95	11:30	64.9	0.9	9.1	28.97	42.1	24
10/06/95	11:35	65.6	356.4	11.4	28.96	40.6	28.2
10/06/95	11:40	65.1	11.9	10.8	28.96	42.2	21.1
10/06/95	11:45	65.5	11	9.4	28.96	41.5	22.4
10/06/95	11:50	65.4	.29	9.3	28.96	40.5	8.6
10/06/95	11:55	66.5	2	7.6	28.96	40.3	15.9

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
Run 1							
08/01/95	19:40	79.3	223.2	5.1	29.37	87.6	10.8
08/01/95	19:45	79.5	217.3	8.8	29.37	88.9	14.3
08/01/95	19:50	79.5	244.3	5.5	29.37	89.1	8.8
08/01/95	19:55	79.4	220	2.2	29.37	89.6	30.5
08/01/95	20:00	79.2	152.8	1.1	29.37	89.9	68.7
08/01/95	20:05	79.2	132.1	1.3	29.37	90.2	13.6
08/01/95	20:10	79.1	134.8	1.6	29.37	91.2	8.3
08/01/95	20:15	79	108	3.9	29.37	91.6	8.1
08/01/95	20:20	78.8	117	4.8	29.37	92.8	5.4
08/01/95	20:25	78.7	112.1	5.1	29.37	93	4.7
08/01/95	20:30	78.6	117	5.2	29.37	93.4	4.6
08/01/95	20:35	78.4	114.1	4.8	29.37	93.9	5.4
08/01/95	20:40	78.4	118.1	4.3	29.37	93.9	4.8
08/01/95	20:45	78.3	122.9	3.5	29.37	94.1	4.7
08/01/95	20:50	78.3	128.9	3.6	29.37	94.2	3.8
08/01/95	20:55	78.3	129.1	3.7	29.37	94.7	6.3
08/01/95	21:00	78.2	134.1	4.1	29.37	95.5	13.1
08/01/95	21:05	78.1	124	4.5	29.37	96	3.7
08/01/95	21:10	78	126.9	4.6	29.37	96.8	3.8
Run 2							
08/02/95	10:55	79	176.2	11.3	29.45	99.7	9.7
08/02/95	11:00	79.4	178.9	11	29.45	99.2	8.5
08/02/95	11:05	80	187.9	11.6	29.45	98.1	11.5
08/02/95	11:10	81.1	196.2	11.3	29.45	95.4	13.6
08/02/95	11:15	81.6	179.1	13.7	29.44	90.5	11.5
08/02/95	11:20	81	186.8	12.7	29.44	89.3	9.3
08/02/95	11:25	81.7	180.2	11.2	29.45	89.4	10.8
08/02/95	11:30	81.8	178.9	12.5	29.45	87.3	11
08/02/95	11:35	81.1	182.9	10.3	29.45	88.7	8.7
08/02/95	11:40	81.5	163.8	10.1	29.45	88.8	10.7
08/02/95	11:45	81.3	170.8	12.2	29.45	87.5	12.4
DATA LOSS - CONTINUE							
08/02/95	12:00	81.2	167	13.4	29.45	84.5	9.7
08/02/95	12:05	81.6	172.1	12.2	29.45	84.7	13.6
08/02/95	12:10	81.9	179.1	11.5	29.45	83.6	13.2
08/02/95	12:15	82.9	178.9	10.5	29.45	82.5	12.3
08/02/95	12:20	82.4	188.1	10.2	29.45	80	12.9
08/02/95	12:25	82.8	186.1	9.9	29.45	79.5	16.2
08/02/95	12:30	82.8	176.9	10.5	29.44	78.4	11.3
08/02/95	12:35	82.2	186.8	10.5	29.44	79.8	11.9
08/02/95	12:40	82.5	185.2	9.8	29.44	80.4	12.3
08/02/95	12:45	82.9	167	9.9	29.44	80	10.7
08/02/95	12:50	82.8	157	11.9	29.44	79.1	11
08/02/95	12:55	83	161.8	10.7	29.44	78.6	10.9
08/02/95	13:00	83.2	157.9	11	29.44	77.8	10.1
08/02/95	13:05	83.7	187.2	10.9	29.44	77.3	12.8
08/02/95	13:10	84	190.1	11.1	29.44	75.4	10.8
08/02/95	13:15	84.7	173.2	12	29.44	74.2	11
08/02/95	13:20	84.6	176.2	11.7	29.44	72.1	13
08/02/95	13:25	84.3	159.8	15.2	29.43	71.8	7.4
08/02/95	13:30	84.3	179.8	12.6	29.44	73.1	8.6
08/02/95	13:35	84.7	176	11.8	29.43	76.1	16.1
08/02/95	13:40	84.4	169.2	10.9	29.43	76.7	16.2
08/02/95	13:45	84.4	172.8	10.2	29.43	76.7	14
08/02/95	13:50	84.6	167	9.9	29.42	76.5	13.9
08/02/95	13:55	84.6	171.2	11.8	29.42	74.3	11.9
08/02/95	14:00	84.8	184	11.1	29.42	73.1	11
08/02/95	14:05	85.1	186.8	11.2	29.41	72	10.7
08/02/95	14:10	85.1	184	9.9	29.41	71.3	10.6
08/02/95	14:15	85.4	167	11.2	29.41	70.4	11.7
08/02/95	14:20	85.5	164.2	11.6	29.41	69.9	14.3

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/02/95	14:25	86	156.1	13.5	29.41	68.6	10.9
08/02/95	14:30	86	154.1	13.8	29.41	67.2	10.7
08/02/95	14:35	85.6	162.2	13.7	29.41	67.6	9.9
08/02/95	14:40	85.7	167	12.2	29.41	68.9	12.1
08/02/95	14:45	85.8	155.2	11.9	29.41	68.8	10.1
08/02/95	14:50	86.4	170.8	10.2	29.41	68.8	13.1
08/02/95	14:55	86.3	176	10.8	29.41	68	11.7
08/02/95	15:00	86.2	172.1	11.4	29.41	68.5	12.4
08/02/95	15:05	86.3	176.2	10.2	29.41	67.6	14.8
08/02/95	15:10	86.4	163.1	11.9	29.4	67.5	9.7
08/02/95	15:15	86.7	169.9	11.5	29.4	66.7	10.3
08/02/95	15:20	86.9	177.1	11.1	29.4	66.2	11.4
08/02/95	15:25	87.1	169.2	12.7	29.4	63.4	8
08/02/95	15:30	87.5	154.8	10.3	29.4	65.2	13.4
08/02/95	15:35	88.4	160.2	11.1	29.39	65.5	13.9
08/02/95	15:40	88.4	152.8	11.9	29.38	62.9	19.6
08/02/95	15:45	88.7	151.9	11.3	29.38	62	13.9
08/02/95	15:50	88.2	153.2	11.5	29.38	61.4	11.8
08/02/95	15:55	88.5	157.1	12.3	29.38	62.2	16.1
08/02/95	16:00	87.6	127.1	11.4	29.39	66.2	10.9
08/02/95	16:05	86.4	128	15	29.39	66.9	7.5
08/02/95	16:10	86.1	125.1	12.8	29.39	68.9	11.7
08/02/95	16:15	85.8	134.1	14.3	29.39	69.2	8.1
08/02/95	16:20	85.6	120.1	15.2	29.38	68.6	9.7
08/02/95	16:25	85.2	123.8	14.9	29.38	69.7	8.5
08/02/95	16:30	84.9	128.2	15.7	29.38	70.8	9.3
08/02/95	16:35	85.1	136.8	14.9	29.38	71.6	9.8
08/02/95	16:40	84.9	132.1	15.4	29.37	72.7	11.8
08/02/95	16:45	84.2	130	17.3	29.37	73	7.6
08/02/95	16:50	84.2	132.1	14.9	29.38	73.6	8.2
08/02/95	16:55	83.8	133	15.4	29.38	73.5	9.4
08/02/95	17:00	84	132.1	16.3	29.38	73.3	12.5
08/02/95	17:05	84.5	135.9	13.8	29.38	73.4	8.8
08/02/95	17:10	84.4	137.2	14.7	29.38	74.3	9.4
Run 3							
08/02/95	17:55	83.4	135	17.2	29.37	76.5	7.7
08/02/95	18:00	83.5	132.8	16.6	29.37	76.1	7.2
08/02/95	18:05	83.5	130.1	15.8	29.37	76.2	8.6
08/02/95	18:10	83.8	128.9	14.8	29.37	76	8.1
08/02/95	18:15	83.3	141.1	17.5	29.36	76.7	7.1
08/02/95	18:20	83.5	145.1	13.2	29.37	78.6	10.4
08/02/95	18:25	83.3	146.9	14.1	29.37	78.5	8.7
08/02/95	18:30	83.3	136.1	15.4	29.37	78.2	8.3
08/02/95	18:35	83.3	136.1	14.7	29.37	78.4	9.4
08/02/95	18:40	83.3	145.8	13.6	29.37	78.6	10.6
08/02/95	18:45	83.2	136.8	12.7	29.37	78.9	8.2
08/02/95	18:50	83.2	141.1	10.3	29.37	79.7	10.9
08/02/95	18:55	83.2	144.2	8.9	29.37	79.9	11.2
08/02/95	19:00	82.9	142	10.2	29.37	80.4	8.3
08/02/95	19:05	82.7	143.8	10	29.37	80.6	11.3
08/02/95	19:10	82.6	141.1	11	29.37	80.5	9.6
08/02/95	19:15	82.5	141.8	9	29.36	81.3	8.5
08/02/95	19:20	82.4	133.9	11.6	29.36	79.8	8.5
08/02/95	19:25	82.7	134.8	11.2	29.36	78.3	7.6
08/02/95	19:30	82.7	141.1	10	29.36	78.6	6.3
08/02/95	19:35	82.6	144.9	8.9	29.36	79.3	9.9
08/02/95	19:40	82.6	131.9	8.5	29.37	78.2	8.7
08/02/95	19:45	82.4	132.1	8.8	29.37	78.6	8.2
08/02/95	19:50	82.1	132.1	8.6	29.37	80.4	8.1
08/02/95	19:55	81.7	134.8	8.3	29.37	82.3	8.7
08/02/95	20:00	81.4	134.1	10.5	29.37	83	11.3
08/02/95	20:05	81.1	137.2	9.5	29.37	84.3	6.9

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/02/95	20:10	80.8	140	7.5	29.37	85.7	7.5
08/02/95	20:15	80.5	138.1	7.2	29.37	86.9	8.6
08/02/95	20:20	80.3	139.1	7.6	29.37	87.7	8.6
08/02/95	20:25	80	135	7	29.37	89.2	6.3
08/02/95	20:30	79.8	138.1	7.2	29.37	90.3	7.2
08/02/95	20:35	79.6	135	7.2	29.38	91.2	6.1
08/02/95	20:40	79.5	139.1	6.5	29.38	92	7.7
08/02/95	20:45	79.3	140.9	5.4	29.38	92.9	9.1
08/02/95	20:50	79	145.1	4.7	29.38	94	11
08/02/95	20:55	78.9	142.9	5.5	29.38	94.8	7.5
08/02/95	21:00	78.7	146.2	4.3	29.38	96	7.6
08/02/95	21:05	78.6	149	4.1	29.39	97	8.2
08/02/95	21:10	78.3	151.9	4.2	29.39	98.1	7.1
08/02/95	21:15	78.3	150.1	3.9	29.39	98.9	9.6
08/02/95	21:20	78.3	144.2	4.5	29.4	99.3	6.3
08/02/95	21:25	78.2	141.8	4.4	29.4	99.6	6.8
08/02/95	21:30	78.2	143.1	5	29.4	99.6	9.8
08/02/95	21:35	78.3	151	4.8	29.4	99.6	6.5
08/02/95	21:40	78.1	140.9	4.6	29.4	99.6	9.7
08/02/95	21:45	78	135	4.5	29.4	99.7	6.5
08/02/95	21:50	78	141.8	4.5	29.4	99.7	7
08/02/95	21:55	77.9	147.1	4.3	29.4	99.7	8.7
08/02/95	22:00	77.7	156.1	3.7	29.4	99.7	9.2
08/02/95	22:05	77.7	170.1	2.6	29.41	99.7	9.9
08/02/95	22:10	77.5	167.9	2.5	29.41	99.7	7.2
08/02/95	22:15	77.4	163.1	2.9	29.41	99.7	9.4
08/02/95	22:20	77.2	155.2	3.2	29.41	99.7	5.5
08/02/95	22:25	77	153.2	3.3	29.41	99.7	5.7
08/02/95	22:30	77	142	3.3	29.41	99.7	5.4
08/02/95	22:35	76.9	147.1	3.2	29.41	99.7	8.8
08/02/95	22:40	76.7	139.1	2.9	29.41	99.7	6.4
08/02/95	22:45	76.7	123.8	4	29.41	99.7	7.9
08/02/95	22:50	76.9	117.9	4.2	29.41	99.7	6.9
08/02/95	22:55	77	123.8	2.7	29.42	99.7	2.2
08/02/95	23:00	77	124	1.8	29.42	99.7	9.9
08/02/95	23:05	77	122	1.3	29.42	99.7	0.5
08/02/95	23:10	77	122	1.1	29.42	99.7	0.1
08/02/95	23:15	76.6	116.8	3.9	29.42	99.7	5
08/02/95	23:20	76.7	119.9	4.6	29.42	99.6	4.7
08/02/95	23:25	76.7	127.1	4.3	29.43	99.7	5.4
08/02/95	23:30	76.7	137.2	3.1	29.43	99.7	7.9
08/02/95	23:35	76.6	136.1	3.1	29.43	99.7	9
08/02/95	23:40	76.4	125.1	3.7	29.43	99.7	4.6
08/02/95	23:45	76.4	128.9	3.2	29.43	99.7	4.8
08/02/95	23:50	76.3	127.1	2.5	29.43	99.7	0.3
08/02/95	23:55	76.3	133.9	2.3	29.43	99.6	8.7
08/03/95	00:00	76.1	139.1	3.3	29.43	99.6	7.5
08/03/95	00:05	76	134.1	3	29.43	99.6	5
08/03/95	00:10	75.9	128.9	2.6	29.43	99.6	4.2
08/03/95	00:15	75.9	150.8	1.5	29.43	99.7	8
08/03/95	00:20	75.6	155.2	2.7	29.43	99.6	8.5
08/03/95	00:25	75.7	167.9	2.8	29.43	99.6	8.2
08/03/95	00:30	75.6	167	2.6	29.43	99.6	8.7
08/03/95	00:35	75.5	167	1.5	29.43	99.6	9.8
08/03/95	00:40	75.4	163.1	1.1	29.43	99.6	12.1
08/03/95	00:45	75.5	147.1	1.2	29.43	99.6	6.9
08/03/95	00:50	75.4	145.1	1.2	29.43	99.6	8
08/03/95	00:55	75.4	137.2	1.1	29.43	99.6	2.6
08/03/95	01:00	75.3	137.2	1.1	29.43	99.6	3.7
08/03/95	01:05	75.2	136.8	1.1	29.43	99.6	0
08/03/95	01:10	75.2	136.8	1.1	29.43	99.6	0
08/03/95	01:15	75.1	136.8	1.1	29.43	99.6	0.6

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/03/95	01:20	74.9	130.1	1.1	29.43	99.6	3.9
08/03/95	01:25	74.9	127.1	1.1	29.43	99.6	0
08/03/95	01:30	74.9	127.1	1.1	29.43	99.6	0
08/03/95	01:35	74.9	127.1	1.1	29.43	99.6	0
08/03/95	01:40	74.8	128	1.1	29.43	99.6	0.9
08/03/95	01:45	74.8	154.1	1.1	29.43	99.6	17.3
08/03/95	01:50	74.9	133.9	1.1	29.43	99.6	2.6
08/03/95	01:55	74.8	131.9	1.1	29.43	99.7	0
08/03/95	02:00	74.9	131.9	1.1	29.43	99.6	2.1
08/03/95	02:05	74.9	190.1	1.1	29.43	99.6	51.4
08/03/95	02:10	74.7	222.8	1.1	29.43	99.6	9
08/03/95	02:15	74.4	209.2	1.1	29.43	99.6	11.9
08/03/95	02:20	74.4	154.1	1.1	29.43	99.6	13.9
08/03/95	02:25	74.1	165.1	1.1	29.43	99.6	13.4
08/03/95	02:30	74.1	165.1	1.1	29.43	99.6	11.4
08/03/95	02:35	74.2	130.1	1.1	29.43	99.6	9.8
08/03/95	02:40	74	116.1	2.3	29.43	99.6	5.5
08/03/95	02:45	74	123.8	2.7	29.43	99.6	3
08/03/95	02:50	74.2	119	2.5	29.43	99.6	2.2
08/03/95	02:55	74.5	119	1.1	29.43	99.6	0
08/03/95	03:00	74.6	121.1	1.1	29.43	99.6	1
08/03/95	03:05	74.6	144.2	1.1	29.43	99.6	9.2
08/03/95	03:10	74.6	136.8	1.1	29.43	99.6	8.2
08/03/95	03:15	74.6	134.1	1.1	29.43	99.6	8.6
08/03/95	03:20	74.6	136.8	1.1	29.43	99.6	8
08/03/95	03:25	74.6	145.1	1.1	29.43	99.6	7.7
08/03/95	03:30	74.5	156.1	1.6	29.43	99.6	13.7
08/03/95	03:35	74.2	188.1	2.8	29.42	99.6	8.5
08/03/95	03:40	74.3	179.1	3.4	29.42	99.6	7.9
08/03/95	03:45	74.5	195.8	3.3	29.42	99.6	7.6
08/03/95	03:50	74.5	179.1	2.4	29.42	99.6	11.2
08/03/95	03:55	74.4	171.9	3.1	29.42	99.6	11.2
08/03/95	04:00	74.5	155.9	2.4	29.42	99.6	9
08/03/95	04:05	74.5	151	2.4	29.42	99.6	8.8
08/03/95	04:10	74.4	150.1	2.5	29.42	99.6	8.2
08/03/95	04:15	74.6	145.1	1.1	29.42	99.6	15.2
08/03/95	04:20	74.5	122	1.3	29.42	99.6	10.2
08/03/95	04:25	74.7	112.1	1.1	29.42	99.6	0
08/03/95	04:30	74.7	193.9	1.3	29.43	99.6	38.3
08/03/95	04:35	74.9	225.2	1.1	29.43	99.6	9.1
08/03/95	04:40	74.7	189.9	1.3	29.43	99.6	10.8
08/03/95	04:45	74.7	175.1	1.6	29.42	99.6	16.2
08/03/95	04:50	74.7	197.1	1.7	29.42	99.6	10.7
08/03/95	04:55	74.8	199.8	1.2	29.42	99.6	19.1
08/03/95	05:00	74.7	180.9	1.2	29.42	99.6	9.4
08/03/95	05:05	74.6	203.9	1.2	29.42	99.6	11
08/03/95	05:10	74.6	219.2	1.1	29.43	99.6	16.3
08/03/95	05:15	74.5	191.2	1.1	29.43	99.6	9.3
08/03/95	05:20	74.4	170.8	1.1	29.43	99.6	6.1
08/03/95	05:25	74	132.1	1.1	29.43	99.6	6.8
08/03/95	05:30	73.7	133	1.1	29.43	99.6	5.7
08/03/95	05:35	73.7	149	1.1	29.43	99.6	6.9
08/03/95	05:40	73.7	167.9	1.1	29.43	99.6	7.1
08/03/95	05:45	73.7	211.9	1.1	29.43	99.6	19
08/03/95	05:50	73.7	253.3	1.1	29.43	99.6	1.4
08/03/95	05:55	73.9	251.8	1.1	29.43	99.6	0
08/03/95	06:00	73.8	251.8	1.1	29.43	99.6	12.5
08/03/95	06:05	73.7	251.8	1.1	29.43	99.6	0
08/03/95	06:10	73.5	252.2	1.1	29.43	99.6	0
08/03/95	06:15	73.6	252.2	1.1	29.44	99.6	0
08/03/95	06:20	73.8	251.8	1.1	29.44	99.6	0
08/03/95	06:25	74	252.2	1.1	29.44	99.6	0

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/03/95	06:30	74.1	252.2	1.1	29.44	99.6	0
08/03/95	06:35	74.4	252.2	1.1	29.44	99.6	0
08/03/95	06:40	74.5	252.2	1.1	29.44	99.6	0
08/03/95	06:45	74.6	252.2	1.1	29.44	99.6	0
08/03/95	06:50	74.8	252.2	1.1	29.44	99.6	0
08/03/95	06:55	74.9	252.2	1.1	29.44	99.6	0
08/03/95	07:00	75	274.9	1.1	29.44	99.6	0
08/03/95	07:05	75.1	281.3	1.1	29.44	99.6	0
08/03/95	07:10	74.9	85	2.8	29.44	99.6	56.1
08/03/95	07:15	74.9	102.1	3.1	29.45	99.7	7.6
08/03/95	07:20	75.1	114.1	3	29.45	99.6	6
08/03/95	07:25	75.2	115	2.1	29.45	99.6	2.1
08/03/95	07:30	75.8	123.1	1.1	29.46	99.7	11.9
08/03/95	07:35	75.9	142.9	1.7	29.46	99.7	10.8
08/03/95	07:40	75.9	155.9	3.6	29.46	99.7	8.1
08/03/95	07:45	76.2	133	4.3	29.46	99.7	9.6
08/03/95	07:50	76.2	154.1	4.6	29.46	99.7	13.5
08/03/95	07:55	76.4	164.2	3	29.46	99.7	22.1
08/03/95	08:00	76.4	217.3	3.1	29.46	99.7	10.9
08/03/95	08:05	76.7	214.2	2.6	29.46	99.7	31.8
08/03/95	08:10	76.7	226.3	2.2	29.46	99.7	18.3
08/03/95	08:15	76.7	214.9	3.1	29.46	99.7	8.5
08/03/95	08:20	76.9	213.1	3.1	29.46	99.7	8
08/03/95	08:25	77.3	220	3	29.46	99.7	9.7
08/03/95	08:30	77.7	195.1	2.9	29.46	99.7	43
08/03/95	08:35	78.2	191.2	4.6	29.46	99.7	27.7
08/03/95	08:40	78.8	204.1	5.3	29.46	99	14.1
08/03/95	08:45	79.3	192.2	5.7	29.46	97.4	18.8
08/03/95	08:50	79.6	206.1	6.7	29.46	96.3	18.3
08/03/95	08:55	80.2	198.2	5.8	29.46	94.3	23.8
08/03/95	09:00	80.5	207.9	6.6	29.46	93	15.7
08/03/95	09:05	80.5	230.9	7	29.47	93	17.4
08/03/95	09:10	80.2	208.1	7.9	29.47	91.9	13.2
08/03/95	09:15	81	205.9	7.7	29.47	90.9	13.4
08/03/95	09:20	81.7	198.2	6.7	29.47	87.2	18.9
08/03/95	09:25	81.7	197.1	8.2	29.47	85.9	18.5
08/03/95	09:30	82.1	199.8	6.8	29.46	84.3	14.1
08/03/95	09:35	82.9	180.9	7.6	29.46	82.2	19.2
08/03/95	09:40	83.2	180.9	7.4	29.46	80.7	15.8
08/03/95	09:45	82.8	212.2	7.9	29.46	79	29.2
08/03/95	09:50	82.1	231.1	6.9	29.47	82.4	13.5
08/03/95	09:55	82.6	224.3	7.6	29.47	82.6	36
08/03/95	10:00	82.9	249.8	8.2	29.46	83	12.5
08/03/95	10:05	82.8	253.8	7.3	29.46	81.2	8.5
08/03/95							
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08/03/95							
08/03/95							
08/03/95							
Run 4							
08/03/95	11:10	84.7	218.2	6.3	29.45	75.7	23
08/03/95	11:15	85	196.2	6.5	29.45	73.3	22.3
08/03/95	11:20	84.8	218.9	7.5	29.45	71.7	10.9
08/03/95	11:25	84.7	240.8	6.5	29.45	72	9.7
08/03/95	11:30	85.4	205.2	6.6	29.45	71.3	15.9
08/03/95	11:35	85.5	212.2	7.9	29.45	70.5	18.9
08/03/95	11:40	85.8	188.8	6.5	29.45	69.5	17.3
08/03/95	11:45	85.9	221.2	7.5	29.45	66.9	26.3
08/03/95	11:50	86.1	168.1	8.5	29.45	64.3	24.1

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/03/95	11:55	86.9	168.1	6.2	29.45	65.2	20
08/03/95	12:00	87.6	136.8	3.9	29.45	62.6	18.9
08/03/95	12:05	87.1	243.2	6.5	29.45	65.5	18.5
08/03/95	12:10	87.4	204.1	6.7	29.45	64.7	27.3
08/03/95	12:15	86.6	231.1	7.1	29.45	66.2	9.9
08/03/95	12:20	87.7	190.8	3.9	29.45	65.2	49.2
08/03/95	12:25	87.7	240.3	3.2	29.44	64.3	22.5
08/03/95	12:30	88.8	203.2	5.2	29.44	62.2	42.9
08/03/95	12:35	88.8	153.9	7.7	29.44	60.7	12
08/03/95	12:40	89.5	157.1	4.4	29.44	57.1	30.3
08/03/95	12:45	88.2	179.1	8	29.44	58.5	19
08/03/95	12:50	88.2	166	6.2	29.45	59.4	43.5
08/03/95	12:55	89	151	6.5	29.44	57.3	20.7
08/03/95	13:00	89.1	188.8	7.2	29.44	58	22.3
08/03/95	13:05	89.4	175.1	7.1	29.43	58.7	15.1
08/03/95	13:10	89.4	171.2	6.2	29.43	59.4	41.4
08/03/95	13:15	89.8	170.1	7.7	29.43	58	35.6
08/03/95	13:20	89.2	204.1	6.6	29.43	58.8	17.4
08/03/95	13:25	90.2	192.2	4.4	29.43	57.7	27
08/03/95	13:30	90.2	196.2	6.6	29.42	58.2	37.1
08/03/95	13:35	90.1	175.1	8.3	29.42	58.6	21.8
08/03/95	13:40	89.9	149.9	7.7	29.42	57.5	20.6
08/03/95	13:45	90.7	175.1	5.1	29.42	56.4	29.4
08/03/95	13:50	90.9	198.2	5.1	29.42	55.5	21.6
08/03/95	13:55	91	145.1	5.5	29.41	54.7	25.1
08/03/95	14:00	91.3	189.9	6	29.41	54.1	17.5
08/03/95	14:05	91.2	275.9	3.9	29.41	53.4	60.5
08/03/95	14:10	90.8	214.2	6.6	29.41	54.7	29.2
08/03/95	14:15	90.5	179.8	7	29.41	57.2	14.5
08/03/95	14:20	90.4	149	4.5	29.41	55.4	17.2
08/03/95	14:25	90.4	209.9	7	29.41	57.2	14.2
08/03/95	14:30	90.8	213.8	6.2	29.4	55.8	17
08/03/95	14:35	91.5	238.9	4	29.4	54.3	20.1
08/03/95	14:40	91.9	216.9	5.4	29.4	55.1	32.2
08/03/95	14:45	91.6	233.3	4.5	29.4	55.2	20.3
08/03/95	14:50	92.6	154.1	5.4	29.4	54.2	23.3
08/03/95	14:55	92.4	112.1	7	29.39	49.5	16.9
08/03/95	15:00	92.4	103	7.1	29.39	47.2	49.4
08/03/95	15:05	92.1	106.9	7.4	29.39	46.7	16.9
08/03/95	15:10	90.7	94.9	6	29.39	47.5	21
08/03/95	15:15	90.5	119	7.1	29.4	50.1	11.5
08/03/95	15:20	91.6	143.1	4.9	29.39	51.8	20.7
08/03/95	15:25	91	159.1	6.6	29.39	54	9.4
08/03/95	15:30	90.8	144.2	5.3	29.39	54	17.5
08/03/95	15:35	92.3	132.1	3.1	29.39	50.6	29.4
08/03/95	15:40	91.9	94	6.9	29.38	49.1	20.3
08/03/95	15:45	91.9	95.1	8.1	29.38	47.1	8.7
08/03/95	15:50	91	132.8	7.3	29.38	50	25
08/03/95	15:55	90.3	114.8	6.9	29.38	52.1	15.2
08/03/95	16:00	91.1	91.1	5.2	29.38	51	15.3
08/03/95	16:05	91.7	100.1	8.9	29.38	48	13.7
08/03/95	16:10	91.5	113	7.7	29.37	49.1	10.3
08/03/95	16:15	91	109.1	5.8	29.37	48.3	16.7
08/03/95	16:20	91	113	8.1	29.38	50.4	11
08/03/95	16:25	92.1	101.9	6.4	29.37	48.2	14.5
08/03/95	16:30	92.3	113	7.9	29.37	46.7	15.4
08/03/95	16:35	92.7	128.2	6.4	29.37	47.8	22.2
08/03/95	16:40	92.7	121	7.6	29.37	45.4	12.8
08/03/95	16:45	92.2	117	10.6	29.37	48	17.9
08/03/95	16:50	92.1	106.9	11.1	29.37	45.2	10.7
08/03/95	16:55	92.1	90	9	29.37	44	9.1
08/03/95	17:00	91.4	108.9	9.2	29.37	45	14.2

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
Run 5							
08/03/95	18:15	91.7	103	9.3	29.36	45.2	10.2
08/03/95	18:20	91.6	108	9.4	29.36	45	15.1
08/03/95	18:25	91	116.1	9.5	29.36	47.1	8.7
08/03/95	18:30	90.1	105.1	10.5	29.36	49.8	7.6
08/03/95	18:35	89.9	108.9	8.5	29.36	51.6	7.2
08/03/95	18:40	90.1	119.9	7.4	29.36	51.8	9
08/03/95	18:45	90.7	113.9	7.8	29.36	50.9	9.2
08/03/95	18:50	90.7	117.9	10.4	29.36	50.6	7.9
08/03/95	18:55	90.6	109.1	9.9	29.36	50.3	10.6
08/03/95	19:00	90.5	112.1	10.7	29.36	50.2	11.4
08/03/95	19:05	90.4	110	8.6	29.36	49.8	8.1
08/03/95	19:10	90.3	106.9	9.1	29.36	50.1	9.7
08/03/95	19:15	90.1	99	8.4	29.36	50.5	7.9
08/03/95	19:20	89.7	98.1	8.2	29.36	50.7	8.7
08/03/95	19:25	89.6	101.9	7.1	29.37	51.5	7.9
08/03/95	19:30	89.3	95.1	7.6	29.37	52.5	7.9
08/03/95	19:35	88.8	97.9	8.4	29.37	53.1	6.8
08/03/95	19:40	88.4	94.9	7.4	29.37	54.6	5.5
08/03/95	19:45	88.1	93.1	6.8	29.37	55.6	6.4
08/03/95	19:50	87.7	93.1	6.8	29.37	56.9	5.9
08/03/95	19:55	87.2	97.9	7.1	29.37	58.9	5.8
08/03/95	20:00	86.8	101	6.5	29.37	61.3	7.5
08/03/95	20:05	86.4	103.9	5.7	29.37	63.6	5.7
08/03/95	20:10	85.9	97.9	4.3	29.37	65.8	3
08/03/95	20:15	85.5	92	4	29.37	67.3	2.1
08/03/95	20:20	85.1	97	4.2	29.37	69.1	2.6
08/03/95	20:25	84.6	103	4.1	29.37	71.5	2.4
08/03/95	20:30	84.3	93.1	5	29.37	73.2	4.4
08/03/95	20:35	83.7	93.1	4.9	29.37	75.2	4.2
08/03/95	20:40	83	103	4.8	29.37	78	2.8
08/03/95	20:45	82.5	106	3.8	29.37	79.8	2.5
08/03/95	20:50	82.3	103	3.7	29.37	81.2	2.5
08/03/95	20:55	82.2	99	3.9	29.37	82.2	3.5
08/03/95	21:00	82.2	90.9	4.8	29.37	82.9	5.2
08/03/95	21:05	81.7	103	4.1	29.37	84	4.4
08/03/95	21:10	81.5	106.9	3.8	29.37	84.9	3
08/03/95	21:15	81.6	94.9	3.9	29.37	84.7	5.9
08/03/95	21:20	82	80.1	3	29.37	84.3	1.9
08/03/95	21:25	81.8	78	3	29.37	83.7	0.1
08/03/95	21:30	82.1	76	2.8	29.37	83.6	2.5
08/03/95	21:35	81.5	72	1.9	29.37	85.7	0
08/03/95	21:40	80.1	27	3.3	29.38	91.1	20.2
08/03/95	21:45	80.5	15	3.2	29.38	91.6	8.2
08/03/95	21:50	80.6	54.9	3.2	29.38	91.7	3.7
08/03/95	21:55	80.2	54.9	2.5	29.38	91.2	0
08/03/95	22:00	79.9	54.9	1.4	29.38	93.6	3.6
08/03/95	22:05	79.3	54.9	1.1	29.39	93.1	0
08/03/95	22:10	78.9	54.9	1.1	29.39	93.9	0.4
08/03/95	22:15	79.5	51	1.1	29.4	93.8	0
08/03/95	22:20	79.6	51	2.3	29.4	93.8	0
08/03/95	22:25	78.8	51	2.4	29.4	95.6	0.8
08/03/95	22:30	79	58	3	29.39	94.8	3.7
08/03/95	22:35	78.1	63	2.4	29.39	98.6	0
08/03/95	22:40	78	63	1.2	29.4	99.2	0
08/03/95	22:45	78.3	63	1.1	29.4	98.6	0.6
08/03/95	22:50	77.7	61	1.1	29.4	98.9	2.6
08/03/95	22:55	78.1	41.1	1.1	29.4	97.1	4.3
08/03/95	23:00	78.4	38	1.1	29.4	96.7	0
08/03/95	23:05	78.3	38	1.1	29.4	96.9	0
08/03/95	23:10	77.7	45.9	2	29.4	99.3	7
08/03/95	23:15	77.6	60.9	2.7	29.4	99.6	1.1

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/03/95	23:20	77.8	60	2	29.41	99.4	0.4
08/03/95	23:25	77.7	60	1.1	29.41	99.6	0
08/03/95	23:30	77.4	60	1.1	29.41	99.7	0
08/03/95	23:35	77.2	60	1.1	29.41	99.5	0
08/03/95	23:40	77.2	60	1.1	29.41	99.6	0
08/03/95	23:45	76.9	60	1.1	29.41	99.6	0
08/03/95	23:50	76.6	60	1.1	29.41	99.7	0
08/03/95	23:55	76.6	60	1.1	29.41	99.7	0
08/03/95	00:00	76.9	60	1.1	29.41	99.7	0
08/04/95	00:05	76.6	60	1.1	29.41	99.7	0
08/04/95	00:10	77.1	60	1.1	29.41	99.6	0
08/04/95	00:15	77.5	60	1.1	29.41	99.6	0
08/04/95	00:20	77.6	60	1.1	29.41	99.6	0
08/04/95	00:25	77	58.9	1.1	29.41	99.7	1.5
08/04/95	00:30	76.9	58	1.1	29.41	99.6	0
08/04/95	00:35	76.2	58	1.2	29.41	99.7	0
08/04/95	00:40	76.2	58	2	29.41	99.7	0
08/04/95	00:45	76.2	58	1.1	29.41	99.6	0
08/04/95	00:50	75.9	58	1.1	29.41	99.7	0
08/04/95	00:55	75.4	58	1.1	29.41	99.6	0
08/04/95	01:00	75.7	58	1.1	29.41	99.7	0
08/04/95	01:05	75.6	58	1.1	29.41	99.7	0
08/04/95	01:10	75.9	58	1.1	29.41	99.7	0
08/04/95	01:15	76	58	1.1	29.41	99.6	0
08/04/95	01:20	76	58	1.1	29.41	99.7	0
08/04/95	01:25	76.1	58	1.1	29.41	99.7	0
08/04/95	01:30	75.3	58	1.1	29.41	99.6	0
08/04/95	01:35	75.8	59.1	1.1	29.41	99.7	1.4
08/04/95	01:40	75.9	63	1.1	29.41	99.7	0
08/04/95	01:45	75.6	70	1.3	29.41	99.7	26.5
08/04/95	01:50	75.4	133	2.6	29.4	99.7	9.4
08/04/95	01:55	75.6	121.9	4	29.4	99.7	2.8
08/04/95	02:00	76	122	4.3	29.4	99.4	0
08/04/95	02:05	76	130.9	4	29.4	98.4	7.5
08/04/95	02:10	76.1	156.1	3.2	29.4	96.8	8.7
08/04/95	02:15	76	162.2	3.3	29.4	96.2	6
08/04/95	02:20	75.9	158	3	29.4	96.5	5.8
08/04/95	02:25	75.7	164.2	3	29.4	96.9	6.5
08/04/95	02:30	75.6	176.9	3.5	29.4	96.1	7.2
08/04/95	02:35	75.9	188.1	3.4	29.4	94.9	6.1
08/04/95	02:40	75.7	230.9	1.7	29.4	98	23.2
08/04/95	02:45	75.3	198.9	2.8	29.4	98.4	9.8
08/04/95	02:50	75.3	216.2	2.3	29.4	99.5	9.1
08/04/95	02:55	75.2	218.2	2.6	29.4	99.5	8.5
08/04/95	03:00	75.2	215.1	2.8	29.4	99.4	3.2
08/04/95	03:05	75	223.9	3.1	29.4	99.6	6.3
08/04/95	03:10	75	234.9	2.6	29.4	99.6	5.5
08/04/95	03:15	74.9	232.2	2.5	29.4	99.6	6.1
08/04/95	03:20	74.9	261.2	1.4	29.4	99.6	8.3
08/04/95	03:25	74.9	268.2	1.1	29.4	99.6	0
08/04/95	03:30	74.9	268.2	1.1	29.4	99.6	0
08/04/95	03:35	74.8	268.2	1.1	29.4	99.6	1.2
08/04/95	03:40	74.5	261.9	1.1	29.4	99.6	11.4
08/04/95	03:45	73.8	202	2.7	29.4	99.6	10.6
08/04/95	03:50	74.1	211.1	3.7	29.4	99.6	8.2
08/04/95	03:55	74.2	226.3	3.1	29.4	99.6	4.6
08/04/95	04:00	74	211	2.6	29.4	99.6	7.9
08/04/95	04:05	73.9	223.9	2.5	29.4	99.6	9.8
08/04/95	04:10	74	248.2	1.3	29.4	99.6	1.6
08/04/95	04:15	73.8	248.2	1.1	29.4	99.6	0
08/04/95	04:20	73.5	248.2	1.1	29.4	99.6	0
08/04/95	04:25	73.6	248.2	1.1	29.41	99.6	0

Very small town POTW

Meteorological Data							
			WD	WS			
			Scalar	Scalar	BP	RH	Sigma
Date	Time	Temp (F)	(Deg)	(mph)	(in Hg)	(%)	Theta
08/04/95	04:30	73.5	248.2	1.1	29.41	99.6	0
08/04/95	04:35	73.5	248.2	1.1	29.4	99.6	0
08/04/95	04:40	73.6	248.2	1.1	29.41	99.6	0
08/04/95	04:45	73.4	206.1	1.1	29.4	99.6	43
08/04/95	04:50	73	123.8	1.1	29.4	99.6	2
08/04/95	04:55	72.9	121.9	1.1	29.4	99.6	1.9
08/04/95	05:00	72.9	113	1.1	29.4	99.6	6.3
08/04/95	05:05	73.2	108.9	1.1	29.4	99.6	0
08/04/95	05:10	73.2	106.9	1.1	29.4	99.6	4.3
08/04/95	05:15	73.2	11.9	2.9	29.41	99.6	43.2
08/04/95	05:20	73.3	307.8	3.2	29.4	99.6	10.8
08/04/95	05:25	73.3	295.2	1.8	29.4	99.6	0
08/04/95	05:30	73	295.2	1.2	29.4	99.6	0
08/04/95	05:35	73	294.8	1.1	29.41	99.6	0
08/04/95	05:40	73.2	294.8	1.1	29.41	99.6	0
08/04/95	05:45	73.4	294.8	1.1	29.41	99.6	0
08/04/95	05:50	73.3	294.8	1.1	29.41	99.6	0
08/04/95	05:55	73.2	296.3	1.1	29.42	99.6	2
08/04/95	06:00	73.2	301.3	1.1	29.42	99.6	4.6
08/04/95	06:05	73.1	301.3	1.1	29.42	99.6	0
08/04/95	06:10	72.7	301.3	1.1	29.42	99.6	0
08/04/95	06:15	72.5	301.3	1.1	29.42	99.6	0
08/04/95	06:20	72.6	301.3	1.1	29.42	99.6	0
08/04/95	06:25	72.6	301.3	1.1	29.42	99.6	0
08/04/95	06:30	72.3	301.3	1.1	29.42	99.6	0
08/04/95	06:35	72.6	302.9	1.1	29.42	99.6	1.6
08/04/95	06:40	73.3	327.2	1.1	29.42	99.6	10.8
08/04/95	06:45	73.5	335.3	1.1	29.42	99.6	0
08/04/95	06:50	73.7	335.3	1.1	29.42	99.7	0
08/04/95	06:55	74.3	335.3	1.1	29.42	99.7	0
08/04/95	07:00	75	335.3	1.1	29.42	99.7	0
08/04/95	07:05	75.7	335.9	1.1	29.42	99.7	1.2
08/04/95	07:10	76.6	336.1	1.1	29.43	99.7	0.6
08/04/95	07:15	77.1	335.9	1.1	29.43	99.7	1.5
08/04/95	07:20	76.9	329.4	1.1	29.43	99.7	0
08/04/95	07:25	77.2	320	1.3	29.43	99.7	9.9
08/04/95	07:30	77.5	262.3	1.6	29.43	99.7	3.5
08/04/95	07:35	77.8	259.2	2.5	29.44	99.7	7.6
08/04/95	07:40	78	240.3	2.4	29.44	99.7	15.7
08/04/95	07:45	78.6	261.9	1.5	29.44	99.4	11.3
08/04/95	07:50	79.1	246.2	1.4	29.44	98.3	8
08/04/95	07:55	79.6	235.8	1.6	29.45	97.1	5
08/04/95	08:00	80.2	220.1	1.6	29.45	95.3	0.9
08/04/95	08:05	80	223.9	4	29.45	94.6	11.3
08/04/95	08:10	79.9	226.3	4.8	29.45	95.3	12.6
08/04/95	08:15	80	232.9	5	29.45	94.6	10.6
08/04/95	08:20	80.3	223.9	4.2	29.45	93.8	16.5
08/04/95	08:25	80.7	235.8	5	29.45	91.2	16.5
08/04/95	08:30	81	247	4.1	29.45	90.9	14
08/04/95	08:35	81.4	231.1	5.3	29.45	88.6	15.4
08/04/95	08:40	81.7	262.8	5.2	29.45	86	14.2
08/04/95	08:45	82.1	283.3	5.5	29.45	83.2	14.5

APPENDIX E

INDIVIDUAL VALID EMISSION RATE DETERMINATIONS

EX- Example Calculation for Emission Rates
E1 - Beef Processing Plant in Southwest U.S.
E2 - Beef Processing Plant in Midwest U.S.
E3 - Chicken Processing Plant in Southeast U.S.
E4 - POTW for Small Town in Southwest U.S.
E5 - POTW for Very Small Town in Southwest U.S.

EXAMPLE CALCULATION
FOR EMISSION RATES

The following data reduction scheme was followed:

1. Determine the average upwind concentration for each compound at each site.

2. Determine the minimum and maximum downwind values for each compound at each site.

3. Determine periods of valid meteorological date (= ideal wind direction of +/- 30 degrees for all sites except SW Beef where a value of +/- 15 degrees was used)

4. Subtract upwind values from downwind values for all valid time periods.

5. Convert concentrations to $\mu g/m^3$ using the following conversion factors:

Compound	ppg to $\mu g/m^3$		Compound	ppg to $\mu g/m^3$		Compound	ppg to $\mu g/m^3$
H_2O	0.7368		CO	1.146		Methylene Chloride	3.474
CO_2	1.8000		C_2H_4	1.065		Chloroform	4.883
SF_6	5.9734		H_2S	1.394		Carbon Tet	6.291
CH_4	0.6560					Trichlorofluoromethane	5.618
NH_3	0.6965					Dichlorodifluoromethane	4.945
N_2O	1.8000						

6. Calculate emission rates for each compound using Equation 4-2:

ER = ER of SF_6 • (Conc. of gas)/(Conc. Of SF_6)

ER of SF_6 = 0.700 g/sec.

EXAMPLE

From Appendix B, for the time period ending at 0240 on 8/24/95, the measured CH_4 concentration was 123.85 ppm and the measured SF_6 concentration was 0.06428 ppm. The average upwind data for this site from Table 5-2 is a CH_4 concentration of 2.3. Ppm and a SF_6 concentration of 0.00054 ppm. Using the conversion factors shown above, this yields a difference between the downwind and upwind values of:

CH_4: (123.85 - 2.3) (0.656) (1000 ppb/ppm) = 79,740 $\mu g/m^3$
SF_6: (0.06428-0.00054) (5.9734) (1000 ppb/ppm) = 380.7 $\mu g/m^3$

Using Equation 4-2, the emission rate for methane is:

$$(0.700 \text{ g/sec}) (79{,}740 / 380.7) = 147 \text{ g/sec}$$

This value is given in appendix E1 for this data point. The wind direction during this time period was 161 degrees.

Beef Processing Plant in the SW U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
08/23/95	06:50:15	169	0.995	0.000		146
08/23/95	14:49:53	221	3.363	0.000		146
08/23/95	15:59:58	436	4.092	0.000		146
08/25/95	03:50:05	291	2.108	0.000		146
08/23/95	22:54:52	5619	43.458	0.000		146
08/24/95	01:44:55	414	3.798	0.000		146
08/24/95	07:25:01	215	1.791	0.000		146
08/24/95	23:30:00	1306	9.432	0.000		146
08/25/95	01:00:02	1079	7.749	0.000		146
08/25/95	01:05:02	863	7.009	0.000		146
08/25/95	01:10:02	2292	17.462	66.964		146
08/25/95	03:45:05	1386	6.768	0.000		146
08/23/95	23:19:52	308	2.339	0.000		147
08/24/95	00:59:54	263	1.937	0.000		147
08/24/95	01:19:54	247	1.996	0.000		147
08/24/95	01:59:56	268	2.119	0.000		147
08/24/95	03:19:56	160	1.065	0.000		147
08/25/95	02:55:04	770	4.704	0.000		147
08/25/95	04:25:07	238	1.250	0.000		147
08/23/95	04:40:12	165	0.653	3.895		148
08/24/95	02:09:56	439	3.254	0.000		148
08/24/95	03:14:56	280	2.443	0.000		148
08/24/95	07:35:01	154	0.685	0.000		148
08/24/95	07:45:03	130	0.577	0.000		148
08/25/95	01:50:03	329	2.076	0.000		148
08/23/95	23:09:52	690	6.314	0.000		148
08/24/95	01:14:55	248	1.813	0.000		148
08/24/95	03:09:56	236	1.857	0.000		148
08/24/95	04:14:58	113	0.584	0.000		148
08/25/95	00:15:01	656	4.972	0.000		148
08/25/95	02:40:04	144	1.216	4.038		148
08/25/95	03:25:04	344	3.354	0.000		148
08/25/95	04:15:06	217	0.928	3.530		148
08/23/95	04:20:12	161	0.887	0.000		149
08/23/95	13:04:51	307	3.668	0.000		149
08/23/95	13:29:52	231	3.343	0.000		149
08/24/95	07:50:02	107	0.653	0.000		149
08/24/95	23:35:00	418	4.236	0.000		149
08/24/95	23:50:01	738	6.299	0.000		149
08/25/95	04:20:06	176	1.054	0.000		149
08/24/95	01:49:55	379	3.321	0.000		149

Beef Processing Plant in the SW U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
08/24/95	03:34:57	143	1.018	0.000		149
08/24/95	06:35:01	149	0.604	0.000		149
08/24/95	23:45:01	392	4.125	0.000		149
08/25/95	02:35:04	191	1.581	0.000		149
08/25/95	03:35:04	574	4.159	0.000		149
08/25/95	04:00:05	212	1.411	0.000		149
08/25/95	04:30:07	207	1.231	0.000		149
08/23/95	03:20:11	160	0.563	0.000		150
08/24/95	00:34:55	126	1.048	0.000		150
08/24/95	01:04:55	134	1.002	0.000		150
08/24/95	02:49:57	113	0.592	2.375		150
08/25/95	00:50:01	339	2.431	0.000		150
08/25/95	03:10:03	257	2.810	0.000		150
08/25/95	03:15:03	392	2.967	0.000		150
08/25/95	04:05:06	202	1.316	0.000		150
08/23/95	02:55:11	177	0.881	4.141		150
08/23/95	05:30:13	185	0.959	0.000		150
08/23/95	06:55:15	169	1.013	0.000		150
08/24/95	00:54:54	136	0.808	3.365		150
08/24/95	19:54:54	445	2.467	6.628		150
08/24/95	23:40:00	236	3.207	0.000		150
08/25/95	00:00:00	345	3.065	0.000		150
08/25/95	00:05:00	326	3.168	0.000		150
08/25/95	00:30:00	273	2.518	0.000		150
08/25/95	00:55:01	307	2.579	0.000		150
08/25/95	02:05:02	160	1.076	4.056		150
08/25/95	03:30:04	132	1.422	0.000		150
08/24/95	00:29:54	141	1.110	0.000		151
08/24/95	01:34:55	140	1.116	0.000		151
08/24/95	01:39:55	178	1.650	0.000		151
08/24/95	01:54:56	137	0.924	0.000		151
08/24/95	23:55:01	336	3.136	0.000		151
08/25/95	00:20:01	311	3.013	0.000		151
08/25/95	00:45:01	209	1.445	4.580		151
08/25/95	03:20:03	340	3.218	0.000		151
08/23/95	04:15:12	185	0.820	0.000		151
08/23/95	04:25:13	182	0.776	0.000		151
08/23/95	04:55:13	160	0.819	0.000		151
08/23/95	05:55:14	174	0.903	0.000		151
08/23/95	06:00:14	159	1.014	0.000		151
08/24/95	01:29:55	228	2.159	0.000		151

Beef Processing Plant in the SW U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
08/24/95	02:14:56	151	1.218	0.000		151
08/24/95	02:54:57	105	0.692	0.000		151
08/24/95	03:04:56	157	1.090	0.000		151
08/24/95	03:29:57	192	1.366	0.000		151
08/24/95	03:39:57	124	0.842	0.000		151
08/24/95	07:30:01	136	0.843	0.000		151
08/25/95	01:25:02	91	2.170	0.000		151
08/24/95	00:39:55	114	0.773	2.430		152
08/24/95	01:09:55	134	0.767	2.888		152
08/24/95	03:44:58	129	0.827	0.000		152
08/25/95	00:40:01	160	1.271	3.912		152
08/25/95	01:45:03	574	4.063	0.000		152
08/23/95	04:50:13	174	0.776	4.143		152
08/23/95	06:10:13	207	0.959	0.000		152
08/24/95	00:09:53	315	1.811	0.000		152
08/24/95	06:40:01	148	0.721	0.000		152
08/25/95	00:10:00	238	2.232	0.000		152
08/25/95	00:35:00	162	1.678	0.000		152
08/25/95	03:55:05	239	1.748	0.000		152
08/23/95	05:25:13	189	0.980	0.000		153
08/23/95	13:24:51	230	3.617	0.000		153
08/23/95	23:39:53	162	1.549	0.000		153
08/24/95	04:19:58	141	0.853	0.000		153
08/24/95	19:49:54	220	1.336	4.314		153
08/25/95	00:25:00	178	1.781	0.000		153
08/24/95	00:24:54	139	0.812	2.851		153
08/25/95	02:25:03	88	1.280	3.857		153
08/25/95	04:40:06	193	1.551	0.000		153
08/23/95	06:05:13	166	0.962	0.000		154
08/23/95	23:34:51	135	1.241	0.000		154
08/24/95	06:30:00	142	0.536	2.824		154
08/25/95	04:35:07	209	1.628	0.000		154
08/23/95	04:10:12	178	0.720	3.878		154
08/23/95	13:19:53	200	2.745	0.000		154
08/23/95	23:24:51	174	1.073	3.762		154
08/24/95	00:14:54	172	1.193	4.157		154
08/24/95	03:49:58	127	0.842	0.000		154
08/24/95	02:59:57	108	0.756	2.346		155
08/25/95	02:00:02	146	1.491	4.736		155
08/23/95	04:35:13	162	0.551	0.000		155
08/24/95	00:44:55	100	0.559	1.997		155

Beef Processing Plant in the SW U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
08/24/95	03:54:58	107	0.625	2.434		155
08/24/95	00:49:54	129	0.636	2.643		156
08/23/95	04:05:12	167	0.676	0.000		156
08/23/95	05:00:13	160	0.827	0.000		156
08/23/95	23:29:51	167	1.143	0.000		156
08/24/95	02:19:56	135	0.700	2.721		156
08/23/95	04:30:13	170	0.596	0.000		157
08/23/95	05:20:13	172	0.858	0.000		157
08/23/95	12:59:51	383	4.417	0.000		157
08/23/95	14:04:52	232	3.689	0.000		157
08/23/95	12:54:52	236	2.940	0.000		157
08/24/95	08:00:02	160	0.956	0.000		157
08/25/95	04:10:06	109	0.889	3.328		157
08/23/95	23:44:52	155	0.962	3.403		158
08/24/95	02:44:56	147	0.567	0.000		158
08/25/95	07:45:12	208	1.426	0.000		158
08/23/95	13:14:52	238	3.326	0.000		158
08/24/95	03:59:57	127	0.611	2.886		159
08/24/95	06:25:00	155	0.695	3.866		159
08/23/95	05:15:12	153	0.703	0.000		159
08/23/95	12:34:51	217	3.123	0.000		159
08/23/95	13:54:52	290	4.238	0.000		159
08/24/95	00:19:54	121	0.723	2.528		159
08/24/95	04:09:57	148	0.679	3.274		159
08/24/95	07:55:02	135	0.937	0.000		159
08/25/95	07:40:12	224	1.379	0.000		159
08/23/95	03:10:12	162	0.628	3.638		160
08/23/95	03:15:12	137	0.441	3.094		160
08/23/95	05:10:12	160	0.622	0.000		160
08/23/95	15:24:55	228	2.546	0.000		160
08/23/95	15:19:55	256	3.392	0.000		161
08/25/95	04:45:06	230	1.666	5.315		161
08/23/95	02:50:11	169	0.578	3.753		161
08/23/95	12:39:51	291	3.205	0.000		161
08/24/95	02:34:56	160	0.515	0.000		161
08/24/95	02:39:56	147	0.565	0.000		161
08/25/95	07:50:13	199	1.354	4.650		162
08/23/95	05:05:13	179	0.671	0.000		162
08/23/95	07:35:16	169	0.771	0.000		162
08/23/95	12:44:51	216	2.750	0.000		162
08/24/95	02:24:57	165	0.767	3.350		162

Beef Processing Plant in the SW U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
08/24/95	04:24:58	154	0.799	3.230		162
08/23/95	23:49:52	185	0.833	4.163		164
08/23/95	13:49:52	471	5.332	0.000		165
08/23/95	14:44:52	800	8.820	0.000		165
08/24/95	02:29:57	169	0.666	0.000		165
08/23/95	10:59:50	262	2.097	0.000		165
08/23/95	14:59:54	267	4.213	0.000		165
08/25/95	04:55:07	263	1.491	5.437		165
08/23/95	11:09:50	196	2.030	0.000		166
08/24/95	06:45:01	160	0.641	3.336		166
08/25/95	05:00:07	212	1.309	4.899		166
08/23/95	12:24:52	215	2.770	0.000		166
08/23/95	13:09:52	647	6.456	0.000		166
08/25/95	04:50:07	227	1.584	5.123		166
08/25/95	07:35:12	234	1.491	0.000		166
08/23/95	11:25:03	213	2.055	0.000		167
08/24/95	07:00:00	142	0.577	0.000		167
08/25/95	05:05:06	247	1.334	4.803		167
08/23/95	15:14:55	424	5.279	0.000		168
08/23/95	15:49:57	698	6.338	0.000		168
08/23/95	12:49:52	374	5.376	0.000		168
08/24/95	08:05:02	159	0.948	0.000		168
08/24/95	19:04:55	238	1.868	5.508		168
08/24/95	06:20:01	152	0.668	0.000		169
08/23/95	14:09:53	205	2.996	0.000		169
08/23/95	14:34:56	454	4.807	0.000		169
08/24/95	19:44:55	225	1.355	4.909		169
08/24/95	04:29:57	159	0.728	0.000		170
08/23/95	15:39:56	246	3.702	0.000		171
08/24/95	04:04:57	152	0.606	0.000		171
08/24/95	18:54:56	312	2.269	6.102		171
08/24/95	19:19:54	217	1.860	5.239		171
08/25/95	08:15:14	212	1.573	0.000		171
08/23/95	07:40:16	150	0.611	0.000		171
08/23/95	10:04:51	202	1.571	0.000		171
08/24/95	19:39:55	289	1.479	5.980		171
08/25/95	05:15:07	256	1.355	0.000		171
08/25/95	07:55:13	232	1.332	4.825		171
08/24/95	18:49:55	202	1.625	5.508		172
08/25/95	05:10:06	226	1.285	4.552		172
08/23/95	10:49:51	217	1.894	0.000		172

Beef Processing Plant in the SW U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
08/23/95	11:59:49	333	3.113	0.000		172
08/24/95	18:44:54	280	2.331	6.673		172
08/24/95	19:14:54	289	1.998	5.774		172
08/25/95	05:40:07	248	1.337	5.185		172
08/24/95	08:15:03	177	0.917	0.000		173
08/24/95	18:59:54	236	1.984	6.016		173
08/25/95	05:35:06	212	1.260	4.729		173
08/25/95	07:30:12	224	1.190	4.861		173
08/23/95	10:44:51	469	3.353	0.000		173
08/24/95	04:34:57	156	0.750	3.343		173
08/25/95	05:20:07	254	1.461	5.604		173
08/23/95	09:59:50	242	1.551	0.000		174
08/23/95	11:29:55	300	2.718	0.000		174
08/24/95	05:55:00	157	0.502	0.000		174
08/24/95	08:10:03	153	0.808	0.000		174
08/25/95	05:45:07	233	1.278	5.279		174
08/24/95	08:20:03	161	0.885	0.000		175
08/24/95	19:29:55	190	1.543	5.494		175
08/24/95	19:34:54	182	1.210	4.789		175
08/23/95	10:54:50	321	2.311	0.000		175
08/23/95	11:04:50	335	2.967	0.000		175
08/24/95	19:09:55	255	1.743	5.588		175
08/25/95	05:30:06	224	1.157	0.000		175
08/25/95	08:00:13	272	1.372	0.000		175
08/25/95	08:20:14	273	1.427	0.000		175
08/25/95	08:25:14	296	1.622	0.000		175
08/23/95	10:09:50	252	1.693	0.000		176
08/24/95	19:24:55	231	1.653	5.247		176
08/25/95	08:40:15	226	1.435	0.000		176
08/23/95	11:49:54	318	4.226	0.000		176
08/25/95	08:35:15	209	1.381	0.000		176
08/23/95	10:14:50	466	2.540	0.000		176
08/25/95	08:45:15	253	1.606	0.000		176

Site: Beef processing plant in Midwest U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
8/31/95	16:55:03	10195.756	134.796	356.171		134.8
8/31/95	13:59:59	13119.584	182.702	478.419		134.8
8/31/95	16:50:02	10486.480	136.652	369.280		134.8
8/30/95	23:19:56	198.003	3.939	0.000		134.8
8/31/95	17:15:02	10782.099	138.270	373.856		135
8/30/95	23:39:55	182.589	3.388	0.000		135.9
8/30/95	23:54:55	206.218	3.853	0.000		135.9
8/31/95	22:34:54	207.397	2.876	7.905		136.1
8/30/95	23:44:56	182.724	3.445	6.922		136.1
8/31/95	22:04:54	175.434	2.040	6.476		136.8
8/31/95	22:14:55	187.392	2.054	6.772		136.8
8/31/95	12:44:58	10960.122	133.024	384.024		136.8
8/31/95	22:09:55	188.748	2.119	6.773		136.8
8/30/95	23:14:56	194.525	4.068	0.000		136.8
8/30/95	21:49:53	194.667	2.052	6.764		137.2
8/31/95	21:14:53	191.277	2.020	7.275		137.2
8/31/95	21:59:54	178.989	1.975	6.377		137.2
8/31/95	14:04:59	10757.328	185.507	401.312		137.2
8/31/95	21:54:55	191.356	2.125	7.016		138.1
8/31/95	17:45:03	7540.790	99.852	249.557		139.1
8/31/95	21:49:55	189.051	2.082	7.087		139.1
8/31/95	20:49:52	179.653	1.951	6.784		139.9
8/31/95	23:29:55	200.049	2.037	7.011		139.9
8/30/95	19:14:52	221.795	3.725	0.000		139.9
8/30/95	19:09:51	210.921	3.536	0.000		139.9
8/31/95	21:19:54	183.417	2.079	7.048		140
8/31/95	21:09:53	177.885	1.992	6.958		140
8/31/95	23:24:56	204.175	2.266	7.365		140
8/31/95	23:19:56	204.216	2.300	7.382		140.9
8/30/95	22:14:53	203.802	2.299	7.075		140.9
8/30/95	23:59:55	193.616	4.039	7.834		140.9
8/31/95	21:44:54	197.002	2.201	7.269		141.1
8/31/95	23:09:56	208.413	2.221	7.391		141.1
8/31/95	0:04:56	195.576	3.812	7.569		141.1
8/31/95	20:54:52	177.341	1.811	6.345		141.8
8/31/95	17:00:02	15145.436	197.983	583.771		141.8
8/31/95	14:19:59	13014.235	195.949	469.809		141.8
8/30/95	21:29:53	191.176	2.119	6.995		142
8/31/95	12:14:57	8633.740	89.197	300.159		142
8/31/95	23:14:55	202.044	2.144	7.143		142
8/31/95	21:34:55	182.121	2.224	6.733		142
8/31/95	21:39:54	195.471	2.360	7.237		142
8/31/95	22:39:55	213.952	2.974	7.914		142
8/31/95	0:09:56	202.753	3.795	7.995		142
8/30/95	21:59:54	167.564	1.917	6.041		142.9
8/31/95	23:04:55	219.223	2.471	7.891		142.9
8/31/95	23:34:55	194.185	2.010	6.856		143.1
8/31/95	16:20:01	8891.208	148.556	358.567		143.1
8/30/95	19:19:52	205.262	3.714	0.000		143.1
8/31/95	0:14:55	196.839	3.968	0.000		144
8/30/95	18:19:52	137.187	1.086	4.246		144.2
8/31/95	1:09:57	210.837	3.648	8.260		144.2
8/31/95	0:34:55	185.890	3.951	0.000		144.2
8/31/95	21:04:53	173.843	2.025	6.401		144.9
8/31/95	21:29:55	190.619	2.357	6.998		144.9
8/31/95	0:39:55	187.038	3.930	0.000		144.9
8/31/95	0:29:56	191.878	4.360	0.000		144.9
8/31/95	20:59:52	178.856	1.937	6.698		145.1
8/31/95	21:24:54	179.934	2.238	6.725		145.1
8/31/95	22:59:55	208.536	2.618	7.581		145.1
8/31/95	1:14:56	213.429	3.554	7.905		145.1
8/30/95	18:24:51	142.429	0.960	4.343		145.8
8/31/95	1:19:56	198.327	3.401	7.653		145.8
8/31/95	1:04:57	191.132	3.508	7.168		145.8
8/30/95	19:34:51	196.535	3.896	0.000		145.8
8/30/95	19:24:52	205.344	4.191	0.000		145.8
8/31/95	17:05:02	10626.576	145.970	369.047		146.2
8/31/95	16:25:02	8538.693	137.215	307.322		146.2

Site: Beef processing plant in Midwest U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
8/31/95	16:40:03	9548.900	152.809	378.365		146.2
8/31/95	0:19:55	189.792	4.072	7.523		146.2
8/31/95	0:24:56	184.601	4.082	7.441		146.2
8/31/95	0:59:56	190.037	3.649	7.257		146.9
8/30/95	19:29:51	213.886	4.486	0.000		146.9
8/31/95	0:44:55	193.311	3.856	0.000		146.9
8/31/95	22:44:56	214.430	2.825	7.962		147.1
8/30/95	21:54:53	170.971	1.825	5.893		148
8/31/95	15:19:59	7541.115	142.348	280.326		148
8/31/95	2:04:59	195.118	3.382	7.569		148
8/30/95	19:39:52	204.992	3.777	7.607		148
8/31/95	23:39:56	196.909	2.022	6.914		148.1
8/31/95	15:30:00	8445.984	141.992	305.881		148.1
8/31/95	0:54:56	195.039	4.003	0.000		148.1
8/31/95	0:49:56	197.864	4.121	0.000		148.1
8/31/95	2:09:58	211.685	3.901	0.000		148.1
8/31/95	22:54:55	196.063	2.802	7.350		148.9
8/30/95	22:19:54	189.047	2.038	6.502		149
8/31/95	1:34:57	207.670	3.508	8.102		149
8/31/95	10:39:56	3428.519	19.646	0.000		149.9
8/30/95	18:14:51	149.214	1.311	4.408		149.9
8/31/95	16:05:01	9782.125	140.747	348.610		149.9
8/31/95	22:49:56	202.944	2.840	7.509		150.1
8/31/95	14:39:59	7992.886	138.440	296.775		150.1
8/31/95	1:59:59	198.380	3.429	7.232		150.1
8/31/95	1:54:58	185.883	3.386	7.098		150.1
8/31/95	1:39:57	201.627	3.540	7.632		150.1
8/31/95	2:14:58	210.887	4.027	0.000		150.1
8/31/95	1:24:57	190.271	3.326	7.131		150.8
8/30/95	18:09:51	193.753	1.580	6.552		151
8/31/95	23:44:56	199.667	1.991	7.025		151
8/31/95	14:59:59	9572.370	136.556	345.418		151
8/30/95	21:44:54	207.551	2.128	7.362		151.9
8/31/95	14:15:00	10871.597	138.485	377.099		151.9
8/31/95	1:29:57	192.730	3.411	7.370		151.9
8/31/95	1:44:58	212.503	3.698	8.057		151.9
8/31/95	2:19:59	193.583	3.816	0.000		151.9
8/31/95	2:24:59	190.316	3.733	0.000		152.1
8/30/95	19:44:51	172.485	3.482	0.000		152.8
8/31/95	15:35:00	9645.966	212.440	377.297		152.8
8/31/95	16:10:02	8625.570	153.075	310.027		154.1
8/31/95	1:49:58	181.422	3.456	7.187		154.1
8/31/95	2:29:59	191.138	3.731	7.496		154.1
8/30/95	22:09:53	206.523	2.419	7.125		155.2
8/31/95	2:39:58	174.932	3.531	0.000		155.9
8/31/95	2:34:58	190.165	3.808	7.327		155.9
8/31/95	14:35:00	8815.144	143.098	323.183		156.1
8/31/95	15:55:02	9696.587	153.212	339.114		156.1
8/31/95	15:45:01	7923.599	157.292	289.368		156.1
8/31/95	15:25:00	7606.209	146.394	286.497		156.1
8/31/95	23:49:55	196.439	2.213	6.830		157
8/30/95	22:04:54	206.896	2.338	7.149		157.1
8/31/95	14:55:00	15155.306	194.890	580.655		157.1
8/31/95	15:10:00	9060.229	148.012	324.671		157.1
8/31/95	14:30:00	8169.362	136.644	311.273		157.1
8/30/95	21:34:53	182.852	1.850	0.000		157.9
8/31/95	2:44:59	186.376	3.608	7.379		157.9
8/31/95	14:44:59	10656.224	148.366	388.386		158
8/29/95	22:49:59	188.118	2.737	7.457		158
8/31/95	2:49:59	180.998	3.623	6.993		158
8/31/95	14:50:00	8856.688	138.738	307.677		159.1
8/31/95	15:04:59	7644.818	152.554	301.257		159.1
8/31/95	16:00:01	10066.244	147.333	349.773		159.8
8/31/95	15:14:59	7774.780	156.000	289.301		159.8
8/29/95	22:55:00	181.942	2.738	6.984		159.8
8/31/95	16:35:03	11685.780	151.524	398.446		160.2
8/29/95	22:44:59	198.209	2.864	7.488		160.2
8/31/95	2:54:58	186.773	3.442	6.823		160.2
8/31/95	15:50:01	8585.894	158.868	307.159		160.9

Site: Beef processing plant in Midwest U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
8/29/95	23:15:00	199.999	2.606	7.261		161.1
8/31/95	16:15:01	10254.693	149.951	363.226		161.8
8/29/95	23:00:00	190.627	2.979	7.339		161.8
8/30/95	18:29:51	198.886	1.558	0.000		162.2
8/29/95	23:30:00	202.351	3.116	7.538		162.2
9/1/95	0:04:56	196.003	2.613	7.113		162.9
8/29/95	23:24:59	189.609	2.762	6.905		162.9
8/30/95	19:49:51	181.867	3.695	0.000		162.9
8/29/95	23:35:00	196.969	2.918	7.327		162.9
8/31/95	23:54:55	182.098	2.528	6.687		163.1
8/31/95	23:59:56	194.601	2.763	7.195		163.1
8/29/95	23:19:59	206.135	2.736	7.439		163.1
8/29/95	23:10:00	185.179	2.815	6.983		163.1
8/29/95	23:59:59	203.425	3.177	7.650		163.1
9/1/95	0:09:56	189.858	2.579	6.802		163.8
8/31/95	14:10:00	9048.737	153.055	332.605		163.8
8/29/95	23:04:59	186.874	2.975	7.075		163.8
8/29/95	23:39:59	188.780	2.881	7.012		163.8
8/29/95	23:50:00	187.765	3.036	6.923		163.8
8/30/95	0:14:59	188.086	3.131	7.072		163.8
8/30/95	18:49:52	193.710	1.893	5.973		164.2
8/31/95	15:40:01	8881.450	161.253	324.924		164.2
8/29/95	23:54:59	193.710	3.129	7.224		164.2
8/29/95	23:45:00	197.236	3.019	7.277		164.2
8/30/95	0:10:00	203.157	3.189	7.593		164.2
8/30/95	0:05:00	192.383	3.034	7.331		164.9
8/30/95	0:34:59	197.533	3.397	7.448		164.9
8/30/95	21:39:54	199.636	2.481	6.990		165.1
8/30/95	0:20:00	184.462	3.111	6.916		165.1
9/1/95	0:14:57	198.244	2.862	7.258		166
8/30/95	20:14:52	197.692	4.165	6.843		166.1
8/30/95	0:25:00	185.526	3.294	6.981		166.1
8/30/95	0:29:59	183.222	3.220	6.858		166.1
8/30/95	18:54:51	215.509	1.876	8.022		166.9
9/1/95	0:19:57	228.737	3.303	8.373		167
8/31/95	14:24:59	9407.604	155.482	348.055		167
8/30/95	0:40:00	210.113	3.485	7.762		167
8/30/95	1:00:00	189.400	3.379	7.165		167
8/30/95	0:55:01	191.891	3.302	7.212		167
8/30/95	0:45:00	201.327	3.385	7.499		167.9
8/29/95	22:40:00	190.355	3.473	7.301		168.1
8/30/95	0:50:01	201.252	3.599	7.593		169.2
8/30/95	18:34:52	192.553	1.943	0.000		169.9
8/31/95	10:19:55	8248.310	39.801	269.559		170.1
9/1/95	0:34:56	194.661	3.066	7.229		170.1
9/1/95	0:24:57	226.367	3.278	8.242		171.2
8/29/95	22:34:59	198.585	3.721	7.617		171.2
8/30/95	7:30:04	202.599	3.593	8.269		171.2
9/1/95	0:29:56	202.531	3.147	7.473		172.1
8/30/95	20:19:53	198.068	4.731	7.404		172.1
8/30/95	20:09:52	195.154	4.630	7.080		172.1
8/30/95	4:30:01	198.905	3.563	7.975		173.2
9/1/95	0:39:57	218.205	3.253	8.105		174.1
8/30/95	20:29:52	186.022	4.484	6.740		174.1
8/30/95	20:04:51	189.933	4.363	0.000		174.1
8/30/95	1:05:00	199.104	3.406	7.403		174.1
8/30/95	7:25:03	202.282	3.600	8.089		174.1
8/30/95	7:20:03	186.245	3.357	7.555		174.1
8/30/95	1:15:01	192.256	3.455	7.229		175
8/30/95	1:10:01	200.390	3.471	7.440		175
8/30/95	4:25:01	195.862	3.595	7.487		175
9/1/95	0:54:56	225.149	3.189	8.446		175.1
9/1/95	0:59:57	218.107	3.183	8.271		175.1
8/29/95	22:24:59	206.774	4.111	7.761		175.1
8/30/95	7:45:03	184.265	3.449	0.000		175.1
8/30/95	4:20:00	196.191	3.608	7.827		175.1
8/30/95	7:35:04	199.818	3.457	8.249		175.1
8/30/95	7:15:04	194.586	3.388	7.808		175.1
8/30/95	7:05:03	201.118	3.325	7.788		176.2

Site: Beef processing plant in Midwest U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
8/30/95	7:10:04	198.269	3.409	7.788		176.2
8/30/95	1:20:00	199.152	3.858	7.581		176.2
8/30/95	7:40:03	197.246	3.544	8.228		176.9
8/30/95	7:00:03	204.926	3.316	7.796		177.1
8/29/95	22:29:59	198.999	4.065	7.600		177.1
8/30/95	7:50:04	179.604	3.443	0.000		177.1
8/30/95	1:25:00	201.964	3.895	7.659		177.1
8/30/95	8:05:04	205.734	3.429	8.202		177.8
8/30/95	6:55:04	203.443	3.272	7.743		178
8/30/95	18:44:51	220.056	2.115	0.000		178.9
8/30/95	17:49:52	329.113	2.720	10.036		178.9
9/1/95	1:04:57	221.452	3.178	8.294		178.9
8/30/95	6:50:04	198.795	3.185	7.480		178.9
8/30/95	4:10:01	200.843	3.565	7.618		178.9
8/30/95	4:15:00	208.093	3.568	7.780		178.9
8/30/95	4:35:00	197.389	3.719	8.074		178.9
9/1/95	0:44:57	214.883	3.054	7.811		179.1
9/1/95	0:49:56	213.450	3.121	7.950		179.1
8/30/95	6:30:05	210.875	3.306	8.009		179.1
8/30/95	6:40:04	215.318	3.368	8.179		179.1
8/30/95	6:25:04	204.805	3.367	7.945		179.1
8/30/95	6:15:05	214.988	3.432	8.210		179.1
8/30/95	7:55:04	184.817	3.472	0.000		179.1
8/30/95	4:05:01	200.995	3.639	7.743		179.1
8/30/95	4:00:00	205.957	3.703	7.950		179.1
8/30/95	3:55:00	202.595	3.614	7.722		179.1
8/30/95	1:30:01	205.335	3.817	7.768		179.1
8/30/95	1:35:00	202.142	3.927	7.719		179.1
8/30/95	1:40:00	205.766	3.810	8.493		179.1
8/30/95	4:40:00	193.585	3.734	7.413		179.1
9/1/95	2:09:59	214.769	2.620	7.788		179.8
9/1/95	2:14:58	231.634	2.654	8.427		179.8
9/1/95	1:09:57	196.421	2.897	7.309		179.8
8/30/95	6:20:04	203.373	3.386	7.629		179.8
8/30/95	1:45:01	203.827	3.861	7.640		179.8
8/30/95	4:45:00	203.550	3.855	7.771		179.8
8/30/95	3:30:01	203.516	3.480	7.448		180.9
8/30/95	3:35:01	199.030	3.627	7.528		180.9
9/1/95	2:19:58	221.093	2.598	7.942		181.1
9/1/95	1:14:57	210.291	3.120	7.813		181.1
8/30/95	6:45:04	192.393	3.083	7.151		181.1
8/30/95	6:35:04	211.169	3.367	8.076		181.1
8/30/95	20:24:53	193.274	4.927	0.000		181.1
8/30/95	8:00:04	204.081	3.587	7.729		181.1
8/30/95	2:00:00	185.805	3.540	6.996		181.1
8/30/95	3:50:01	202.495	3.634	7.639		181.1
8/30/95	4:50:01	196.697	3.781	7.672		181.1
8/29/95	22:19:58	192.896	3.745	7.534		181.8
8/30/95	3:45:00	208.588	3.681	7.881		182
9/1/95	1:39:59	237.587	2.741	8.612		182.2
9/1/95	2:04:59	221.545	2.625	7.978		182.2
8/30/95	20:34:52	190.891	4.040	6.923		182.2
8/30/95	2:05:01	209.352	3.594	7.560		182.2
8/30/95	1:50:01	200.938	3.880	7.591		182.2
8/30/95	2:10:00	191.423	3.440	7.022		182.9
8/30/95	5:05:00	198.440	3.748	7.950		182.9
8/30/95	6:10:04	207.544	3.542	7.986		182.9
8/30/95	3:40:00	206.795	3.806	7.891		182.9
8/30/95	4:55:01	195.026	3.708	8.024		182.9
8/30/95	18:04:52	265.807	2.741	0.000		183.1
8/30/95	21:24:53	190.142	2.581	6.841		183.1
8/30/95	8:15:05	207.850	3.249	8.102		183.1
8/30/95	8:10:05	196.867	3.215	7.413		183.1
8/30/95	3:25:00	205.253	3.531	7.600		183.1
8/30/95	1:55:00	209.799	3.971	7.920		183.1
9/1/95	1:49:58	219.468	2.737	7.980		184
9/1/95	1:59:59	208.319	2.591	7.769		184
9/1/95	1:19:58	217.574	3.180	8.059		184
8/30/95	8:20:04	199.643	3.140	7.335		184

Site: Beef processing plant in Midwest U.S.						
				HCC		
		CH4	NH3	(TNMHC)		
		Emission	Emission	Emission		WD
		Rate	Rate	Rate		Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)		(Deg)
8/30/95	2:50:00	197.198	3.216	6.998		184
8/30/95	19:54:52	214.818	4.615	7.756		184
8/30/95	6:00:04	190.159	3.397	7.289		184
8/30/95	5:55:04	191.423	3.631	7.488		184
8/30/95	5:15:01	204.301	3.756	8.162		184
9/1/95	1:34:58	226.412	2.800	8.272		184.1
8/30/95	3:20:00	194.963	3.353	7.229		184.1
8/30/95	6:05:03	190.752	3.435	7.563		184.1
8/30/95	5:10:01	188.320	3.586	7.562		184.1
8/30/95	12:55:37	254.608	3.583	9.076		184.9
8/30/95	2:25:01	193.036	3.469	7.089		184.9
8/30/95	3:15:01	197.939	3.356	7.308		184.9
8/30/95	5:20:01	200.391	3.821	7.613		184.9
8/30/95	5:00:00	200.006	3.668	8.036		184.9
8/30/95	17:54:51	208.226	2.454	6.440		185.2
9/1/95	1:44:59	220.034	2.642	8.048		185.2
9/1/95	1:54:58	228.745	2.701	8.384		185.2
9/1/95	1:24:58	206.510	2.959	7.534		185.2
8/30/95	8:40:05	197.550	3.056	7.283		185.2
8/30/95	2:15:00	200.653	3.590	7.328		185.2
8/30/95	5:50:03	194.375	3.674	7.304		185.2
8/30/95	5:45:03	187.114	3.554	7.113		185.2
8/30/95	8:25:04	211.930	3.135	7.551		185.9
8/30/95	8:35:05	208.087	3.089	7.371		185.9
8/30/95	2:55:01	215.347	3.260	7.628		185.9
8/30/95	2:20:01	199.572	3.539	7.327		185.9
8/30/95	3:05:00	200.940	3.465	7.423		185.9
8/30/95	3:10:00	200.488	3.390	7.248		185.9
8/30/95	8:45:04	200.156	3.124	7.435		186.1
9/1/95	2:24:59	214.555	2.456	7.765		186.8
8/30/95	5:30:02	194.416	3.653	7.344		186.8
8/30/95	17:59:51	236.549	2.334	7.307		187.2
9/1/95	1:29:58	212.103	2.873	7.596		187.2
8/30/95	2:45:00	198.979	3.144	6.926		187.2
8/30/95	2:40:01	208.147	3.361	7.378		187.2
8/30/95	2:30:00	197.584	3.561	7.273		187.2
8/30/95	2:35:01	202.260	3.430	7.294		187.2
8/30/95	3:00:01	207.771	3.185	7.345		187.2
8/30/95	5:40:03	209.373	3.715	7.933		187.2
8/30/95	5:25:02	196.858	3.651	7.387		187.2
8/30/95	8:50:04	197.399	3.191	7.184		187.9
8/30/95	5:35:02	195.080	3.525	7.247		188.1
8/30/95	12:20:35	256.064	4.263	9.120		188.8
8/30/95	19:59:51	200.089	3.944	7.279		188.8
8/30/95	8:30:05	213.588	3.069	7.623		188.8
8/29/95	22:14:58	200.948	3.541	7.520		188.8
8/30/95	9:00:05	198.971	3.209	7.190		189.2
8/30/95	17:44:52	285.169	2.307	8.764		190.1
8/30/95	13:50:37	254.531	4.393	9.195		190.1
8/30/95	12:25:35	256.801	3.787	9.220		190.1
8/30/95	8:55:05	188.103	3.105	6.819		190.1
8/30/95	9:05:05	191.263	3.084	6.968		190.1
8/30/95	12:15:34	195.377	3.274	7.838		190.8
8/30/95	20:44:52	224.073	3.144	7.947		191.2
8/30/95	20:39:53	216.559	3.619	6.918		191.2
8/30/95	9:20:06	208.369	3.479	7.794		191.2
8/30/95	9:10:05	215.747	3.409	7.777		191.2
9/1/95	3:34:59	7593.589	92.585	268.064		191.9
8/30/95	9:25:05	218.613	3.336	7.992		191.9
8/30/95	13:00:37	279.260	4.209	9.898		193
8/30/95	9:50:05	215.863	3.451	7.849		193
8/30/95	9:15:06	209.531	3.350	7.743		193
8/30/95	12:30:35	283.410	3.651	10.005		193.1
8/30/95	11:45:34	224.369	3.674	8.150		193.9
9/1/95	2:29:59	240.078	2.832	8.589		194.2
8/30/95	12:00:33	220.355	3.565	7.944		194.2
8/30/95	9:45:05	204.678	3.203	7.581		194.9

Site: Chicken processing plant in SE U.S.

Date	Time	CO2 emission rate (g/sec)	CH4 emission rate (g/sec)	N2O emission rate (g/sec)	CO emission rate (g/sec)	H2S emission rate (g/sec)	DICLM (Methylene Chloride) emission rate (g/sec)	CL3F (Chloroform) emission rate (g/sec)		WD Scalar (deg)
09/06/95	16:59:35	-23.066	13.514	0.033	0.127	9.292	0.000	-0.002		61.9
09/06/95	18:39:36	-47.662	11.565	0.060	0.176	16.145	0.000	-0.003		61.9
09/06/95	17:39:36	17.513	10.761	0.034	0.147	13.246	0.000	-0.002		63
09/06/95	18:34:35	-41.864	16.358	0.057	0.174	14.620	0.000	-0.003		63
09/06/95	10:10:01	19126.935	439.489	5.691	5.610	1474.937	21.169	11.319		65
09/06/95	13:05:03	38523.929	440.977	5.227	15.140	2595.051	17.680	10.798		65
09/06/95	13:45:04	3034.681	52.358	0.589	1.087	285.510	0.000	-0.042		67.9
09/06/95	14:05:03	5306.546	54.378	1.292	2.601	706.794	0.000	-0.093		67.9
09/06/95	11:25:00	23310.542	200.137	3.888	7.198	1556.634	26.340	11.506		68.1
09/06/95	09:25:00	26341.930	227.559	6.619	28.371	1209.753	24.788	14.050		69
09/06/95	11:10:00	23092.912	384.216	5.029	6.495	1707.631	24.517	11.703		69
09/06/95	17:54:36	26.310	14.871	0.042	0.151	12.630	0.000	-0.002		69
09/06/95	08:10:00	25734.952	898.366	9.485	26.732	0.000	23.978	15.558		70
09/06/95	10:05:01	20510.123	262.933	5.903	10.771	1511.057	22.029	11.574		70.9
09/06/95	10:45:01	20362.887	293.408	4.633	5.983	1453.229	24.508	11.390		70.9
09/06/95	14:45:02	8633.525	177.972	2.425	9.156	1326.259	0.000	-0.175		70.9
09/06/95	18:24:36	-35.307	17.756	0.052	0.166	13.742	0.000	-0.003		70.9
09/06/95	09:55:02	21529.301	550.451	5.976	13.972	1409.231	21.712	11.827		71.8
09/06/95	11:50:00	25402.278	283.961	4.083	7.375	1794.392	25.060	11.386		72
09/06/95	16:54:36	-31.243	13.676	0.024	0.133	10.540	0.000	-0.002		74.9
09/06/95	18:04:35	-25.861	14.219	0.044	0.159	13.272	0.000	-0.003		74.9
09/06/95	18:19:35	-33.035	18.182	0.051	0.162	13.340	0.000	-0.003		74.9
09/06/95	15:45:03	1311.650	73.577	0.756	2.579	444.566	0.000	-0.050		75.1
09/06/95	10:35:02	19852.704	172.839	4.781	7.225	1400.138	24.141	11.504		76
09/06/95	15:05:02	2636.488	31.438	0.517	2.178	158.434	0.000	-0.039		76
09/06/95	15:40:02	1639.289	60.114	0.584	2.147	332.697	0.000	-0.039		76
09/06/95	15:50:03	2671.425	50.167	0.702	3.135	400.369	0.000	-0.049		76
09/06/95	11:30:00	23162.887	325.885	4.057	6.339	1558.758	24.874	11.162		77.1
09/06/95	14:10:02	3486.701	47.128	0.642	1.306	333.307	0.000	-0.049		77.1
09/06/95	14:30:02	2216.106	35.469	0.412	1.370	198.999	0.000	-0.032		77.1
09/06/95	14:40:03	1165.901	45.447	0.327	1.057	174.202	0.000	-0.024		77.1
09/06/95	13:15:02	39508.481	824.910	5.947	11.230	2268.492	0.000	8.783		78
09/06/95	14:25:04	1680.089	22.620	0.305	0.824	97.448	0.000	-0.023		78.9
09/06/95	16:15:02	1783.528	49.041	0.477	2.223	260.177	0.000	-0.034		78.9
09/06/95	17:04:36	-12.532	14.397	0.027	0.134	10.664	0.000	-0.002		78.9
09/06/95	13:20:02	40642.284	312.142	5.026	11.453	2798.859	0.000	8.498		79
09/06/95	16:05:02	1021.022	25.467	0.248	1.190	122.309	0.000	-0.018		80.1
09/06/95	18:14:36	-36.107	14.894	0.046	0.162	13.773	0.000	-0.003		80.1

SE Chicken

Site: Chicken processing plant in SE U.S.										
							DICLM (Methylene Chloride)	CL3F (Chloroform)		
		CO2 emission rate	CH4 emission rate	N2O emission rate	CO emission rate	H2S emission rate	emission rate	emission rate		WD Scalar
Date	Time	(g/sec)	(g/sec)	(g/sec)	(g/sec)	(g/sec)	(g/sec)	(g/sec)		(deg)
09/06/95	18:29:36	-22.595	17.148	0.054	0.171	14.012	0.000	-0.003		80.8
09/06/95	08:30:01	25745.223	393.033	9.209	31.094	0.000	22.119	15.253		82.1
09/06/95	11:35:02	24241.464	339.228	4.695	6.426	1784.046	24.245	11.195		83
09/06/95	17:59:36	4.203	13.188	0.043	0.153	12.623	0.000	-0.002		84.1
09/06/95	12:40:02	30074.817	473.678	4.949	9.524	2176.739	23.663	10.878		85
09/06/95	15:00:03	2960.346	68.343	0.650	2.183	184.835	0.000	-0.046		85
09/06/95	12:05:02	26134.624	349.785	4.360	7.182	1907.653	21.622	10.496		85.9
09/06/95	14:35:04	2858.855	79.573	0.717	2.047	333.475	0.000	-0.048		85.9
09/07/95	12:22:11	2922.580	33.211	0.327	0.252	95.914	3.424	1.478		85.9
09/06/95	12:35:04	29023.149	336.859	4.256	9.454	1929.434	24.833	10.878		87
09/06/95	10:00:02	20610.695	324.135	5.695	11.172	1458.783	22.753	12.082		87.9
09/06/95	10:15:02	18391.183	365.082	5.668	4.816	1531.205	20.174	10.938		87.9
09/06/95	17:19:36	151.805	12.994	0.031	0.137	10.630	0.000	-0.002		87.9
09/06/95	16:20:03	1538.713	35.660	0.432	2.032	210.713	0.000	-0.031		88
09/06/95	11:40:00	24115.517	304.514	4.860	6.961	1794.573	22.979	10.940		94
09/06/95	15:30:03	3100.799	62.202	0.920	3.649	460.820	0.000	-0.065		94
09/07/95	12:42:11	4384.501	53.378	0.480	-0.231	152.989	4.670	2.043		94
09/06/95	10:50:01	20248.804	210.106	4.633	6.437	1462.867	23.897	11.161		96.9
09/06/95	15:55:02	4526.414	99.889	1.352	6.383	692.952	0.000	-0.090		97.9
09/06/95	10:40:02	22334.611	302.219	5.452	7.585	1576.219	25.602	12.274		101
09/06/95	15:35:03	1108.560	35.722	0.382	1.723	216.792	0.000	-0.026		103
09/06/95	09:00:00	28122.043	434.111	8.406	31.967	961.450	22.391	14.367		103.9
09/06/95	11:15:01	22352.603	256.176	5.170	6.484	1755.368	23.522	11.385		105.8
09/06/95	10:20:03	20313.037	267.370	5.434	4.398	1561.517	20.174	11.891		106
09/06/95	12:15:02	29748.200	243.962	4.143	8.091	1898.578	24.743	11.386		108
09/06/95	16:00:01	1341.475	24.296	0.342	1.729	165.220	0.000	-0.025		110
09/07/95	12:27:11	7813.968	54.431	0.810	-0.349	285.833	8.988	3.932		113
09/06/95	11:55:01	27668.236	198.424	4.565	7.035	2086.893	24.833	11.593		115
09/07/95	12:47:11	8627.407	73.535	1.145	-0.327	244.168	8.397	4.044		119
09/06/95	12:55:02	26427.185	194.291	4.345	8.351	1938.510	23.205	10.433		121.1

No detectable emissions were found at the
POTW for the Small Town in the Southwest U.S.

Site: POTW in very small town in SW U.S.				
		H2S		
		Emission		WD
		Rate		Scalar
Date	Time	(g/sec)		(Deg)
08/02/95	21:16:34	0.000		150.1
08/03/95	04:11:46	0.000		150.1
08/03/95	00:16:36	0.000		150.8
08/02/95	21:36:33	0.000		151
08/03/95	04:06:45	0.000		151
08/03/95	12:56:34	0.000		151
08/02/95	16:00:43	0.000		151.9
08/02/95	21:11:34	0.000		151.9
08/01/95	19:59:46	0.000		152.8
08/02/95	15:55:43	0.000		152.8
08/02/95	16:05:44	0.000		153.2
08/02/95	22:26:34	0.000		153.2
08/03/95	12:36:34	0.000		153.9
08/02/95	14:45:42	0.000		154.1
08/03/95	01:46:39	0.000		154.1
08/03/95	02:21:40	0.000		154.1
08/03/95	07:51:53	0.000		154.1
08/03/95	14:51:37	13.919		154.1
08/02/95	15:45:44	0.000		154.8
08/02/95	15:00:42	0.000		155.2
08/02/95	22:21:35	0.000		155.2
08/03/95	00:21:35	0.000		155.2
08/03/95	04:01:45	0.000		155.9
08/03/95	07:41:52	0.000		155.9
08/02/95	14:40:42	0.000		156.1
08/02/95	22:01:35	0.000		156.1
08/03/95	03:31:45	0.000		156.1
08/04/95	02:09:24	0.000		156.1
08/02/95	12:49:41	0.000		157
08/02/95	16:10:44	0.000		157.1
08/03/95	12:41:35	0.000		157.1
08/02/95	12:59:41	0.000		157.9
08/04/95	02:19:25	0.000		158
08/03/95	15:26:36	566.117		159.1
08/02/95	13:30:15	0.000		159.8
08/02/95	15:50:46	0.000		160.2
08/02/95	12:54:41	0.000		161.8
08/02/95	14:50:44	0.000		162.2
08/04/95	02:14:24	0.000		162.2
08/02/95	15:25:43	0.000		163.1
08/02/95	22:16:35	0.000		163.1
08/03/95	00:41:36	0.000		163.1
08/02/95	11:39:39	0.000		163.8
08/02/95	14:35:41	0.000		164.2
08/03/95	07:56:53	0.000		164.2
08/04/95	02:24:24	0.000		164.2
08/03/95	02:26:40	0.000		165.1
08/03/95	02:31:41	0.000		165.1
08/03/95	12:51:34	0.000		166
08/02/95	11:59:39	0.000		167
08/02/95	12:44:40	0.000		167
08/02/95	13:55:16	0.000		167
08/02/95	14:20:16	0.000		167

Site: POTW in very small town in SW U.S.				
		H2S		
		Emission		WD
		Rate		Scalar
Date	Time	(g/sec)		(Deg)
08/02/95	14:55:42	0.000		167
08/03/95	00:31:36	0.000		167
08/03/95	00:36:36	0.000		167
08/02/95	22:11:34	0.000		167.9
08/03/95	00:26:35	0.000		167.9
08/03/95	05:41:50	0.000		167.9
08/03/95	11:51:33	0.000		168.1
08/03/95	11:56:34	0.000		168.1
08/02/95	13:45:15	0.000		169.2
08/02/95	15:40:43	0.000		169.2
08/02/95	15:30:43	0.000		169.9
08/02/95	22:06:34	0.000		170.1
08/03/95	13:16:34	0.000		170.1
08/02/95	11:44:40	0.000		170.8
08/02/95	15:05:43	0.000		170.8
08/03/95	05:21:49	0.000		170.8
08/02/95	14:00:16	0.000		171.2
08/03/95	13:11:34	0.000		171.2
08/03/95	03:56:46	0.000		171.9
08/02/95	12:04:39	0.000		172.1
08/02/95	15:15:42	0.000		172.1
08/02/95	13:50:15	0.000		172.8
08/02/95	13:20:16	0.000		173.2
08/03/95	04:46:48	0.000		175.1
08/03/95	13:06:35	0.000		175.1
08/03/95	13:36:35	0.000		175.1
08/03/95	13:46:35	0.000		175.1
08/02/95	13:40:16	0.000		176
08/02/95	15:10:43	0.000		176
08/02/95	10:54:38	0.000		176.2
08/02/95	13:25:16	0.000		176.2
08/02/95	15:20:42	0.000		176.2
08/02/95	12:29:39	0.000		176.9
08/04/95	02:29:24	0.000		176.9
08/02/95	15:35:43	0.000		177.1
08/02/95	10:59:39	0.000		178.9
08/02/95	11:29:38	0.000		178.9
08/02/95	12:14:40	0.000		178.9
08/02/95	11:14:38	0.000		179.1
08/02/95	12:09:39	0.000		179.1
08/03/95	03:41:45	0.000		179.1
08/03/95	03:51:46	0.000		179.1
08/03/95	12:46:35	0.000		179.1
08/02/95	13:35:15	0.000		179.8
08/03/95	14:16:37	90.265		179.8
08/02/95	11:24:39	0.000		180.2
08/03/95	05:01:49	0.000		180.9
08/03/95	09:36:52	0.000		180.9
08/03/95	09:41:52	0.000		180.9
08/02/95	11:34:38	0.000		182.9
08/02/95	14:05:18	0.000		184
08/02/95	14:15:15	0.000		184
08/02/95	12:39:40	0.000		185.2

Site: POTW in very small town in SW U.S.				
		H2S		
		Emission		WD
		Rate		Scalar
Date	Time	(g/sec)		(Deg)
08/02/95	12:24:39	0.000		186.1
08/02/95	11:19:39	0.000		186.8
08/02/95	12:34:40	0.000		186.8
08/02/95	14:10:19	0.000		186.8
08/02/95	13:04:42	0.000		187.2
08/02/95	11:04:39	0.000		187.9
08/02/95	12:19:40	0.000		188.1
08/03/95	03:36:45	0.000		188.1
08/04/95	02:34:25	0.000		188.1
08/03/95	11:41:33	0.000		188.8
08/03/95	13:01:35	0.000		188.8
08/03/95	04:41:48	0.000		189.9
08/03/95	14:01:35	11.453		189.9
08/02/95	13:09:41	0.000		190.1
08/03/95	02:06:41	0.000		190.1
08/03/95	12:21:34	0.000		190.8
08/03/95	05:16:49	0.000		191.2
08/03/95	08:36:53	0.000		191.2
08/03/95	08:46:52	0.000		192.2
08/03/95	13:26:34	0.000		192.2
08/03/95	04:31:47	0.000		193.9
08/03/95	08:31:52	0.000		195.1
08/03/95	03:46:45	0.000		195.8
08/02/95	11:09:38	0.000		196.2
08/03/95	11:16:32	0.000		196.2
08/03/95	13:31:34	0.000		196.2
08/03/95	04:51:48	0.000		197.1
08/03/95	09:26:51	0.000		197.1
08/03/95	08:56:52	0.000		198.2
08/03/95	09:21:55	0.000		198.2
08/03/95	13:51:36	0.000		198.2
08/04/95	02:44:24	0.000		198.9
08/03/95	04:56:49	0.000		199.8
08/03/95	09:31:52	0.000		199.8
08/04/95	03:44:24	0.000		202
08/03/95	12:31:34	0.000		203.2
08/03/95	05:06:48	0.000		203.9
08/03/95	08:41:51	0.000		204.1
08/03/95	12:11:34	0.000		204.1
08/03/95	13:21:35	0.000		204.1
08/03/95	11:31:33	0.000		205.2
08/03/95	09:16:52	0.000		205.9
08/03/95	08:51:53	0.000		206.1
08/04/95	04:44:24	0.000		206.1
08/03/95	09:01:52	0.000		207.9
08/03/95	09:11:52	0.000		208.1
08/03/95	02:16:41	0.000		209.2
08/03/95	14:26:36	9.304		209.9

APPENDIX F

COMPLETE RESULTS OF WASTEWATER ANALYSES PERFORMED BY RADIAN

F1 - Beef Processing Plant in Southwest U.S.
F2 - Beef Processing Plant in Midwest U.S.
F3 - Chicken Processing Plant in Southeast U.S.
F4 - POTW for Small Town in Southwest U.S.
F5 - POTW for Very Small Town in Southwest U.S.

Note: Data are given by field site. Results are shown both by sample ID and sorted by sampling location.

Project: EPA Greenhouse Gas

Site: Beef Processing Plant in Southwestern U.S.

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 025 Tannery	8/21/95	12.3	0.0	29.2	1,395	11,880	28,810	3,985	950	960	< 30	12.56
A 026 Influent	8/21/95	8.6	0.0	33.6	17,140	4,470	4,570	355	170	53	0.093	7.44
A 027 Effluent	8/21/95	8.9	0.1	29.5	330	220	920	25	820	200	0.166	7.63
A 028 Tannery	8/22/95	12.3	0.0	30.7	2,350	4,575	5,810	580	670	405	5.43	12.50
A 029 Influent	8/22/95	8.9	0.0	31.7	1,280	4,260	4,665	300	155	27	0.035	7.09
A 030 Effluent	8/22/95	9.1	0.0	29.5	365	350	635	19	225	200	0.126	7.62
A 031 Tannery	8/22/95	12.2	0.0	30.2	2,100	4,545	5,715	710	640	400	5.77	12.56
A 032 Influent	8/22/95	8.3	0.0	37.1	1,800	2,820	4,190	365	180	41	0.094	7.21
A 033 Tannery	8/23/95	13.0	0.0	28.6	9,400	8,960	20,950	3,240	2,990	405	3.14	12.56
A 034 Influent	8/23/95	8.8	8	32.9	1,190	2,410	3,430	240	135	27	0.035	7.14
A 035 Effluent	8/23/95	9.2	0.7	29.2	390	315	570	22	240	200	0.051	7.99
A 039 Tannery	8/23/95	11.4	0.0	31.7	3,940	5,220	31,905	1,400	1,025	465	3.18	12.48
A 040 Influent	8/23/95	8.6	4.6	37.2	1,430	3,880	4,285	335	170	43	0.045	7.12
A 047 Effluent	8/24/95	7.6	0.0	30.3	430	370	605	22	235	185	0.044	7.51
A 048 Tannery	8/24/95	11.5	0.0	31.0	850	2,050	3,335	315	485	22	1.65	11.48
A 049 Influent	8/24/95	7.1	0.0	35.0	1,795	2,940	5,240	340	160	37	0.042	6.73
A 050 Tannery	8/24/95	9.1	0.0	26.3	1,300	1,820	2,240	415	240	300	2.03	8.86
A 051 Influent	8/24/95	6.7	0.5	31.3	1,233	3,180	4,145	310	145	49	0.044	6.65

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 026 Influent	8/21/95	8.6	0.0	33.6	17,140	4,470	4,570	355	170	53	0.093	7.44
A 029 Influent	8/22/95	8.9	0.0	31.7	1,280	4,260	4,665	300	155	27	0.035	7.09
A 032 Influent	8/22/95	8.3	0.0	37.1	1,800	2,820	4,190	365	180	41	0.094	7.21
A 034 Influent	8/23/95	8.8	8	32.9	1,190	2,410	3,430	240	135	27	0.035	7.14
A 040 Influent	8/23/95	8.6	4.6	37.2	1,430	3,880	4,285	335	170	43	0.045	7.12
A 049 Influent	8/24/95	7.1	0.0	35.0	1,795	2,940	5,240	340	160	37	0.042	6.73
A 051 Influent	8/24/95	6.7	0.5	31.3	1,233	3,180	4,145	310	145	49	0.044	6.65
n		7	7	7	7	7	7	7	7	7	7	7
Avg.		8.14	1.87	34.11	3,695	3,423	4,361	320.7	159.3	39.57	0.055	7.05
Std. Dev.		0.88	3.19	2.41	5,934	784	556	42.4	15.7	10.05	0.026	0.28
Min		6.7	0	31.3	1,190	2,410	3,430	240	135	27	0.035	6.65
Max		8.9	8	37.2	17,140	4,470	5,240	365	180	53	0.094	7.44
A 025 Tannery	8/21/95	12.3	0.0	29.2	1,395	11,880	28,810	3,985	950	960	<30	12.56
A 028 Tannery	8/22/95	12.3	0.0	30.7	2,350	4,575	5,810	580	670	405	5.43	12.50
A 031 Tannery	8/22/95	12.2	0.0	30.2	2,100	4,545	5,715	710	640	400	5.77	12.56
A 033 Tannery	8/23/95	13.0	0.0	28.6	9,400	8,960	20,950	3,240	2,990	405	3.14	12.56
A 039 Tannery	8/23/95	11.4	0.0	31.7	3,940	5,220	31,905	1,400	1,025	465	3.18	12.48
A 048 Tannery	8/24/95	11.5	0.0	31.0	850	2,050	3,335	315	485	22	1.65	11.48
A 050 Tannery	8/24/95	9.1	0.0	26.3	1,300	1,820	2,240	415	240	300	2.03	8.86
n		7	7	7	7	7	7	7	7	7	7	7
Avg.		11.69	0.00	29.67	3,048	5,579	14,109	1,521	1,000	422.4	3.03	11.86
Std. Dev.		1.26	0.00	1.82	2,976	3,650	12,753	1,487	917	279.1	2.06	1.38
Min		9.1	0	26.3	850	1,820	2,240	315	240	22	0	8.86
Max		13	0	31.7	9,400	11,880	31,905	3,985	2,990	960	5.77	12.56
A 027 Effluent	8/21/95	8.9	0.1	29.5	330	220	920	25	820	200	0.166	7.63
A 030 Effluent	8/22/95	9.1	0.0	29.5	365	350	635	19	225	200	0.126	7.62
A 035 Effluent	8/23/95	9.2	0.7	29.2	390	315	570	22	240	200	0.051	7.99
A 047 Effluent	8/24/95	7.6	0.0	30.3	430	370	605	22	235	185	0.044	7.51
n		4	4	4	4	4	4	4	4	4	4	4
Avg.		8.7	0.2	29.625	378.8	313.8	682.5	22.00	380	196.25	0.097	7.688
Std. Dev.		0.744	0.337	0.4717	42.1	66.5	160.5	2.45	293	7.50	0.059	0.209
Min		7.6	0	29.2	330	220	570	19	225	185	0.044	7.51
Max		9.2	0.7	30.3	430	370	920	25	820	200	0.166	7.99

Project: EPA Greenhouse Gas

Site: Beef Processing Plant in Midwestern U.S.

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 053 Influent	8/28/95	6.8	0.7	33.3	1,930	2,430	5,620	320	175	43	0.092	6.08
A 054 Effluent	8/28/95	7.2	0.1	29.1	625	280	990	46	250	220	0.043	7.23
A 055 Influent	8/28/95	6.9	0.6	33.4	1,590	2,600	5,720	310	180	43	0.090	6.32
A 056 Effluent	8/29/95	7.0	0.4	26.8	460	275	830	59	235	210	0.047	7.09
A 057 Influent	8/29/95	7.1	0.3	28.6	2,190	3,340	4,990	390	205	33	0.069	6.53
A 058 Influent	8/29/95	6.9	0	33.1	950	1,820	3,120	195	115	24	0.051	6.35
A 061 Influent	8/30/95	6.7	0.6	28.6	1,475	3,020	4,470	400	200	75	0.093	7.03
A 062 Influent	8/30/95	6.8	0.5	28.4	1,470	2,920	4,580	425	195	75	0.092	6.43
A 063 Effluent	8/30/95	7.1	0.4	26.0	405	305	830	57	250	205	0.050	7.15
A 069 Influent	8/31/95	6.7	0.1	29.6	910	1,530	3,020	230	125	41	0.054	6.27
A 070 Influent	8/31/95	6.7	0.2	29.5	890	1,610	2,910	225	120	43	0.072	6.42
A 071 Effluent	8/31/95	7.0	0.4	26.8	840	310	1,040	75	245	220	0.041	7.25

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 053 Influent	8/28/95	6.8	0.7	33.3	1,930	2,430	5,620	320	175	43	0.092	6.08
A 055 Influent	8/28/95	6.9	0.6	33.4	1,590	2,600	5,720	310	180	43	0.090	6.32
A 057 Influent	8/29/95	7.1	0.3	28.6	2,190	3,340	4,990	390	205	33	0.069	6.53
A 058 Influent	8/29/95	6.9	0	33.1	950	1,820	3,120	195	115	24	0.051	6.35
A 061 Influent	8/30/95	6.7	0.6	28.6	1,475	3,020	4,470	400	200	75	0.093	7.03
A 062 Influent	8/30/95	6.8	0.5	28.4	1,470	2,920	4,580	425	195	75	0.092	6.43
A 069 Influent	8/31/95	6.7	0.1	29.6	910	1,530	3,020	230	125	41	0.054	6.27
A 070 Influent	8/31/95	6.7	0.2	29.5	890	1,610	2,910	225	120	43	0.072	6.42
n		8	8	8	8	8	8	8	8	8	8	8
Avg.		6.825	0.375	30.56	1,426	2,409	4,304	311.88	164.38	47.13	0.0766	6.43
Std. Dev.		0.139	0.260	2.28	485	686	1,153	88.36	38.12	18.43	0.0176	0.277
Min.		6.7	0	28.4	890	1,530	2,910	195	115	24	0.051	6.08
Max		7.1	0.7	33.4	2,190	3,340	5,720	425	205	75	0.093	7.03
A 054 Effluent	8/28/95	7.2	0.1	29.1	625	280	990	46	250	220	0.043	7.23
A 056 Effluent	8/29/95	7.0	0.4	26.8	460	275	830	59	235	210	0.047	7.09
A 063 Effluent	8/30/95	7.1	0.4	26.0	405	305	830	57	250	205	0.050	7.05
A 071 Effluent	8/31/95	7.0	0.4	26.8	840	310	1040	75	245	220	0.041	7.25
n		4	4	4	4	4	4	4	4	4	4	4
Avg.		7.08	0.33	27.18	582.5	292.5	922.5	59.25	245	213.8	0.0453	7.16
Std. Dev.		0.096	0.15	1.34	195.5	17.6	108.7	11.95	7.07	7.5	0.0040	0.100
Min.		7.0	0.1	26.0	405	275	830	46	235	205	0.041	7.05
Max		7.2	0.4	29.1	840	310	1040	75	250	220	0.05	7.25

Project: EPA Greenhouse Gas

Site: Chicken Processing Plant in Southeastern U.S.

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 077 Effluent	9/5/95	6.1	1.5	23.8	60	60	160	16	85	82	0.028	6.33
A 078 Influent	9/5/95	6.8	4.9	23.5	660	1,340	1,890	160	140	5	1.40	6.32
A 079 Influent	9/5/96	6.8	5.6	25.0	905	1,420	3,970	180	105	6	1.37	6.14
A 080 Influent	9/6/95	--	4.3	25.2	750	1,240	2,270	175	95	7	1.29	6.44
A 081 Effluent	9/6/95	--	0.9	25.2	75	75	190	29	65	75	0.038	6.32
A 084 Influent	9/6/95	--	4	24.7	830	1,410	2,460	210	135	8	1.12	6.11
A 085 Effluent	9/7/95	--	0.2	24.6	165	85	250	34	80	88	0.024	6.32
A 086 Sludge	9/7/95	--	0	23.8	43,500	4,350	8,505	120	565	88	0.478	7.14
A 089 Influent	9/7/95	--	5.7	24.1	1,030	1,600	2,175	220	115	11	3.80	6.51
A 090 Influent	9/7/95	--	5.2	26.2	1,100	1,410	1,795	395	110	7	1.59	6.67

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 078 Influent	9/5/95	6.8	4.9	23.5	660	1,340	1,890	160	140	5	1.40	6.32
A 079 Influent	9/5/96	6.8	5.6	25.0	905	1,420	3,970	180	105	6	1.37	6.14
A 080 Influent	9/6/95	--	4.3	25.2	750	1,240	2,270	175	95	7	1.29	6.44
A 084 Influent	9/6/95	--	4	24.7	830	1,410	2,460	210	135	8	1.12	6.11
A 089 Influent	9/7/95	--	5.7	24.1	1,030	1,600	2,175	220	115	11	3.80	6.51
A 090 Influent	9/7/95	--	5.2	26.2	1,100	1,410	1,795	395	110	7	1.59	6.67
n		2	6	6	6	6	6	6	6	6	6	6
Avg.		6.80	4.95	24.78	879.17	1403.33	2426.67	223.33	116.67	7.33	1.76	6.37
Std. Dev.		0.00	0.69	0.93	166.93	118.10	794.72	87.04	17.51	2.07	1.01	0.22
Min.		6.8	4	23.5	660	1,240	1,795	160	95	5	1.12	6.11
Max.		6.8	5.7	26.2	1,100	1,600	3,970	395	140	11	3.8	6.67
A 077 Effluent	9/5/95	6.1	1.5	23.8	60	60	160	16	85	82	0.028	6.33
A 081 Effluent	9/6/95	--	0.9	25.2	75	75	190	29	65	75	0.038	6.32
A 085 Effluent	9/7/95	--	0.2	24.6	165	85	250	34	80	88	0.024	6.32
n		1	3	3	3	3	3	3	3	3	3	3
Avg.		6.10	0.87	24.53	100.00	73.33	200.00	26.33	76.67	81.67	0.03	6.32
Std. Dev.		n/a	0.65	0.70	56.79	12.58	45.83	9.29	10.41	6.51	0.01	0.01
Min.		n/a	0.2	23.8	60	60	160	16	65	75	0.024	6.32
Max.		n/a	1.5	25.2	165	85	250	34	85	88	0.038	6.33
A 086 Sludge	9/7/95	--	0	23.8	43,500	4,350	8,505	120	565	88	0.478	7.14

Project: EPA Greenhouse Gas

Site: POTW for Small Town in Southwestern U.S.

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 091 Influent	10/04/95	7.1	1.1	23.5	325	235	170	42	39.4	25.7	<0.015	6.97
A 092 Effluent	10/04/95	7.6	4.8	20.8	75	83	95	27	17.1	2.6	0.069	7.99
A 093 Influent	10/04/95	7.0	0.3	25.5	250	190	245	44	33.0	21.0	0.028	6.98
A 094 Effluent	10/04/95	8.0	4.0	22.5	65	65	75	26	19.0	0.90	0.078	8.05
A 097 Influent	10/04/95	6.9	0.9	26.9	155	205	205	58	36.4	18.9	0.072	6.98
A 098 Effluent	10/04/95	8.3	11.5	26.2	95	79	130	25	18.8	0.50	0.069	8.52
A 101 Influent	10/05/95	7.2	0.6	23.8	120	90	130	37	30.2	18.4	<0.015	6.99
A 102 Effluent	10/05/95	8.2	3.4	20.3	70	125	130	18	18.4	2.3	0.082	7.85
A 103 Influent	10/05/95	7.5	0.4	25.0	195	135	140	57	27.2	18.7	0.031	7.01
A 107 Influent	10/06/95	6.9	0.2	22.3	60	68	32	64	23.8	13.8	0.025	7.09
A 108 Effluent	10/06/95	8.4	5.2	18.4	95	135	140	33	16.8	0.90	0.587	8.29
A 109 Final Effluent	10/06/95	8.4	4.9	17.7	60	36	85	19	12.0	0.20	0.022	8.67
A 110 Influent	10/06/95	7.5	0.6	24.8	175	220	120	69	31.6	21.0	0.029	7.12

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 091 Influent	10/04/95	7.1	1.1	23.5	325	235	170	42	39.4	25.7	0.015	6.97
A 093 Influent	10/04/95	7.0	0.3	25.5	250	190	245	44	33.0	21.0	0.028	6.98
A 097 Influent	10/04/95	6.9	0.9	26.9	155	205	205	58	36.4	18.9	0.072	6.98
A 101 Influent	10/05/95	7.2	0.6	23.8	120	90	130	37	30.2	18.4	0.015	6.99
A 103 Influent	10/05/95	7.5	0.4	25.0	195	135	140	57	27.2	18.7	0.031	7.01
A 107 Influent	10/06/95	6.9	0.2	22.3	60	68	32	64	23.8	13.8	0.025	7.09
A 110 Influent	10/06/95	7.5	0.6	24.8	175	220	120	69	31.6	21.0	0.029	7.12
n		7	7	7	7	7	7	7	7	7	7	7
Avg.		7.16	0.59	24.54	183	163	149	53	31.66	19.64	0.0307	7.02
Std. Dev.		0.26	0.32	1.50	86.4	65.9	68.0	12.1	5.29	3.59	0.0193	0.06
Min.		6.9	0.2	22.3	60	68	32	37	23.8	13.8	0.015	6.97
Max.		7.5	1.1	26.9	325	235	245	69	39.4	25.7	0.072	7.12
A 092 Effluent	10/04/95	7.6	4.8	20.8	75	83	95	27	17.1	2.6	0.069	7.99
A 094 Effluent	10/04/95	8.0	4.0	22.5	65	65	75	26	19.0	0.90	0.078	8.05
A 098 Effluent	10/04/95	8.3	11.5	26.2	95	79	130	25	18.8	0.50	0.069	8.52
A 102 Effluent	10/05/95	8.2	3.4	20.3	70	125	130	18	18.4	2.3	0.082	7.85
A 108 Effluent	10/06/95	8.4	5.2	18.4	95	135	140	33	16.8	0.90	0.587	8.29
n		5	5	5	5	5	5	5	5	5	5	5
Avg.		8.10	5.78	21.64	80.0	97.4	114.0	25.8	18.02	1.44	0.177	8.14
Std. Dev.		0.32	3.27	2.94	14.1	30.7	27.7	5.36	1.01	0.94	0.229	0.27
Min.		7.6	3.4	18.4	65	65	75	18	16.8	0.5	0.069	7.85
Max.		8.4	11.5	26.2	95	135	140	33	19	2.6	0.587	8.52
A 109 Final Effluent	10/06/95	8.4	4.9	17.7	60	36	85	19	12.0	0.20	0.022	8.67

Project: EPA Greenhouse Gas

Site: POTW for Very Small Town in Southwestern U.S.

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 001 Effluent	7/31/95	9.7	14.0	26.5	50	19	105	21	4.90	0.56	0.035	8.39
A 002 Effluent - Pond2	7/31/95	8.9	9.5	25.5	60	51	170	17	8.40	1.40	0.197	7.91
A 003 Effluent - Pond 1	7/31/95	8.3	3.5	26.6	45	74	155	26	24.50	14.0	0.045	7.47
A 004 Effluent	8/01/95	9.8	9.5	29.0	40	17	155	20	2.80	0.47	0.022	8.19
A 005 Effluent - Pond 2	8/01/95	9.7	2.7	27.5	50	26	120	17	10.85	2.57	0.123	7.60
A 006 Influent	8/01/95	7.5	0.2	26.4	160	195	200	21	25.55	22.4	0.038	7.07
A 009 Effluent	8/02/95	9.4	5.3	28.4	40	17	95	17	5.95	0.23	0.026	8.34
A 010 Effluent - Pond 2	8/02/95	9.1	5.5	28.4	65	50	140	19	7.00	2.80	0.121	7.37
A 011 Influent	8/02/95	8.6	0.3	32.8	90	74	140	22	25.90	19.1	0.027	7.06
A 015 Effluent - Pond 2	8/02/95	9.2	3.0	28.6	55	41	120	18	4.55	2.10	0.163	7.50
A 016 Influent	8/02/95	8.5	0.0	28.2	80	105	200	30	28.0	21.0	0.023	7.05
A 019 Effluent - Pond 2	8/03/95	9.2	1.9	30.4	40	47	120	18	3.85	1.63	0.162	7.78
A 020 Influent	8/03/95	8.6	0.0	36.6	75	160	290	51	31.85	26.6	0.047	6.75
A 023 Effluent - Pond 2	8/03/95	9.4	4.4	38.2	40	39	140	18	4.20	2.10	0.095	7.49
A 024 Influent	8/03/95	8.8	0.2	29.5	270	200	225	29	28.35	24.4	0.043	6.73

Sample Identification	Date Sampled	Field pH	DO mg O2/L	Temp deg C	TSS mg/L	BOD mg O2/L	COD mg/L	TOC mg/L	TKN mg/L	NH3-N mg/L	NO3-N mg/L	Lab pH
A 006 Influent	8/01/95	7.5	0.2	26.4	160	195	200	21	25.55	22.4	0.038	7.07
A 011 Influent	8/02/95	8.6	0.3	32.8	90	74	140	22	25.90	19.1	0.027	7.06
A 016 Influent	8/02/95	8.5	0.0	28.2	80	105	200	30	28.0	21.0	0.023	7.05
A 020 Influent	8/03/95	8.6	0.0	36.6	75	160	290	51	31.85	26.6	0.047	6.75
A 024 Influent	8/03/95	8.8	0.2	29.5	270	200	225	29	28.35	24.4	0.043	6.73
n		5	5	5	5	5	5	5	5	5	5	5
Avg.		8.4	0.14	30.7	135	146.8	211	30.6	27.93	22.7	0.0356	6.93
Sted. Dev.		0.51	0.13	4.04	82.92	55.62	54.13	12.10	2.52	2.92	0.01	0.18
Min.		7.5	0	26.4	75	74	140	21	25.55	19.1	0.023	6.73
Max.		8.8	0.3	36.6	270	200	290	51	31.85	26.6	0.047	7.07
A 003 Effluent - Pond 1	7/31/95	8.3	3.5	26.6	45	74	155	26	24.50	14.0	0.045	7.47
A 002 Effluent - Pond2	7/31/95	8.9	9.5	25.5	60	51	170	17	8.40	1.40	0.197	7.91
A 005 Effluent - Pond 2	8/01/95	9.7	2.7	27.5	50	26	120	17	10.85	2.57	0.123	7.60
A 010 Effluent - Pond 2	8/02/95	9.1	5.5	28.4	65	50	140	19	7.00	2.80	0.121	7.37
A 015 Effluent - Pond 2	8/02/95	9.2	3.0	28.6	55	41	120	18	4.55	2.10	0.163	7.50
A 019 Effluent - Pond 2	8/03/95	9.2	1.9	30.4	40	47	120	18	3.85	1.63	0.162	7.78
A 023 Effluent - Pond 2	8/03/95	9.4	4.4	38.2	40	39	140	18	4.20	2.10	0.095	7.49
n		6	6	6	6	6	6	6	6	6	6	6
Avg.		9.25	4.5	29.77	51.7	42.3	135	17.8	6.475	2.1	0.1435	7.61
Sted. Dev.		0.27	2.77	4.43	10.33	9.33	19.75	0.75	2.79	0.53	0.04	0.20
Min.		8.9	1.9	25.5	40	26	120	17	3.85	1.4	0.095	7.37
Max.		9.7	9.5	38.2	65	51	170	19	10.85	2.8	0.197	7.91
A 001 Effluent - Pond 3	7/31/95	9.7	14.0	26.5	50	19	105	21	4.90	0.56	0.035	8.39
A 004 Effluent - Pond 3	8/01/95	9.8	9.5	29.0	40	17	155	20	2.80	0.47	0.022	8.19
A 009 Effluent - Pond 3	8/02/95	9.4	5.3	28.4	40	17	95	17	5.95	0.23	0.026	8.34
n		3	3	3	3	3	3	3	3	3	3	3
Avg.		9.63	9.60	27.97	43.33	17.67	118.33	19.33	4.55	0.42	0.0277	8.31
Sted. Dev.		0.21	4.35	1.31	5.77	1.15	32.15	2.08	1.60	0.17	0.0067	0.10
Min.		9.4	5.3	26.5	40	17	95	17	2.8	0.23	0.022	8.19
Max.		9.8	14	29	50	19	155	21	5.95	0.56	0.035	8.39

APPENDIX G

WASTEWATER TREATMENT DATA PROVIDED BY SYSTEM OPERATORS

G1 - Beef Processing Plant in Southwest U.S.
G2 - Beef Processing Plant in Midwest U.S.
G3 - Chicken Processing Plant in Southeast U.S.
G4 - POTW for Small Town in Southwest U.S.
G5 - POTW for Very Small Town in Southwest U.S.

Site: Beef Processing Plant in Southwestern U.S.

Weekly Data Provided by Plant Operator

Date	Sample Location	BOD (mg/L)	TSS (mg/L)	pH (SU)	TKN (mg/L)	Ammonia (as N mg/L)	Comments
1/4/95	Influent	1470	1135	6.78	86	26	
1/11/95	Influent	1550	1070	7.56	153	34	
1/18/95	Influent	1550	2210	7.21			
1/26/95	Influent	1220	780	7.05	87	19	
2/3/95	Influent	970	450	7.13	81	22	
2/7/95	Influent	2550	1740	6.97	120	28	
2/15/95	Influent	1540	960	6.89	60	17	
2/22/95	Influent	3390	2190	6.72	145	35	
3/1/95	Influent	630	470	7.58	38	6	
3/8/95	Influent	1620	1080	7.37	53	22	
3/14/95	Influent	2490	1600	6.98	197	45	
3/22/95	Influent	1030	805	7.51	89	14	
3/29/95	Influent	950	690	7.58	80	15	
4/5/95	Influent	2780	2735	7.07	209	51	
4/12/95	Influent	3310	3700	6.72	324	50	
4/19/95	Influent	830	440	7.85	87	17	
4/26/95	Influent	4970	5175	6.23	402	61	
5/3/95	Influent	5170	4540	6.12	482	59	
5/10/95	Influent	2800	2340	6.6	217	30	
5/18/95	Influent	1160	1040	7.57	67	13	
5/25/95	Influent	1190	590	7.35	87	17	
6/7/95	Influent	1570	1890	7.05	101	20	
6/14/95	Influent	1260	1815	7.42	113	38	
6/21/95	Influent	1220	1270	6.81	81	21	
6/28/95	Influent	2970	3080	6.2	227	51	
7/5/95	Influent	1300	600	7.44	101	17	
7/12/95	Influent	2159	1710	6.39	144	28	
7/19/95	Influent	1641	2530	6.99	158	63	
7/26/95	Influent	2590	1935	6.35	139	24	
8/2/95	Influent	2894	2070	6.76	153	39	
8/9/95	Influent	1920	1440	7.01	124	16	
8/16/95	Influent	3590	4116	6.54	313	80	
8/23/95	Influent		175	7.64	64	16	Week of EPA's Sampling
8/31/95	Influent	1367		7.43	157	38	
9/6/95	Influent	1858	1300	7.48	126	28	
	n	34	34	35	34	34	
	Avg.	2,044	1,755	7.039	149.0	31.2	
	Std. dev.	1,110	1,222	0.462	100.6	17.4	
	Min	630	175	6.12	38	6	
	Max	5,170	5,175	7.85	482	80	

Site: Beef Processing Plant in Southwestern U.S.

Weekly Data Provided by Plant Operator

Date	Sample Location	BOD (mg/L)	TSS (mg/L)	pH (SU)	TKN (mg/L)	Ammonia (as N mg/L)	Nitrate (as N mg/L)	Comments
1/4/95	Effluent	176	650	7.87	263	209		
1/11/95	Effluent	186	630	8	250	196		
1/18/95	Effluent	179	1030	8.27				
1/26/95	Effluent	185	750	7.7	245	185		
2/3/95	Effluent	303	810	7.95	254	185		
2/8/95	Effluent	208	680	8	246	192		
2/15/95	Effluent	218	670	7.74	247	190		
2/22/95	Effluent	271	1040	7.87	257	184		
3/1/95	Effluent	196	900	8.21	264	204		
3/8/95	Effluent	95	400	8.16	279	170		
3/15/95	Effluent	259	1070	7.84	279	193		
3/22/95	Effluent	142	420	8.32	220	177		
3/29/95	Effluent	127	590	8.18	236	194		
4/5/95	Effluent	124	470	7.6	233	190		
4/12/95	Effluent	152	690	7.8	243	188		
4/19/95	Effluent	135	630	7.83	236	185		
4/26/95	Effluent	144	680	7.95	231	185		
5/3/95	Effluent	185	440	7.85	249	192		
5/10/95	Effluent	279	1160	8.11	264	189		
5/18/95	Effluent	219	800	7.84	246	186		
5/25/95	Effluent	182	740	7.6	237	179		
6/7/95	Effluent	165	795	8.22	224	152		
6/14/95	Effluent	106	830	8.1	200	158		
6/21/95	Effluent	136	660	7.76	225	168		
6/28/95	Effluent	137	950	7.81	228	180		
7/5/95	Effluent	141	270	8	184	145		
7/12/95	Effluent	158	505	7.76	242	179		
7/19/95	Effluent	161	210	7.95	248	193		
7/26/95	Effluent	156	150	6.35	231	189		
8/2/95	Effluent	168	360	7.98	240	192		
8/9/95	Effluent	216	430	8.11	247	201		
8/16/95	Effluent	265	840	7.82	240	179		
8/23/95	Effluent	161	200	8.03	255	202		Week of EPA's Sampling
8/31/95	Effluent	174	218	8.17	224	190	<0.2	
9/6/95	Effluent	156	350	8.04	266	217		
	n	35	35	35	34	34	1	
	Avg.	179.0	629.1	7.908	242.1	185.8	<0.2	
	Std. dev.	49.8	268.3	0.328	19.6	14.8	0	
	Min	0	150	6.35	184	145	<0.2	
	Max	303	1160	8.32	279	217	<0.2	

Site: Beef Processing Plant in Midwestern U.S.

Weekly Data Provided by Plant Operator

Date	Sample Location	BOD (mg/L)	TSS (mg/L)	pH (SU)	TKN (mg/L)	Nitrate (as N mg/L)	Comments
1/4/95	Influent	934	700	8.01	51		
1/10/95	Influent	2449	1528	7.53	137		
1/17/95	Influent	960	820	7.97	85		
1/24/95	Influent	1257	820	7.14	102	2.4	
1/31/95	Influent	1254	1133	8.15	92	<0.1	
2/7/95	Influent	2411	2380	8.41	246	0.17	
2/14/95	Influent	1683	2680	9.18	225	<0.1	
2/21/95	Influent	1902	1700	7.84	139	<0.1	
2/28/95	Influent	1427	1270	9.33	181	0.7	
3/7/95	Influent	2486	3580	12.68	430	<0.1	
3/14/95	Influent	1332	2780	9.32	214		
3/21/95	Influent	2061	2700	8.83	289	1	
3/28/95	Influent		2800	6.81	217	<0.1	
4/4/95	Influent	2697	2220	7.16	176	<0.1	
4/11/95	Influent	2051	2840	7.6	149		
4/18/95	Influent	3015	2520	8.03	376		
4/25/95	Influent	1833	1840	7.61	181		
5/2/95	Influent	1679	1570	7.41	184		
5/9/95	Influent	2724	1640	7.06	195		
5/16/95	Influent	2250	1520	6.96	194		
5/23/95	Influent	1155	2910	6.95	159	0.9	
6/1/95	Influent	1170	3560	7.45	270	0.2	
6/6/95	Influent	2550	4600	9.49	433	0.4	
6/13/95	Influent	1640	2710	8.24	137	0.2	
6/21/95	Influent	2470	660	6.59	266	0.3	
6/27/95	Influent	1210	6680	7.26	271	0.6	
7/6/95	Influent	2610	2720	6.65	163	0.3	
7/11/95	Influent	4090	7330	6.55	234	0.4	
7/19/95	Influent	1350	7800	9.88	305	0.3	
7/26/95	Influent	1170	1140	6.87	221	0.2	
8/1/95	Influent	1100	812	7.12	117	0.3	
8/16/95	Influent	2450	4820		334	0.3	
8/22/95	Influent	2860	2320	6.64	208	0.4	
8/29/95	Influent	2970	3260	6.55	198	0.4	Week of EPA's Sampling
9/6/95	Influent	5590	6500	9.36	353	0.5	
	n	34	35	34	35	25	
	Avg.	2,082	2,768	7.901	215.2	<0.4	
	Std. dev.	968	1,884	1.286	92.7	0.50	
	Min	934	660	6.55	51	<0.1	
	Max	5,590	7,800	12.68	433	2.4	

Site: Beef Processing Plant in Midwestern U.S.

Weekly Data Provided by Plant Operator

Date	Sample Location	BOD (mg/L)	TSS (mg/L)	pH (SU)	TKN (mg/L)	Ammonia (as N mg/L)	Nitrate (as N mg/L)	Comments
4/18/95	Effluent	86	162	8.04	239	231		
5/16/95	Effluent	74	84	7.98	226	212		
5/31/95	Effluent	78	124	8.03	231	222	0.2	
6/6/95	Effluent	84	100	7.98	238	221	0.3	
6/13/95	Effluent	58	100	8.1	228	221	0.3	
6/21/95	Effluent	36	100	7.98	232	222	0.2	
7/19/95	Effluent	53	124	7.86	208	201	0.3	
7/26/95	Effluent	16	92	7.96	210	200	0.3	
8/1/95	Effluent	40	104	8.02	215	193	0.3	
8/16/95	Effluent	61	76		220	207	0.3	
8/22/95	Effluent	60	68	8.02	215	201	0.4	
8/29/95	Effluent	44	94	8.01	209	195	0.4	Week of EPA's Sampling
9/6/95	Effluent	48	92	8.08	211	198	0.6	
	n	13	13	12	13	13	11	
	Avg.	56.8	101.5	8.005	221.7	209.5	0.33	
	Std. dev.	20.4	24.2	0.062	11.2	12.6	0.11	
	Min	16	68	7.86	208	193	0.2	
	Max	86	162	8.1	239	231	0.6	

Site: Chicken Processing Plant in Southeastern U.S.

Monthly Data Provided by Plant Operator

Date	Sample Location	BOD (lb/day)	TSS (lb/day)	pH (SU)	TKN (lb/day)	DO (mg/L)	Comments
1/95	Effluent	7.6	27.4	6.68	6	7.37	
2/95	Effluent	7.4	18.1	6.7	3.6	7.45	
3/95	Effluent	4.9	17.2	6.66	3	7.72	
4/95	Effluent	6.3	17	6.64	3.8	7.45	
5/95	Effluent	10	13.1	6.65	10.7	7.57	
6/95	Effluent	6.3	14.8	6.67	8.4	7.67	
7/95	Effluent	5.4	18.6	6.67	5.7	7.03	
8/95	Effluent	6.5	11.2	6.67	5.6	6.86	
9/95	Effluent	10.7	14.3	6.65	5	6.88	Week of EPA Sampling
10/95	Effluent	13.2	19.7	6.64	6.3	6.9	
11/95	Effluent	10.5	18.3	6.67	5.1	7.06	
	n	11	11	11	11	11	
	Avg.	8.07	17.25	6.664	5.75	7.269	
	Std. dev.	2.64	4.26	0.018	2.21	0.330	
	Min	4.9	11.2	6.64	3	6.86	
	Max	13.2	27.4	6.7	10.7	7.72	

No data for specific time periods were provided by the operator of the POTW for the Small Town in the Southwest U.S.

Site: POTW for Very Small Town in SW U.S.

Weekly Data Provided by Plant Operator

Date	Sample Location	5-day BOD (mg/L)	TSS (mg/L)	pH	DO (mg/L)	Ammonia (as N mg/L)	Temp. (degree F)	Comments
11/02/94	Effluent	27	88	8.79	6	0.18	64	
11/09/94	Effluent	19	104	8.72	4.2		71	
11/16/94	Effluent	43	138	8.39	5.4		60	
11/23/94	Effluent	42	70	8.15	7.3		59	
11/30/94	Effluent	25	66	8.24	7.8		55	
12/07/94	Effluent	33	92	8.45	7.9	0.61	68	
12/14/94	Effluent	51	52	8.15	7.3		52	
12/21/94	Effluent	54	46	7.52	5.7			
12/28/94	Effluent	72	56	9	6.4			
01/04/95	Effluent	84	80	8.59	10	<0.10	44	
01/11/95	Effluent	70	116	8.32	8.1		64	
01/18/95	Effluent	66	86	8.01	4.9		56	
01/25/95	Effluent	49	90	7.77	7.3		51	
02/01/95	Effluent	67	64	8.36	10	2.1	50	
02/08/95	Effluent	72	80	8.11	7.9		49	
02/15/95	Effluent	51	52	8.18	10		52	
02/22/95	Effluent	45	82	8.27			55	
03/01/95	Effluent	78	98	7.67	7.4	4.4	53	
03/08/95	Effluent	130	70	8.25	9.7		44	
03/15/95	Effluent	100	120	9.15	10		62	
03/22/95	Effluent	35	68	8.05	3.7		68	
03/29/95	Effluent	76	86	8.2	7.8		64	
05/03/95	Effluent	44	96	8.71	3.8	0.51	70	
05/10/95	Effluent	88	100	8.39	5.3		72	
05/17/95	Effluent	65	52	7.97	2.4		79	
05/24/95	Effluent	30	48	8.32	3.6		77	
05/31/95	Effluent	39	50	7.87	5.1		74	
06/07/95	Effluent	35	70	9.28	7.1	0.23	73	
06/14/95	Effluent	30	52	8.98	4.8		77	
06/21/95	Effluent	30	48	8.75	3		82	
06/28/95	Effluent	19	34	8.32	2.8		81	
08/02/95	Effluent	18	46	9.12	7	<0.10	79	Week of EPA's Sampling
	n	32	32	32	31	8	30	
	Avg.	52.7	75.0	8.377	6.44	1.004	63.5	
	Std. Dev.	26.2	25.0	0.435	2.27	1.532	11.5	
	Min	18	34	7.52	2.4	0	44	
	Max	130	138	9.28	10	4.4	82	

Site: POTW for Very Small Town in SW U.S.

Monthly Report to State Agency

Note: All data are for system effluent except for flowrate.

Month	BOD (daily avg.) (mg/L)	BOD (lbs/day)	TSS (lbs/day)	TSS (daily avg.) (mg/L)	Daily Flow (MGD)	Max Flow (MGD)	NH3-N (mg/L)
Dec '93	26.6	5.37	15.18	75.2	0.0242	0.0443	
Jan '94	49.25	9.45	25.32	132	0.023	0.035	
Feb '94	50-72			72-140			
Mar '94	74.8	17.59	22.2	94.4	0.0282	0.063	
Apr '94	64.25	16.42	18.66	73	0.03064	0.05403	
May '94	21-56			48-56			
June '94	25	3.86	18.76	121.6	0.0185	0.0225	
July '94	41.5	6.99	29.4	174.5	0.0202	0.0266	
Aug '94	43.4	9.05	23.2	111.2	0.025	0.04	
Sept '94	41.75	11.14	23.35	87.5	0.032	0.05	0.58
Oct '94	30.25	6.31	17.72	85	0.025	0.052	0.11
Nov '94	31.2	8.33	24.87	93.2	0.032	0.038	
Dec '94	72	15.76	18.46	61.5	0.036	0.045	
Jan '95	84	23.56	32.58	93	0.042	0.05	
Feb '95	58.75	17.15	20.29	69.5	0.035	0.045	
Mar '95	130	39.93	42.12	88.4	0.0571	0.1043	
Apr '95							
May '95	53.2	20.76	27.01	69.2	0.0468	0.201	
June '95	28.5	6.66	11.91	51	0.028	0.124	

*Flowmeter was changed in April '95 (first week).

n	18	16	16	18	16	16	2
Avg.	47.47	13.65	23.19	82.23	0.0315	0.0622	0.345
Std. Dev.	31.05	9.18	7.30	41.47	0.0102	0.0454	0.332
Min	0	3.86	11.91	0	0.0185	0.0225	0.11
Max	130	39.93	42.12	174.5	0.0571	0.201	0.58

APPENDIX H

AUDIT REPORT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL RISK MANAGEMENT RESEARCH LABORATORY
AIR POLLUTION PREVENTION AND CONTROL DIVISION
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
RESEARCH AND DEVELOPMENT

Memorandum

November 18,1996

From: Richard Shores, QA Staff, MD-91

To: Susan Thorneloe, Project Manager, MD-63

Subject: Technical Systems and Performance Audit Report. This report documents the results of an audit conducted at one of the green house gas (GHG) field measurement sites, the Southwest U.S. Beef Processing Plant.

Attached is a final copy of the GHG field measurement site audit report. This report evaluates the field contractor's performance and determines an estimate of bias for the determination of GHG emission rates. The results contained in this report are not a reflection of the field measurement data collected at the other four GHG measurement sites.

If you have any questions, don't hesitate to call me at extension 1-4983. Thank you.

QTRAK No 93027
cc: Nancy Adams, APPCD Quality Assurance Officer

Audit Report

National Risk Management Research Laboratory
Air Pollution Prevention and Control Division
Technical Services Branch

Quality Assurance Tracking Number	93027/III
Audit Type	Technical Systems and Performance Audit
Audit Dates	August 22-25, 1995
Project	Field Measurement of Greenhouse Gas Emission Rates and Development of Emission Factors for Wastewater Treatment
Project Officer	Susan Thorneloe Atmospheric Protection Branch (MD-63)
Auditors	Richard C. Shores, USEPA Technical Services Branch (MD-49)
	James Flanagan, Research Triangle Institute Quality Assurance Department
Audit Site	Southwest U.S. Beef Processing Plant
Site Contacts	Bart Ecklund, Radian Corporation, Austin, TX. Randy Strait, E.H. Pechan & Associates, Inc., Durham, N.C.

Table of Contents

Section 1.0
Introduction

1.1 Background

A greenhouse gas (GHG) is generally defined as any molecule which absorbs infrared light in the spectral region of 5 to 20 micrometers (μm). These gases include, but are not limited to water vapor (H_2O), carbon dioxide (CO_2), carbon monoxide (CO), methane (CH_4), certain volatile organic compounds (VOCs), and nitrous oxide (N_2O). Reasonably accurate global balances of GHGs are needed for climatic models and for estimating long-term global temperature changes. The development of a global balance for any compound requires identification of all major emission sources, and the estimation of their source strength (i.e., emission rate). The emphasis of this project is to characterize the emissions from waste management facilities.

Greenhouse gases are produced from the decomposition of waste in landfills, septic sewage systems, and wastewater treatment facilities. The decomposition of organic waste may occur aerobically or anaerobically. Aerobic decomposition of organic carbon results in the production of CO_2, while anaerobic decomposition results in the production of CH_4. In terms of greenhouse gases, CO_2 and CH_4 are not equivalent. Given equal masses of CO_2 and CH_4, CH_4 will retain 58 times more heat energy than will CO_2. For this reason, the emissions of CH_4 are of greater importance, from a global warming perspective. At present, emissions from waste management facilities are based upon mass balance calculations and various assumptions.

The Air Pollution Prevention and Control Division (APPCD) in EPA's National Risk Management Research Laboratory (NRMRL) has initiated a project to better quantify the GHG emissions from waste management facilities. This project is managed by Susan Thorneloe, APPCD/NRMRL, US EPA. E.H. Pechan & Associates, Inc. is the prime contractor; Radian Corporation is a subcontractor and responsible for the field measurements.

One of the GHG project field sites, a Southwest U.S. beef processing plant, was audited. This project involved the measurement of methane upwind and downwind of a waste lagoon, to estimate methane emissions from the lagoon. Biological oxygen demand (BOD) measurements were also made. The audit was conducted by Richard Shores, a member of the EPA's QA staff and James Flanagan, an employee of APPCD's QA contractor, Research Triangle Institute. The results of this audit are described in the following sections. Appendix A contains the technical systems audit checklist used during the audit and Appendix B contains the field contractor comments and responses to issues identified in the technical systems and performance audit report.

1.2 Purpose

It can be anticipated that numerous organizations will utilize the Greenhouse Gas emissions data, and it is important to the USEPA that the quality of the data be defined as specified in the Quality Assurance Project Plan. For this reason, the primary purpose of this

audit was to evaluate the implementation of the Quality Assurance Project Plan (QAPP), prepared by E.H. Pechan & Associates, and to assure that the data from the field study satisfied the criteria specified in the QAPP. To accomplish this, a technical systems audit and a performance audit were conducted. The overall objectives of these audits, were as follows:

- Evaluate the implementation of the approved Quality Assurance Project Plan.
- Conduct a performance audit to evaluate the area source emission measurements.

1.3 Audit Summary

The audit results have been used to determine an estimate of bias for the GHG emission rates. This bias estimate is based on the results of the performance audit, which showed that the emission rates determined by the field contractor were dependent upon the distance from the Open Path Measurement-Fourier Transform Infrared (OPM-FTIR) optical path. The performance audit technique was to release an audit tracer gas at different locations. The field contractor measured the audit tracer gas and reported their calculated audit tracer gas emission rates. When the audit tracer gas was released from the southern end of the facility, farthest from the OPM-FTIR location, the calculated release rates were slightly lower (acceptable difference) than actual rates. When the audit tracer gas was released in the middle of the facility, the calculated release rates were in good agreement with the known release rates. When the audit tracer gas was released from the northern end of the facility, the calculated release rates were much higher than the actual release rates.

The auditors were concerned that portions of the Greenhouse Gas (GHG) plume would be missed under typical wind direction shifts because the OPM FTIR optical path was not long enough. The Quality Assurance Project Plan specified that wind direction shifts of +/- 15 degrees would be acceptable for valid data collection. The site plan prepared by the auditors indicate that the optical path was not long enough for the +/- 15 degree tolerance to be acceptable. Because the SF_6 tracer gas release did not represent the entire width of the lagoons, good SF_6 capture may not indicate good GHG plume capture. The portion of the GHG plume being missed would be the southern end or the portion of the source being under-represented, as indicated by the performance audit results. The portion of the GHG plume always being captured would be the northern end or the portion of the source being over-represented, as indicated by the performance audit results. A problem with trying to assess the effect of the performance audit results is the fact that we do not know where the GHG's are being emitted from within the lagoon area. The subsequent analysis of the audit results assumes a homogeneous release of GHGs from the lagoon area (source). Field contractor analysis of emission rates versus wind direction data indicated that the +/- 15 degree criteria would be acceptable for the wind direction criteria.

The field contractor did not align the wind direction sensor as specified in the Quality Assurance Project Plan, and the data did not satisfy the data quality objectives (+/- 10 degrees). The wind direction sensor was found to be out of alignment. The auditors identified this problem

to the field contractor, and the alignment of the sensor was adjusted.

In the areas of sample custody, instrument usage and calibration, the auditors found no major problems. The OPM-FTIR equipment appeared to be operated and calibrated within appropriate ranges, and internal QC samples (canister samples) were taken by the measurement team. The background methane and SF_6 levels taken by the OPM-FTIR method upwind of the lagoons were adequate to provide a good baseline.

Section 2.0
Audit Findings

2.1 Technical Systems Audit Results

Technical Systems audits are intended to assess how well a Quality Assurance Project Plan was followed by field personnel and identify activities that will have an adverse effect on the data collected in the field. Observations made during the technical systems audit are listed below.

- The pH meter was not calibrated and the ph probe was not stored in a suitable liquid as recommended by the manufacturer. The field pH is itself not a critical measurement; however, samples are acidified prior to shipment using the pH meter as an indicator of the sample stability. Errors in pH could potentially affect the sample integrity and the subsequent analytical results. Recommendation: The pH meter should be checked with a standard buffer each time it is used and the electrode should be stored in a suitable liquid. Manufacturer's recommendations for electrode conditioning should be followed.

- Water measurements were taken primarily from well-aerated locations. As a result, the degree of oxygenation within the anaerobic areas in the lagoons is unknown. Recommendation: The need for dissolved oxygen data in the anaerobic lagoons should be evaluated. If this is found to be a necessary measurement, then future sampling of the anaerobic lagoons should be done in a representative manner.

- Waste water at this facility was first treated in the anaerobic lagoons and then in the aerobic lagoon. Most of the water effluent BOD levels were determined at the outlet of the aerobic lagoon. The amount of BOD removed in the aerobic lagoon is thus known only from estimates supplied by the facility. Since BOD removal by aerobic processes results primarily in CO_2, not methane, this could result in bias in the emission rate for methane. Recommendation: Whenever possible, BOD removal should be determined across both the anaerobic and aerobic lagoons.

- The field contractor station time was ahead of universal time (determined at the National Weather Service) by 123 seconds. Recommendation: Station times should be synchronized with universal time. This will allow comparison with wind direction data from NWS and any other available sources.

- Tracer Source did not encompass the width of the plume - As shown in the Figure 1, the seven rotameter-controlled release points for the SF_6 tracer do not encompass the entire width of the lagoons. As a result, good capture of the tracer plume does not guarantee good capture of the plume from the lagoon.

- The wind direction sensor had not been aligned according to the Quality Assurance Project Plan. The plan specifies that both a compass and a transit will be used to align the wind direction sensor. Only after the auditors identified that the alignment was in error did the field contractor indicate that they did not have an adequate compass. There was no transit at the field site.

2.2 Performance Audit Results

Performance audits are intended to assess the accuracy of measurements made in the field. The auditor's tracer gas was released while the field contractor's crew conducted GHG monitoring. GHG monitoring included the determination of ambient air gaseous concentrations (using the OPM-FTIR), the operation of meteorological sensors and the controlled release of sulfur hexaflouride (SF_6). Using equation 1, these data were then used to calculate the OPM-FTIR emission rates for ethylene, for comparison with actual rates.

$$ER_{C_2H_4}(g/sec) = ER_{SF_6}(g/sec) \times Conc_{C_2H_4}(\mu g/m^3) \ / \ Conc_{SF_6}(\mu g/m^3) \qquad (1)$$

where:

ER_{C2H4} = Ethylene emission rate (g/sec)
ER = Sulfur Hexaflouride emission rate (g/sec)
$Conc_{C2H4}$ = Ethylene concentration , measured with FTIR ($\mu g/m^3$)
$Conc_{SF6}$ = Sulfur Hexaflouride, measured with FTIR ($\mu g/m3$)

Radian uses this same method to calculate the other greenhouse gases' emission rates from the lagoon. The only difference is that they normalize the reported methane emission rate for factors such as lagoon surface area, waste water composition, and lagoon volume.

Ethylene was released at a rate of 0.50 g/sec. This release rate was calculated by the auditors using the measured volumetric release rate of ethylene gas. It was found, as expected, that releasing tracer as near as possible to the SF_6 release location resulted in good agreement between the known and calculated emission rates. This release location is shown as point ① in Figure 1. Releases from points upwind of the SF_6 release location (points ② and ③ in Figure 1) resulted in average emission rates for ethylene that were low. Releases from points downwind of the SF_6 release location (points ④ and ⑤ in Figure 1) were markedly higher than the true

emission rate. The variability at the latter locations was also markedly larger than for releases farther upwind, both on an absolute and relative basis. These data are shown in Table 1 and summarized below.

Location	No. Valid Observations	Radian Measured Average Ethylene Emission (g/sec)	Auditor Released Average Ethylene Emission (g/sec)	Percent Difference (Measured-Released) (%)	Percent Recovery (%)
SE ②	8	0.48	0.5	-2.0	96
SW ③	0	n/a	0.5	n/a	n/a
Center ①	5	0.49	0.5	-1.0	98
NE ④	5	8.67	0.5	1634.0	1734
NW ⑤	4	1.5	0.5	200.0	300

The data indicated that there was an effect of distance between the OPM-FTIR optical path and the field contractor's calculated release rate. As for the GHG emission rates, this would cause the portions of the lagoon nearest the OPM-FTIR optical path to be over represented. The portions of the source farthest from the IR beam would be under represented.

A linear estimate of how much this bias would impact the average emission rate for the entire lagoon was devised as follows. The field contractor calculated emission rates were considered to be apparent emissions rates and representative of the lagoon area. These apparent emission rates were weighted to represent six (two south, two center and two north) points evenly spaced around the lagoons. This is shown in the following equation.

$$E.R._{AVG} = \frac{2(0.48)+2(0.49)+8.67+1.5}{6} = 2.02 \qquad (2)$$

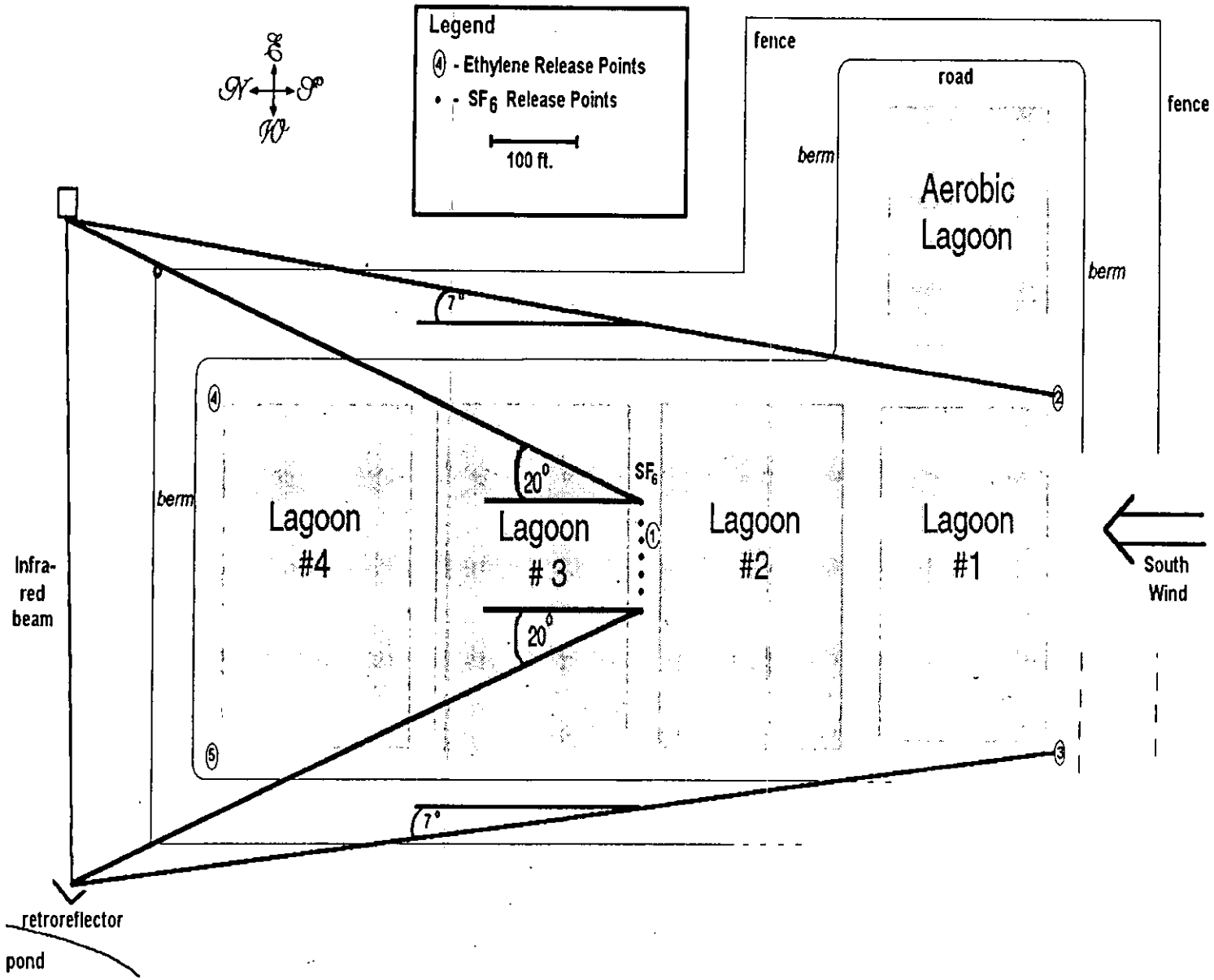

Figure 1. An overview of the waste water treatment facility and location of the IR beam.

Table 1. OPM-FTIR performance audit data, including the location of the ethylene release points.

Date	Time	Wind Direction (Deg)	Deviation From Ideal (Deg)**	Wind Speed (Deg)	Radian Measured SF6, (ppb)	Auditor Ethylene Release Location *	Radian Measured Ethylene (ppb)	Radian Estimated Ethylene $E.R._R$ (g/sec)	Auditor Calculated Ethylene $E.R._A$ (g/sec)	Percent Difference (%)	Average Percent Difference (%)
8/23/95	9:59:50	174	13	12.3	8.82	Center	29.44	0.42	0.50	-16.0	
8/23/95	10:04:51	171	10	11.9	10.93	Center	41.18	0.47	0.50	-6.0	
8/23/95	10:09:50	175	15	11.6	8.72	Center	27.92	0.40	0.50	-20.0	
8/23/96	10:44:51	173	12	11.6	4.43	Center	22.7	0.64	0.50	28.0	Center @
8/23/95	10:49:95	172	13	12.8	9.53	Center	41.32	0.54	0.50	8.0	-1.2
8/24/95	7:45:03	148	13	4.7	37.14	SE	101.08	0.34	0.50	-32.0	
8/24/95	7:50:02	149	12	4.7	39.12	SE	200.76	0.64	0.50	28.0	
8/24/95	7:55:02	159	2	6.2	33.27	SE	155.10	0.58	0.50	16.0	
8/24/95	8:00:02	157	4	6.1	31.58	SE	165.69	0.66	0.50	32.0	
8/24/95	8:05:02	168	7	6.9	30.77	SE	111.18	0.45	0.50	-10.0	
8/24/95	8:10:02	174	13	6.8	31.36	SE	99.30	0.40	0.50	-20.0	
8/24/95	8:15:03	173	12	7.3	28.24	SE	87.23	0.39	0.50	-22.0	
8/24/95	8:20:03	175	14	7.1	27.19	SE	83.10	0.38	0.50	-24.0	
8/25/95	3:45:04	146	15	5.8	3.47	NE	778.12	28.0	0.50	5500.0	
8/25/95	3:50:05	146	15	6.1	11.61	NE	688.25	7.4	0.50	1380.0	
8/25/95	3:55:05	152	9	5.6	16.71	NE	640.15	4.8	0.50	860.0	
8/25/96	4:00:05	149	12	5.2	19.52	NE	717.63	4.6	0.50	820.0	

Date	Time	Wind Direction (Deg)	Deviation From Ideal (Deg)**	Wind Speed (Deg)	Radian Measured SF6, (ppb)	Auditor Ethylene Release Location *	Radian Measured Ethylene (ppb)	Radian Estimated Ethylene $E.R._R$ (g/sec)	Auditor Calculated Ethylene $E.R._A$ (g/sec)	Percent Difference (%)	Average Percent Difference (%)
8/25/95	4:05:06	150	11	4.7	20.91	NE	824.24	4.9	0.50	880.0	NE @
8/25/95	4:10:06	157	4	5.1	39.00	NE	718.73	2.3	0.50	360.0	1665.7 %
8/25/95	4:15:95	148	13	5.3	31.01	NW	224.20	0.90	0.50	80.0	
8/25/95	4:20:06	149	12	5.3	29.69	NW	503.83	2.1	0.50	320.0	
8/25/95	4:25:06	147	14	5.3	24.05	NW	421.71	2.2	0.50	340.0	NW @
8/25/95	4:30:06	149	12	5.5	24.38	NW	155.95	0.80	0.50	60.0	200.0 %

* Release location reference to Figure 1: Center is position ① ; SE or South East is position ②; SW or South West is position ③; NE or North East is position ④; and NW or North West is position ⑤.

** Ideal direction is identified as 161 degrees +/- 15 degrees.

Since the known emission rate average is 0.50 g/sec, a linear estimate of the bias is (2.02-0.50)/0.50 = 368%. Clearly, much better estimate of bias is possible based on the excellent agreement seen when the audit tracer is placed alongside the SF_6 tracer (location ①) and at the southern end of the lagoon area .

A nonlinear estimate of how much this bias would impact the average emission rate for the entire lagoon was devised as follows. The audit results were fitted to a polynomial function with 2 degrees of freedom. This function established a relationship between average percent difference between auditor released rates and field contractor calculated rates and the distance from the OPM-FTIR optical path. The average percent difference for the entire lagoon area was determined by integrating the area under the polynomial function. The average percent difference for the entire lagoon area was calculated to be + 67 %. This estimate of bias is considered to be much more representative than the previous linear estimate. Average percent difference versus distance from the OPM-FTIR optical path is shown in the following graph.

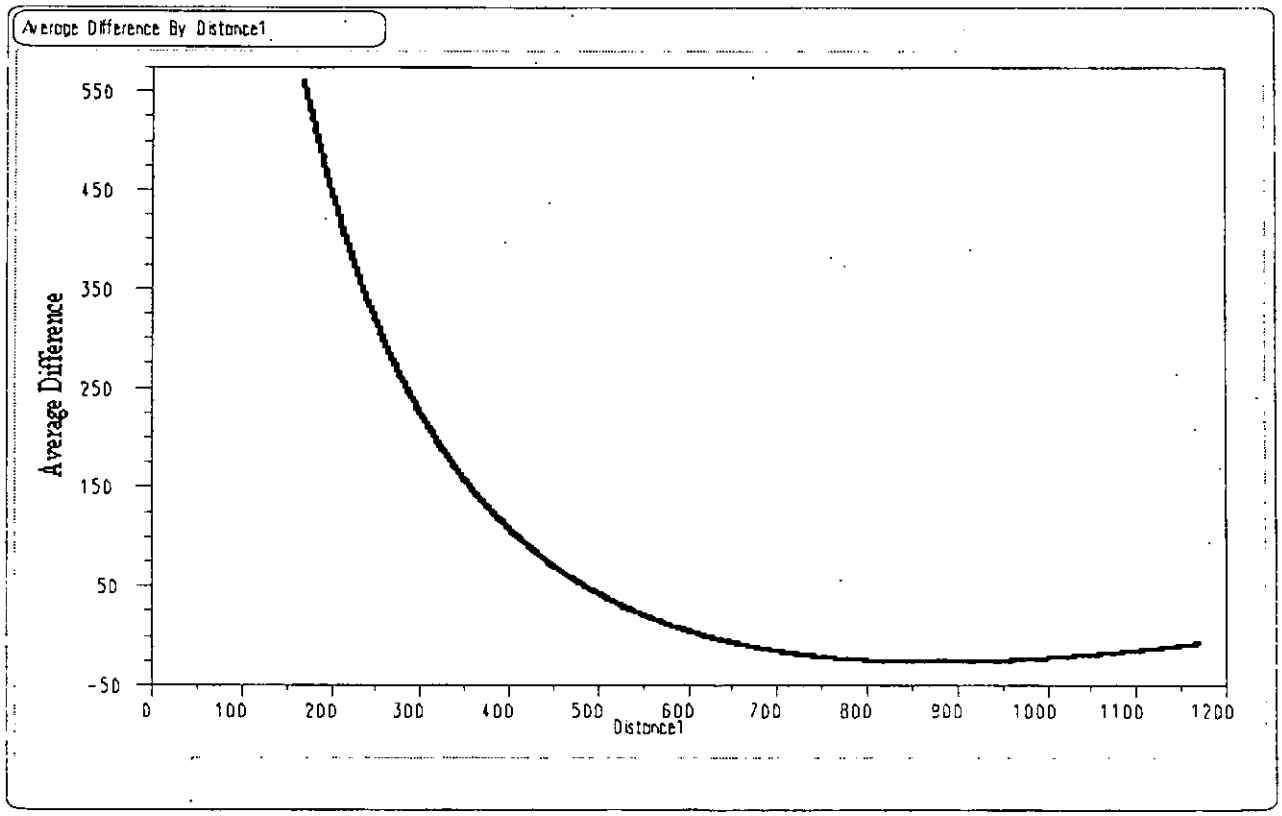

Figure 2. Average percent difference versus distance from the OPM-FTIR optical path.

This graph demonstrates the relationship between distance and the average percent difference of emission rate estimates calculated by the field contractor and the known auditor known release rates. The lagoon area is represented by the distance of ~175 feet to 1175 feet.

In future studies, this situation might be improved by more appropriate placement of the OPM-FTIR optical path in relation to the source. Simply moving the OPM-FTIR optical path farther downwind should produce marked reduction in this source of bias. This recommendation is based on the fact that there was good agreement when the auditor release point was in the center and at the southern end of the lagoon area. Spreading the SF_6 tracer release points over more of the lagoon area would also improve agreement, but the distance between the OPM-FTIR optical path and the source is the critical variable to reducing bias.

The wind direction can cause part of the plume to evade the optical path. Data obtained while ethylene was being released dramatically illustrate the effects of wind direction on plume capture and on calculated emission rates. Figure 2 shows wind direction, actual ethylene emission rate, and the calculated ethylene emission rate. This figure illustrates the effects of changing wind direction on the plume capture and the effects of the calculated GHG emission rates. The importance of wind direction data was emphasized in the Quality Assurance Project Plan. The data quality objectives for wind direction data were a precision of +/-1 degree and an accuracy of +/- 10 degrees.

The wind direction sensor alignment was audited. The performance audit evaluation of the wind direction sensor indicated that the sensor was out of alignment by 25 degrees. The wind direction audit results were reported to the Radian Corporation personnel at the time of the audit (August 23). Even though the auditors recommended that the sensor not be changed because it would be easier to adjust the data after the field effort had been completed, the field personnel adjusted the alignment of the sensor.

Figures 3 and 4 demonstrate how well the wind direction data collected by Radian Corporation agree with wind direction data recorded by a NOAA-NWS station located in the near vicinity. These figures also show the shift in alignment of the sensor. Before the adjustment the average difference was 41 degrees; after the adjustment the difference was 18 degrees, a change of 23 degrees. Even after the adjustment, the wind direction data may not have satisfied the requirements specified in the Quality Assurance Project Plan. A meteorologist at the NOAA-NWS station considered the NOAA data to be representative of the field measurement site. The terrain in this part of the country is mostly flat. The representativeness of the NOAA-NWS station to the field site can be debated, but at a minimum, data from the two sites can be evaluated for change.

The NOAA-NWS meteorological data were obtained during the audit and are not all included in the field test report. Also, further validation of data by the contractor may invalidate some or all of the data in these figures; nevertheless, they illustrate problems with the meteorological data and some of the potential problems inherent in OPM-FTIR.

To avoid these problems, it is suggested that the contractor test the effects of longer IR path length. This should allow more wind direction variability without missing the plume.

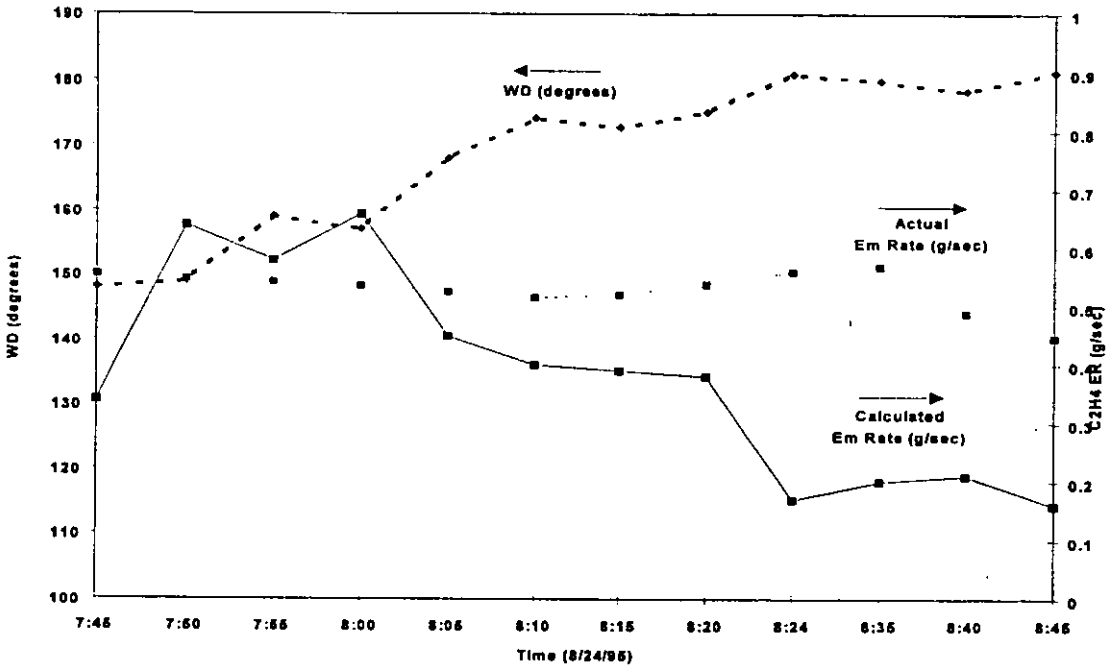

Figure 3. Showing the effects of wind direction on the calculated ethylene emission rate.

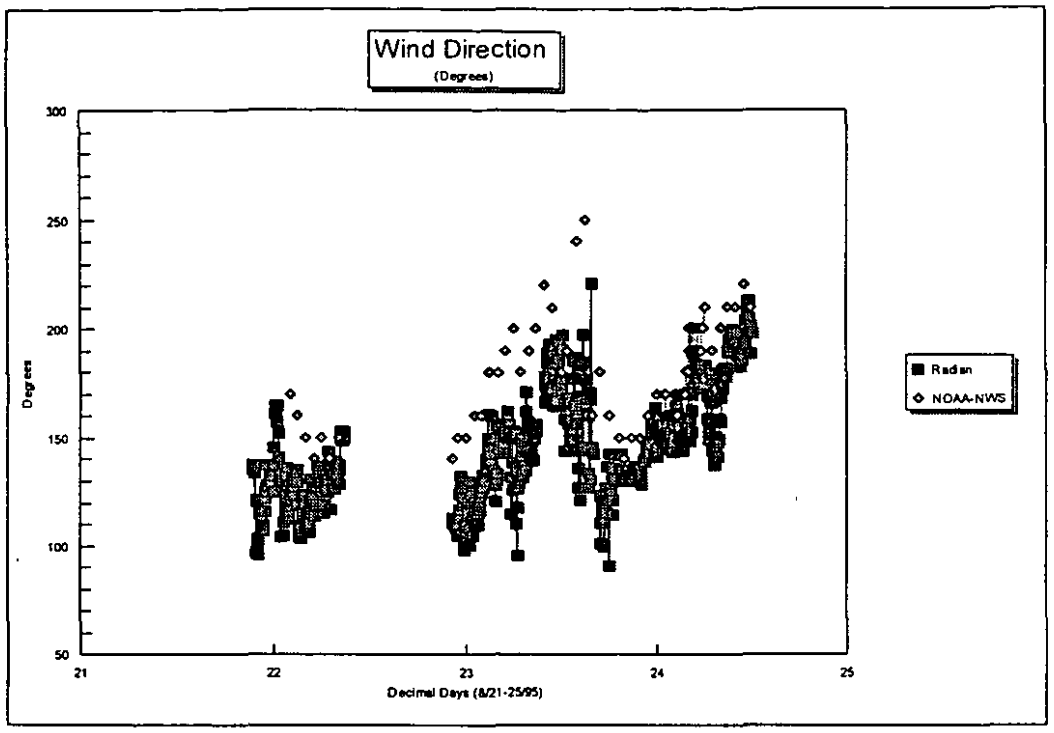

Figure 4. Shows the wind direction data collected by Radian and the NOAA station. Decimal days represent the fraction of the audit dates (August 21-25, 1995).

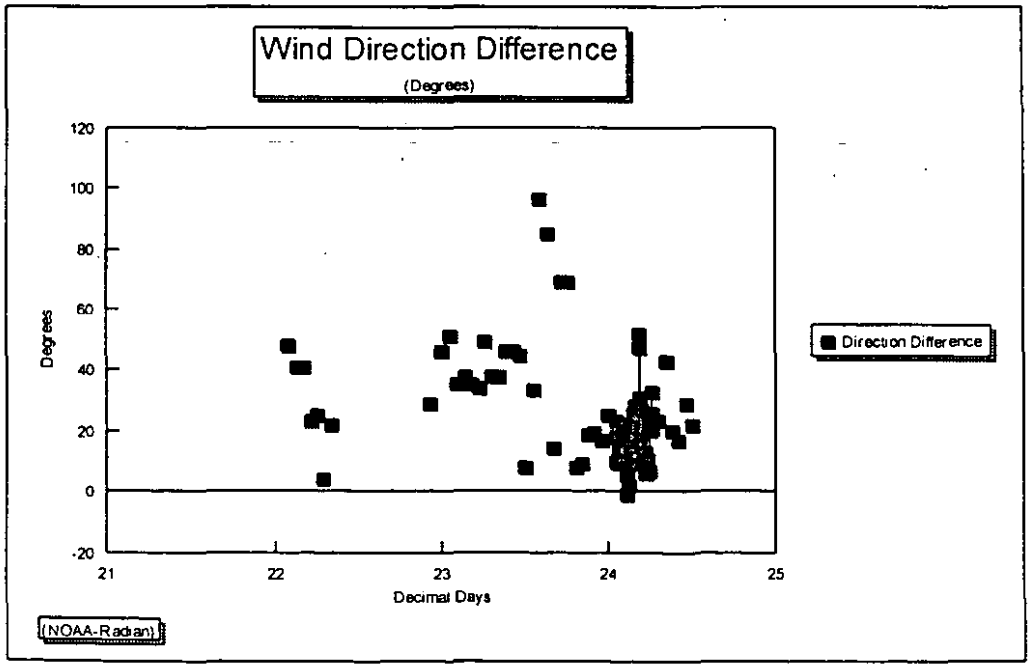

Figure 5. Shows the difference between the Radian and NOAA wind direction data. Notice the shift in difference on August 23,1995.

Section 3.0
Auditing Activities

3.1 Audit Preparation

Preparation for this audit included planning meetings with the Project Officer, review of the Quality Assurance Project Plan, and discussions with both the E. H. Pechan & Associates, Inc. and Radian Corporation personnel. Technical systems audit preparation included the preparation of a checklist based on the QAPP. Performance audit preparation was much more extensive and included the creation of a method to evaluate the emission estimates being calculated from the OPM-FTIR concentration data.

Ethylene was used by the auditors as a second tracer gas to evaluate the emission estimates. Ethylene has the advantages of having almost the same buoyancy as air, and it is not found in significant amounts in this semi-rural setting. Further, it has characteristic IR absorption regions that are free from interferences by other gases present at the site, including water, carbon dioxide, methane, and Sulfur Hexa-flouride. Ethylene is also detectable at low concentrations. This is important because of practical limitations in the amount of the auditor's tracer gas released. Ethylene was released from a 220 cubic foot steel cylinder. This cylinder was provided by the Radian personnel to support the quality assurance work conducted by the EPA and RTI auditors.

The auditors made ethylene releases at known rates from different locations within the lagoon area. The first release location was near the midpoint of the lagoon. This location was also the location where the Radian personnel conducted their SF_6 releases. The other ethylene releases were conducted from the four corners of the lagoon. (See Figure 1.)

The auditor's (actual) emission rate for ethylene was determined using a dry gas meter and stopwatch. A needle valve and a pressure regulator were used to adjust the release rate from the ethylene tank.

3.2 Supporting Documentation

Documentation referred to during this audit included the Quality Assurance Project Plan, prepared by E.H. Pechan & Associates and Radian Corporation, dated July 25,1995. This Quality Assurance Project Plan was reviewed by the APPCD QA Staff and approved for field study implementation. The specified date identifies the final revision, in response the APPCD QA Staff review comments.

3.3 On-Site Activities

Tuesday, August 22, 1995

Auditors arrived at the site at 6:00 p.m. The Radian team had completed making upwind background measurements and was dismantling the equipment so that it could be moved to the downwind monitoring location. Eight photographs were taken to document the site. Site orientation was determined with a hand-held compass.

Wednesday, August 23, 1995

Auditors arrived at the site at approximately 9:00 a.m. Mr. Bart Eklund of Radian told the auditors that Radian personnel had monitored all night, with continuous release of SF_6 tracer.

Auditors released ethylene tracer gas from 9:45 until 10:50 a.m. at a release rate of 1 cu.ft./40 sec. The release location was near the center of the SF_6 array that had been set up by Radian. The release point is shown as point ① on Figure 1.

At approximately 11:00 a.m., the ethylene release location was moved to the southeast corner of the anaerobic lagoons, point ② in Figure 1. Ethylene emissions stabilized at 11:15 a.m. The release concluded at 11:55 a.m. Radian indicated that no SF_6 and no ethylene were being detected. The auditors estimated (using a compass) that the wind direction was about 210 degrees; however, Radian's wind vane readout indicated closer to 180 degrees. The auditors then conducted a performance audit on the alignment of the wind direction sensor. The following results were obtained:

Vane Orientation	Radian Direction Sensor Indicated, (degrees)	Auditor's True Direction, (degrees)	Difference, [Auditor-Radian] (degrees)
North	336	360	24
South	154	180	26
		average difference	25

Auditors observed a water sample being taken from the aerobic lagoon. A narrow-mouth plastic bottle attached to a long pole was dipped into the lagoon about 3 feet from the edge. Sample bottles were filled from the dipper bottle. Disinfectant solution (1:10 water:chlorox) was sprayed on the outside of the large and small sample bottles and was also used to rinse the inside of the large sampling bottle. All were rinsed with clean water from a different bottle (non-chlorinated "Sparkletts" drinking water). Sample vials were filled, labeled, and packed in ice for shipping. Iced samples were sent to Radian labs by Federal Express.

Using the methods outlined in the EPA's Quality Assurance Guidance Manual, "Meteorological Measurements, Volume IV", solar noon was calculated to be 1:45 p.m. local

time (Central Daylight Time). The lagoon perimeter fence appeared have been aligned with geographic coordinates. Magnetic north was approximately 10 degrees east of true north.

The auditors observed water sample preservation and pH check at 3:20 p.m. The portable meter used was a "Check mate 90" manufactured by Corning. The probe was rinsed in the tap water. No calibration standards were used. It took 2-3 minutes for the reading to stabilize after the probe was immersed in a sample from the aerobic lagoon. The pH meter was used to monitor the pH while the contents of 4 small bottles were acidified to pH <2.

Thursday, August 24, 1995

Auditors started releasing ethylene at the southeast corner of the lagoon area (point ② in Figure 1) at 7:40 a.m. Flow stabilized at 7:45 a.m. and the release concluded at 8:46 a.m. At 8:50 a.m. the auditors moved the release point to ③ and continued the release. Auditors estimated the wind direction to be around 200 degrees magnetic (210 degrees true). It was likely that most of the tracer was missing the plume.

Visited the NOAA weather station. This is roughly 3 miles from the monitoring site. It was found that the time on Radian's data recording instruments was about 2 minutes and 3 seconds faster than NOAA time. Local magnetic declination is 10 degrees (true north west of magnetic north), according to NOAA personnel.

Radian informed us that the wind vane had been realigned by about 15 degrees.

Shores and Flanagan discussed spectroscopy with Jeff Lacosse. The spectrometer is set up for 0.5 cm^{-1} resolution and uses 230 scans for each 5-minute average. The instrument is a Nicolet Magna series model 750 with OMNIC software. Radian is working on new software. A special interface card is used between the Nicolet and the PC-compatible computer used for data acquisition.

The telescopes used are special-order with long focal length (high *f* number). Reflective coating is Al with SiO_2 coating.

A calibration cell is used that contains 3% methane and 200 ppm SF_6. Signal-to-noise (S/N) is determined once per day. To maintain an acceptable S/N ratio the goal is to operate with an absorbance of less than 0.001 Absorbance Units, in the region of measurement. This is required to achieve their detection limit for the absorbance lines of interest. For ethylene quantificaiton, the peak at 951 cm-1 will be used.

Merging the IR data with the meteorological data will be done at Radian. These data were acquired separately in the field.

Auditors questioned the Radian team about their siting distance measurements and how they located the beam. They answered that the beam was placed about 50 meters from the berm. This agrees with auditors' measurements. The path length was limited by the presence of a small pond behind the retroreflector and by standing water (mud) behind the truck.

Radian's preliminary validation criteria were:
- sigma-theta ($\sigma\theta$) less than 30 degrees
- Pasquill-Gifford stability "acceptable" (see QAPP, planning documentation)
- Wind speed within acceptable range (see QAPP, planning documentation)
- Wind direction within limits (to be determined)

Friday, August 25, 1996

Auditors arrived at the site before 3:00 a.m. to take advantage of favorable winds. A key had been provided by operators of the test facility. Ethylene releases were made from the southwest, northeast, and southeast corners, points ③, ④, and ⑤. The supply of ethylene available to the auditors was expended at approximately 4:30 a.m. Auditors packed up and left to catch a 6:00 am flight.

REFERENCES

Eklund, Bart, Radian Corporation, letter to Randy Strait of E.H.Pechan Corporation, December 12, 1995.

APPENDIX A

TECHNICAL SYSTEMS AUDIT QUALITY ASSURANCE CHECKLIST

National Risk Management Research Laboratory (NRMRL)
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Audit Subject: TSA on 93027/III - Measurement of Greenhouse Gases from Anaerobic Decomposition...

Date: August 22 - 25, 1995 RTI Project Number: 6314-017

Contractor: Radian Corp. RTI Auditor: J.Flanagan

Location: Amarillo, TX

EPA Lead Auditor: Richard Shores, EPA/NRMRL/APPCD

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
A. ON-SITE DOCUMENTATION				
1. Is a copy of the *QA Project Plan* available at the site?	✓			
2. Are logbooks used at the site to record data and operational information? List all working logbooks and other records associated with the field study.	✓			Logbooks and shipping logs are used. Strict "chain of custody" procedures are not used because the data are not required to be legally defensible for litigation or enforcement.
3. What is the source of the spectral interpretation software? List manufacturer or author, version number, date, and other pertinent information? Is a standard spectral library used? If so, describe author, version, date, etc. How many compounds in the library will be used for this project?				Nicolet software is used.

TECHNICAL SYSTEMS AUDIT QUALITY ASSURANCE CHECKLIST (*continued*)

Audit Subject/Contractor: Greenhouse Gas Emissions, Radian Corp.

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
4. Describe the background measurements:				Upwind measurements were made the first day at the site. No additional upwind measurements were planned.
4a. What is the frequency of background measurement?				
4b. What analytical methods are used for background determination? (e.g., canister sampling followed by gc analysis; FTIR on a different path)				Canisters were taken for later analysis by GC. A variety of locations were used: • upwind • downwind • Vertical profile • Path-integrated (walking)
4c. If canister sampling is an important element in background determination, describe the QA/QC program for canister sampling and analysis. Are field blanks taken? How is comparability between canister sampling and FTIR established?				
4d. If FTIR is the method used to establish background, describe and illustrate the alternative optical path used on the site sketch. Is this path representative of the sample path?				See Figure 1. The upwind path should be adequately representative. The auditors saw no nearby sources of methane or interferent gases.
B. CALIBRATIONS				
1. Have FTIR calibrations been done that encompass the expected range of concentrations for all tracers, greenhouse gases, and interfering gases? List calibrated gases, date of calibration, and concentrations used.		✓		Calibration data are obtained from standard spectra.

TECHNICAL SYSTEMS AUDIT QUALITY ASSURANCE CHECKLIST *(continued)*

Audit Subject/Contractor: Greenhouse Gas Emissions, Radian Corp.

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
2. Are the operating conditions including resolution (cm^{-1}) standardized for all reference spectra?		✓		Some spectra were taken on another instrument with slightly different characteristics.
3. For critical gases (methane and tracers) are the peaks used for quantification well-resolved (i.e., peak width at half height > FTIR resolution)?	✓			Spectra appear well-resolved at 0.5 cm^{-1} resolution.
4. Are FTIR correlation coefficients acceptably high (i.e., r > 0.9)?	✓			
5. Are atmospheric interferences present in the calibration spectra? If so, how are they accounted for?	✓			The usual interferences are present. They are taken into account as described in the QAPP.
6. For the meteorological sensors, what calibration or check-out procedures were used at the site during and after installation?				Hand held compass used for alignment, otherwise no on-site activities were used at the site.
7. Was true North established using a reliable method? Describe the method used and check the station orientation using an independent method, if possible.		✓		A magnetic compass was used but the error identified would indicate problems or a lack of experience. Auditors used solar noon method to verify true north.
8. Are all other instruments in calibration as recommended by the manufacturer or QAPP? Verify that calibration procedures described in the QAPP were followed by reviewing documentation. Instruments other than the FTIR and meteorological sensors include: - OVA - Rotameters		✓		The handling of the pH meter was not in accord with the manufacturer's instructions. This is not a critical measurement, however. See "Findings" section.

TECHNICAL SYSTEMS AUDIT QUALITY ASSURANCE CHECKLIST (*continued*)

Audit Subject/Contractor: Greenhouse Gas Emissions, Radian Corp.

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
9. Was the A/D converter or other data logger input calibrated? When was it calibrated? What standard was used?			✓	The Odessa data logger does not have analog outputs. It was not possible to audit A/D conversion.
10. For OVA-108 portable monitor determine the following: - Actual frequency of calibration: - Actual frequency of leak checking: - Identify the source of calibration gases:			✓	OVA was not used at this site.
10a. Is the written calibration procedure followed?			✓	"
10b. Is calibration done at atmospheric pressure?			✓	"
11. Has the FTIR's Signal to Noise (S/N) ratio been established under the operating conditions?	✓			Yes. The procedure was reviewed with Jeff Lacosse.
12. Illustrate the geometry and the cell used for FTIR calibration.			✓	
C. SITE SELECTION				
1. Does the site appear to be adequately free of obstructions to wind flow? Illustrate the site layout. Show how the meteorological equipment is mounted. Show height above ground and distance from any obstacles and from the lagoon. Show all planned sampling paths. Show off-site sources of interferences. Indicate tracer release locations.	✓			This appears to be an excellent site. It is free of upwind and downwind obstructions. See Figure 1.

TECHNICAL SYSTEMS AUDIT QUALITY ASSURANCE CHECKLIST *(continued)*

Audit Subject/Contractor: Greenhouse Gas Emissions, Radian Corp.

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
2. Document the height above ground level (or other reference) of the following: - IR path - tracer release point - Lagoon surface - Lagoon berms and related equipment - Nearby trees, buildings, etc.			✓	See Figure 1. The only nearby buildings are those on the West side of the first lagoon.
3. How was the most likely prevailing wind determined? Indicate source of this information.			✓	Existing weather data indicate southerly winds for this area as confirmed by the National Weather Service. However, the prevailing wind often varies by up to 10 degrees between averaging periods.
4. How far is the lagoon near edge from the optical path? What is the distance from the center of the logoon area to the optical path? Is the distance sufficient for dispersion assumptions to be obtained ?			✓	The effect of the elevated lagoon on mixing is unknown.
D. METEOROLOGICAL EQUIPMENT AND OPERATIONS				
1. Are meteorological data samples synchronized with FTIR measurements? If possible, dump instantaneous data and check time synchronization vs. an event that occurs at a known time.	✓			Time synchronization was confirmed by the auditors. Compared with a time check at the local airport, the Radian time was fast by 2 minutes 3 seconds.
2. Are the wind speed and direction averaging algorithms identified (e.g., scalar, vector)?	✓			
3. Is sigma-theta being calculated and recorded?	✓			

TECHNICAL SYSTEMS AUDIT QUALITY ASSURANCE CHECKLIST (*continued*)

Audit Subject/Contractor: Greenhouse Gas Emissions, Radian Corp.

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
4. How many instantaneous samples are combined to produce a 5-minute average?			✓	FTIR - 230 scans per 5-minute period.
If possible, dump some instantaneous data and recalculate one or more 5-minute averages for all parameters. Verify that the averages are calculated correctly.			✓	It was not possible to dump or monitor instantaneous data.
E. TRACER RELEASE EQUIPMENT AND PROCEDURES				
1. Inspect the tracer release equipment for integrity. Are any problems noted?		✓		Equipment was visually inspected. No problems were noted.
2. How many release points are there? Are the release points configured to avoid momentum effects that might disturb the air flow?	✓			Seven total release points. Release was parallel with the ground. The rate of release was not high enough to impart objectionable momentum effects.
3. Is the length of the manifold comparable with the width of the source?		✓		The manifold was about half the cross-sectional width of the lagoon. See discussion.
4. Is the total flow at the tank regulator balanced against the sum of the individual release rates (imbalance could indicate leakage)?			✓	Could not determine.
5. Check the flow rate calculations for the tracer release. Were flow rate calibration data adjusted for molecular weight, viscosity, heat capacity, etc. if referenced to air or other gas?			✓	Could not determine.
6. How often are the tracer release rotameters checked? Does the procedure appear adequate to maintain a steady flow rate?	✓			Rotameters are checked daily when the tracer tank is changed.

TECHNICAL SYSTEMS AUDIT QUALITY ASSURANCE CHECKLIST *(continued)*

Audit Subject/Contractor: Greenhouse Gas Emissions, Radian Corp.

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
7. How often is the tracer release system checked for leaks? When are checks conducted?				No checks conducted.
8. Sketch the tracer release equipment configuration. Note the source/supplier of the tracer gas.			✓	See Figure 1.
9. Note indicated pressure on the tracer regulator at intervals. Compare the usage rate calculated from pressure changes with the release rates obtained by Radian.			✓	Each tracer tank lasts 12-18 hours. This appears reasonable based on the original weight and release rate.
F. OPERATIONS AND CALCULATIONS				
1. Describe how plume capture efficiency (percent of plume intersected by the IR beam) will be determined during monitoring:			✓	This was not being closely monitored. See discussion.
1a. How soon after a wind shift will it be recognized by the operator?			✓	No effort was made to recognize and compensate for wind shifts.
1b. What are contingency plans for moving the monitoring path when there is a wind shift?			✓	At this site there were no specific plans for moving the monitoring path. The expected wind direction was from the South.
1c. Describe how corrections are made for incomplete plume capture.			✓	Any such corrections would have to be made during data analysis and interpretation.

AUDIT QUESTIONS	RESPONSE			COMMENTS
	Y	N	NA	
2. How will highly variable winds be recognized? How would excessive variation in wind speed or direction be dealt with during monitoring? How will excessive variability be taken into account during later data validation and analysis?			✓	Wind direction variability can be seen from the value of sigma-theta and from the variation between 5-minute averages. Excessive variability would render the data from that time period unsuitable for emission rate calculation.
3. What dispersion models are used to assist in the field? Identify. Describe how they are used.			✓	Not identified by field personnel.
4. Describe any modifications or corrections to the analysis equations given in the QAPP that may be applied in actual usage.			✓	Not known by field personnel.
5. Will dispersion models be used for further analysis after the data are returned to the Radian office? If so, describe.			✓	Not known.
6. Describe the data processing operations done on site. Provide a block diagram of major data transfer operations from acquisition.			✓	Only minimal data processing is completed on site.

APPENDIX B

FIELD CONTRACTOR COMMENTS AND RESPONSE TO ISSUES IDENTIFIED IN TECHNICAL SYSTEMS PERFORMANCE AUDIT REPORT

October 22, 1996

Ms. Susan A. Thorneloe
Air Pollution Prevention and Control Division, MD-63
National Risk Management Research Laboratory
Office of Research and Development
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

SUBJECT: Comments on and Response to Issues Identified in Technical Systems and Performance Audit Report
(EPA Contract No. 68-D4-0100, Base Statement of Work Area, Delivery Order No. 2, Line Item 21)

Dear Susan:

Enclosed are the Pechan Team's comments on and response to issues identified in Mr. Richard Shores' September 23, 1996, memorandum that documents the results of the "Technical Systems and Performance Audit" that was conducted for the greenhouse gas field measurement study at the Beef Processing Plant in the Southwest U.S.

If you have any questions, please contact me at (919) 493-3144, x118.

Sincerely,

Randy Strait
Sr. Environmental Scientist

Enclosure

cc: Bill Barnard (Pechan-NC)
Bart Eklund (Radian-TX)
Dorothy Schilder (Pechan-NC)

Comments on and Response to Issues Identified in Technical Systems and Performance Audit Report

October 22, 1996

Introduction

The Pechan Team has reviewed the memorandum from Mr. Richard Shores to Ms. Susan Thorneloe dated September 23, 1996, that gives the results of the "Technical Systems and Performance Audit" for the greenhouse gas field measurement study conducted at a beef processing plant in the Southwest U.S.

The audit report fairly represents the field activities that were undertaken. Both Mr. Shores and Mr. Flanagan appeared to have considerable experience with field sampling and both approached their work in a professional manner. Overall, the auditors raise many valid issues in their report that merit consideration. However, it appears that the data set developed during the audit includes both valid and invalid data. Drawing upon the entire data set, the auditors reach conclusions that are not supported by a close examination of the data.

The comments follow the format of Mr. Shores' memorandum: Audit Summary, Technical Systems Audit Findings, and Performance Audit Results.

Audit Summary

The audit summary has three primary conclusions: 1) the audit results indicate that the measurement results may be biased high; 2) the wind direction sensor was out of alignment; and 3) the use of a heavier-than-air gas as a tracer may not be valid. As explained in the discussion that follows, the first and third conclusion are not valid. The second conclusion is valid, but as indicated below, the problem would have been detected and corrected during the data reduction if it had not been identified during the audit.

Technical Systems Audit Findings

The audit report has eight bulleted items. The gist of each comment is given in italics followed by our response.

1. *The pH meter was not being calibrated and stored as recommended by the manufacturer.*

The pH meter was used to monitor sample pH during acidification (preservation) of certain water samples to a pH level of ≤ 2. The deficiency was corrected at the site and correct procedures were followed at the subsequent three field sites. The effect of the infrequent calibrations on the analytical results should be non-existent.

A pH-related issue, of potential future interest, was the buffering capacity of the samples. The high levels of chemical oxygen demand (COD) and total suspended solids (TSS) led to a large buffering capacity in the influent samples. Low pH readings were transitory in some cases. The samples required stirring after acid addition, pH monitoring over a longer than usual time period, and repeated acid addition before a constant pH level of ≤ 2 could be achieved.

2. *Water measurements were taken primarily from well-aerated locations.*

At all five sites, influent and effluent water samples were collected at piping or sumps, whenever possible, as opposed to dipping samples from the lagoons. Given the large surface area of the lagoons and their depths, the former option should result in more representative samples. As seen in Table 5-5 of the December 20, 1995, draft field measurement report, the effluent wastewater samples averaged only 0.2 milligrams per liter (mg/L) of O_2 and never exceeded 0.7 mg/L. Given the low readings, aeration of the samples due to sample location does not appear to be significant.

3. *Effluent samples were collected after an aerobic lagoon.*

At this site, no access was available to wastewater between the four large anaerobic lagoons and the one small aerobic lagoon. This was not an issue at the other four sites. We agree with the recommendation that "Whenever possible, biological oxygen demand (BOD) removal should be determined across both the anaerobic and aerobic lagoons".

4. *The station time was ahead of universal time by 2 minutes 3 seconds.*

We agree with the recommendation that "Station times should be synchronized with universal time".

A related issue of possible interest is the accuracy of the time rate. When using a portable generator, the electrical power may not be exactly 60 Hz and this can result in clocks running slow or fast. This complicates data reduction. Inaccurate clock speed was not an issue in this study.

5. *Tracer source did not encompass the width of the plume.*

The width of the tracer source was 30 meters (m) versus a lagoon width of 91m at the audit site and 58m to 236m at the other four sites. Tracer releases often are a point source and the audit results for this study indicate that very comparable results were obtained for a point source of ethylene versus a line source of SF_6 (see next section). In principle, however, it is advisable to extend the line source to as close as possible to the width of the area source.

6. *Site layout was not fully characterized on-site.*

This comment is not correct. We were aware of the length of the monitoring beam (173m) versus the lagoon width (91m), but as noted in the audit report, the presence of a small pond on the site prevented us from extending the monitoring beam to the west.

7. *No allowance was made for horizontal dispersion ...the SF_6 tracer cross-wind profile may be different from that of [methane].*

We took horizontal dispersion into account by narrowing the acceptance criteria for wind direction from the +/- 30° value given in the Quality Assurance Project Plan (QAPP) to +/-15°. As shown by the audit results for tracer release from the far upwind edge of the lagoon system, we could accurately determine emission rates.

The concern that SF_6 will behave differently than other gases in the atmosphere is a widespread misconception. It is based, perhaps, on the erroneous assumption that gas behavior due to diffusion is the dominant transport mechanism in the atmosphere. It is true that the molecular weight (MW) of SF_6 is 146 versus a MW of 29 for ambient air. It is still considered to be a volatile gas, however. For comparison, the MW of chloroform is 119 and the MW of carbon tetrachloride is 154; both are volatile organic compounds (VOCs).

There are two arguments that SF_6 behaves exactly the same as other gases under typical atmospheric conditions. One, the U.S. EPA's default regulatory model for atmospheric dispersion (i.e., ISC3) makes no distinction in atmospheric transport among volatile gases based on molecular weight. A molecule of SF_6 is assumed to behave exactly the same as a molecule of methane or nitrogen. The EPA and innumerable outside experts have accepted this assumption as being valid. The exceptions are scenarios involving reactive gases, particles that may be deposited, or dense gases at high concentrations. The dense gas exception is not applicable to our situation, as atmospheric models designed to address accidental releases of dense gases indicate that dense gas effects are not significant until the dense gas concentration approaches 10% (we were at less than 1 ppmv). Two, measurements in ambient air indicate that atmospheric gases are not distributed by molecular weight. If this were not true, one would expect the first few feet of air above the ground surface to be noble (e.g., Ar, Kr) and other dense gases. Further evidence is that the percentage of oxygen in air is the same at ground level as at breathing height as at 50m above ground (the partial pressure, of course, does vary with altitude - but not the percentage). The heavier oxygen does not "settle out" from the nitrogen in the atmosphere.

8. *The wind direction sensor had not been aligned according to the QAPP.*

The audit finding is correct. The original alignment of the wind direction (WD) sensor was performed when the wind speed was greater than 10 mph, which made alignment inaccurate due to difficulties in holding the WD sensor steady. This was not a problem at the other four field sites. More care was taken at subsequent field sites, both in the initial alignment and in checking the alignment afterwards. In any event, the FTIR monitoring

itself provided a good indication of the WD alignment. A plot of measured methane concentration versus wind direction (see Figure 6-2 of our report) shows a strong dependence of methane concentration with WD. The maximum methane readings were at or near the ideal WD of 176° and the concentration dropped off as the deviation from the ideal WD increased. If the problem had not been identified by the audit, it would have been identified during the data reduction, thought the cause of the error would have been somewhat subject to doubt.

Performance Audit Results

The audit gas was released from five locations. The results given in the audit report include data from time periods when the WD deviated from the ideal by more than 15°. If these invalid data are removed from the data set, the data are as shown in the following table:

Audit Gas Release Point	Number of valid data points	Avg. Emission Rate (g/sec)	% Recovery
Center	5	0.49	98
SE	8	0.48	96
SW	0	n/a	--
NE	6	8.7	1,700
NW	4	1.5	300

It was expected that individual data points would show variability, so the QAPP required that, for the routine measurements, at least 10 valid data points be collected and averaged. The audit yielded somewhat smaller data sets for each location. The comparison of the average emission rate is the key; the % recovery for individual data points is not significant except as a measure of variability. Excellent agreement was found for both the center release point and for the SE release at the far upwind edge of the lagoon. Unfortunately, no valid data were collected for the release of audit gas from the SW point.

The audit gas release closest to the FTIR beam (i.e., the NE and NW release points) yielded a large, positive bias. At first glance, this is counterintuitive. Any bias would be expected to be negative. Any release of a non-buoyant plume from the close edge of the lagoon would be more likely to pass under the beam and yield small recoveries (i.e., a negative bias) than to somehow be concentrated upon the beam.

An area source such as a lagoon has a non-buoyant plume. In other words, the emitted gases are at the same temperature as the ambient air and the plume has no initial vertical momentum, as opposed to the release of hot gases from a combustion source. To simulate this type of plume, Radian's tracer release system consisted of a series of release points that were close to ground level and had the gas release parallel to the ground to avoid any

vertical momentum. The release of the audit gas, however, was an upwards-pointing cone. This type of tracer release is frequently used by experienced staff, but this type of release does give the audit gas a vertical momentum. The potential for this to cause a problem was not noted by any of the parties in the field. For the release points more than 50m from the FTIR beam, this type of release did not make any difference - the plume traveled a sufficient distance to become dispersed vertically and horizontally to the same extent as the gases emitted from the lagoon. This is a commonly observed phenomenon - at a sufficient distance a point source and an area source yield equivalent dispersion. Such is not the case, however, for close-in distances. For the two closer release points, the vertical momentum of the audit gas caused it to not be representative of a non-buoyant source. The plume did not disperse to the same extent as the gases emitted by the lagoon. Therefore, the performance audit did not yield valid data for the two release points close to the FTIR beam because it did not adequately simulate the actual emission source. A rough analogy is to think of trying to measure relative humidity with a water hose dousing the sensor. It is certainly possible that some other factor caused the large, positive bias, but the nature of the tracer gas release seems the most likely cause.

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(Please read Instructions on the reverse before completing)

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15. SUPPLEMENTARY NOTES APPCD project officer is Susan A. Thorneloe, Mail Drop 63, 919/541-2709.

16. ABSTRACT The report gives results of field testing to develop more reliable greenhouse gas (GHG) emission estimates for Wastewater treatment (WWT) lagoons. (NOTE: Estimates are available for the amount of methane (CH4) emitted from certain types of waste facilities, but there is not adequate field measurement data to validate these estimates.) Field tests of emissions were conducted for WWT lagoons that use anaerobic processes to treat large volumes of wastewater with large biological oxygen demand (BOD) loadings. Air emissions and wastewater were measured at anaerobic lagoons at three meat processing plants and two publicly owned treatment works. The overall emission rates of CH4, carbon dioxide, carbon monoxide, nitrous oxide, ammonia (NH3), and chlorofluorocarbons were measured from each source using an open-path monitoring approach. The emitted compounds were identified and quantified by Fourier-Transform Infrared spectroscopy. Emission factors were developed for CH4 and NH3 as a function of the plant production rate, wastewater parameters (e.g., influent BOD and chemical oxygen demand (COD) loadings), and WWT system performance (e.g., BOD and COD removal rates). GHGs are produced from the anaerobic decomposition of waste in landfills, septic sewage systems, and WWT facilities.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS		b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group	
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Waste Water	Ammonia	Stationary Sources		07B
Waste Treatment	Meat			06H
Greenhouse Effect	Processing		04A	13H
Emission			14G	
Measurement				

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