1999/2000 Urban Air Toxics Monitoring Program (UATMP)

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1999/2000 Urban Air Toxics Monitoring Program (UATMP)

Final Report
EPA Contract No. 68-D-99-007
Delivery Order 6/8

Prepared for:
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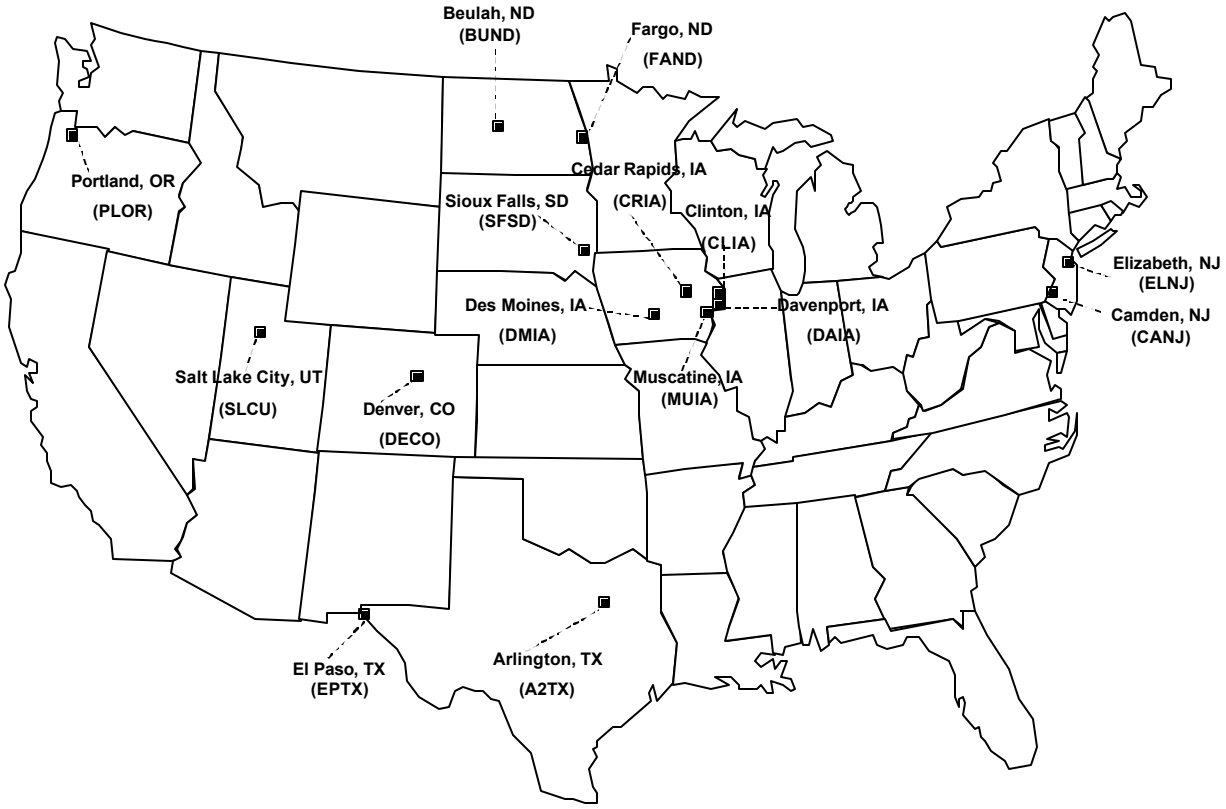

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March 2001

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LIST OF ABBREVIATIONS

AIRS	Aerometric Information and Retrieval System
AQS	Air Quality Subsystem (of the Aerometric Information and Retrieval System)
ATSDR	Agency for Toxic Substances and Disease Registry
BTEX	benzene, toluene, ethylbenzene, and xylenes (*o*-, *m*-, and *p*-xylene)
CO	carbon monoxide
DNPH	2,4-dinitrophenylhydrazine
EPA	U.S. Environmental Protection Agency
FC-43	perfluorotributylamine
FID	flame ionization detection
GC	gas chromatography
HPLC	high-performance liquid chromatography
MEK	methyl ethyl ketone
MS	mass spectrometer
MTBE	methyl *tert*-butyl ether
NA	not applicable
ND	nondetect
NMOC	Nonmethane Organic Compounds
NO_x	oxides of nitrogen
ppbC	parts per billion Carbon
ppbv	parts per billion (by volume)
PM	particulate matter
R_{max}	maximum radius of concern
RPD	relative percent difference
SNMOC	Speciated Nonmethane Organic Compound
SVOC	Semivolatile Compounds
TRI	Toxics Release Inventory
UATMP	Urban Air Toxics Monitoring Program
VOC	volatile organic compound(s)

LIST OF ABBREVIATIONS (Continued)

Monitoring Stations

A2TX	Arlington, TX
BUND	Beulah, North Dakota
CANJ	Camden, New Jersey
CLIA	Clinton, Iowa
CRIA	Cedar Rapids, Iowa
DAIA	Davenport, Iowa
DECO	Denver, Colorado
DMIA	Des Moines, Iowa
ELNJ	Elizabeth, New Jersey
EPTX	El Paso, Texas
FAND	Fargo, North Dakota
MUIA	Muscatine, Iowa
PLOR	Portland, Oregon
SLCU	Salt Lake City, Utah
SFSD	Sioux Falls, South Dakota

Executive Summary

This report presents the results and conclusions from the ambient air monitoring conducted as part of the 1999/2000 Urban Air Toxics Monitoring Program (UATMP)—a program designed to characterize the magnitude and composition of potentially toxic air pollution in, or near, urban locations. The 1999/2000 UATMP included 15 monitoring stations that collected 24-hour air samples, typically on a 6- or 12-day schedule. Six sites analyzed ambient air samples for concentrations of 59 volatile organic compounds (VOC) and 16 carbonyl compounds. Ten sites also analyzed for 80 speciated nonmethane organic compounds (SNMOC). One site analyzed for the VOC, carbonyl compounds, and 92 semivolatile compounds (SVOC). Overall, nearly 28,000 ambient air concentrations were measured during the 1999/2000 UATMP. The summary presented in this report uses various graphical, numerical, and statistical analyses to put the vast amount of ambient air monitoring data collected into perspective.

Not surprisingly, the ambient air concentrations measured during the program varied significantly from city to city and from season to season. This report describes and interprets these spatial and temporal variations separately for halogenated hydrocarbons, hydrocarbons, polars, and carbonyls.

The ambient air monitoring data collected during the 1999/2000 UATMP serve a wide range of purposes. Not only do these data characterize the nature and extent of urban air pollution close to the 12 monitoring stations participating in this study, but they also indicate some trends and patterns that may be common to all urban environments. Therefore, this report presents some results that are specific to particular monitoring locations and presents other results that are apparently common to urban environments. These results should ultimately provide additional insight into the complex nature of urban air pollution. The final data are also included in the appendices to this report.

1.0 Introduction

Air pollution in urban locations contains many components that originate from a wide range of industrial, motor vehicle, and natural emissions sources. Because some of these components include toxic compounds known or suspected to be carcinogenic, the U.S. Environmental Protection Agency (EPA) continues to encourage state and local agencies to understand and appreciate the nature and extent of potentially toxic air pollution in urban locations. To achieve this goal, EPA sponsors the Urban Air Toxics Monitoring Program (UATMP), a program designed to characterize the composition and magnitude of urban air pollution through extensive ambient air monitoring. Since the inception of the UATMP in 1987, many environmental and health agencies have participated in the UATMP to assess the causes and effects of air pollution within their jurisdictions. This report summarizes and interprets the 1999/2000 UATMP monitoring effort, which included 17 months of six- and twelve-day measurements of ambient air quality in or near 15 urban locations. Much of the analysis and data interpretation in this report focuses on compound-specific data trends.

Note: In previous years, the UATMP sampling typically began in September and ended in August of the following calendar year. This year, the sampling began anywhere from August to December 1999 and ERG ended all sampling at the end of December 2000. The "program year" is therefore assigned as UATMP 1999/2000. The following years will be named in accordance with the year sampling was initiated (i.e., UATMP 2001, UATMP 2002, etc.).

The contents of this report provide both a qualitative overview of air pollution at selected urban locations and a quantitative analysis of the factors that appear to affect urban air quality most significantly. Much of the analysis and data interpretation in this report focuses on topics that previous annual UATMP reports have not addressed in detail, such as site-specific and compound-specific data trends. This report also focuses on data trends at each of the 15 different air sampling locations, a site-specific approach that allows for much more detailed analyses of the factors (e.g., motor vehicle emission sources, industrial sources, natural sources) that affect air quality differently from one urban center to the next.

Ultimately, the contents of this report should offer participating agencies useful insights into important air quality issues. For example, participating agencies can use trends and patterns in the UATMP monitoring data to determine whether levels of air pollution present public health concerns, to identify which emissions sources contribute most strongly to air pollution, or to forecast whether proposed pollution control initiatives might significantly improve air quality. Though they are extensive, the analyses in this report should not be viewed as a comprehensive account of urban air pollution at every UATMP monitoring station. State and local environmental agencies are encouraged to perform additional analyses of the monitoring data so that the many factors that affect ambient air quality can be appreciated fully.

To facilitate examination of the 1999/2000 UATMP monitoring data, the complete set of measured concentrations is presented in appendices of this report. In addition, these data are publicly available in electronic format from the Air Quality Subsystem (AQS) of EPA's Aerometric Information Retrieval System (AIRS) at http://www.epa.gov/ttn/airs/.

The remainder of this report is organized into fourteen text sections and thirteen appendices. Table 1-1 highlights the contents of each section. As with previous UATMP annual reports, all figures and tables in this report appear at the end of their respective sections (figures first, followed by tables).

Table 1-1
Organization of the 1999/2000 UATMP Report

Report Section	Section Title	Overview of Contents
2	The 1999/2000 UATMP	This section provides background information on the scope of the 1999/2000 UATMP and includes information about the: • Monitoring locations • Compounds selected for monitoring • Sampling and analytical methods • Sampling schedules • Completeness of the air monitoring program.
3	Overview of Compounds	These sections present and discuss significant trends and relationships in the UATMP data. These sections characterize how ambient air concentrations varied with monitoring location and with time, then interpret the significance of the observed spatial and temporal variations.
4	Monitoring results for Denver, CO (DECO)	These sections summarize the 1999/2000 UATMP monitoring data collected in the respective cities and analyze in detail ambient air concentrations of selected nitriles and oxygenated compounds.
5	Monitoring results for Cedar Rapids (CRIA), Clinton (CLIA), Davenport (DAIA), Des Moines (DMIA), Muscatine, IA (MUIA)	
6	Monitoring results for Camden (CANJ) and Elizabeth, NJ (ELNJ)	
7	Monitoring results for Beulah (BUND) and Fargo, ND (FAND)	
8	Monitoring results for Portland, OR (PLOR)	
9	Monitoring results for Sioux Falls, SD (SFSD)	
10	Monitoring results for Arlington (A2TX) and El Paso, TX (EPTX)	
11	Monitoring results for Salt Lake City, UT (SLCU)	

Table 1-1. (Continued)

Report Section	Section Title	Overview of Contents
12	Data Quality	This section defines and discusses the concepts of precision and accuracy. Based on quantitative and qualitative analyses, this section comments on the precision and accuracy of the 1999/2000 UATMP ambient air monitoring data.
13	Conclusions and Recommendations	This section summarizes the most significant findings of the report and makes several recommendations for future projects that will involve ambient air monitoring in urban locations.
14	References	This section lists the references cited throughout the report.

2.0 The 1999/2000 UATMP

The 1999/2000 UATMP included 15 monitoring stations that collected 24-hour integrated canister and cartridge samples of ambient air for up to 17 months at six and twelve day sampling periods. These samples were analyzed in a central laboratory for concentrations of selected hydrocarbons, halogenated hydrocarbons, and polar compounds from the canister samples, carbonyl compounds from the cartridge samples, and semivolatiles from the XAD-2® thimbles. The following discussion reviews the monitoring locations, the compounds selected for monitoring, the sampling schedules, the completeness of the 1999/2000 UATMP, and the sampling and analytical methods.

2.1 Monitoring Locations

Although EPA sponsors the UATMP, EPA does not dictate where the UATMP monitoring stations are located. Rather, representatives from the state and local agencies that voluntarily participate in the program and contribute to the overall monitoring costs select the monitoring locations. Some monitors were placed near the centers of heavily populated cities (e.g., Denver and Portland), while others were placed in moderately populated areas (e.g., Beulah and Des Moines). The monitoring stations participating in the UATMP program are listed in Table 2-1.

Figure 2-1 shows the 15 monitoring locations of the 1999/2000 program. The maps in Figures 2-2 through 2-31 and the site descriptions in Table 2-2 and in Appendix A provide detailed information on the surroundings at the 15 1999/2000 UATMP monitoring locations. Figures 2-2 through 2-16 illustrate the locations and surroundings of each monitoring site. Figures 2-17 through 2-31 show the numbers and locations of facilities within 10 miles of the monitoring sites that reported to the Toxics Release Inventory (TRI) in 1999.

As Figure 2-1 shows, the 1999/2000 UATMP monitors were distributed across the country. The monitoring data from these stations may indicate certain air quality trends that are common to all urban environments. The analyses in this report differentiate those trends that appear to be site-specific from those that appear to be common to urban environments.

Chemical concentrations measured during the 1999/2000 UATMP varied significantly from monitoring location to monitoring location. As discussed throughout this report, the proximity of the monitoring locations to different emissions sources, especially industrial facilities and heavily traveled roadways, often explains the observed spatial variations in ambient air quality. To provide a first approximation of the respective contributions of motor vehicle emissions and industrial emissions on ambient air quality at each site, Table 2-3 lists the number of people living within 10 miles of each monitoring location, as well as the number of industrial facilities that meet EPA's TRI reporting requirements.

At every UATMP monitoring location, the air sampling equipment was installed in a small temperature-controlled enclosure (usually a trailer or a shed) with the sampling inlet probe protruding through the roof. With this common setup, every UATMP monitor sampled ambient air at heights approximately 5 to 20 feet above local ground level.

For record keeping and reporting purposes, each of these locations was assigned:

- A unique four-character UATMP site code – used to track samples from the monitoring locations to the laboratory; and
- A unique nine-digit AIRS site code – used to index monitoring results in the AIRS database.

This report often cites these codes when presenting selected monitoring results.

2.2 Compounds Selected for Monitoring

Urban air pollution typically contains hundreds of components, including, but not limited to, volatile organic compounds (VOC), metals, inorganic acids, and particulate matter. Because sampling and analysis to monitor for every component of air pollution has been prohibitively expensive, the UATMP instead focuses on measuring ambient levels of 59 VOC (13 hydrocarbons, 37 halogenated hydrocarbons, and 9 polar compounds), 15 carbonyl compounds, 80 Speciated Nonmethane Organic

Compounds (SNMOC), and 91 Semivolatile Compounds (SVOC). Tables 2-4, 2-5, 2-6, and 2-7 identify the specific compounds of interest.

2.3 Sampling Schedules

Table 2-8 presents the dates on which sampling began and ended for each monitoring location. With the following exceptions, the monitoring locations started the 1999/2000 UATMP sampling in November 1999 and stopped sampling in December 2000. The following sites did not start at the beginning of the sampling period because the monitoring stations were not ready:

- Beulah, North Dakota started in July 2000;
- Cedar Rapids, Iowa started in June 2000;
- Clinton, Davenport, Des Moines, and Muscatine, Iowa started in October 2000;
- Denver, Colorado started sampling in September 2000;
- Elizabeth, New Jersey started in January 2000; and
- Sioux Falls, South Dakota started in March 2000.

According to the UATMP schedule, 24-hour integrated samples were to be collected at every monitoring location once every 6 or 12 days and each sample collection began and ended at midnight, local standard time. At each test site, VOC and carbonyl samples were collected concurrently, except for the Fargo, ND and Sioux Falls, SD sites. The following sites also collected SNMOC samples:

? Beulah, North Dakota;

? Cedar Rapids, Iowa;

? Clinton, Iowa;

? Davenport, Iowa;

? Denver, Colorado;

? Des Moines, Iowa;

? Fargo, North Dakota;

? Muscatine, Iowa;

? Salt Lake City, Utah; and

? Sioux Falls, South Dakota.

Portland, Oregon collected SVOC samples, the only site that collected this type of sample.

As part of the sampling schedule, site operators were instructed to collect duplicate samples on roughly 10 percent of the sampling days. Sampling calendars were distributed to help site operators schedule the collection of samples, duplicates, and field blanks. In cases where monitors failed to collect valid samples on a scheduled sampling day, site operators sometimes rescheduled samples for other days. This practice explains why some monitoring locations periodically strayed from the 6 or 12-day sampling schedule.

The 6- or 12-day sampling schedule permits cost-effective data collection for characterization (annual-average concentrations) of toxic compounds in ambient air and ensures that sampling days are evenly distributed among the 7 days of the week to allow comparison of air quality on weekdays to air quality on weekends.

2.4 Completeness

Completeness refers to the number of valid samples collected compared to the number of samples expected from a 6- or 12-day sampling cycle. Monitoring programs that consistently generate valid results have higher completeness than programs that consistently invalidate samples. The completeness of an air monitoring program, therefore, is a qualitative measure of the reliability of air sampling equipment and laboratory analytical equipment and a measure of the efficiency with which the program was managed.

Appendices B (VOC), C (carbonyl), D (SNMOC), and E (SVOC) identify samples that were invalidated and list the specific reasons why the samples were invalidated. Table 2-8 summarizes the completeness of the VOC and carbonyl data sets collected during the 1999/2000 UATMP:

? For VOC sampling, the completeness ranged from 75 to 100 percent, with an overall completeness of 92 percent.

? For carbonyl sampling, the completeness ranged from 75 to 93 percent with an overall completeness of 88 percent.

According to the UATMP data quality objectives (USEPA, 1988), at least 15 ambient air samples from a given monitoring station must be analyzed successfully to generate a sufficiently complete data set for estimating annual average air concentrations. The data in Table 2-8 show that all of the 1999/2000 UATMP monitoring stations that started by the end of June met this data quality objective. Because the samples taken in Clinton, Davenport, Des Moines, and Muscatine, Iowa were collected for only 3 months of the 12-month sampling period, the monitoring data from these stations do not characterize seasonal variations in air quality. Thus, central tendency concentrations for these stations might not represent actual annual average levels.

2.5 Sampling and Analytical Methods

During the 1999/2000 UATMP, three EPA-approved methods were used to characterize urban air pollution:

? *Compendium Method TO-15* was used to measure ambient air concentrations of 59 VOC and 80 SNMOC;

? *Compendium Method TO-11A* was used to measure ambient air concentrations of 15 carbonyl compounds; and

? *Compendium Method TO-13A* was used to measure ambient air concentrations of 91 SVOC.

The following discussion presents an overview of these sampling and analytical methods. For detailed descriptions of the methods, readers should refer to EPA's original documentation of the Compendium Methods (USEPA, 1999a).

2.5.1 VOC Sampling and Analytical Method

As specified in the EPA method, ambient air samples for VOC analysis were collected in passivated stainless steel canisters. The central laboratory distributed the prepared (i.e., cleaned and evacuated) canisters to the UATMP monitoring stations before each scheduled sampling event, and site operators connected the canisters to air sampling equipment prior to each sampling day. Before their use in the field, the passivated canisters had internal sea level pressures much lower than atmospheric. Because of this sea level pressure differential, ambient air naturally flowed into the canisters once they were opened, and pumps were not needed to collect ambient air for VOC analysis. A flow controller on the sampling device ensured that ambient air entered the canister at a constant rate across the collection period. At the end of the 24-hour sampling period, a solenoid valve automatically stopped ambient air from flowing into the canister, and site operators returned the canisters to the central laboratory for analysis.

By analyzing each sample with gas chromatography incorporating mass selective detection and flame ionization detection (GC/MS-FID), laboratory staff determined ambient air concentrations of 59 VOC (13 hydrocarbons, 37 halogenated hydrocarbons, and 9 polar compounds) and 80 SNMOC within the sample. Because isobutene and 1-butene as well as *m*-xylene and *p*-xylene elute from the GC column at the same time, the VOC analytical method reports only the sum of the concentrations for these compounds, and not the separate concentrations for each compound.

Table 2-4 lists the method detection limits for the laboratory analysis of the VOC samples and Table 2-6 lists the method detection limits for the SNMOC samples. Although the sensitivity of the analytical method varies from compound to compound, the detection limit for VOC reported for every compound is lower than 0.25 parts per billion by volume (ppbv); most of the detection limits were below 0.1 ppbv. For the SNMOC the detection limits reported for every compound are lower than

VOC detection limits, ranging from 0.03 to 0.16 ppbv. Speciated Nonmethane Organic Compound (SNMOC) detection limits are expressed in parts per billion Carbon (ppbC) as well as ppbv.

Because nondetect results significantly limit the range of data interpretations for ambient air monitoring programs, participating agencies should note that the approach for treating nondetects may slightly affect the magnitude of the calculated central tendency concentrations, especially for compounds with a low prevalence. Following the approach used to process the 1995 - 1997 UATMP monitoring data, *data analysts replaced all nondetect observations with concentrations equal to one-half of the compound's corresponding method detection limit*. This is the approach recommended for risk assessments involving environmental monitoring data (USEPA, 1988).

This year, the reportable SNMOC analysis option was combined with the standard VOC sampling. Data analysis has begun for the SNMOC sites where data was collected. These data are presented in Appendix F, with the VOC data. Table 2-5 lists the method detection limits for the laboratory analysis of the SNMOC samples.

2.5.2 Carbonyl Sampling and Analytical Method

Following the specifications of EPA Compendium Method TO-11A, ambient air samples for carbonyl analysis were collected by passing ambient air over silica gel cartridges coated with 2,4-dinitrophenylhydrazine (DNPH), a compound known to react selectively and reversibly with many aldehydes and ketones. Carbonyl compounds in ambient air remain within the sampling cartridge, while other compounds pass through the cartridge without reacting with the DNPH-coated matrix. As with the VOC sampling, the central laboratory distributed the silica gel cartridges to the monitoring locations, and site operators connected the cartridges to the air sampling equipment. After each 24-hour sampling period, site operators returned the cartridges to the central laboratory for chemical analysis.

To quantify concentrations of carbonyls in the sampled ambient air, laboratory analysts eluted the exposed silica gel cartridges with acetonitrile. This solvent elution liberated a solution of DNPH

derivatives of the aldehydes and ketones collected from the ambient air. High-performance liquid chromatography (HPLC) analysis and ultraviolet detection of these solutions determined the relative amounts of individual carbonyls present in the original air sample. Because butyraldehyde and isobutyraldehyde elute from the HPLC column at the same time, the carbonyl analytical method can report only the sum of the concentrations for these compounds, and not the separate concentrations for each compound. For the same reason, the analytical method reports only the sum of the concentrations for the three tolualdehyde isomers, as opposed to reporting separate concentrations for the three individual compounds.

Appreciating Detection Limits

The detection limit of an analytical method must be considered carefully when interpreting the corresponding ambient air monitoring data. By definition, detection limits represent the lowest concentrations at which laboratory equipment can *reliably* quantify concentrations of selected compounds to a specific confidence level. If a chemical concentration in ambient air does not exceed the method sensitivity (as gauged by the detection limit), the analytical method might not differentiate the compound from other compounds in the sample or from the random "noise" inherent in laboratory analyses. Therefore, when samples contain concentrations at levels below their respective detection limits, multiple analyses of the same sample may lead to a wide range of results, including highly variable concentrations or "nondetect" observations. *Because analytical methods do not quantify concentrations at levels below the detection limits accurately or precisely, data analysts must exercise caution when interpreting monitoring data with many reported concentrations at levels near or below the corresponding detection limits.*

Table 2-6 lists the detection limits reported by the analytical laboratory for measuring concentrations of 14 carbonyl compounds. Although the sensitivity of the analytical method varies from compound to compound, the detection limit reported by the analytical laboratory for every compound is less than or equal to 0.026 ppbv. Carbonyl detection limits ranged from 0.003 to 0.026 ppbv.

When reviewing these data, readers should keep in mind that data analysts replaced all nondetect observations with concentrations equal to one-half of the compound's corresponding detection limit.

2.5.3 Semivolatile Sampling and Analytical Method

Semivolatile sampling is performed completely by the sites in accordance with the Compendium Method TO-13A. ERG receives the samples from the sites for analysis only. Sampling modules containing XAD-2® and petri dishes containing filters, together with Chain of Custody forms and all associated documentation, are shipped to the ERG laboratory from the field. Upon receipt at the laboratory, sample preparation and analysis procedures are based on SW-846 Method 3542 and SW-846 Method 8270.

The samples are extracted with methylene chloride using a large Soxhlet extractor. After extraction, the sample is concentrated to 2 mL. The samples are placed in storage at 4° C until analysis. Sample extracts will be analyzed for semivolatile organic compounds using the analytical procedures of SW-846 Method 8270. The mass spectrometer is tuned and masses calibrated as required using perfluorotributylamine (FC-43), as per the manufacturer's instructions.

Method 8270 calibration procedures and criteria apply. Calibration check compounds and system performance check compounds must meet the criteria outlined in Method 8270. A solvent blank is analyzed prior to sample analysis to demonstrate that the analytical system is free from contamination. Internal standard area counts for each sample analysis must be between 50 and 150% of the last daily calibration standard, in accordance with Method 8270 specifications.

Criteria for identification of the mass spectra of the compounds of interest are positive matching of the relative retention times and the mass spectra of the sample and the standard components in accordance with the specifications of Method 8270. Quantitative analysis is achieved by the use of automated procedures in the Hewlett-Packard data system.

Figure 2-1. Monitoring Locations for the 1999/2000 Urban Air Toxics Monitoring Program

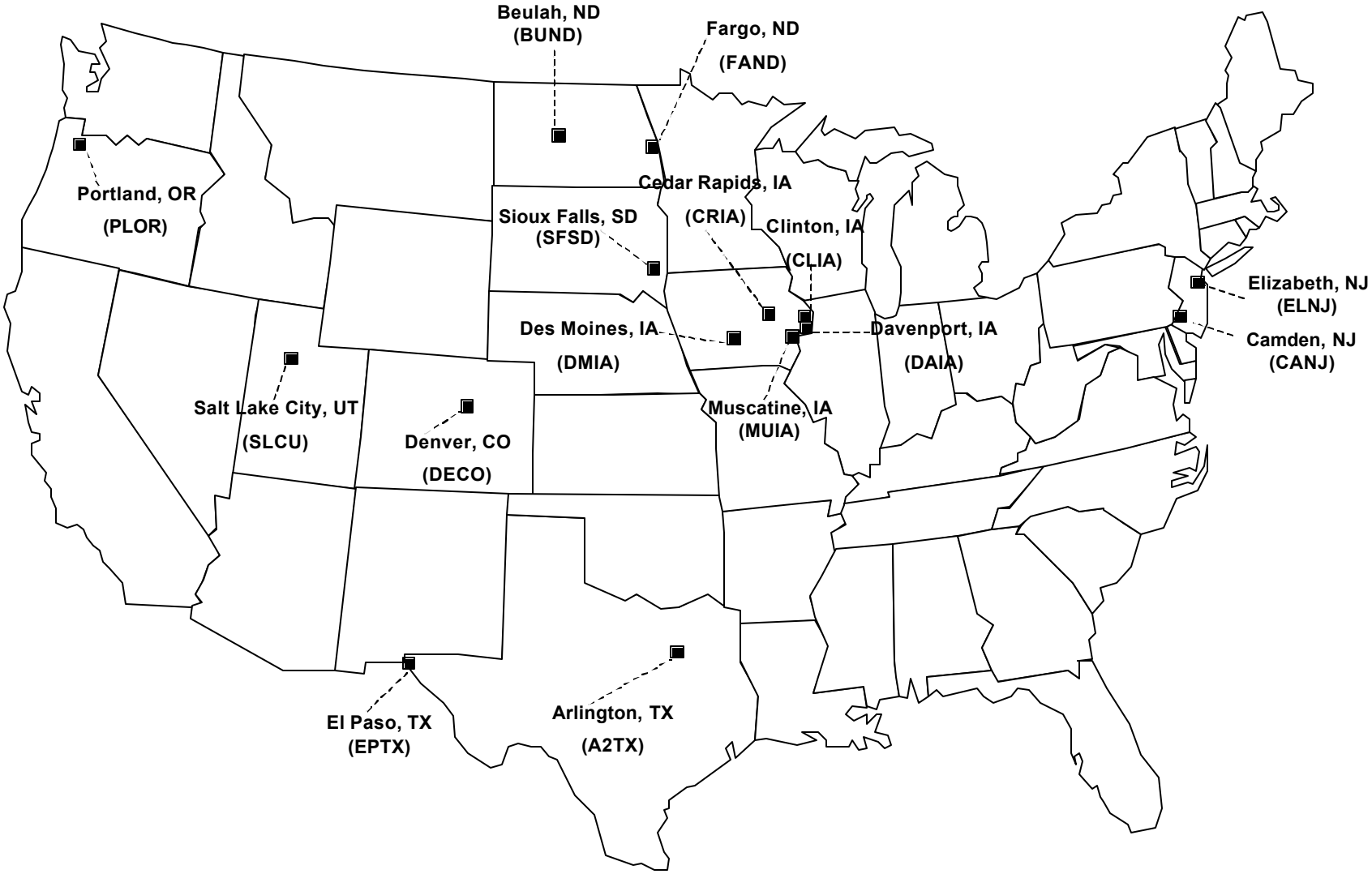
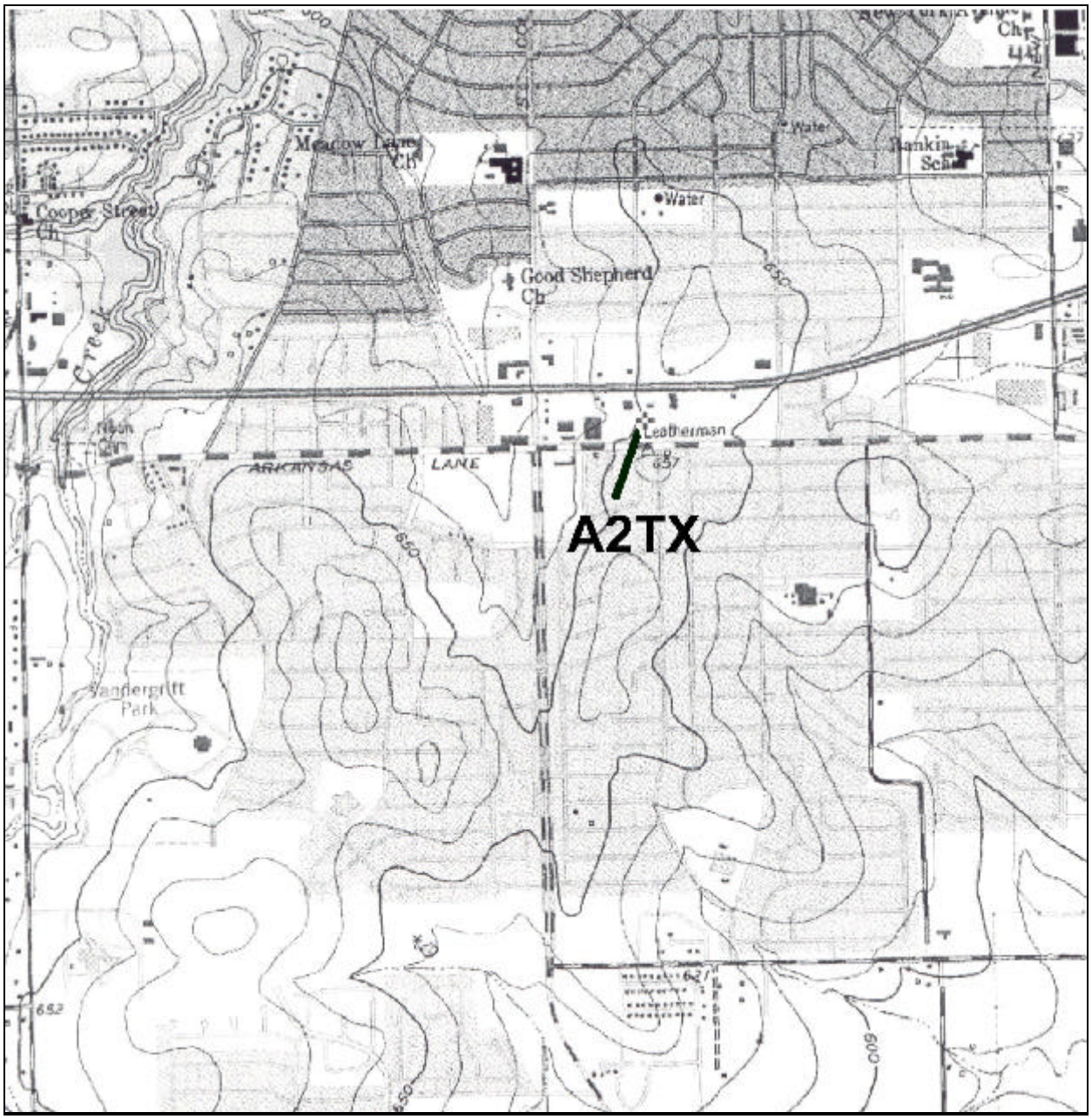
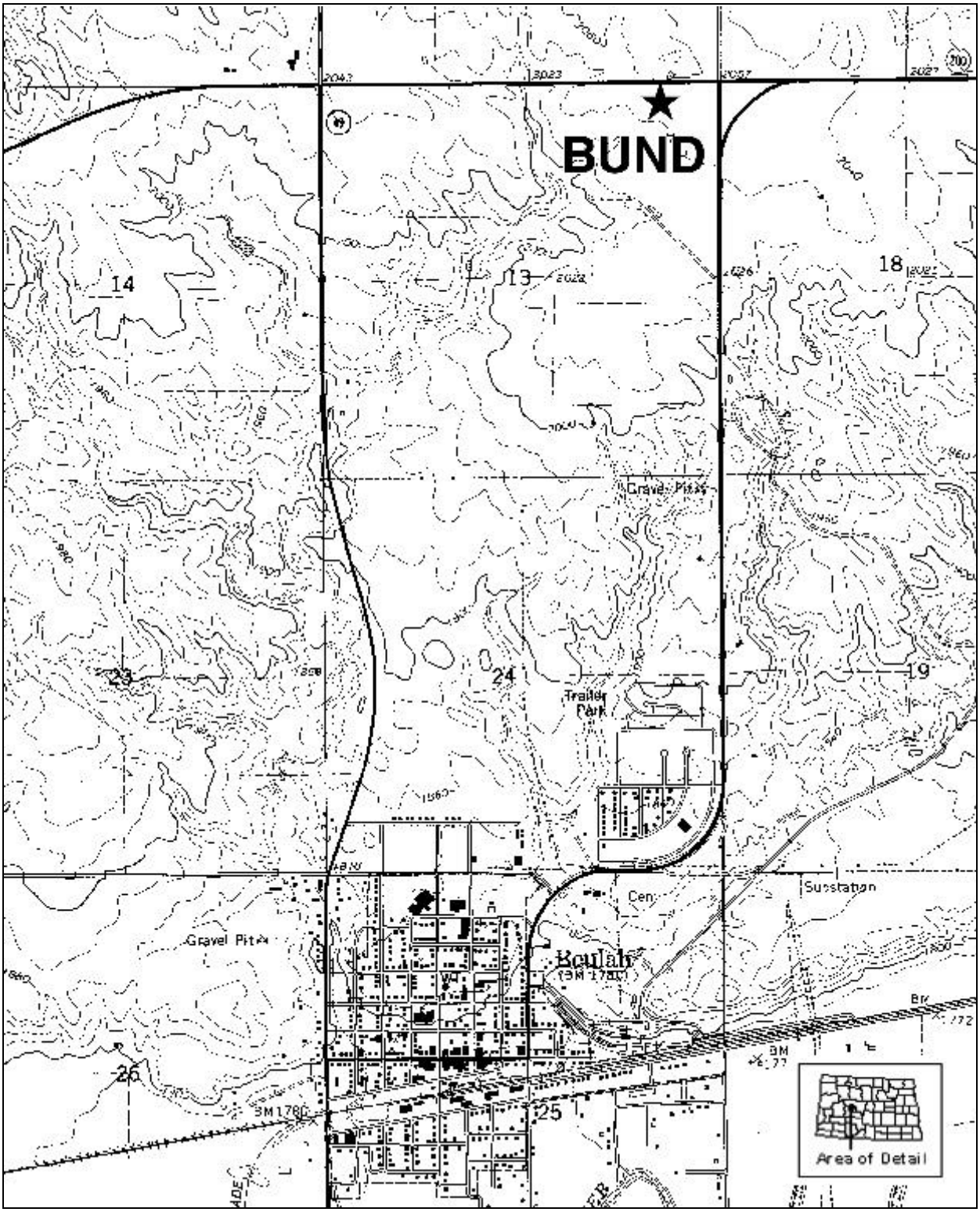


Figure 2-2. Arlington, Texas (A2TX) Monitoring Station



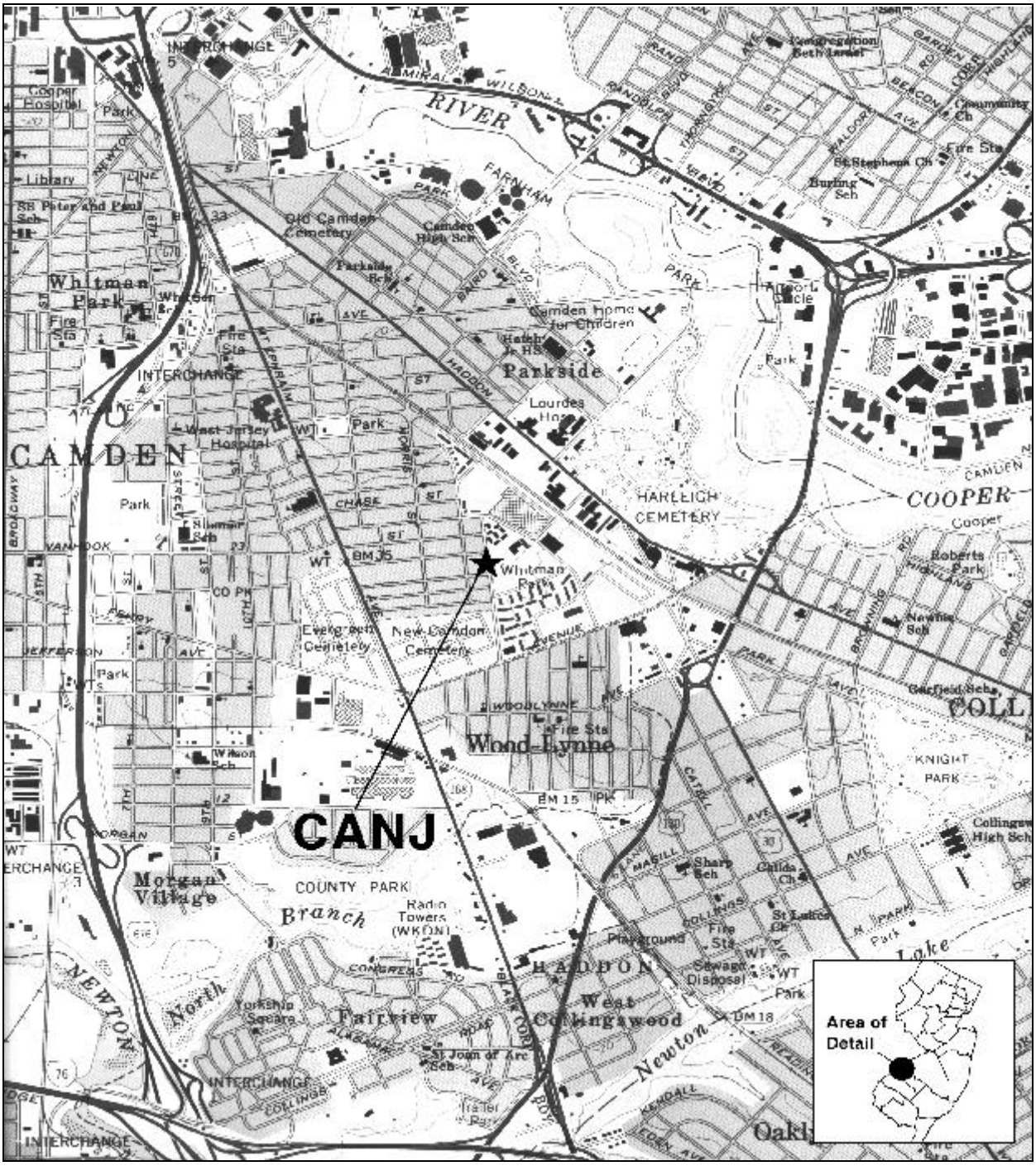
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-3. Beulah, North Dakota (BUND) Monitoring Station



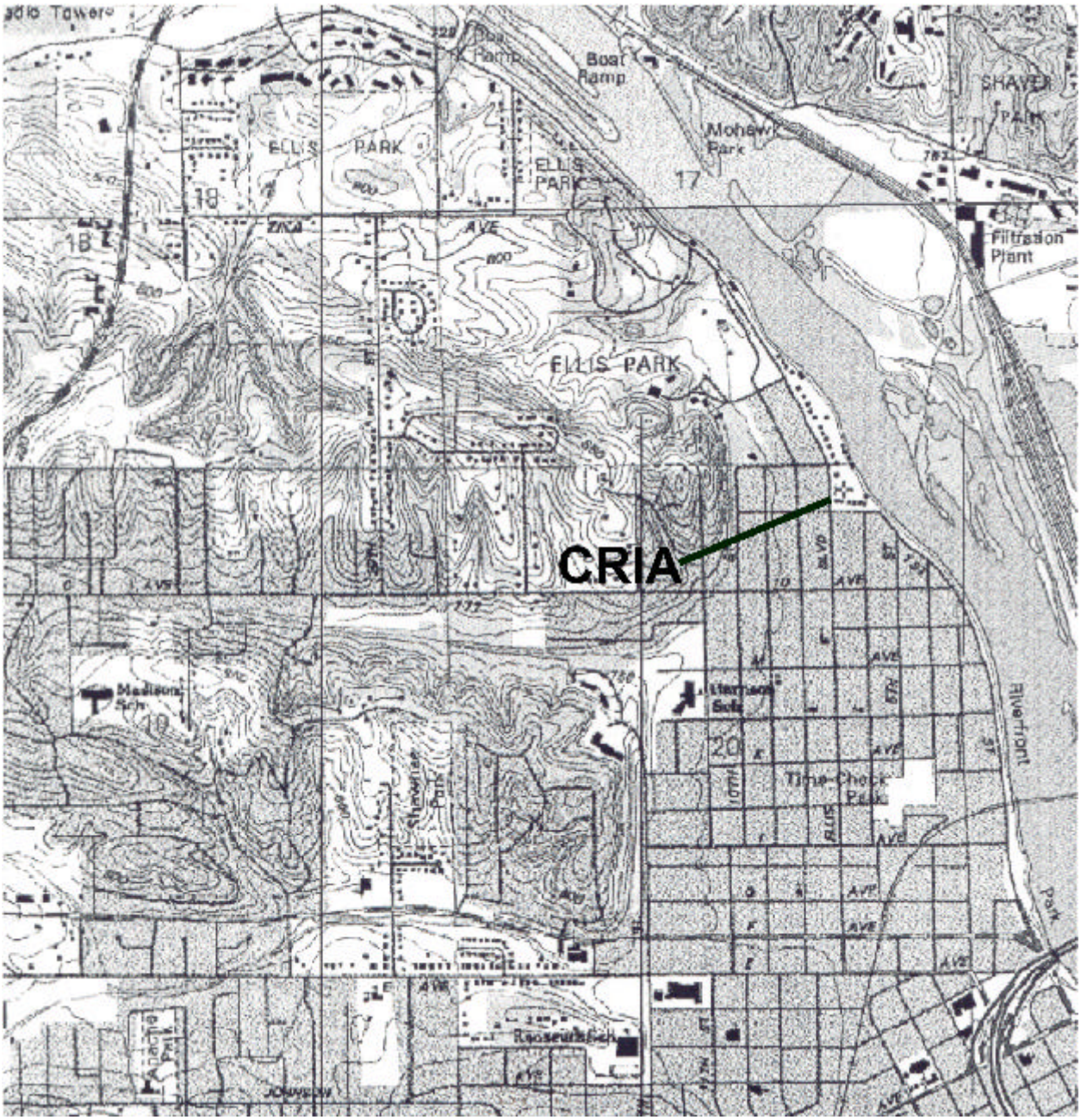
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-4. Camden, New Jersey (CANJ) Monitoring Station



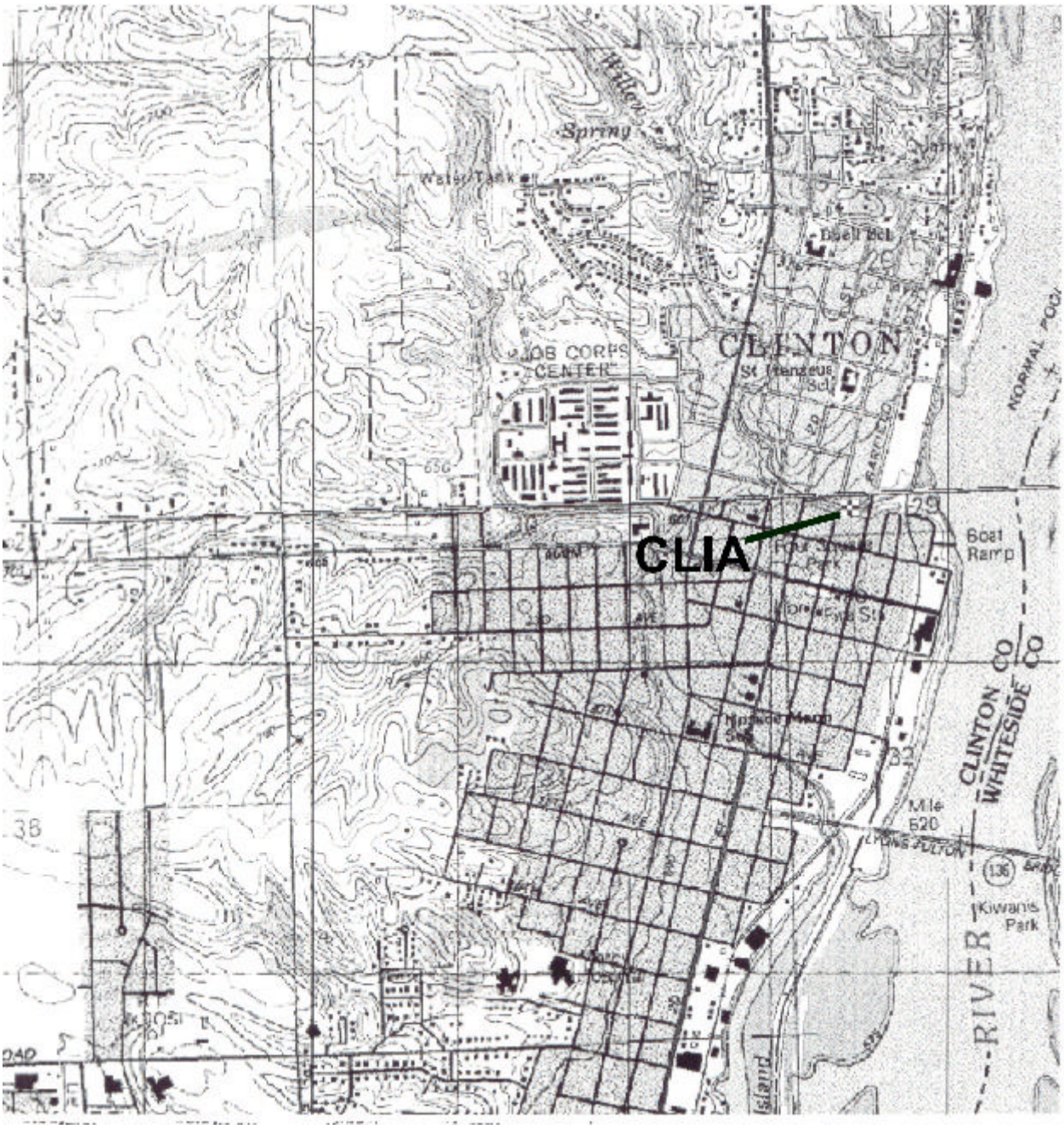
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-5. Cedar Rapids, Iowa (CRIA) Monitoring Site



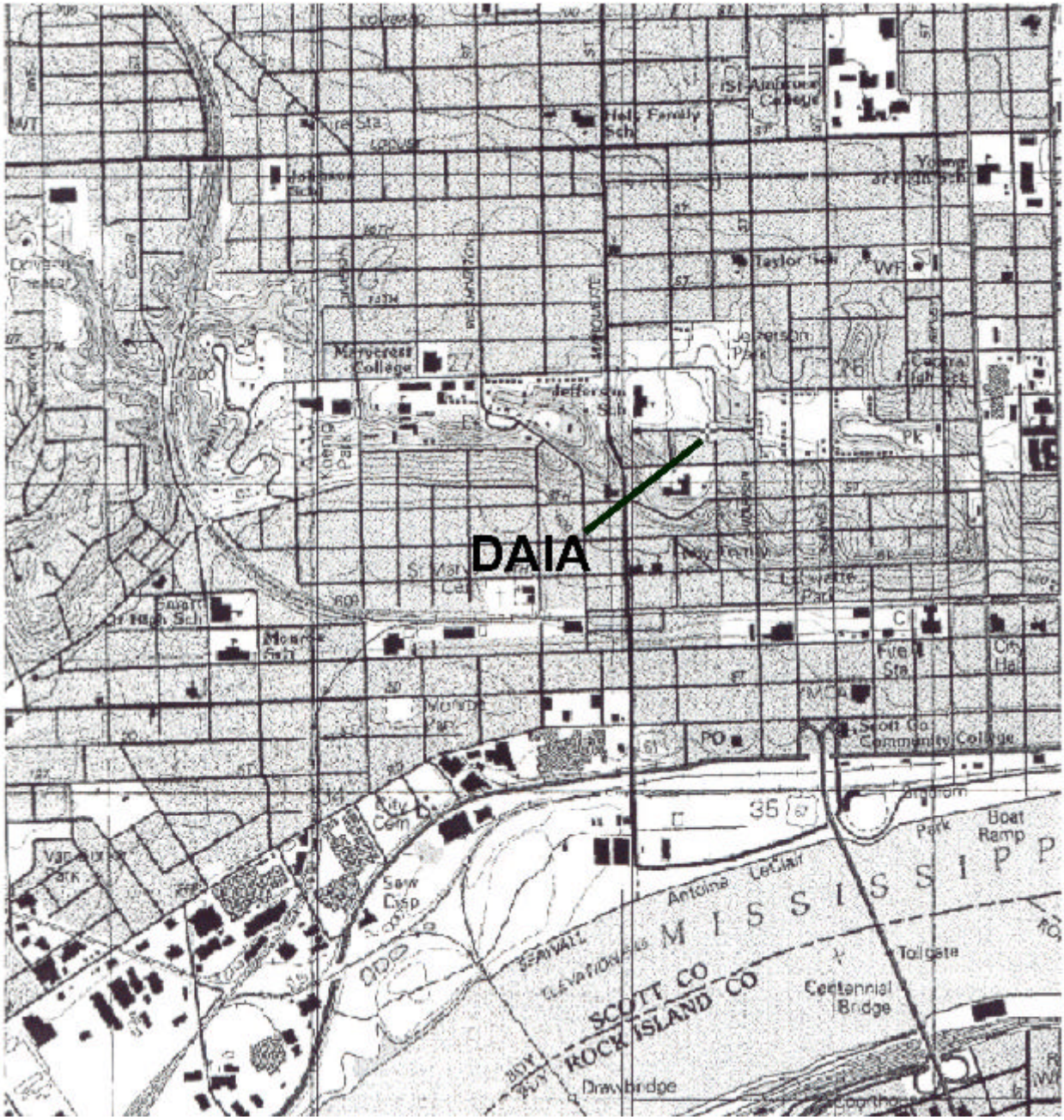
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-6. Clinton, Iowa (CLIA) Monitoring Station



Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-7. Davenport, Iowa (DAIA) Monitoring Station

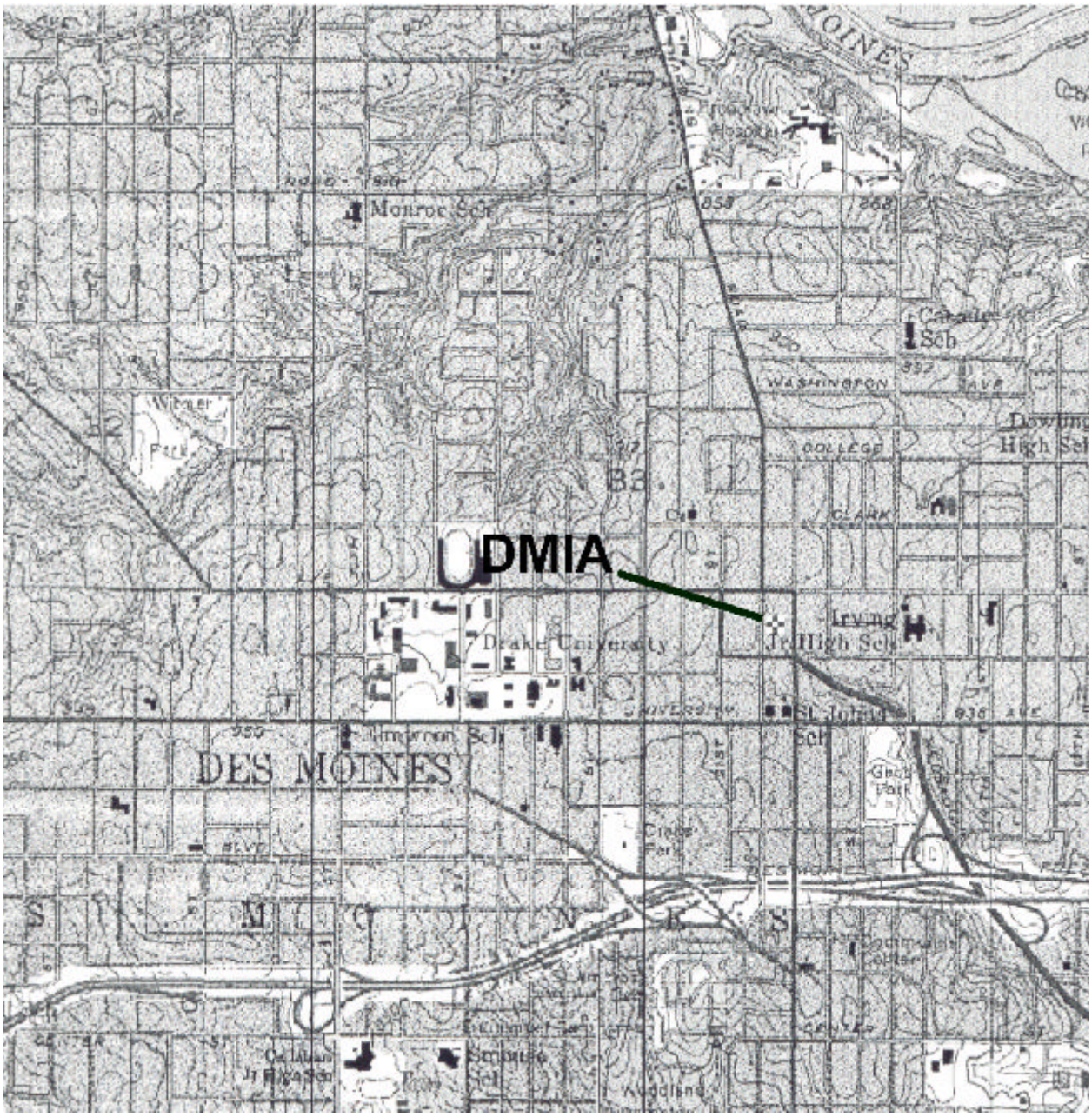


Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-8. Denver, Colorado (DECO) Monitoring Station

Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-9. Des Moines, Iowa (DMIA) Monitoring Station

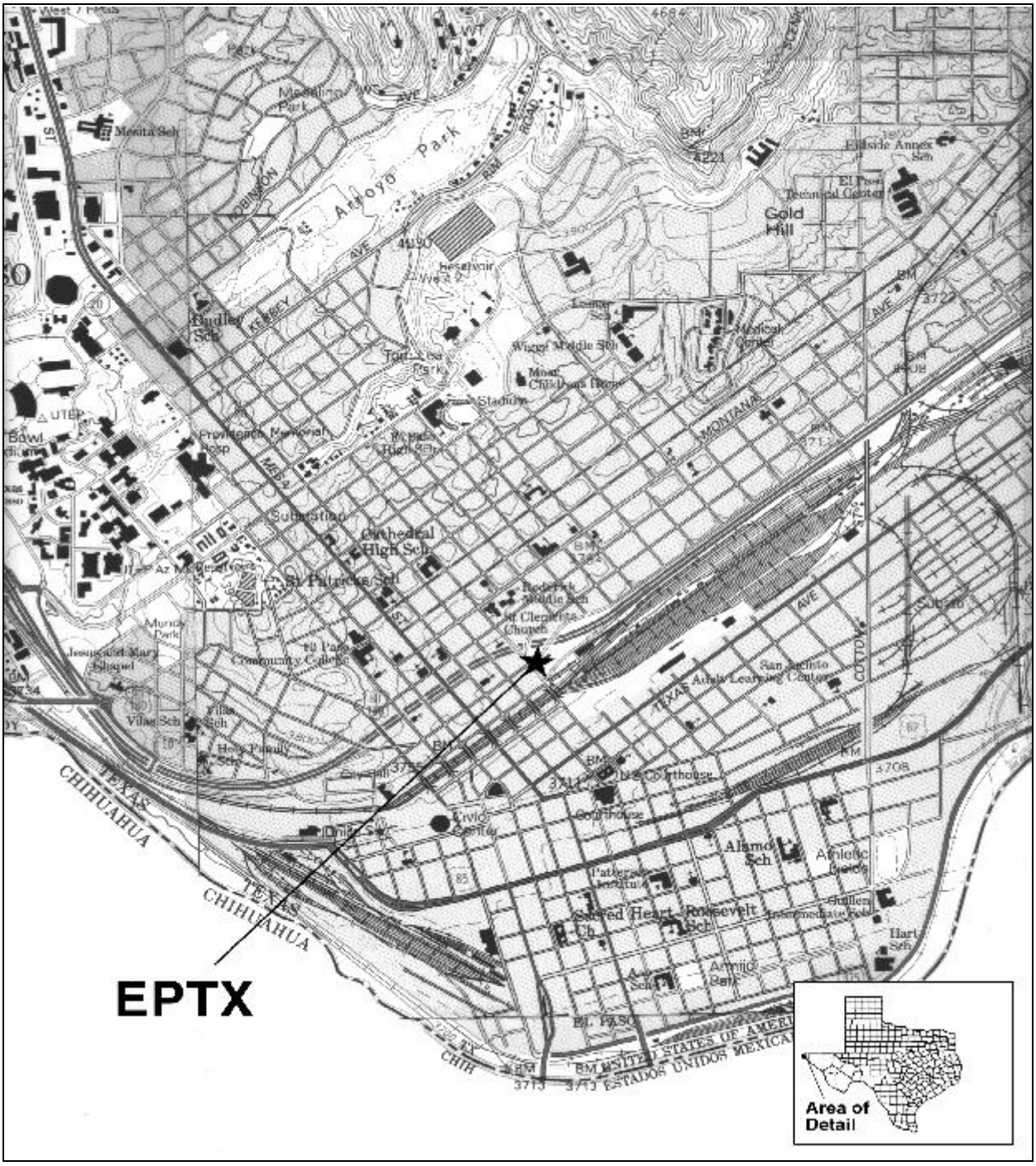


Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-10. Elizabeth, New Jersey (ELNJ) Monitoring Station

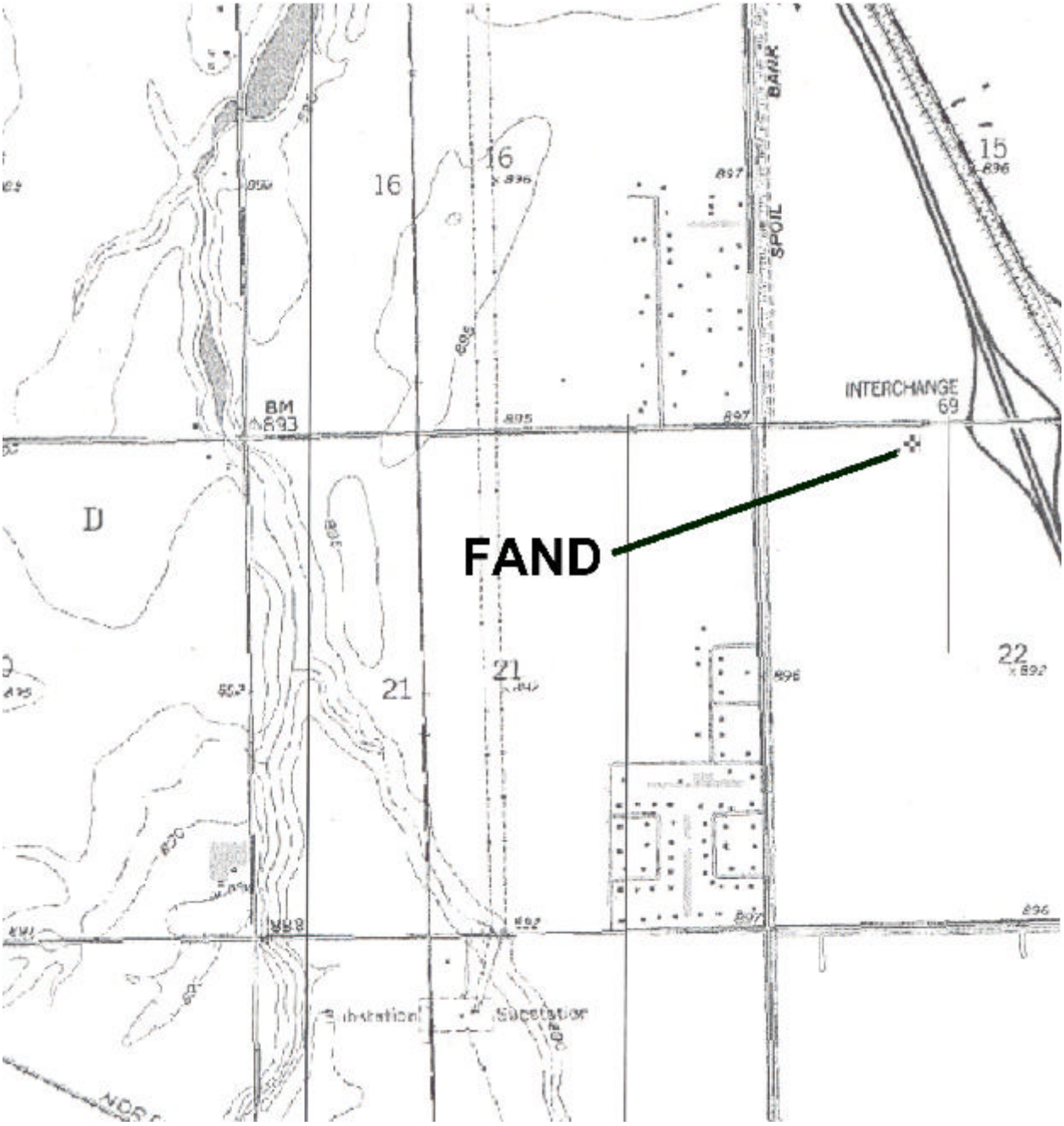
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-11. El Paso, Texas (EPTX) Monitoring Station



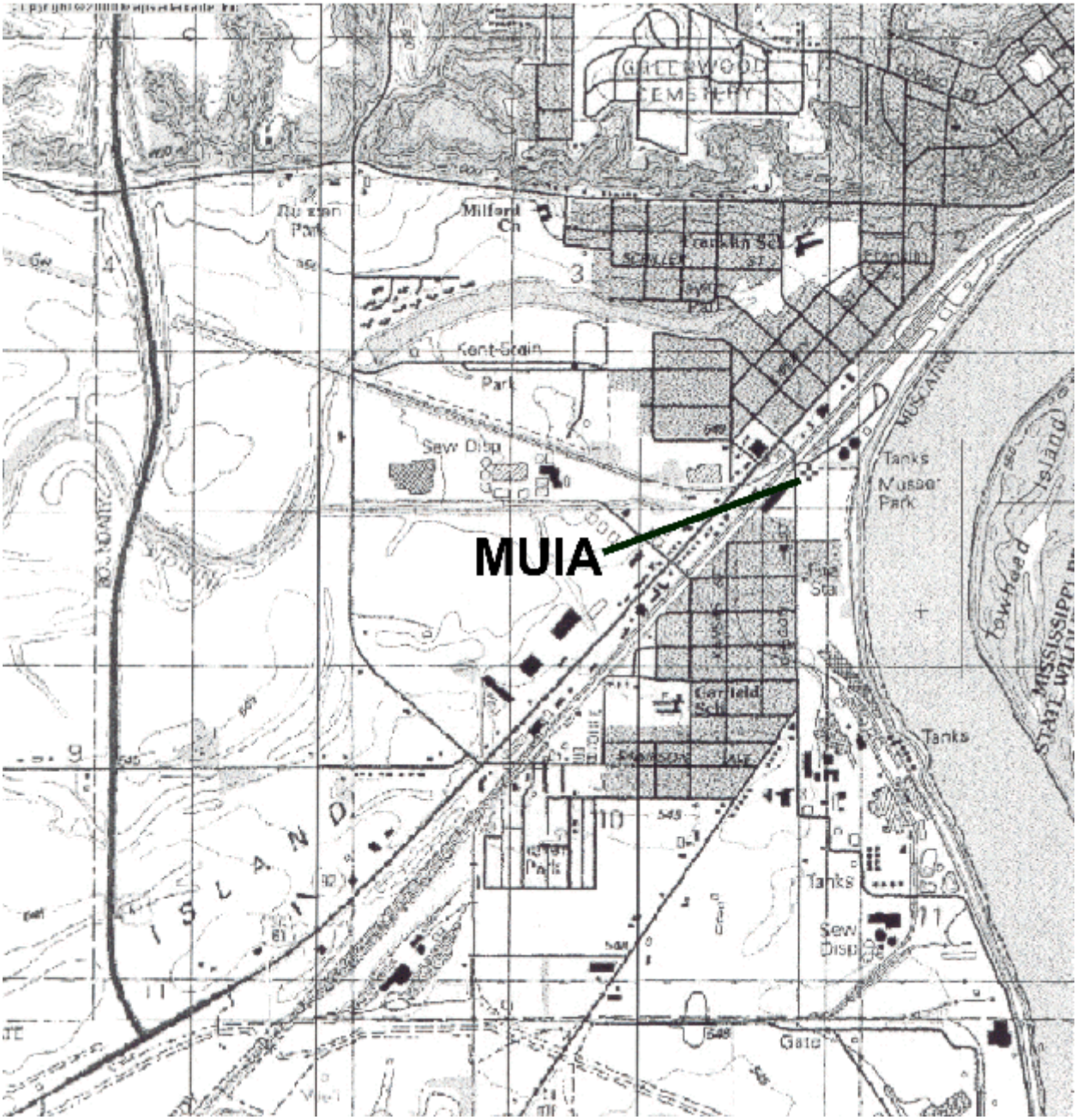
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-12. Fargo, North Dakota (FAND) Monitoring Station



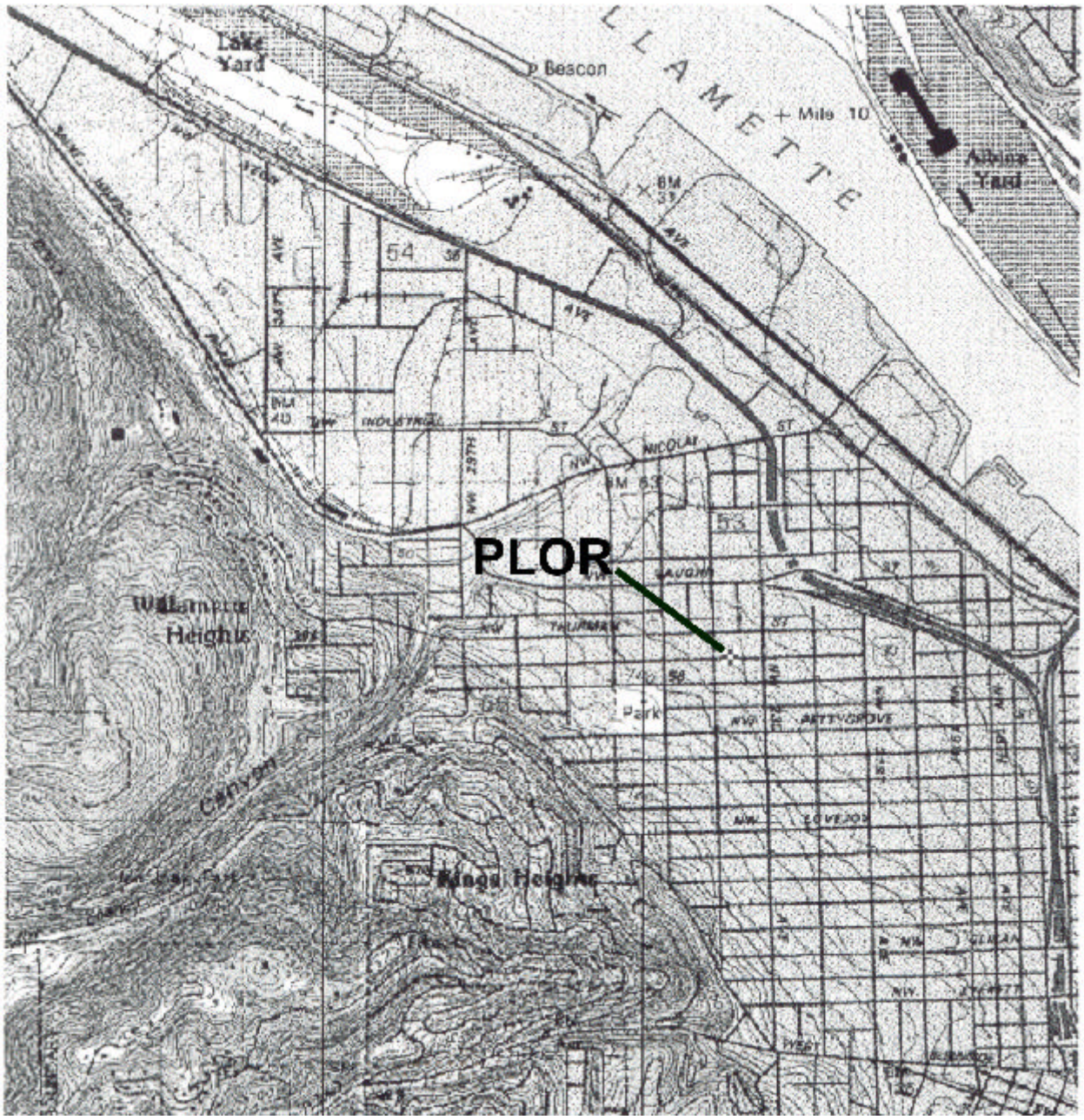
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-13. Muscatine, Iowa (MUIA) Monitoring Station



Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-14. Portland, Oregon (PLOR) Monitoring Station



Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-15. Salt Lake City, Utah (SLCU) Monitoring Station

Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-16. Sioux Falls, South Dakota (SFSD) Monitoring Station

Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-17. Facilities Within 10 Miles of A2TX That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Paper and Allied Products
C = Chemicals and Allied Products
D = Rubber and Misc. Plastic Products
E = Primary Metal Industries
F = Fabricated Metal Products
G = Industrial Machinery and Equipment
H = Electrical and Electronic Equipment
I = Transportation Equipment
J = Instruments and Related Products
K = Wholesale Trade - Non-durable Goods

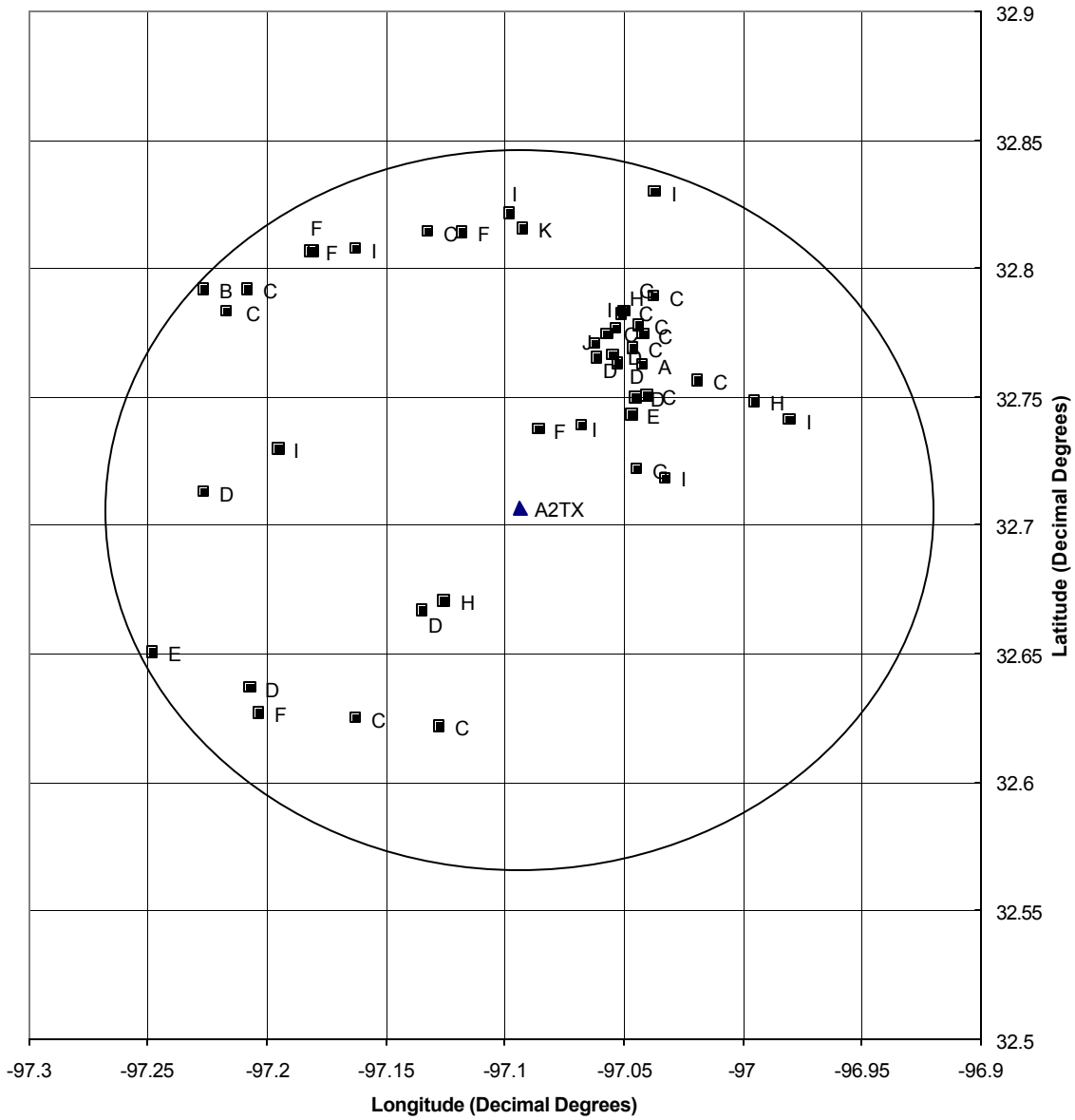


Figure 2-18. Facilities Within 10 Miles of BUND That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:
A = Coal Mining
B = Electric, Gas and Sanitary Services

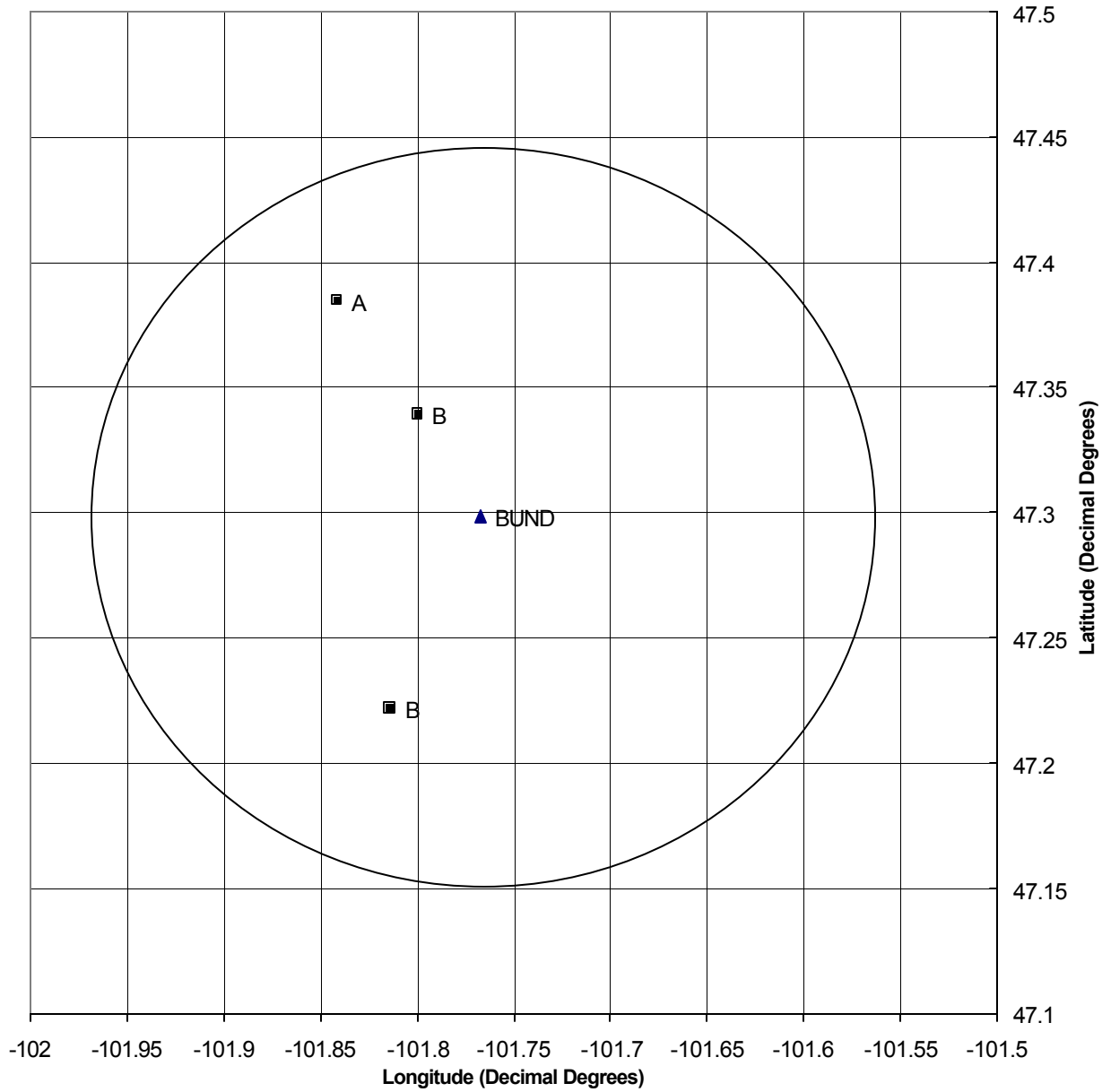


Figure 2-19. Facilities Within 10 Miles of CANJ That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Lumber and Wood Products
B = Printing and Publishing
C = Chemicals and Allied Products
D = Petroleum and Coal Products
E = Rubber and Misc. Plastic Products
F = Primary Metal Industries
G = Fabricated Metal Products
H = Industrial Machinery and Equipment
I = Electrical and Electronic Equipment
J = Instruments and Related Products
K = Electric, Gas and Sanitary Services
L = Wholesale trade - Nondurable Goods
M = Unknown Industrial Classification

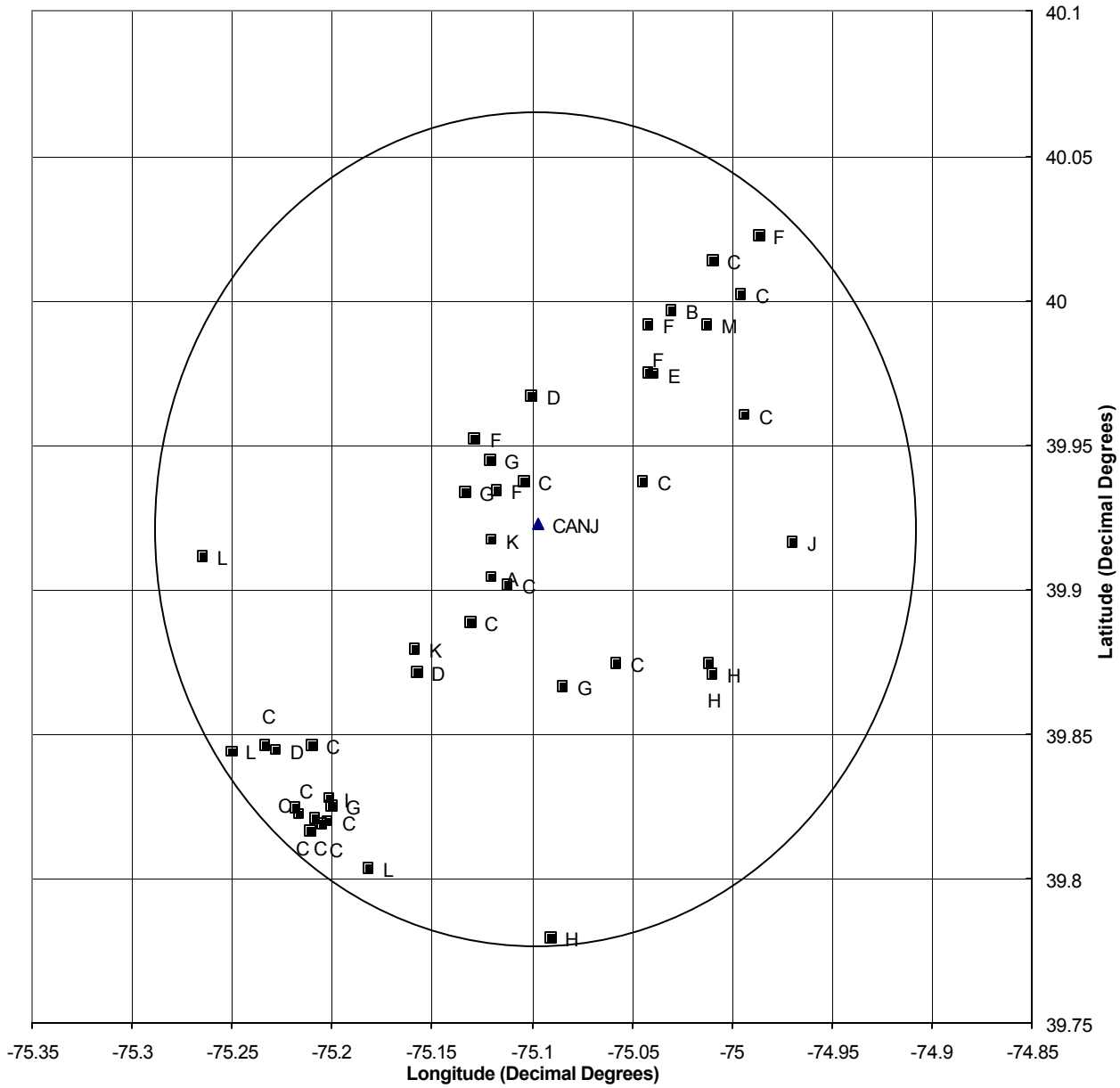


Figure 2-20. Facilities Within 10 Miles of CRIA That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Chemicals and Allied Products
C = Rubber and Misc. Plastic Products
D = Primary Metal Industries
E = Fabricated Metal Products
F = Industrial Machinery and Equipment
G = Electrical and Electronic Equipment
H = Transportation Equipment
I =Electric, Gas and Sanitary Services

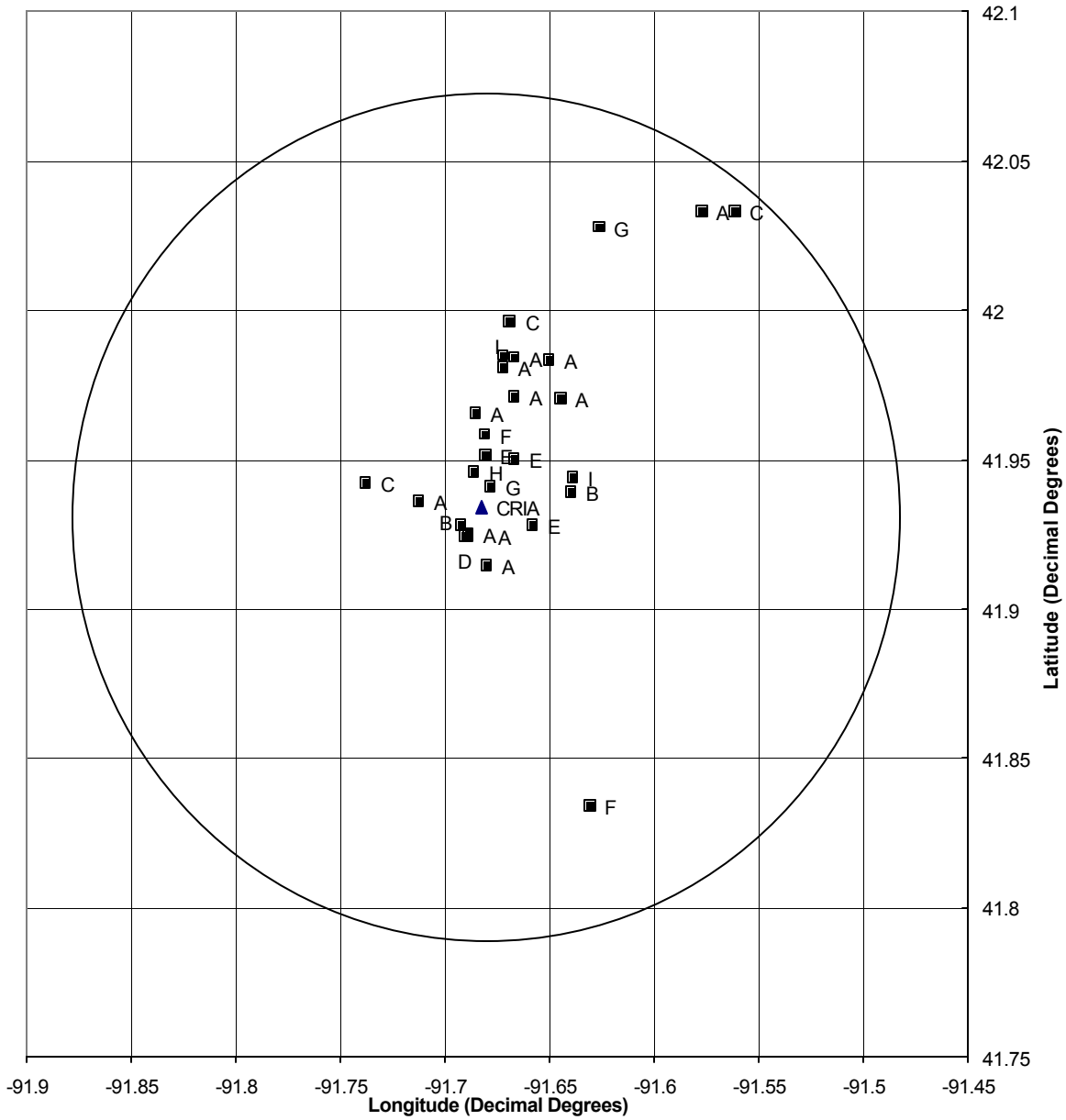


Figure 2-21. Facilities Within 10 Miles of CLIA That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Paper and Allied Products
C = Chemicals and Allied Products
D = Primary Metal Industries
E = Electric, Gas and Sanitary Services
F = Unknown Industrial Classification

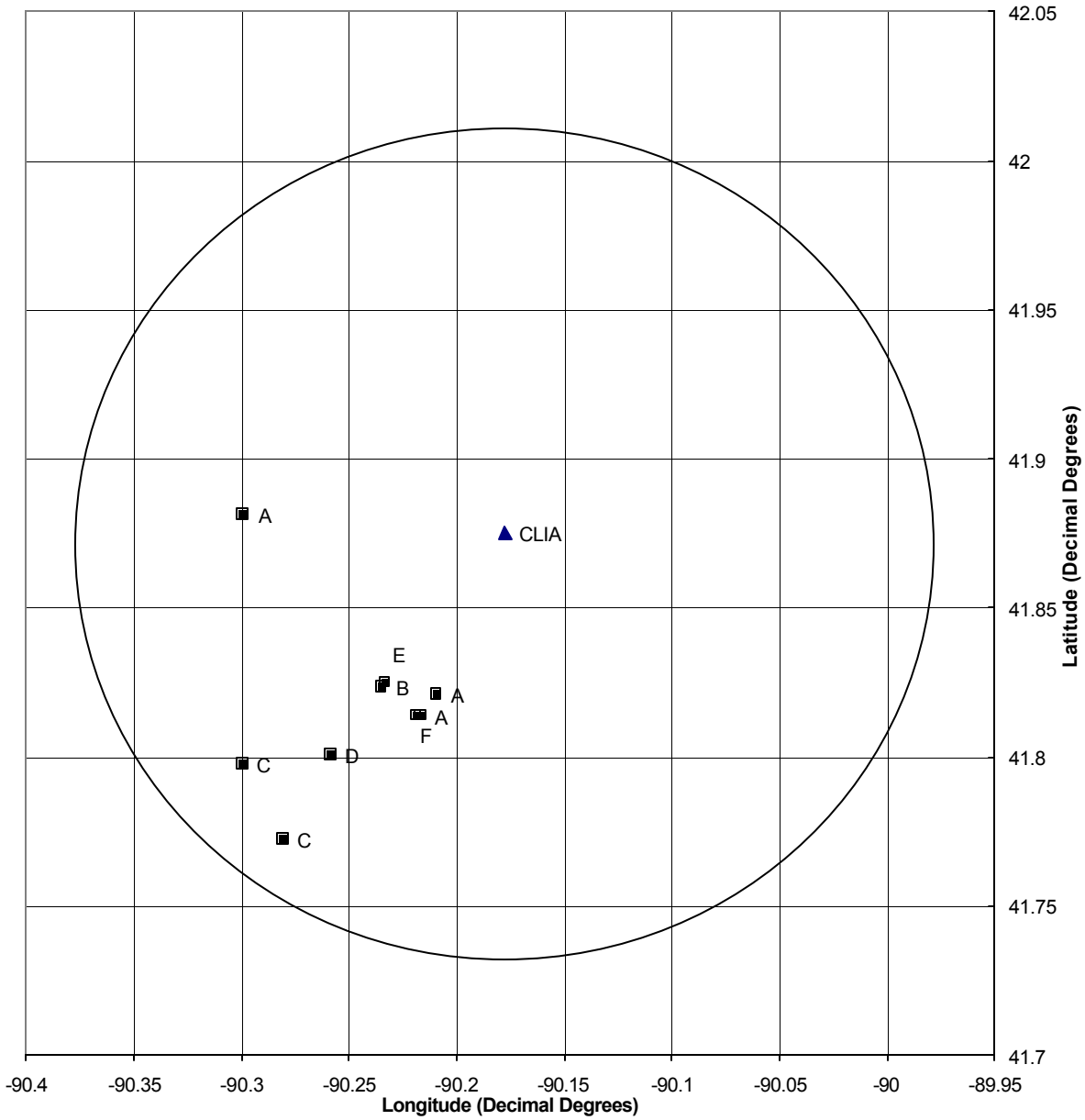


Figure 2-22. Facilities Within 10 Miles of DAIA That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Lumber and Wood Products
C = Chemicals and Allied Products
D = Stone, Clay, Glass and Concrete
E = Primary Metal Industries
F = Fabricated Metal Products
G = Industrial Machinery and Equipment
H = Miscellaneous Manufacturing Industries
I = Electric, Gas and Sanitary Services
J = Wholesale trade - Nondurable Goods
K = Business Services

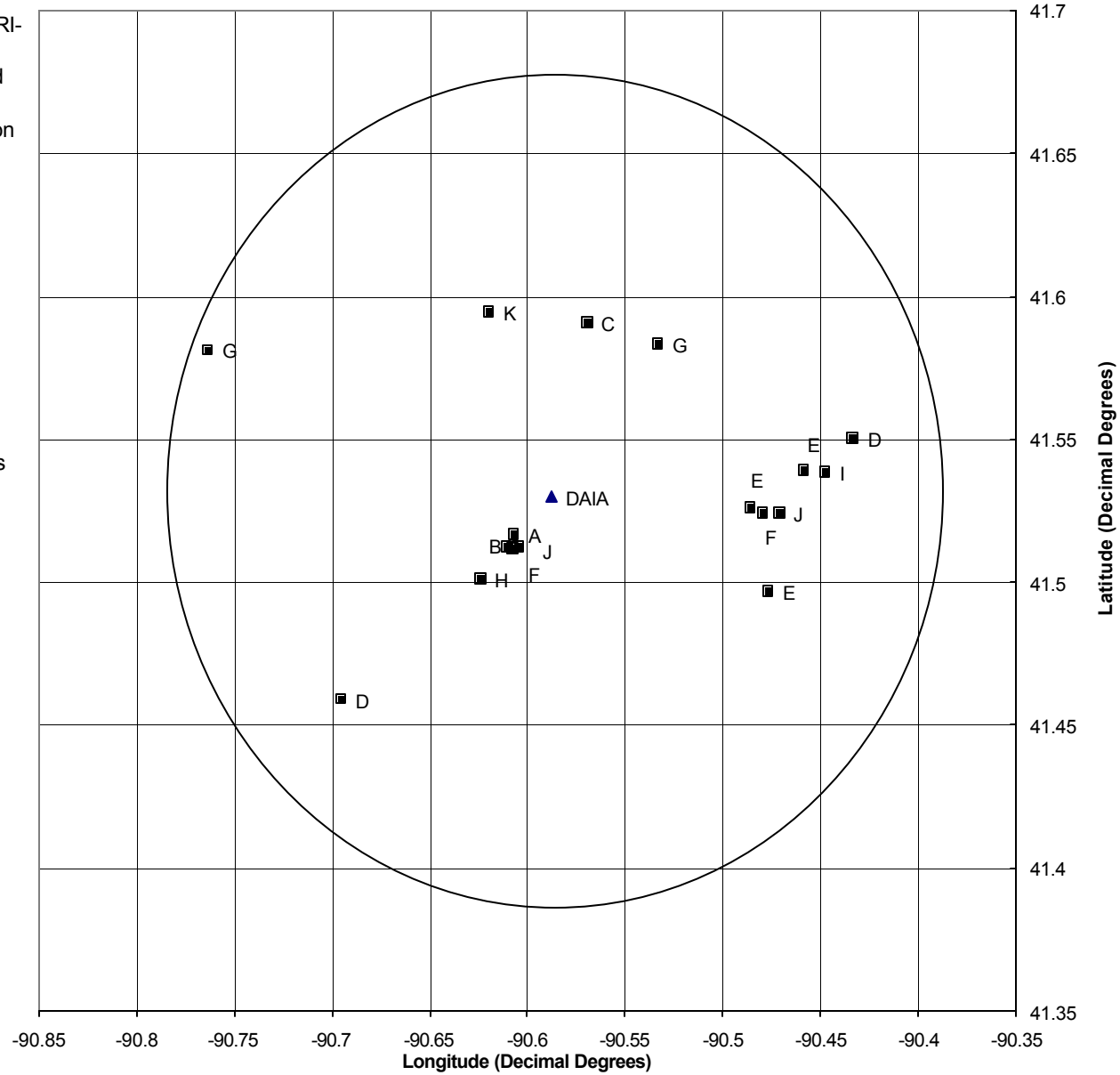


Figure 2-23. Facilities Within 10 Miles of DECO That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Lumber and Wood Products
C = Furniture and Fixtures
D = Paper and Allied Products
E = Chemicals and Allied Products
F = Petroleum and Coal Products
G = Rubber and Misc. Plastic Products
H = Stone, Clay, Glass and Concrete
I = Primary Metal Industries
J = Fabricated Metal Products
K = Industrial Machinery and Equipment
L = Electrical and Electronic Equipment
M = Transportation Equipment
N = Instruments and Related Products
O = Miscellaneous Manufacturing Industries
P = Electric, Gas and Sanitary Services
Q = Wholesale trade - Nondurable Goods

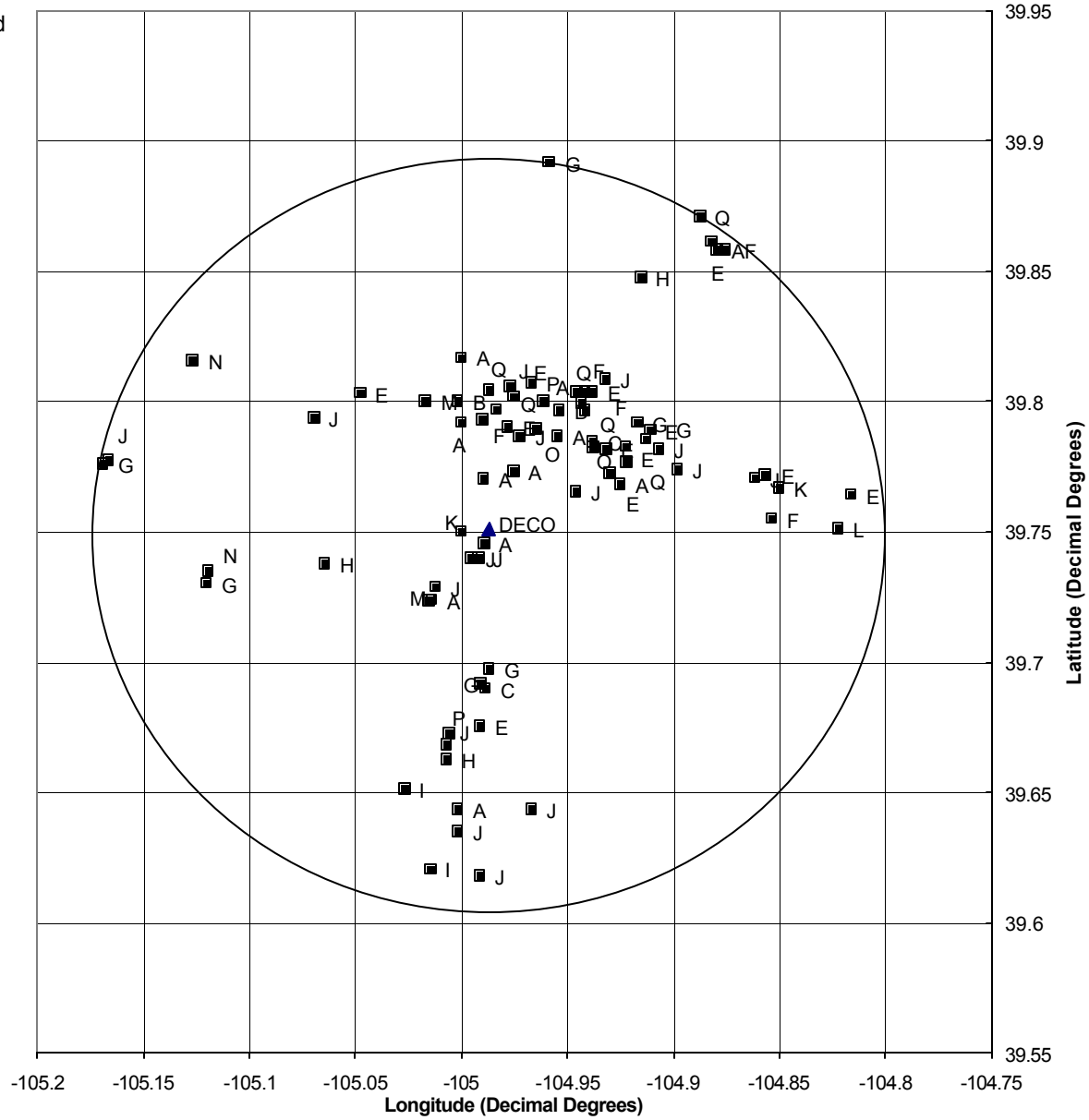


Figure 2-24. Facilities Within 10 Miles of DMIA That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Furniture and Fixtures
C = Printing and Publishing
D = Chemicals and Allied Products
E = Rubber and Misc. Plastic Products
F = Primary Metal Industries
G = Fabricated Metal Products
H = Industrial Machinery and Equipment
I = Wholesale trade - Nondurable Goods
J = Business Services
K = Unknown Industrial Classification

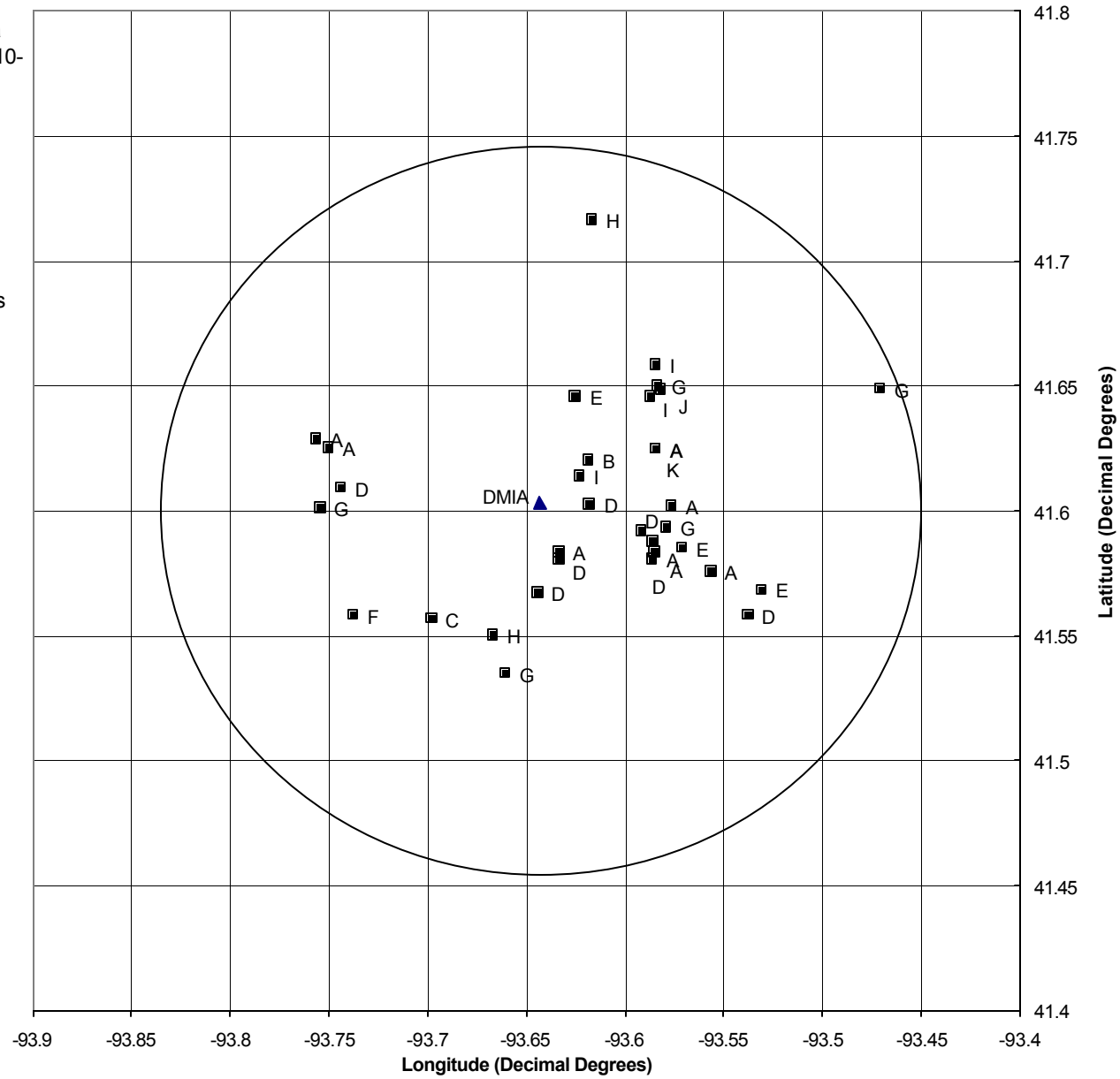


Figure 2-25. Facilities Within 10 Miles of ELNJ That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Textile Mill Products
C = Paper and Allied Products
D = Printing and Publishing
E = Chemicals and Allied Products
F = Petroleum and Coal Products
G = Rubber and Misc. Plastic Products
H = Leather and Leather Products
I = Primary Metal Industries
J = Fabricated Metal Products
K = Electrical and Electronic Equipment
L = Transportation Equipment
M = Miscellaneous Manufacturing Industries
N = Electric, Gas and Sanitary Services
O = Wholesale trade - Nondurable Goods
P = Unknown Industrial Classification

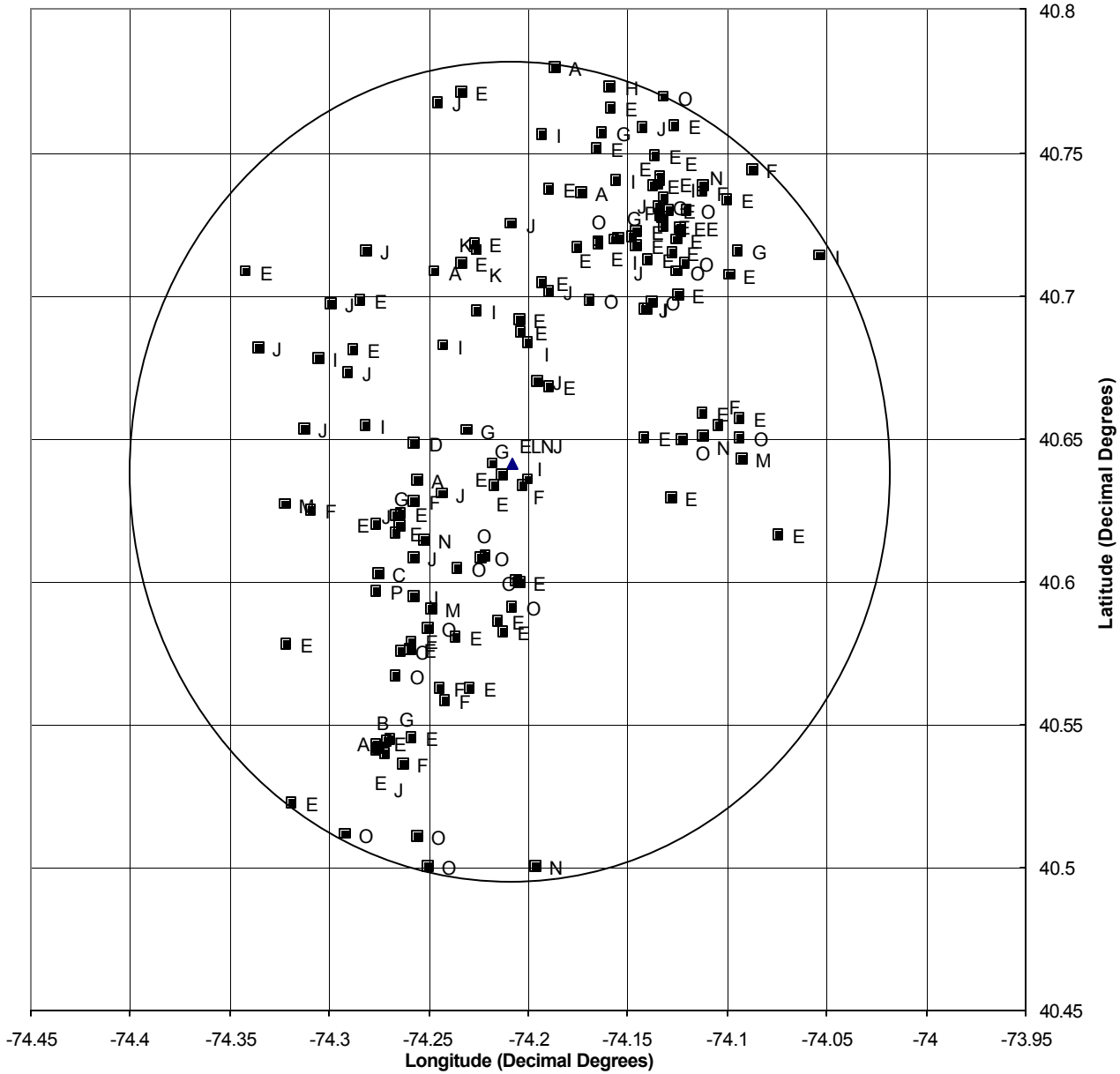


Figure 2-26. Facilities Within 10 Miles of EPTX That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Chemicals and Allied Products
B = Petroleum and Coal Products
C = Rubber and Misc. Plastic Products
D = Leather and Leather Products
E = Primary Metal Industries
F = Fabricated Metal Products
G = Wholesale trade - Nondurable Goods

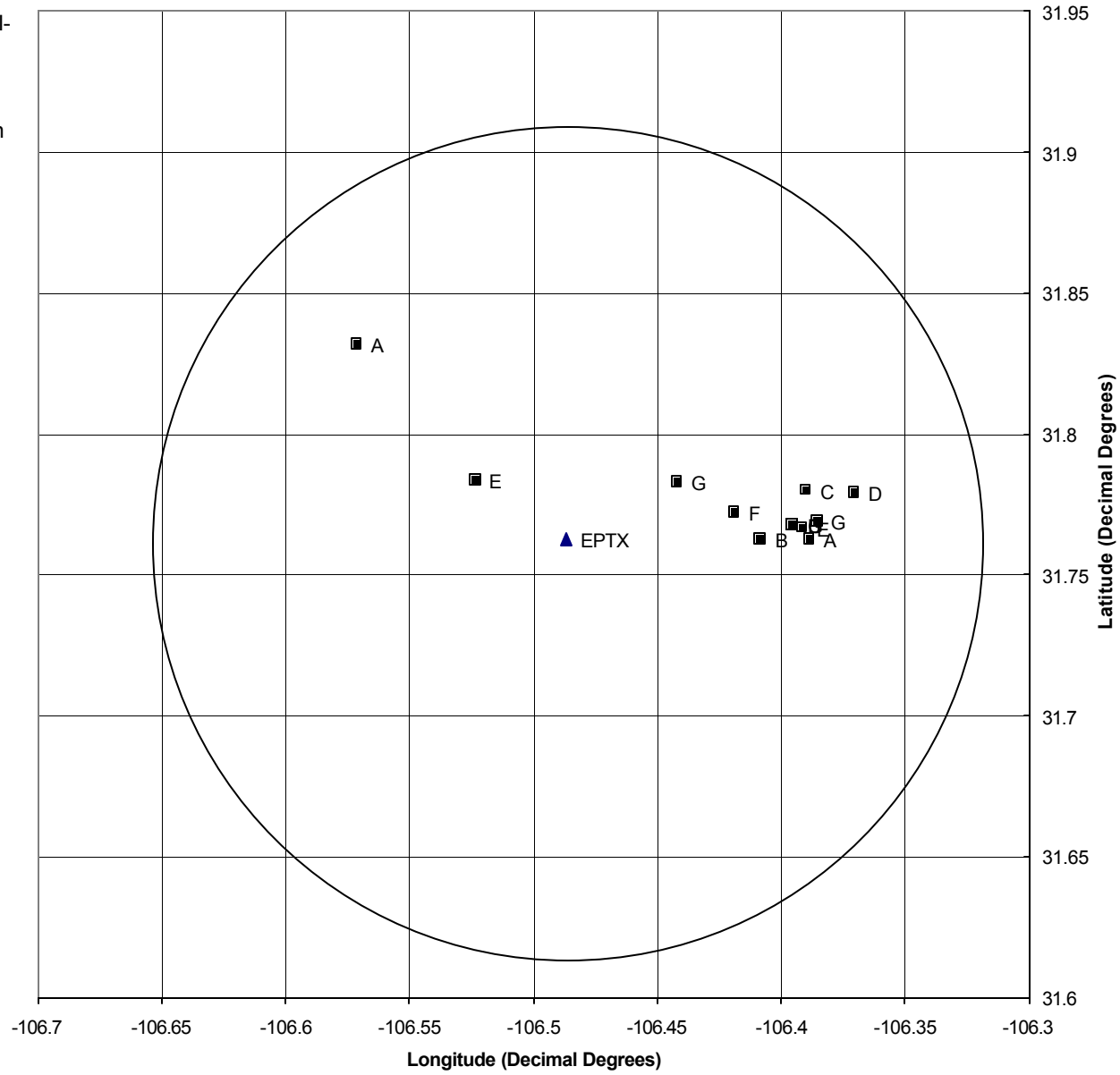


Figure 2-27. Facilities Within 10 Miles of FAND That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Lumber and Wood Products
C = Rubber and Misc. Plastic Products
D = Industrial Machinery and Equipment

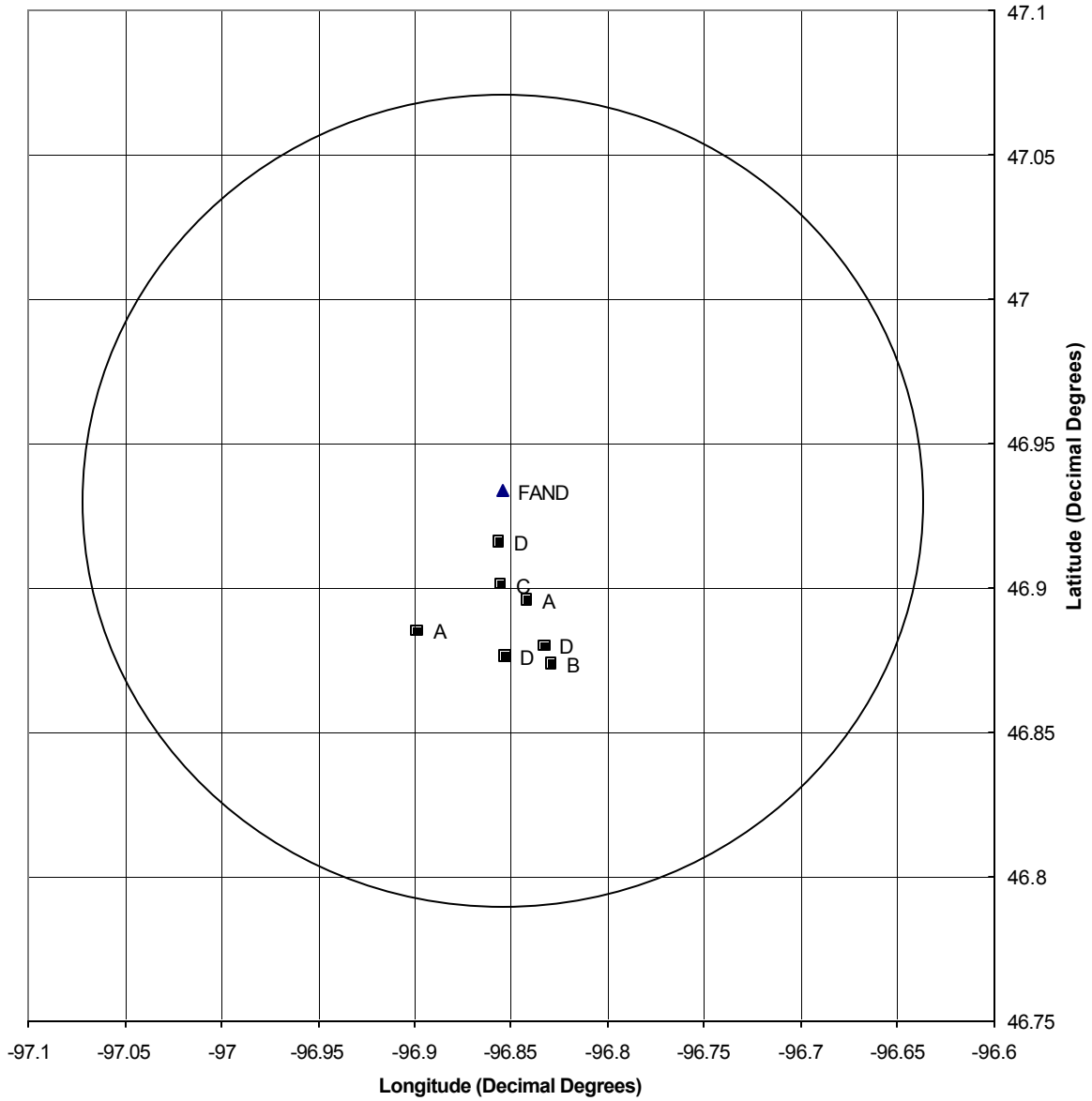


Figure 2-28. Facilities Within 10 Miles of MUIA That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Furniture and Fixtures
C = Chemicals and Allied Products
D = Rubber and Misc. Plastic Products
E = Industrial Machinery and Equipment
F = Miscellaneous Manufacturing Industries
G = Electric, Gas and Sanitary Services

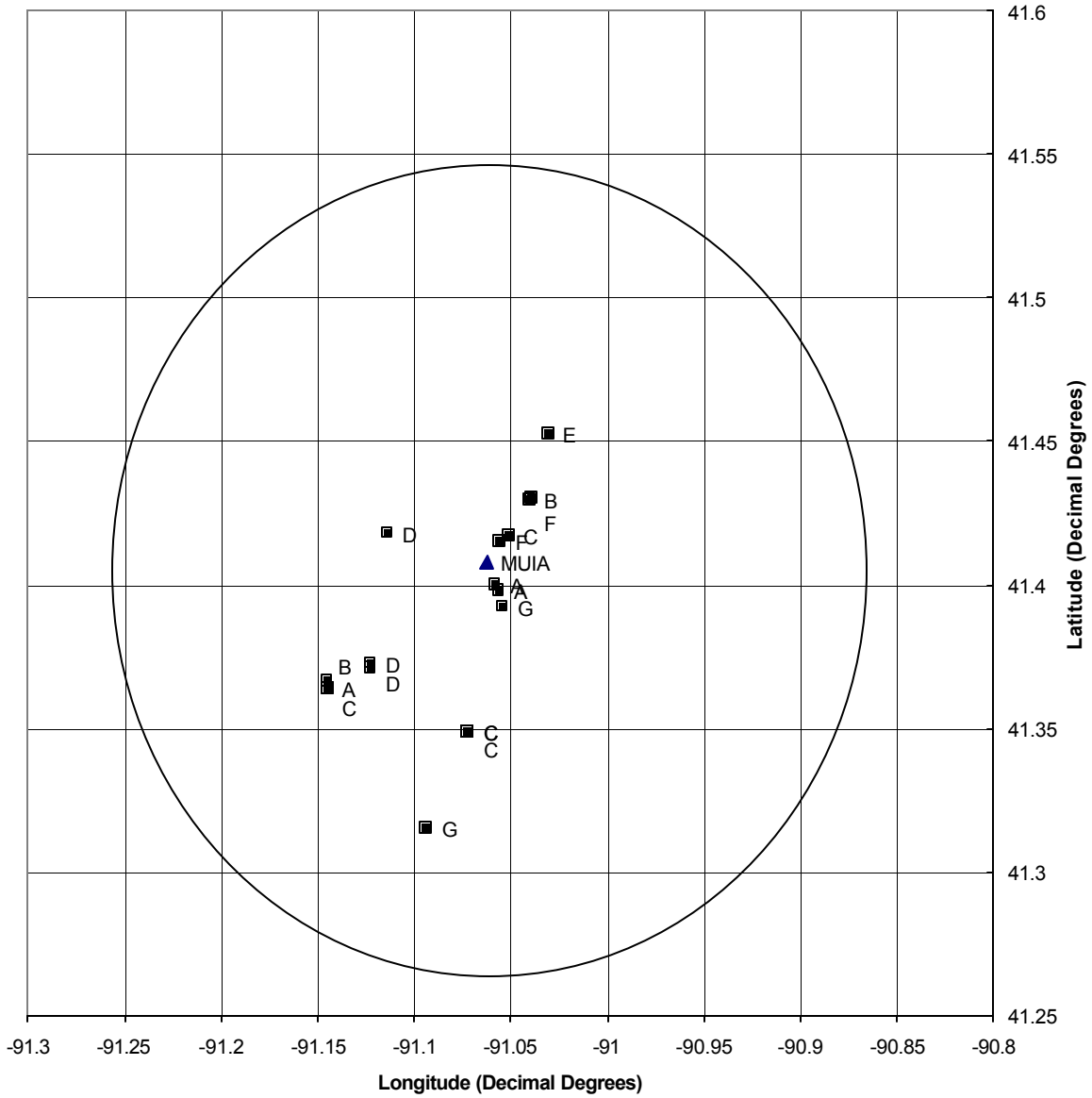


Figure 2-29. Facilities Within 10 Miles of PLOR That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Paper and Allied Products
C = Printing and Publishing
D = Chemicals and Allied Products
E = Petroleum and Coal Products
F = Rubber and Misc. Plastic Products
G = Leather and Leather Products
H = Stone, Clay, Glass and Concrete
I = Primary Metal Industries
J = Fabricated Metal Products
K = Industrial Machinery and Equipment
L = Electrical and Electronic Equipment
M = Transportation Equipment
N = Wholesale trade - Nondurable Goods

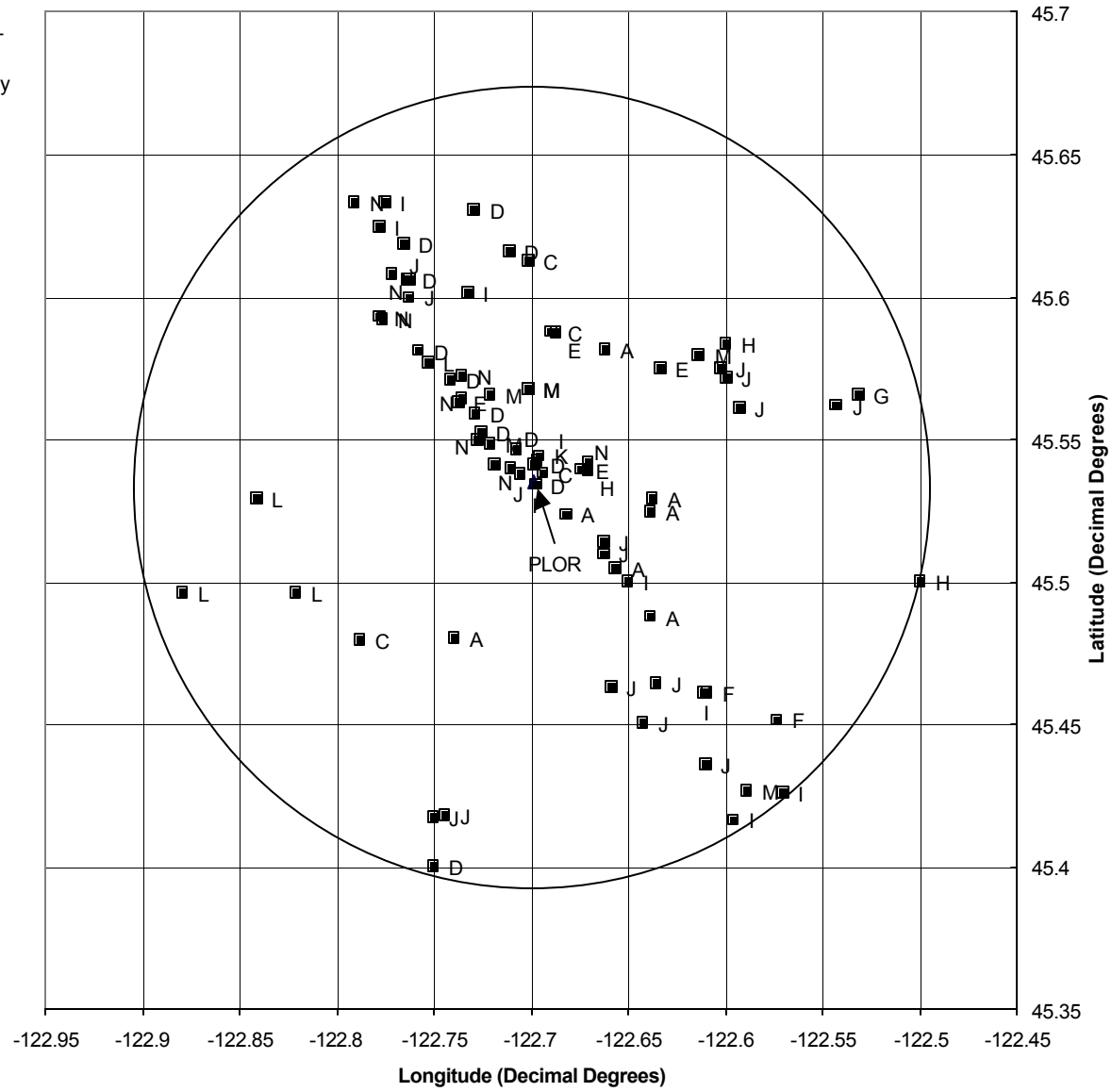


Figure 2-30. Facilities Within 10 Miles of SLCU That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Lumber and Wood Products
C = Furniture and Fixtures
D = Printing and Publishing
E = Chemicals and Allied Products
F = Petroleum and Coal Products
G = Rubber and Misc. Plastic Products
H = Stone, Clay, Glass and Concrete
I = Primary Metal Industries
J = Fabricated Metal Products
K = Industrial Machinery and Equipment
L = Electrical and Electronic Equipment
M = Transportation Equipment
N = Instruments and Related Products
O = Miscellaneous Manufacturing Industries
P = Wholesale trade - Nondurable Goods

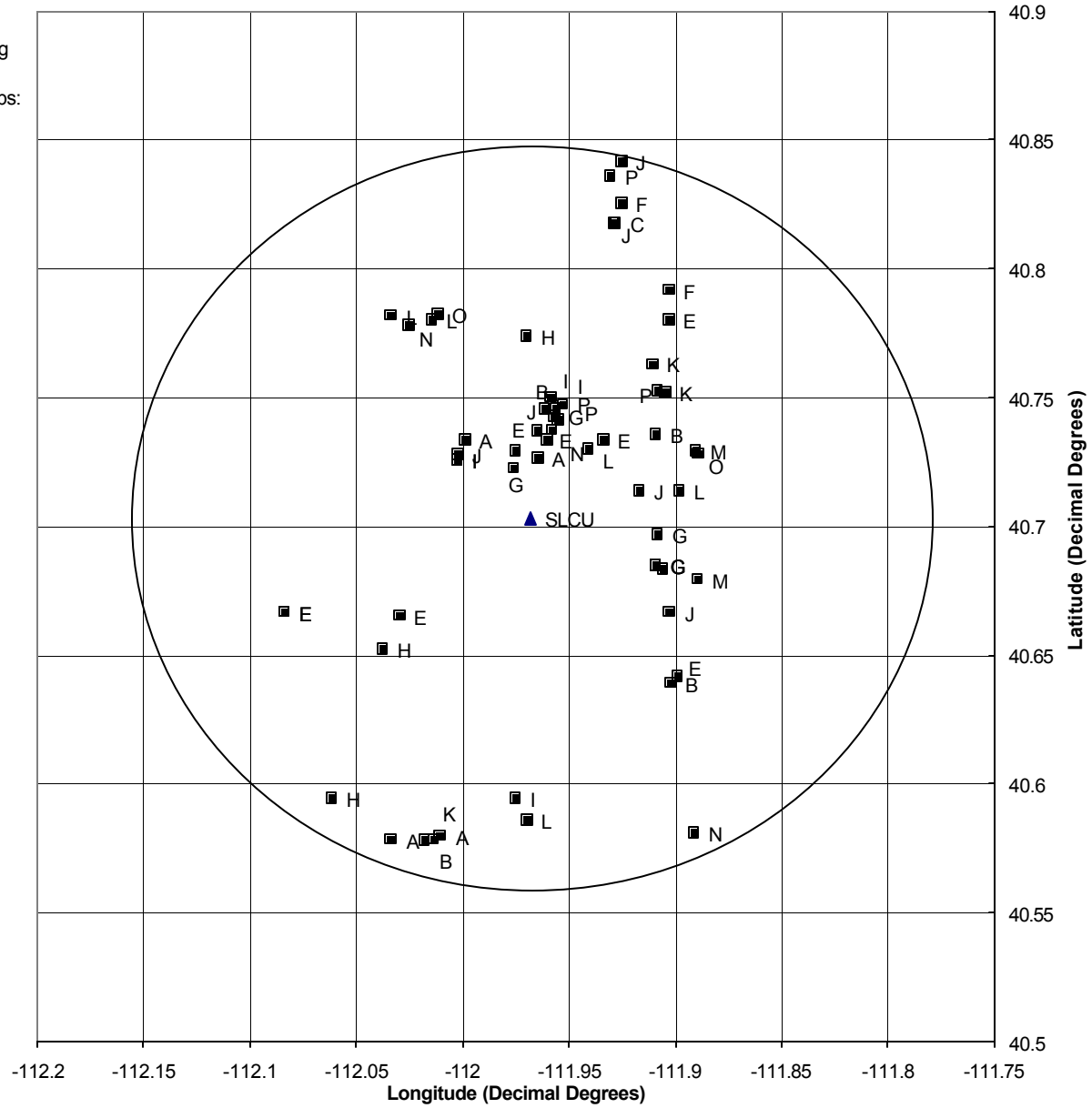


Figure 2-31. Facilities Within 10 Miles of SFSD That Reported to TRI in 1999

Each square on this map represents a TRI-reported facility which is within a 10-mile radius of the monitoring site (represented by a triangle) and is classified by the following Standard Industrial Classification Major Groups:

A = Food and Kindred Products
B = Lumber and Wood Products
C = Rubber and Misc. Plastic Products
D = Fabricated Metal Products
E = Industrial Machinery and Equipment

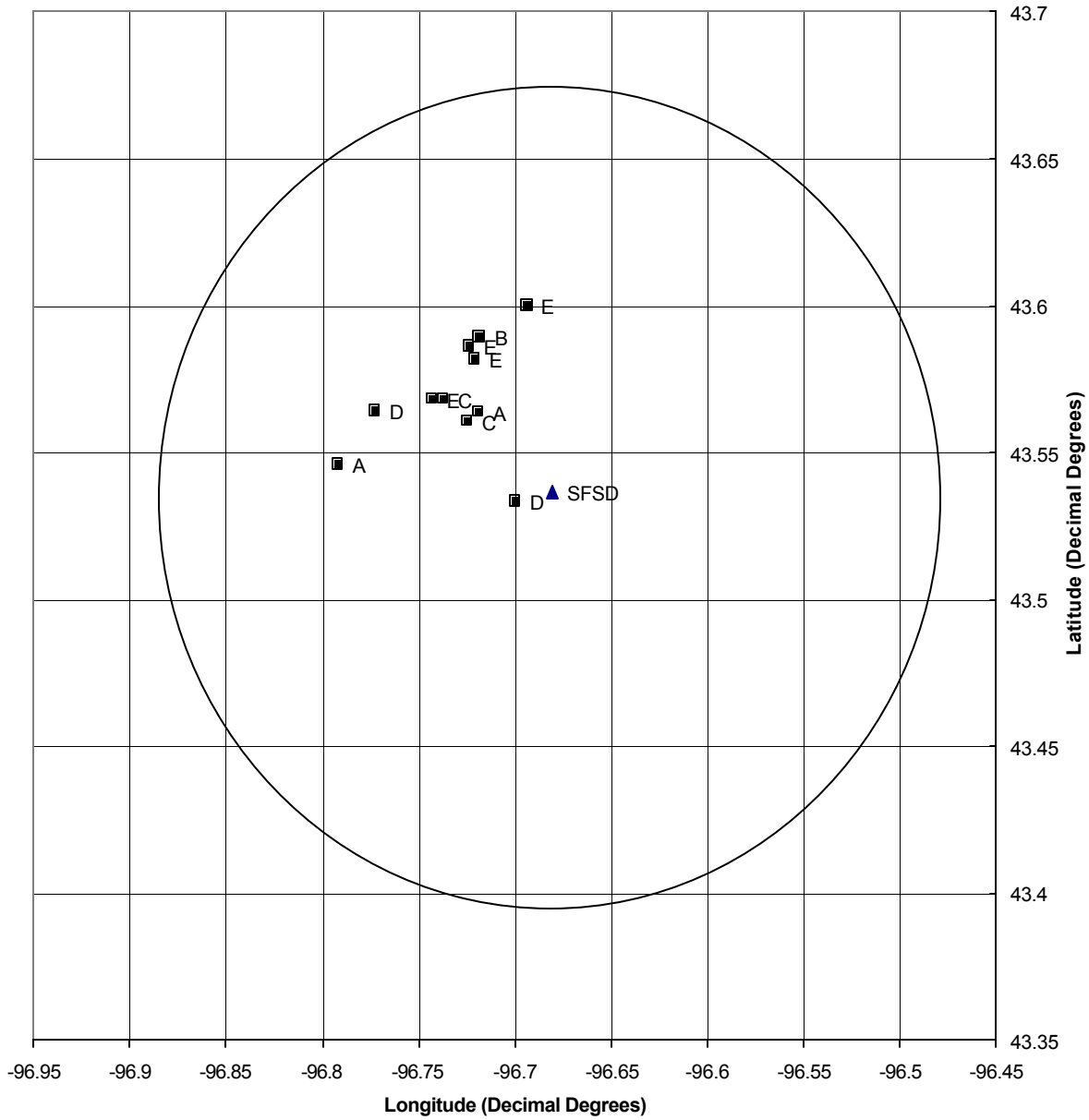


Table 2-1. Monitoring Station Participation in the UATMP

Monitoring Station	Program Years During Which Station Participated in the UATMP					
	1994	1995	1996	1997	1998	1999/ 2000
Arlington, TX (A2TX)						✓
Beulah, ND (BUND)					✓	✓
Camden, NJ (CANJ)	✓	✓	✓	✓	✓	✓
Cedar Rapids, IA (CRIA)						✓
Clinton, IA (CLIA)						✓
Davenport, IA (DAIA)						✓
Denver, CO (DECO)						✓
Des Moines, IA (DMIA)						✓
Elizabeth, NJ (ELNJ)						✓
El Paso, TX (EPTX)		✓	✓	✓	✓	✓
Fargo, ND (FAND)						✓
Muscatine, IA (MUIA)						✓
Portland, OR (PLOR)						✓
Salt Lake City, UT (SLCU)						✓
Sioux Falls, SD						✓

Note: Some of the stations shown in the table participated in UATMPs prior to the 1994 program. However, this report considers only ambient air monitoring data collected during the current and previous contract procurements (i.e., UATMP program years 1994 through 1999/2000).

Table 2-2. Text Descriptions of the 1999/2000 UATMP Monitoring Locations

Monitoring Location	Description of the Immediate Surroundings
Arlington, TX	Arlington, Texas is located in Tarrant County, approximately 20 miles west of Dallas. A roadway that averages more than 17,000 vehicles per day is 73 meters from the site. The monitoring site is located in a residential and light commercial area of up to one and a half miles. The monitor itself is located in the TNRCC building with the probe through the top of the roof, approximately 15 feet from the ground.
Beulah, ND	Beulah, North Dakota, located in Mercer County, is a rural, agricultural area with primarily wheat, small grains, and cattle farms. There are six lignite coal-fired power plants within thirty miles of Beulah, one to the east-southeast; one to the northeast; two to the east; one to the northwest; and one to the southwest. There are a petroleum refinery and a lignite coal-fired power plant fifty miles southeast of Beulah. There is a lignite coal mine located north of the town, one to the south-southwest of town and one to the southeast of town. The monitoring station is located in the approximate area of two coal-fired power plants and a coal gasification plant (the only functioning one in the nation). There is one power plant seven miles to the southwest of the monitoring station; another is six miles to the northwest; and the gasification plant is five miles to the northwest.
Camden, NJ	Although the monitoring site is in a residential area, numerous industrial facilities and busy roadways are located within a ten mile radius. The monitors are situated in a parking lot of a business complex.
Cedar Rapids, IA	This site is considered an EPA Middle Scale site within an industrial and traffic corridor setting, located on a city-owned area in a southwest quadrant called Hawkeye Downs. The site was set up for maximum concentration and source oriented. This site was set up to compare spatial concentrations and is considered an EPA Urban toxics site which is more representative of typical population exposure to levels detected.
Clinton, IA	The Clinton, Iowa site, located in Clinton County, is in a residential section of town. A large grain processing plant is located two miles to the south. Normal small city traffic patterns are observed around this site. The site is located only 200 yards from the Mississippi River.
Davenport, IA	The Davenport, Iowa site, located in Scott County, in a metropolitan area that is approximately 650 yards from the Mississippi valley, is considered a major residential/general commercial site. This is a core site for PM 2.5 monitoring. A meat processing plant, as well as a military manufacturing arsenal, is within five miles of the sampling site. An aluminum roll processing plant is located within 10 miles of the site.

Table 2-2. (Continued)

Monitoring Location	Description of the Immediate Surroundings
Denver, CO	The Denver site, called the Denver-CAMP site by the State of Colorado, is on the northern edge of downtown Denver on a small triangle of land bounded by Broadway, Champa St. and 21st St. The site was originally established in 1965 as a maximum concentration site for the Denver downtown area. The site provides a measure of the air pollution levels to which a large working population is exposed. Being next to a major road in the downtown Denver area, the primary influences on the site are from motor vehicles. There are some industrial facilities to the north of the site, but no large facilities within a one or two mile radius. Residential areas are located a quarter to a half mile to the northeast and east.
Des Moines, IA	The Des Moines site is located in Polk County, Iowa, located centrally to the downtown area and on top of a one-story building. The elevation is slightly higher than the surrounding terrain. It is approximately a half mile from an Interstate highway. No major manufacturers are in the area. It is between 2-3 miles away from a major facility.
Elizabeth, NJ	Elizabeth is located in Union County, New Jersey, at an urban-industrial site where the topography is relatively smooth. The monitoring site is located 75 yards away from the Toll Plaza and about one mile from Bayway Refinery. The neighborhood scale is at maximum concentration. The location has a PM10 filter analyzer for sulfates and nitrates as well as the UATMP site.
El Paso, TX	Located in western Texas, just across the border from Mexico and near the border of New Mexico, the region surrounding the El Paso monitoring station has the second highest population density of the 1999/2000 UATMP monitoring location. The monitoring site is located downtown, in a high-traffic area.
Fargo, ND	The Fargo site is located in Cass County, North Dakota, approximately 4 miles northwest of the downtown area. The Fargo airport terminal is about 2 miles southeast with the north end of the runway about 0.75 miles east of the site. Major point sources are the North Dakota State University heating plant (approximately 2.5 miles southeast) and a seed processing plant (approximately 3 miles south-southwest).
Muscatine, IA	The Muscatine site is located in Muscatine County, Iowa, in a park in a residential section of town. Two hundred yards north of the site is a grain elevator that offloads to the Mississippi River to the west. The large grain processing plant fed by the elevator, is located a quarter mile to the south of the site.

Table 2-2. (Continued)

Monitoring Location	Description of the Immediate Surroundings
Portland, OR	The NW Portland site is located in the corner of a parking lot at a Post Office, in a residential neighborhood that is within 1/4 mile of a large industrial area. The industrial area includes: a foundry, a silicon wafer production facility, fossil fuel terminals, and a rail car manufacturer. There is considerable commercial activity as well, including cabinet makers, metal fabrication, and auto body shops. There is a small neighborhood dry cleaner about 50 yards from the site. A freeway and major artery serve the industrial area, as do railroads. The site itself is on a small residential street. An elementary school is also about a 1/4 mile away.
Salt Lake City, UT	The West Valley site, where the UATMP sampler is located, is in the southeast corner of the staff parking lot behind (south of) the Hillsdale Elementary School. The sampler is north of the school playground and west of a large, open residential lot. The site is a neighborhood scale SLAMS site for PM2.5, CO, and ozone sampling, not near any point sources of air toxics, but approximately 100 yards from the nearest street - 12,000 cars per day on average. The site is several city blocks away from the nearest major street or freeway. A variety of light industries and trucking companies are also located in the area, but not within 2 or 3 blocks.
Sioux Falls, SD	The monitoring site is located in Sioux Falls, South Dakota, the largest city in the state, is located near 2 grade schools north of the site and residential areas on the west, east, and south. The area within 1 mile of the site is mostly residential with a few retail businesses. The main industrial area of the city is about 3 miles northwest and 2 miles to the west of the site. The site was selected because it represents population exposure to chemical and particulate emissions from the industrial parts of the city. The predominant wind direction is northwest for most of the year with southeast winds during the summer months.

Table 2-3. Site Descriptions for the 1999/2000 UATMP Monitoring Stations

1999/2000 UATMP Code	AIRS Site Code	Location	Population Residing Within 10 Miles of the Monitoring Station [a]	Number of Facilities Located Within 10 Miles of the Monitoring Station That Reported Air Releases of UATMP Compounds to the TRI[b]	Closest National Weather Service Station
A2TX	48-439-0057	Arlington, TX	690,394	44	Dallas Fort Worth International Airport
BUND	38-057-004	Beulah, ND	6,916	3	Bismarck Municipal Airport
CANJ	34-007-0003	Camden, NJ	1,889,819	42	Philadelphia, PA
CRIA	19-113-0039	Cedar Rapids, IA	167,435	27	Quad Cities NWS, Clinton Municipal Airport
CLIA	19-045-0021	Clinton, IA	43,233	9	Quad Cities NWS, Clinton Municipal Airport
DAIA	19-163-0015	Davenport, IA	280,170	17	Quad Cities NWS, Clinton Municipal Airport
DECO	08-031-0002	Denver, CO	1,216,500	77	Denver International Airport
DMIA	19-153-0030	Des Moines, IA	363,576	34	Des Moines International Airport
ELNJ	34-039-0004	Elizabeth, NJ	1,998,715	143	Upton, New York
EPTX	48-141-0027	El Paso, TX [c]	474,067	12	El Paso International Airport

Table 2-3. (Continued)

1999/2000 UATMP Code	AIRS Site Code	Location	Population Residing Within 10 Miles of the Monitoring Station [a]	Number of Facilities Located Within 10 Miles of the Monitoring Station That Reported Air Releases of UATMP Compounds to the TRI[b]	Closest National Weather Service Station
FAND	38-017-1004	Fargo, ND	149,377	7	Hector International Airport
MUIA	19-139-0020	Muscatine, IA	33,800	18	Quad Cities NWS, Clinton Municipal Airport
PLOR	41-051-0244	Portland, OR	965,179	77	Portland International Airport
SLCU	49-035-3007	Salt Lake City, UT	793,198	59	Salt Lake City International Airport
SFSD	46-099-0007	Sioux Falls, SD	139,450	11	Joe Foss Field Airport

[a] Reference: http://link-usa.com/zipcode/pop.htm
[b] Reference: TRI, 2001.
[c] The El Paso, Texas, monitoring station is located less than 10 miles from the United States–Mexico border. Because only U.S. census and industry data were reviewed for this study, the listed site characteristics may understate the actual population and number of industrial sources near these monitoring stations.

Table 2-4. VOC Detection Limits

Compound	Method Detection Limit (ppbv)
Hydrocarbons	
Acetylene	0.13
Benzene	0.04
1,3-Butadiene	0.07
Ethylbenzene	0.04
n-Octane	0.06
Propylene	0.05
Styrene	0.07
Toluene	0.06
1,2,4-Trimethylbenzene	0.07
1,3,5-Trimethylbenzene	0.07
m-,p-Xylene	0.05
o-Xylene	0.05
Halogenated Hydrocarbons	
Bromochloromethane	0.12
Bromodichloromethane	0.06
Bromoform	0.08
Bromomethane	0.09
Carbon Tetrachloride	0.08
Chlorobenzene	0.06
Chloroethane	0.08
Chloroform	0.05
Chloromethane	0.0 7
Chloromethylbenzene	0.07
Chloroprene	0.10
Dibromochloromethane	0.08
1,2-Dibromoethane	0.08
m-Dichlorobenzene	0.05
o-Dichlorobenzene	0.06
p-Dichlorobenzene	0.08
1,1-Dichloroethane	0.08
1,2-Dichloroethane	0.06
1,1-Dichloroethene	0.10
cis-1,2-Dichloroethylene	0.10
trans-1,2-Dichloroethylene	0.06
1,2-Dichloropropane	0.07
cis-1,3-Dichloropropene	0.10

Table 2-4. (Continued)

Compound	Method Detection Limit (ppbv)
Halogenated Hydrocarbons (Continued)	
trans-1,3-Dichloropropene	0.11
Dichlorodifluoromethane	0.04
Dichlorotetrafluoroethane	0.05
Hexachloro-1,3-Butadiene	0.06
Methylene Chloride	0.06
1,1,2,2-Tetrachloroethane	0.06
Tetrachloroethylene	0.06
1,2,4-Trichlorobenzene	0.06
1,1,1-Trichloroethane	0.06
1,1,2-Trichloroethane	0.06
Trichloroethylene	0.07
Trichlorofluoromethane	0.04
Trichlorotrifluoroethane	0.07
Vinyl Chloride	0.06
Polar Compounds	
Acetonitrile	0.21
Acrylonitrile	0.25
Ethyl Acrylate	0.16
Ethyl *tert*-Butyl Ether	0.15
Methyl Ethyl Ketone (MEK)	0.15
Methyl Isobutyl Ketone	0.15
Methyl Methacrylate	0.18
Methyl *tert*-Butyl Ether (MTBE)	0.18
tert-Amyl Methyl Ether	0.12

Because *m*-xylene and *p*-xylene elute from the GC column at the same time, the VOC analytical method can only report the sum of *m*-xylene and *p*-xylene concentrations and not concentrations of the individual compounds.

Table 2-5. SNMOC Method Detection Limits

Compound	Method Detection Limit		Compound	Method Detection Limit	
	ppbC	ppbv		ppbC	ppbv
Acetylene	0.26	0.13	3-Methyl-1-Butene	0.42	0.08
Benzene	0.46	0.08	Methylcyclohexane	0.37	0.05
1,3-Butadiene	0.38	0.10	Methylcyclopentane	0.25	0.04
n-Butane	0.52	0.13	2-Methylheptane	0.50	0.06
cis-2-Butene	0.35	0.09	3-Methylheptane	0.51	0.06
trans-2-Butene	0.29	0.07	2-Methylhexane	0.33	0.05
Cyclohexane	0.54	0.09	3-Methylhexane	0.39	0.06
Cyclopentane	0.17	0.03	2-Methylpentane	0.18	0.03
Cyclopentene	0.42	0.08	3-Methylpentane	0.32	0.05
n-Decane	0.39	0.04	2-Methyl-1-Pentene	0.32	0.05
1-Decene	0.39	0.04	4-Methyl-1-Pentene	0.42	0.07
m-Diethylbenzene	0.42	0.04	*n*-Nonane	0.42	0.05
p-Diethylbenzene	0.24	0.02	1-Nonene	0.42	0.05
2,2-Dimethylbutane	0.42	0.07	*n*-Octane	0.52	0.06
2,3-Dimethylbutane	0.39	0.07	1-Octene	0.51	0.06
2,3-Dimethylpentane	0.51	0.07	*n*-Pentane	0.26	0.05
2,4-Dimethylpentane	0.41	0.06	1-Pentene	0.22	0.04
n-Dodecane	0.45	0.04	*cis*-2-Pentene	0.30	0.06
1-Dodecene	0.45	0.04	*trans*-2-Pentene	0.21	0.04
Ethane	0.24	0.12	?-Pinene	0.39	0.04
2-Ethyl-1-Butene	0.47	0.08	?-Pinene	0.39	0.04
Ethylbenzene	0.33	0.04	Propane	0.48	0.16
Ethylene	0.26	0.13	*n*-Propylbenzene	0.37	0.04

Table 2-5. (Continued)

Compound	Method Detection Limit		Compound	Method Detection Limit	
	ppbC	ppbv		ppbC	ppbv
m-Ethyltoluene	0.26	0.08	Propylene	0.25	0.08
o-Ethyltoluene	0.41	0.05	Propyne	0.48	0.16
p-Ethyltoluene	0.38	0.04	Styrene	0.29	0.04
n-Heptane	0.50	0.07	Toluene	0.73	0.10
1-Heptene	0.39	0.06	*n*-Tridecane	0.45	0.03
n-Hexane	0.31	0.05	1-Tridecene	0.45	0.03
1-Hexene	0.47	0.08	1,2,3-Trimethylbenzene	0.28	0.03
cis-2-Hexene	0.31	0.05	1,2,4-Trimethylbenzene	0.53	0.06
trans-2-Hexene	0.31	0.05	1,3,5-Trimethylbenzene	0.28	0.03
Isobutane	0.38	0.10	2,2,3-Trimethylpentane	0.36	0.05
Isobutene/1-Butene	0.31	0.04	2,2,4-Trimethylpentane	0.36	0.05
Isopentane	0.42	0.08	2,3,4-Trimethylpentane	0.37	0.05
Isoprene	0.21	0.04	*n*-Undecane	0.43	0.04
Isopropylbenzene	0.51	0.06	1-Undecene	0.43	0.04
2-Methyl-1-Butene	0.22	0.04	*m*-,*p*-Xylene	0.34	0.04
2-Methyl-2-Butene	0.30	0.06	*o*-Xylene	0.33	0.04

Concentration in ppbC = concentration in ppbv x number of carbon atoms in compound.

Because Isobutene and 1-Butene elute from the GC column at the same time, the SNMOC analytical method can only report the sum of concentrations for these two compounds and not concentrations of the individual compounds. For the same reason, the *m*-xylene and *p*-xylene concentrations are reported together as a sum.

Table 2-6. Carbonyl Detection Limits

Compound	Method Detection Limit (ppbv)
Acetaldehyde	0.022
Acetone	0.013
Benzaldehyde	0.004
Butyr/Isobutyraldehyde	0.008
Crotonaldehyde	0.005
2,5-Dimethylbenzaldehyde	0.008
Formaldehyde	0.026
Hexaldehyde	0.003
Isovaleraldehyde	0.006
Propionaldehyde	0.008
Tolualdehydes	0.005
Valeraldehyde	0.005

Notes: The carbonyl detection limits are based on a sample volume of 500 liters of ambient air.

Because butyraldehyde and isobutyraldehyde elute from the HPLC column at the same time, the carbonyl analytical method can only report the sum of concentrations for these two compounds and not concentrations of the individual compounds. For the same reason, the analytical method also reports only the sum of concentrations for the three tolualdehyde isomers, as opposed to reporting separate concentrations for the three individual compounds.

Table 2-7. Semivolatile Detection Limits

Compound	Method Detection Limit Total ?g	Compound	Method Detection Limit Total ?g
Acenaphthene	5.82	Dimethyl phthalate	9.15
Acenaphthylene	8.87	4,6-Dinitro-2-methylphenol	11.31
Acetophenone	13.87	2,4-Dinitrophenol	10.05
4-Aminobiphenyl	9.60	2,4-Dinitrotoluene	9.71
Aniline	16.20	2,6-Dinitrotoluene	9.38
Anthracene	17.06	Diphenylamine	25.39
Azobenzene	17.38	Ethyl methanesulfonate	29.58
Benzidine	0.00	Fluoranthene	14.49
Benzo(a)anthracene	8.33	Fluorene	10.01
Benzo(a)pyrene	18.17	Hexachlorobenzene	14.12
Benzo(b)fluoranthene	17.34	Hexachlorobutadiene	13.23
Benzo(g,h,i)perylene	15.05	Hexachlorocyclopentadiene	21.74
Benzo(k)fluoranthene	23.61	Hexachloroethane	5.65
Benzoic acid	12.31	Indeno(1,2,3-cd)pyrene	14.56
Benzyl alcohol	8.15	Isophorone	22.61
bis(2-Chloroethyl)ether	11.66	Methyl methanesulfonate	16.50
bis(2-Chloroethoxy)methane	14.03	2-Methylnaphthalene	11.36
bis(2-Chloroisopropyl)ether	11.07	Naphthalene	15.46
bis(2-Ethylhexyl)phthalate	11.62	1-Naphthylamine	5.42
4-Bromophenyl phenyl ether	11.30	2-Naphthylamine	10.22
Butyl benzyl phthalate	11.66	2-Nitroaniline	12.30
Carbazole	12.54	3-Nitroaniline	8.70
4-Chloroaniline	16.83	4-Nitroaniline	10.40
4-Chloro-3-methylphenol	16.80	Nitrobenzene	24.86
1-Chloronaphthalene	30.03	2-Nitrophenol	10.07
2-Chloronaphthalene	18.48	4-Nitrophenol	7.36
2-Chlorophenol	9.99	N-Nitrosodibutylamine	22.42
4-Chlorophenyl-phenyl ether	6.79	N-Nitrosodimethylamine	26.15
Chrysene	10.57	N-Nitrosodipropylamine	21.48
o-Cresol (2-Methylphenol)	9.44	N-Nitrosopiperidine	17.32

Table 2-7. (Continued)

Compound	Method Detection Limit Total ?g	Compound	Method Detection Limit Total ?g
p-Cresol (4-Methylphenol)	7.69	Pentachlorobenzene	9.74
Dibenz(a,h)anthracene	15.85	Pentachloronitrobenzene	10.37
Dibenzofuran	9.28	Pentachlorophenol	14.74
Di-*n*-butyl phthalate	14.01	Phenacetin	16.38
Di-*n*-octyl phthalate	13.19	Phenanthrene	10.29
1,2-Dichlorobenzene	10.96	Phenol	22.48
1,3-Dichlorobenzene	12.05	1,4-Phenylenediamine	0.00
1,4-Dichlorobenzene	10.86	2-Picoline	11.15
3,3'-Dichlorobenzidine	8.95	Pronamide	12.57
2,4-Dichlorophenol	14.55	Pyrene	10.54
2,6-Dichlorophenol	18.10	1,2,4,5-Tetrachlorobenzene	10.54
Diethyl phthalate	7.20	2,3,4,6-Tetrachlorophenol	9.67
4-Dimethylaminoazobenzene	13.41	1,2,4-Trichlorobenzene	13.62
7,12-Dimethylbenz(a)anthracene	19.04	2,4,5-Trichlorophenol	6.90
?,?-Dimethylphenethylamine	10.07	2,4,6-Trichlorophenol	8.35
2,4-Dimethylphenol	17.64		

Table 2-8. Sampling Schedules and Completeness

Code	Monitoring Location	Sampling Period		Carbonyl Data			VOC Data			SNMOC			SVOC		
		Starting Date	Ending Date	A	B	C	A	B	C	A	B	C	A	B	C
A2TX	Arlington, TX	11/26/9	12/26/00	31	28	90	31	29	94	---	---	---	---	---	---
BUN	Beulah, ND	7/5/00	12/26/00	26	25	96	26	25	92	26	25	96	---	---	---
CANJ	Camden, NJ	11/20/9	12/26/00	34	31	91	34	31	91	---	---	---	---	---	---
CRIA	Cedar Rapids, IA	6/23/00	12/20/00	18	15	83	18	15	83	18	15	83	---	---	---
CLIA	Clinton, IA	10/11/0	12/20/00	6	6	100	6	6	100	6	6	100	---	---	---
DAIA	Davenport, IA	10/11/0	12/20/00	5	5	100	5	5	100	5	5	100	---	---	---
DEC	Denver, CO	9/18/00	12/26/00	29	26	90	25	20	80	20	18	90	---	---	---
DMIA	Des Moines, IA	10/15/0	12/26/00	8	5	63	8	6	75	8	6	75	---	---	---
ELNJ	Elizabeth, NJ	1/29/00	12/26/00	24	23	96	25	23	92	---	---	---	---	---	---
EPTX	El Paso, TX	11/14/9	12/26/00	32	28	88	32	30	94	---	---	---	---	---	---
FAND	Fargo, ND	11/22/9	12/26/00	---	---	---	63	61	97	63	62	98	---	---	---
MUIA	Muscatine, IA	10/9/00	12/8/00	5	5	97	5	5	100	5	5	100	---	---	---
PLOR	Portland, OR	8/22/00	9/3/00	35	34	94	34	33	97	---	---	---	36	34	94
SLCU	Salt Lake City, UT	11/12/9	12/14/00	63	59	95	64	58	95	64	58	91	---	---	---
SFSD	Sioux Falls, SD	3/19/00	12/26/00	---	---	---	47	42	89	47	42	89	---	---	---
---	**Overall**	**---**	**—**	**316**	**290**	**92**	**423**	**389**	**92**	**262**	**242**	**92**	**36**	**34**	**94**

A = Days When Samples Were Collected
B = Days With Valid Samples
C = Completeness (%)

Note: The completeness data only indicate the number of days when samples were collected.

3.0 Summary of the 1999/2000 UATMP Data

This section summarizes the data gathered during the 1999-2000 UATMP reporting year. A total of 70 VOC and carbonyl compounds were sampled during this program reporting year. (Unlike previous years, acrolein was not sampled.) Within the VOCs, three distinct groups of compounds were identified: 1) hydrocarbons; 2) halogenated hydrocarbons; and 3) polar compounds. All four of the these compound groups (including carbonyls) are discussed in greater detail in Sections 3.2 through 3.5.

This reporting year includes urban air toxic concentration data beginning August 28, 1999, in Portland, Oregon (PLOR), and ending on December 26, 2000, across eight sites. A complete presentation of the data is in Appendices F through M. Specifically:

- Appendix F: Summary Tables for VOC Monitoring;
- Appendix G: Summary Tables for SNMOC Monitoring;
- Appendix H: Summary Tables for Carbonyl Monitoring;
- Appendix I: Summary Tables for SVOC Monitoring;
- Appendix J: VOC Raw Monitoring Data;
- Appendix K: SNMOC Raw Monitoring Data;
- Appendix L: Carbonyl Raw Monitoring Data; and
- Appendix M: SVOC Raw Monitoring Data.

Nearly 28,000 urban air toxics data concentrations were collected at the fifteen sites for the 1999-2000 UATMP reporting year. Additionally, ten sites chose to sample for speciated nonmethane organic

compounds (SNMOC). These data will be analyzed on a site-specific basis in sections four through eleven of this document. Semivolatile data were collected at one site (PLOR), and those data are listed in Appendix I.

3.1 Data Summary Parameters

The summary tables in Appendices F through I were uploaded into a database for air quality analysis. This section will examine five different data summary parameters: 1) number of sampling detects; 2) concentration range; 3) geometric means; 4) prevalence; and 5) correlation. The following paragraphs review the basic findings indicated by the summary tables.

3.1.1 Number of Sampling Detects

Tables 3-1 and 3-2 are sampling detect summaries of the seventy VOC and carbonyl concentrations. Less than 50 % of the pollutants sampled were found to be above the detection limit (DL). Of those that were detected:

- 32.2% were hydrocarbons;
- 31.5 % were halogenated hydrocarbons;
- 12.0% were polar compounds; and
- 24.3% were carbonyl compounds.

Benzene and Propylene had the greatest number of detectable values reported in samples (389), while nine compounds had zero detects (see Tables 3-1 and 3-2).

3.1.2 Concentration Range

Nearly 85% of the detects had concentration values less than 1 ppbv. Less than 2% had concentration values greater than 5 ppbv. Carbonyl compounds had the highest number of samples greater than 5 ppbv (91); halogenated hydrocarbons had the lowest (40). There was at least one

compound sampled at greater than 5 ppbv on eighty-three of 113 sampling days. An interesting note is that nearly 32 of the seventy compounds never exceeded 1 ppbv.

The range of detectable values for each site is listed in Table 3-3. The BUND, CANJ, and PLOR sites had maximum values of over 200 ppbv, unusually high when compared to the other sites. All of the sites in Iowa had relatively low concentration ranges, possibly due to the relatively few sampling days. Only four sites never sampled a value greater than 5 ppbv (CLIA, DAIA, DMIA, and MUIA). SLCU had the greatest number of detects (2,154) and samples greater than 5 ppbv (48).

3.1.3 Geometric Means

The geometric mean is the central tendency of lognormally distributed data, and can be calculated by taking the "nth" root of the product of the "n" concentrations. The geometric mean is a useful parameter for calculating a central tendency of a concentration data set, whose arithmetic mean may be skewed by an usually high concentration value. Geometric means for each site of the four different pollutant groups are presented in Table 3-4. The BUND and PLOR sites had the highest geometric means for total polar compounds (4.16 ppbv) and total halogenated hydrocarbons (12.58 ppbv), respectively. The highest total carbonyl and total hydrocarbon geometric means were at DECO (14.62 ppbv and 13.95 ppbv). More detailed analysis by compound group and site will occur in Sections 3.2 through 3.5 of this document.

3.1.4 Prevalence

In the context of the UATMP, *prevalence* refers to the frequency with which an air pollutant is found at levels detectable by the corresponding sampling and analytical method. By indicating the frequency of detection, prevalence can help participating agencies identify compounds of concern in urban air pollution. Because part of this report is organized to evaluate trends in ambient air quality primarily on the basis of compound groups, the prevalent compounds are identified on a program-wide, not site-specific, basis. More importantly, the number of nondetects for a given compound (indicated by low prevalence) must be considered when interpreting air monitoring results. Specifically, annual average concentrations cannot be accurately estimated for compounds that are not detected in a majority of samples.

When reviewing the data summary tables, readers should note that a prevalence of zero does not necessarily indicate that a compound is not present in ambient air. Rather, compounds with a prevalence of zero may be present in the air, but at levels consistently below method detection limits.

For the purposes of this report, a group of program-wide prevalent compounds was identified for each of the compound groups listed in Section 3.0. These groups of program-wide prevalent compounds are discussed in detail in Sections 3.2 through 3.5, and throughout the remaining chapters of this report. Because the UATMP does not characterize every component of air pollution, many compounds known to be prevalent in urban air (e.g., ozone and nitrous oxides) are not considered in this report. Readers should be careful not to confuse the most prevalent compounds program-wide identified by the 1999-2000 UATMP with the most prevalent compounds in urban air pollution.

Program-wide prevalent compounds were identified using two statistical parameters: the count of the number of nondetects (ND); and the percent contribution of their mass concentrations. If a compound was detected in at least 75 percent of all the samples, and if the compound contributed to at least 90 percent of the mass concentration within a compound group, then that compound was considered "program-wide prevalent". Twenty-one compounds met both of these criteria (7 halogenated hydrocarbons, 6 hydrocarbons, 5 polar compounds, and 3 carbonyl compounds).

While the prevalence of VOCs and carbonyls in ambient air varied significantly from compound to compound and from monitoring location to monitoring location, the majority of VOC and carbonyl compounds were present at a prevalence greater than 75 percent at most of the monitoring locations. To simplify data presentation and interpretation, for the purposes of this report, program-wide prevalent compounds were identified within each compound group (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds). The analyses and interpretations throughout this report focus primarily on these most program-wide prevalent compounds. For the 1999-2000 UATMP, the program-wide prevalent VOC are:

- **HYDROCARBONS**
    - Acetylene

- Benzene
- *m-,p*-xylene
- *o*-xylene
- Propylene
- Toluene

- **HALOGENATED HYDROCARBONS**

  - Carbon Tetrachloride
  - Chloromethane
  - Dichlorodifluoromethane
  - Methylene Chloride
  - Tetrachloroethylene
  - Trichlorofluoromethane
  - Trichlorotrifluoroethane

? **POLAR COMPOUNDS**

  - Acetonitrile
  - Acrylonitrile
  - Methyl Ethyl Ketone
  - Methyl Isobutyl Ketone
  - Methyl *tert*-Butyl Ether

? **CARBONYL COMPOUNDS**

  - Acetaldehyde
  - Acetone
  - Formaldehyde

Because these compounds were consistently present at detectable levels, the UATMP monitoring data characterize ambient levels for these compounds much more accurately than they characterize ambient levels for the VOCs and carbonyls with lower prevalence. Further, the high

prevalence allows for a meaningful statistical analysis of data correlations and a thorough review of spatial variations and temporal variations in ambient air quality.

Readers interested in examining data trends for the less program-wide prevalent compounds more closely should refer to the summary tables in Appendices F through I, and the raw monitoring data in Appendices J through M. However, the reader should note the limitations posed by data sets with many nondetect observations.

Figures 3-1 through 3-4 illustrate how central tendency concentrations for the program-wide prevalent VOCs and carbonyls varied from one monitoring location to the next.

3.1.5 Pearson Correlations

This report uses Pearson correlation coefficients to measure the degree of correlation between two variables. By definition, Pearson correlation coefficients always lie between -1 and +1. Three qualification statements may be made:

- A correlation coefficient of -1 indicates a perfectly "negative" relationship, indicating that increases in the magnitude of one variable are associated with proportionate decreases in the magnitude of the other variable, and vice versa;

- A correlation coefficient of +1 indicates a perfectly "positive" relationship, indicating that the magnitudes of two variables both increase and both decrease proportionately.

? Data that are completely uncorrelated have Pearson correlation coefficients of zero.

Therefore, the sign (positive or negative) and magnitude of the Pearson correlation coefficient indicate the direction and strength, respectively, of data correlations.

When calculating correlations among the UATMP data, several measures were taken to identify spurious correlations and to avoid introducing bias to the correlations:

? The statistical significance of the Pearson correlation coefficients was evaluated using a standard t-test—a test commonly used for this purpose (Harnett, 1982). In this report, Pearson correlation coefficients were tested for statistical significance using the 5 percent level of significance. Whenever possible, a 95 percent confidence interval was calculated around the estimated correlation coefficient. If zero did not fall within the interval, the coefficient was considered statistically significantly different from zero.

? Data correlations were calculated only for the most program-wide prevalent compounds listed in this report. Because the UATMP monitoring data are least precise for compounds having many nondetect observations (see Section 12), eliminating the less program-wide prevalent compounds improves the correlation analysis.

? Correlations were calculated from the processed UATMP monitoring database in which each compound has just one numerical concentration for each successful sampling date. Nondetect observations, duplicate sampling events, and replicate laboratory analyses were all replaced with appropriate surrogate values. With these data quality measures, data analysts ensured that the calculated correlations characterize actual trends in the UATMP air monitoring data.

3.2 Data Interpretation: Hydrocarbons

Hydrocarbons are organic compounds that contain only carbon and hydrogen. The hydrocarbons are derived mostly from crude petroleum and also from coal tar and plant sources and are classified according to the arrangement of the atoms, as alicyclic, aliphatic, and aromatic. Hydrocarbons are of prime economic importance because they encompass the constituents of the major fossil fuels, petroleum and natural gas, as well as plastics, waxes, and oils. In urban air pollution, these components--along with oxides of nitrogen (NO_x) and sunlight--contribute to the formation of tropospheric ozone.

As stated above, hydrocarbons in the atmosphere originate from natural sources and from various anthropogenic sources, such as combustion of fuel and biomass, petroleum refining, petrochemical manufacturing, solvent use, and gas and oil production and use. Studies have shown that emissions from different anthropogenic sources vary significantly from location to location. For example,

on a nationwide basis, EPA estimates that 50 percent of anthropogenic nonmethane volatile organic compound releases in 1996 came from industrial processes, 42 percent from transportation, 6 percent from fuel combustion, and the rest from other sources (USEPA, 1997). In urban areas, however, the estimated contributions of different source categories differ from these national averages. For instance, a 1987 study in the Los Angeles area estimated that 49 percent of nonmethane hydrocarbon emissions come from vehicle exhaust, 11 percent from liquid gasoline, 10 percent from gasoline vapor, and 30 percent from sources other than motor vehicles (Fujita et al., 1994). These figures suggest that motor vehicles may play a greater role in hydrocarbon emissions in urban areas than national statistics indicate.

As noted in Section 2, the sampling and analytical methods used in the 1999-2000 UATMP measure concentrations of 12 hydrocarbons, all of which have fewer than ten carbon atoms. These 12 hydrocarbons tend to be gases or volatile liquids under standard atmospheric conditions and are commonly referred to as VOC. The discussions in this section center on the general trends observed for six program-wide prevalent hydrocarbons and consider hydrocarbon concentrations quantified at the 15 monitoring locations, with respect to:

- Correlations between concentrations of the program-wide prevalent hydrocarbons and concentrations of other compounds measured at the same time at the same monitoring location;
- Correlations between concentrations of the program-wide prevalent hydrocarbons and temperature;
- Correlations between concentrations of the program-wide prevalent hydrocarbons and other meteorological parameters.
- Spatial variations in hydrocarbon concentrations measured during the 1999-2000 UATMP;
- Relationship between spatial variations in hydrocarbon concentrations measured during the 1999-2000 UATMP and estimates of motor vehicle emissions; and
- Relationship between spatial variations in hydrocarbon concentrations measured during the 1999-2000 UATMP and estimates of industrial emissions.

3.2.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent

compounds from the four groups of chemicals studied in the 1999-2000 UATMP. The following discussion summarizes the calculated correlations.

3.2.1.1 Correlations Between Halogenated Hydrocarbons and Hydrocarbons

Figure 3-5 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent hydrocarbons.

As the distribution of Pearson correlation coefficients in Figure 3-5 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1999-2000 UATMP were moderate to strongly correlated with ambient air concentrations of the program-wide prevalent hydrocarbons. Approximately 33 percent of the correlation coefficients were greater than +0.50, indicating a moderate positive to strong correlation. Nearly 33 percent of the correlation coefficients were between 0 and +0.25, indicating very weak or no correlation. However, the average correlation is statistically significant (0.404 ± 0.173) across the 15 sites. These moderate to strong correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are similar to the factors that affect ambient air concentrations of hydrocarbons.

3.2.1.2 Correlations Between Hydrocarbons and Polar Compounds

Figure 3-5 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 3-5 shows, ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1999-2000 UATMP were all positively correlated with ambient air concentrations of the program-wide prevalent polar compounds. Approximately 40 percent of the correlation coefficients were greater than +0.50, indicating a moderately strong positive correlation. Nearly 27 percent of the correlation coefficients were between 0 and +0.25, indicating very weak or no correlation. However, the average correlation was statistically significant across the 15 sites (0.466 ± 0.131). These moderately strong correlations

again suggest that the factors that most strongly affect levels of hydrocarbons in ambient air are similar to the factors that affect ambient air concentrations of polar compounds.

3.2.1.3 Correlations Between Carbonyls and Hydrocarbons

Figure 3-5 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent carbonyls and program-wide prevalent hydrocarbons.

The distribution of Pearson correlation coefficients in Figure 3-5 shows that ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1999-2000 UATMP were weakly correlated with ambient air concentrations of the program-wide prevalent carbonyls. Approximately 25 percent of the correlation coefficients were greater than +0.50, indicating a moderately strong positive correlation. Another 25 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. The average correlation was, however, statistically significant across the 15 sites (0.378 ± 0.156). These weaker correlations generally suggest that the factors that most strongly affect levels of hydrocarbons in ambient air are from the factors that affect ambient air concentrations of carbonyl compounds.

3.2.2 Correlations Between Concentrations and Temperature

3.2.2.1 Temperature

According to Table 3-5, the program-wide prevalent hydrocarbons generally had negative correlations with maximum, minimum, and average temperature across the majority of the 15 sites. This type of correlation would suggest that increasing temperature would relate to decreasing measured concentration of hydrocarbons. The DMIA site had the strongest negative correlation of hydrocarbon concentration for all three temperature parameters (-0.809, -0.768, and -0.799, respectively). The strongest positive correlations of hydrocarbon concentration with these meteorological parameters occurred at the MUIA site (0.778, 0.933, and 0.532, respectively). Although the number of samples is relatively few compared to the other sites, it is interesting to note that these two Iowa sites are within 150 miles, yet have opposite trends.

Seasonal changes in daily average temperature are much greater at the monitoring locations in the north than at the monitoring locations in the south. These differing magnitudes of seasonal changes in temperature are important to consider when interpreting correlations between ambient air monitoring data and daily average temperature.

Statistical significance of the correlations between the temperature parameters and the measured hydrocarbon concentrations at the 95 percent confidence interval was also calculated for all of the sites. As Table 3-5 shows, none of these correlations were statistically significant with ambient hydrocarbon concentrations.

3.2.2.2 Wind and Sea Level Pressure Information

According to Table 3-5, the program-wide prevalent hydrocarbons had a significantly negative correlation across all 15 sites (-0.315 ± 0.161) with wind speed. As the wind speed increases, the hydrocarbon concentrations tend to decrease. This observation suggests that stagnant, slow-moving air correlates with higher hydrocarbon concentrations. The strongest negative correlation of hydrocarbon concentration with the wind speed was found at the MUIA site (-0.834) while the BUND site had the strongest positive correlation with the wind speed (0.229).

Correlations with sea level pressure and hydrocarbon concentrations were also calculated, but there was no statistical significance to the relationship between the two parameters (0.142 ± 0.179).

3.2.2.3 Dew Point Temperature and Visibility

According to Table 3-5, the program-wide prevalent hydrocarbons had a negative correlation with the dew point temperature. The strongest negative correlation occurred at the Des Moines, IA, site (-0.779). The strongest positive correlation of hydrocarbon concentration with dew point temperature occurred at the MUIA site (0.593). Visibility also had a negative correlation with the program-wide prevalent hydrocarbons (-0.100 ± 0.184). The strongest negative correlation occurred at the DAIA site (-0.775), while the highest positive correlation occurred at the CLIA site (0.632).

Statistical significance of the correlation between the dew point temperature and visibility with the measured hydrocarbon concentrations at the 95 percent confidence interval was also calculated across all 15 sites. As Table 3-5 shows, neither visibility parameter or dew point temperature was statistically significant, suggesting that these parameters have more of a localized affect on ambient concentrations of hydrocarbons.

3.2.3 Spatial Variations

To provide a sense of how overall levels of hydrocarbons varied among the UATMP monitoring locations, Figure 3-6 compares the geometric means of the sums of the program-wide prevalent hydrocarbon concentrations for each monitoring location. These data are provided for comparison purposes only and should not be confused with concentrations of total nonmethane organic compounds, which is another common air quality measurement.

Figure 3-6 clearly indicates that levels of the program-wide prevalent hydrocarbons at DECO were higher than the levels measured at any of the other monitoring stations. The figure also indicates that levels of the most program-wide prevalent hydrocarbons were lowest at BUND.

3.2.4 The Impact of Motor Vehicle Emissions on Spatial Variations

Motor vehicles significantly contribute to air pollution in urban environments. Pollutants found in motor vehicle exhaust generally result from incomplete combustion of vehicle fuels. Although modern vehicles and, more recently, vehicle fuels have been engineered to minimize air emissions, all motor vehicles with internal combustion engines emit a wide range of chemical pollutants. The magnitude of these emissions in urban areas primarily depends on the volume of traffic, while the chemical profile of these emissions depends more on vehicle design and fuel content. This report uses two parameters to evaluate the impact of motor vehicle emissions on ambient air quality:

- Car ownership data; and
- Motor vehicle emissions profiles.

3.2.4.1 Car Ownership Data

As an indicator of motor vehicle emissions near the UATMP monitoring locations, Table 3-6 presents estimates of the number of cars owned by residents within 10 miles of each monitoring location. The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 275,000,000 and total number of cars in U.S. of 203,500,000).

For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent hydrocarbons are presented in Table 3-6, ranked in descending order. The data in the table indicate a positive linear correlation between car ownership data and ambient air concentrations of hydrocarbons. However, readers should keep in mind other factors that might impact the reliability of car ownership data as an indicator of ambient air monitoring data results:

- Estimates of higher car ownership within a 10-mile radius do not necessarily imply increased motor vehicle use in the immediate vicinity of a monitoring location. Conversely, sparsely populated regions often contain heavily traveled roadways.
- Emissions sources in the area other than motor vehicles may significantly affect levels of hydrocarbons in the ambient air.

3.2.4.2 Motor Vehicles Emissions Profiles

The *magnitude* of emissions from motor vehicles generally depends on the volume of traffic in urban areas, but the *composition* of these emissions depends more on vehicle design. Because the distribution of vehicle design (i.e., the relative number of cars of different styles) is probably quite similar from one urban area to the next, the composition of air pollution resulting from motor vehicle emissions is not expected to exhibit significant spatial variations. In support of this hypothesis, previous air monitoring studies have observed relatively constant compositions of ambient air samples collected along heavily traveled urban roadways (Conner et al., 1995). Roadside studies have found particularly consistent proportions of four hydrocarbons (benzene, toluene, ethylbenzene, and the xylene isomers - the "BTEX" compounds) both in motor vehicle exhaust and in ambient air near roadways.

To examine the impact of motor vehicle emissions on air quality at the 1999-2000 UATMP monitoring sites, Figure 3-7 compares concentration ratios for the BTEX compounds measured during

the 1999-2000 UATMP to the ratios reported in a roadside study (Conner et al., 1995). This comparison provides a qualitative depiction of how greatly motor vehicle emissions affect air quality at the UATMP monitoring locations: the more similar the concentration ratios at a particular monitoring location are to those of the roadside study, the more likely that motor vehicle emissions impact ambient levels of hydrocarbons at that location.

As Figure 3-7 shows, the concentration ratios for BTEX compounds measured at every UATMP monitoring station bear some resemblance to the ratios reported in the roadside study. The BTEX ratio for the DECO monitoring location is most similar to the roadside study profile. For all monitoring locations the toluene:ethylbenzene ratio is clearly the largest value of the four ratios and the xylene:ethylbenzene ratio is clearly the smallest value of the ratios. This observation suggests, though certainly does not prove, that emissions from motor vehicles significantly affect levels of hydrocarbons in urban ambient air.

3.2.4.3 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 3-6 summarizes emissions data for each monitoring location, and ranks each data set with the highest value assigned the rank of one. (Readers may also want to refer to the monitoring location maps in Section 2 for a visual representation of industrial facilities.) For each monitoring location, Table 3-6 includes:

- The geometric mean of the sum of the program-wide prevalent hydrocarbon concentrations for each sampling event.
- The sum of emissions of 5 of the 6 program-wide prevalent hydrocarbons detected during the 1999-2000 UATMP reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations. The table does not account for emissions of acetylene because industries are not required to disclose releases of this compound to TRI.
- Total emissions reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations.

As the table shows, the TRI emissions ranks for the 12 sites were not entirely consistent with the respective rank of the total ambient air concentration of the program-wide prevalent hydrocarbons. For instance:

- The ELNJ monitoring site had high concentrations of program-wide prevalent hydrocarbons, high emissions of program-wide prevalent hydrocarbons reported to TRI, and high emissions of total hydrocarbons reported to TRI.
- Some monitoring locations (e.g., DECO, EPTX, and SLCU) had relatively high concentrations of the program-wide prevalent hydrocarbons, but had relatively low levels of both program-wide prevalent hydrocarbon and total industrial emissions reported to TRI.
- Other monitoring locations (e.g., CLIA, CRIA, and MUIA) had relatively low concentrations of hydrocarbons, but had relatively high levels of emissions reported to TRI.

To examine the TRI emissions data more closely, Table 3-7 compares the reported air releases for the individual program-wide prevalent hydrocarbons (excluding acetylene) to the corresponding geometric mean concentrations measured during the 1999-2000 UATMP. For ease of interpretation, Table 3-7 lists the monitoring locations in order of decreasing geometric mean concentration for each compound. Readers should keep in mind that the concentrations of these compounds are quite low in all cases, 0.03 to 2.44 ppbv, and conclusions regarding spatial variation should be made cautiously.

3.3 Data Interpretation: Halogenated Hydrocarbons

Halogenated hydrocarbons are organic compounds that contain carbon, hydrogen, and halogens - the chemical group that includes chlorine, bromine, and fluorine. Most halogenated hydrocarbons are used for industrial purposes and as solvents, though some are produced naturally (Godish, 1997). Once emitted to the air, many volatile halogenated hydrocarbons resist photochemical breakdown and therefore persist in the atmosphere for relatively long periods of time (Godish, 1997; Ramamoorthy and Ramamoorthy, 1997). These compounds can cause chronic health effects as well as contribute to the formation of tropospheric ozone. Like hydrocarbons, only the halogenated hydrocarbons with lower molecular weights are volatile, and the sampling and analytical methods used in the 1999-2000 UATMP measure a subset of 37 of these volatile compounds.

The discussions in this chapter center on the general trends observed for the seven program-wide prevalent halogenated hydrocarbons and consider halogenated hydrocarbon concentrations quantified at the 15 monitoring locations, with respect to:

- Correlations between concentrations of the program-wide prevalent halogenated hydrocarbons and concentrations of other compounds measured at the same time at the same monitoring location;
- Correlations between concentrations of the program-wide prevalent halogenated hydrocarbons and temperature;
- Correlations between concentrations of the program-wide prevalent halogenated hydrocarbons and meteorological parameters;
- ? Spatial variations in halogenated hydrocarbon concentrations measured during the 1999-2000 UATMP; and
- ? Relationship between spatial variations in halogenated hydrocarbon concentrations measured during the 1999-2000 UATMP and estimates of industrial emissions.

3.3.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1999-2000 UATMP (i.e., hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds). The following discussion summarizes the calculated correlations.

3.3.1.1 Correlations Between Halogenated Hydrocarbons and Hydrocarbons

Figure 3-8 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent hydrocarbons.

As the distribution of Pearson correlation coefficients in Figure 3-7 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1999-2000 UATMP were moderately correlated with ambient air concentrations of the program-wide

prevalent hydrocarbons. Approximately 33 percent of the correlation coefficients were greater than +0.50, indicating a moderate positive to strong correlation. Another 33 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. However, the average correlation is statistically significant (0.404 ± 0.173) across the 15 sites. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of hydrocarbons.

3.3.1.2 Correlations Between Halogenated Hydrocarbons and Polar Compounds

Figure 3-8 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 3-7 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1999-2000 UATMP were weak to moderately correlated with ambient air concentrations of the program-wide prevalent polar compounds. Across all sites, there was a statistical significance in the correlations (0.316 ± 0.200). Although 40 percent of the correlation coefficients were greater than +0.50, forty percent were less than +0.25. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of polar compounds.

3.3.1.3 Correlations Between Halogenated Hydrocarbons and Carbonyls

Figure 3-8 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent carbonyl compounds.

The distribution of Pearson correlation coefficients in Figure 3-7 shows that ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1999-2000 UATMP were very weakly correlated with ambient air concentrations of the program-wide

prevalent carbonyl compounds. Across all 15 sites, there was a statistical significance in the correlations (0.179 ± 0.122). However, less than 10 percent of the correlation coefficients were greater than +0.50. Seventy-five percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of carbonyls.

3.3.2 Correlations Between Concentrations and Temperature

3.3.2.1 Temperature

According to Table 3-8, the program-wide prevalent halogenated hydrocarbons had very weak negative correlations with the maximum, minimum, and average temperature across all fifteen sites. This observation would suggest that temperature does not relate well to measured concentration of halogenated hydrocarbons. The strongest positive correlations of halogenated hydrocarbon concentration with maximum temperature occurred at the EPTX site, the minimum and average temperature had strongest correlations at the MUIA site (0.403, 0.412, and 0.406, respectively). The DMIA site had the strongest negative correlation of halogenated hydrocarbon concentration with the three temperature parameters (-0.730, -0.835, and -0.811, respectively).

Statistical significance of the correlation between the temperature parameters and the measured halogenated hydrocarbon concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 3-8 shows, none of these correlations were statistically significant.

3.3.2.2 Wind and Sea Level Pressure Information

According to Table 3-8, the program-wide prevalent halogenated hydrocarbons had a negative correlation with the wind speed across the 15 sites. This observation would suggest that high wind speeds tend to decrease the measured concentration of halogenated hydrocarbons. The correlation between sea level pressure and the measured halogenated hydrocarbon concentration was also negative (-0.061 ± 0.172).

Statistical significance of the correlation between the wind speed and sea level pressure and the measured halogenated hydrocarbon concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 3-8 shows, only the correlation with the wind speed was statistically significant. This observation suggests that increasing wind speeds reduce the concentrations of the halogenated hydrocarbons, either by dilution or by removing the compounds from the area where the measurements are being made.

3.3.2.3 Dew Point Temperature and Visibility

According to Table 3-8, the program-wide prevalent halogenated hydrocarbons generally had weakly negative correlations with both the dew point temperature and visibility. The strongest positive correlation of halogenated hydrocarbon concentration with dew point temperature and visibility occurred at the MUIA (0.473) and the CRIA (0.444) sites, respectively. The strongest negative correlations for these two parameters occurred at the DAIA site (-0.824 and -0.886, respectively).

Statistical significance of the correlation between the dew point temperature and visibility and the measured halogenated hydrocarbon concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 3-8 shows, neither of these meteorological parameters exhibited a statistically significant correlation with the measured halogenated hydrocarbon concentration.

3.3.3 Spatial Variations

To provide a sense of how overall levels of halogenated hydrocarbons varied among the UATMP monitoring locations, Figure 3-9, presents the geometric means of the sampling event sums of the program-wide prevalent halogenated hydrocarbon concentrations for each monitoring location. Unlike the concentration range seen for the hydrocarbons, little variation (except for PLOR and FAND) is demonstrated for the concentrations and no strong trend is exhibited in geometric means data presented in Figure 3-9. In addition, the geometric means for the halogenated compounds are considerably lower at all locations in comparison to the geometric means for hydrocarbons and carbonyl compounds.

It is important to interpret the spatial variations described throughout this document in the proper context. These analyses compare and contrast ambient air quality measured at specific locations within urban environments. Because ambient air quality can vary significantly within urban environments, even over short distances, it is probable that ambient air concentrations throughout a city may differ significantly from those measured at the specific UATMP monitoring stations.

3.3.4 The Impact of Motor Vehicle Emissions on Spatial Variations

Motor vehicles emit significantly greater quantities of hydrocarbons than halogenated hydrocarbons. As a result, motor vehicle emissions generally do not correlate well with airborne levels of halogenated hydrocarbons.

For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent halogenated hydrocarbons are presented in Table 3-9. The data in this table do not show a relationship between car ownership as an indicator of motor vehicle emissions and concentrations of halogenated hydrocarbons in ambient air.

3.3.5 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 3-9 summarizes emissions data for each monitoring location and ranks each data set with the highest value assigned the rank of one. (Readers may also want to refer to the monitoring location maps in Section 2 for a visual representation of industrial facilities.) For each monitoring location, Table 3-9 includes:

? The geometric mean of the sum of the program-wide prevalent halogenated hydrocarbon concentrations for each sampling event;

? The sum of emissions of the 7 program-wide prevalent halogenated hydrocarbons detected during the 1999-2000 UATMP reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations; and

? Total emissions reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations.

As the table shows, the TRI emissions ranks for the 15 sites were not consistent with the respective ranks of the total ambient air concentrations of the program-wide prevalent halogenated hydrocarbons. A unique trend in the data presented in Table 3-9 includes:

? Six of the fifteen sites reported zero emissions in the TRI. Two of these sites (EPTX and Cedar Rapids, IA) ranked third and fourth in the concentration average.

To examine the TRI emissions data more closely, Table 3-10 compares the reported air releases for the individual program-wide prevalent hydrocarbons (excluding carbon tetrachloride, trichlorofluoromethane, and trichlorotrifluoroethane) to the corresponding geometric mean concentrations measured during the 1999-2000 UATMP. For ease of interpretation, Table 3-10 lists the monitoring locations in order of decreasing geometric mean concentration for each compound. In general, the data in Table 3-10 indicate that industrial emissions are not a dominating factor influencing levels of halogenated hydrocarbons in ambient air. Readers should keep in mind that the concentrations of these compounds are quite low in most cases, generally less than 1 ppbv, and conclusions regarding spatial variation should be made cautiously.

There does not appear to be any noticeable correlation with the industrial emissions and the concentrations of pollutant detected at the monitoring sites. In each case, the site with the highest reported concentration is not the site with the highest reported industrial emissions. Many of the sites reported zero emissions for these halogenated hydrocarbons.

3.4 Data Interpretation: Polar Compounds

Polar compounds (i.e., oxygenated compounds such as methyl *tert*-butyl ether, methyl ethyl ketone, etc.) were added to the UATMP analyte list that included the volatile halogenated hydrocarbons and selected hydrocarbons because of the nation-wide use of these types of compounds as gasoline additives and the toxicity of these gasoline additives. Because of the prevalence of compounds characteristic of motor vehicle emissions, any compounds used as gasoline additives would be expected to be correspondingly prevalent. Other polar compounds such as acetonitrile were added to the analyte list because the compounds were observed at high concentrations at one or more monitoring sites.

The discussions in this section center on the general trends observed for the three program-wide prevalent polar compounds and consider polar compound concentrations quantified at the 15 monitoring locations, with respect to:

- Correlations between concentrations of the program-wide prevalent polar compounds and concentrations of other compounds measured at the same time at the same monitoring location;
- Correlations between concentrations of the program-wide prevalent polar compounds and temperature;
- Correlations between concentrations of the program-wide prevalent polar compounds and meteorological parameters.
- Spatial variations in polar compound concentrations measured during the 1999-2000 UATMP; and
- Relationship between spatial variations in polar compound concentrations measured during the 1999-2000 UATMP and estimates based on the estimation of industrial emissions.

3.4.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1999-2000 UATMP (i.e., hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds). The following discussion summarizes the calculated correlations.

3.4.1.1 Correlations Between Hydrocarbons and Polar Compounds

Figure 3-10 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 3-10 shows, ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1999-2000 UATMP were positively correlated with ambient air concentrations of the program-wide prevalent polar compounds. Forty percent of the correlation coefficients were greater than +0.50, indicating a strong to

moderate positive correlation. Nearly 27 percent of the correlation coefficients were between 0 and +0.25, indicating very weak or no correlation. However, the average correlation was statistically significant across the 15 sites (0.466 ± 0.131). These moderately strong correlations generally suggest that the factors that most strongly affect levels of hydrocarbons in ambient air are similar from the factors that affect ambient air concentrations of polar compounds.

3.4.1.2 Correlations Between Halogenated Hydrocarbons and Polar Compounds

Figure 3-10 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 3-10 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1999-2000 UATMP were weak to moderately correlated with ambient air concentrations of the program-wide prevalent polar compounds. Across all 15 sites, there was a statistical significance in the correlations (0.316 ± 0.200). Although 40 percent of the correlation coefficients were greater than +0.50, forty percent were less than +0.25. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of polar compounds.

3.4.1.3 Correlations Between Carbonyl Compounds and Polar Compounds

Figure 3-10 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for pairs of the program-wide prevalent polar compounds and program-wide prevalent carbonyl compounds.

The distribution of Pearson correlation coefficients in Figure 3-10 indicates a very weak correlation between ambient air concentrations of the program-wide prevalent carbonyl compounds measured during the 1999-2000 UATMP and those of program-wide prevalent polar compounds. Over 66 percent of the correlation coefficients were between -0.25 and +0.25, indicating a weak correlation. Nearly 25 percent of the correlation coefficients were greater than +0.50.

3.4.2 Correlations Between Concentrations and Temperature

3.4.2.1 Temperature

According to Table 3-11, the program-wide prevalent polar compounds had a negative correlation for maximum, minimum, and average temperature across all 15 sites. The strongest positive correlations of polar compound concentrations with maximum, minimum, and average temperature occurred at the FAND site (0.418, 0.412, and 0.436, respectively). The DAIA site had the strongest negative correlation of polar compound concentration with all three temperature parameters (-0.837, -0.839, and -0.845, respectively).

Statistical significance of the correlation between the temperature parameters and the measured polar compound concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 3-11 shows, none of these correlations were statistically significant.

3.4.2.2 Wind and Sea Level Pressure Information

According to Table 3-11, the program-wide prevalent polar compounds had negative correlations with the wind speed across the 15 sites. The strongest positive correlation of polar hydrocarbon concentration with the wind speed occurred at the SFSD site (+0.411) while the CLIA site had the strongest negative correlation with the wind speed (-0.763).

The correlation between sea level pressure and polar compound concentrations was positive across the 15 sites. The DMIA site had the strongest negative correlation (-0.763), while the DAIA site had the strongest positive correlation (0.921).

Statistical significance of the correlation between the wind speed and sea level pressure with the measured polar compound concentrations at the 95 percent confidence interval was also calculated across the 15 sites. As Table 3-11 shows, neither of these correlations was statistically significant.

3.4.2.3 Dew Point Temperature and Visibility

According to Table 3-11, the program-wide prevalent polar compounds had a negative correlation with the dew point temperature. The strongest positive correlation of polar compound concentrations with the dew point temperature occurred at the FAND site (0.446), while the strongest negative correlation for this parameter occurred at the DAIA site (-0.769).

Visibility showed a very weak negative correlation with the polar compound concentrations across the 15 sites. The strongest negative correlation occurred at the DAIA site (-0.869), while the highest positive correlation occurred at the FAND site (0.446).

Statistical significance of the correlation between the dew point temperature and the visibility with the measured polar compound concentrations at the 95 percent confidence interval was also calculated across the 15 sites. As Table 3-11 shows, neither of the correlations was statistically significant.

3.4.3 Spatial Variations

To provide a sense of how overall levels of polar compounds varied among the UATMP monitoring locations, Figure 3-11 presents the geometric means of the sampling event sums for the polar compound concentrations at each monitoring location. Little variation is demonstrated for the concentrations and no strong trend is exhibited in geometric means data presented in Figure 3-11. The geometric means for the polar compounds are considerably lower at all locations in comparison to the geometric means for hydrocarbons and carbonyl compounds.

3.4.4 The Impact of Motor Vehicle Emissions on Spatial Variations

For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent polar compounds are presented in Table 3-12. The data in this table do not indicate a possible correlation between car ownership as an indicator of motor vehicle emissions and concentrations of polar compounds in ambient air. Some interesting characteristics were also seen:

- Concentrations of program-wide prevalent polar compounds were high at ELNJ (rank #3); this site had the highest total number of cars.
- Concentrations of program-wide prevalent polar compounds were highest at the BUND monitoring site, also the site with the lowest total number of cars.

- Concentrations of program-wide prevalent polar compounds were lowest at the DAIA monitoring site, the site with the eighth highest total number of cars.

3.4.5 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 3-12 summarizes emissions data for each monitoring location, and ranks each data set with the highest value assigned the rank of one. (Readers may also want to refer to the monitoring location maps in Section 2 for a visual representation of industrial facilities.) For each monitoring location, Table 3-12 includes:

- The geometric mean of the sum of the program-wide prevalent polar compound concentrations for each sampling event.
- The sum of emissions for all 5 of the program-wide prevalent polar compounds detected during the 1999-2000 UATMP, as reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations.
- Total emissions reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations.

As the table shows, the TRI emissions ranks for the 15 sites were inconsistent with the respective rank of the total ambient air concentration of the program-wide prevalent polar compounds. For instance:

- The BUND monitoring site reported the highest concentrations of program-wide prevalent polar compounds but zero industrial emissions of program-wide prevalent polar compounds.
- The A2TX monitoring site had the second highest concentration and emissions.

To examine the TRI emissions data more closely, Table 3-13 compares the reported air releases for the five prevalent polar compounds to the corresponding geometric mean concentrations measured during the 1999-2000 UATMP. For ease of interpretation, Table 3-13 lists the monitoring locations in order of decreasing geometric mean concentration for each compound. Some interesting notes:

- Acetonitrile emissions are reported only at the ELNJ monitoring site. Concentrations at the 15 monitoring site ranged from 0.13 ppbv to 0.31 ppbv.

- While industrial emissions of MEK reported for the BUND monitoring site are zero, the measured concentration is the highest.

3.5 Data Interpretation: Carbonyl Compounds

Carbonyl compounds are organic compounds characterized by their composition of carbon, hydrogen, and oxygen, and by the presence of at least one carbon-oxygen double bond. Several different factors are known to affect ambient air concentrations of carbonyl compounds, but most notably:

- Combustion sources, motor vehicles, and various industrial processes that emit carbonyl compounds directly to the atmosphere;

- Photochemical reactions that *form* carbonyl compounds in the air, typically from airborne hydrocarbons; and

- Photochemical reactions that *consume* carbonyl compounds from the air, generally by photolysis or by reaction with hydroxyl radicals (Seinfeld, 1986).

As noted in Section 2, the 1999-2000 UATMP sampling and analytical methods measured concentrations of 16 carbonyl compounds. The discussions in this chapter center on the general trends observed for four program-wide prevalent carbonyl compounds and consider carbonyl compound concentrations quantified at the 13 monitoring locations (FAND and SFSD did not report carbonyl data), with respect to:

- Correlations between concentrations of the program-wide prevalent carbonyl compounds and concentrations of other compounds measured at the same time at the same monitoring location;

- Correlations between concentrations of the program-wide prevalent carbonyl compounds and temperature;

- Correlations between concentrations of the program-wide prevalent carbonyl compounds and meteorological parameters;

- Spatial variations in carbonyl compound concentrations measured during the 1999-2000 UATMP;

- Relationship between spatial variations in carbonyl compound concentrations measured during the 1999-2000 UATMP and estimates based on estimation of motor vehicle emissions; and

- Relationship between spatial variations in carbonyl compound concentrations measured during the 1999-2000 UATMP and estimates based on estimation of industrial emissions.

3.5.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1999-2000 UATMP (i.e., hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds). The following discussion summarizes the calculated correlations.

3.5.1.1 Correlations Between Carbonyl Compounds and Hydrocarbons

Figure 3-12 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent hydrocarbons and program-wide prevalent carbonyl compounds.

The distribution of Pearson correlation coefficients in Figure 3-12 shows that ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1999-2000 UATMP were weakly correlated with ambient air concentrations of the program-wide prevalent carbonyl compounds. Approximately 25 percent of the correlation coefficients were greater than +0.50, indicating a moderately strong positive correlation. Another 25 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. The average correlation, however, was statistically significant across the 13 sites (0.378 ± 0.156). These weaker correlations generally suggest that the factors that most strongly affect levels of hydrocarbons in ambient air are not the same as or similar to the factors that affect ambient air concentrations of carbonyl compounds, or that the program-wide prevalent hydrocarbon and carbonyl species originate from different sources.

3.5.1.2 Correlations Between Carbonyl Compounds and Halogenated Hydrocarbons

Figure 3-12 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent carbonyl compounds and program-wide prevalent halogenated hydrocarbons.

The distribution of Pearson correlation coefficients in Figure 3-12 shows that ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1999-2000 UATMP were very weakly correlated with ambient air concentrations of the program-wide prevalent carbonyl compounds. Across all 13 sites, there was a statistical significance in the correlations (0.179 ± 0.122). However, less than 10 percent of the correlation coefficients were greater than +0.50. Seventy-five percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of carbonyl compounds.

3.5.1.3 Correlations Between Carbonyl Compounds and Polar Compounds

Figure 3-12 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent carbonyl compounds and program-wide prevalent polar compounds.

The distribution of Pearson correlation coefficients in Figure 3-12 indicates a very weak correlation between ambient air concentrations of the program-wide prevalent carbonyl compounds measured during the 1999-2000 UATMP and those of program-wide prevalent polar compounds. Over 66 percent of the correlation coefficients were between -0.25 and +0.25, indicating a weak negative correlation. Nearly 25 percent of the correlation coefficients were greater than +0.50.

3.5.2 Correlations Between Concentrations and Meteorological Parameters

3.5.2.1 Temperature

According to Table 3-14, the program-wide prevalent carbonyl compounds had positive correlations with maximum, minimum, and average temperature across all 13 sites. This observation would suggest that increasing temperature would relate to increasing measured concentration of carbonyl compounds. The strongest positive correlations of carbonyl compound concentrations with these meteorological parameters all occurred at the DAIA site (0.632, 0.608, and 0.584, respectively). The DMIA site had the strongest negative correlation of carbonyl compound concentrations with the maximum and average temperature (-0.053 and -0.039), while the MUIA site had the strongest negative correlation for minimum temperature (-0.146).

Statistical significance of the correlation between the temperature parameters and the measured carbonyl compound concentrations at the 95 percent confidence interval was also calculated across the 13 sites. As Table 3-14 shows, all of these correlations were statistically significant, suggesting that air temperature is a key component in the measured carbonyl compound concentrations tendency.

3.5.2.2 Wind and Sea Level Pressure Information

According to Table 3-14, the program-wide prevalent carbonyl compounds had a negative correlation with wind speed across the 13 sites. The DAIA site had the strongest negative correlation (-0.961). This observation would suggest that slow-moving air tends to increase the measured concentrations of carbonyl compounds. The strongest negative correlation of carbonyl compound concentration with the sea level pressure occurred at the CANJ site (-0.267) while the A2TX site had the strongest positive correlation (0.303).

Statistical significance of the correlation between the wind speed and sea level pressure with the measured carbonyl compound concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 3-14 shows, only the correlation with wind speed was statistically significant. This observation suggests that increasing wind speeds reduce the concentrations of the carbonyl compounds, either by dilution or by removing the compounds from the area where the measurements are being made.

3.5.2.3 Dew Point Temperature and Visibility

According to Table 3-14, the program-wide prevalent carbonyl compounds generally had positive correlations with both the dew point temperature and visibility. The strongest positive correlation of carbonyl compound concentration with the dew point temperature and the visibility occurred at the DAIA site (0.578) and the CLIA site (0.735). The MUIA site had the strongest negative correlation for the dew point temperature (-0.153) while the DMIA site had the strongest negative correlation with visibility (-0.523).

Statistical significance of the correlation between these parameters and the measured carbonyl compound concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 3-14 shows, only the dew point temperature was statistically significant, which suggests that carbonyl compound concentrations may increase with increasing moisture.

3.5.3 Spatial Variations

To provide a sense of how overall levels of carbonyl compounds varied among the UATMP monitoring locations, Figure 3-13 presents the geometric means of the sampling event sums for the program-wide carbonyl compound concentrations at each monitoring location. There appears to be some variation across the sites. DECO appears to have a significantly higher geometric mean than the other sites. All the Iowa sites had low geometric means.

3.5.4 The Impact of Motor Vehicle Emissions on Spatial Variations

Motor vehicles are thought to contribute to variations in carbonyl compound concentrations in ambient air. This report uses car ownership data to evaluate the impact of motor vehicle emissions on ambient air quality.

3.5.4.1 Car Ownership Data

As an indicator of motor vehicle emissions near the UATMP monitoring locations, Table 3-15 presents estimates of the number of cars owned by residents within 10 miles of each monitoring location. For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent carbonyl compounds are presented in Table 3-15. The data in the table indicate some correlation between car ownership data and ambient air concentrations of carbonyl compounds:

- Four sites (CANJ, DECO, PLOR, and SLCU) rank in the top five of measured concentration of prevalent compounds and number of cars owned.

- The BUND and Iowa sites (CLIA, CRIA, DAIA, DMIA, and MUIA) reported low concentrations of program-wide prevalent carbonyl compounds and low numbers of cars within 10 miles of the sites.

Readers should keep in mind other factors that might impact the reliability of car ownership data as an indicator of ambient air monitoring data results:

- Higher car ownership within a 10-mile radius does not necessarily imply increased motor vehicle use in the immediate vicinity of a monitoring location. Conversely, sparsely populated regions often contain heavily traveled roadways.

- Emissions sources in the area other than motor vehicles may significantly affect levels of carbonyl compounds in the ambient air.

3.5.5 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 3-15 summarizes emissions data for each monitoring location and ranks each data set with the highest value assigned the rank of one. For each monitoring location, Table 3-15 includes:

- The geometric mean of the sum of the program-wide prevalent carbonyl compound concentrations for each sampling event.

- The sum of emissions of 2 of the 3 program-wide prevalent carbonyl compounds detected during the 1999-2000 UATMP (acetaldehyde and formaldehyde) as reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations. The table does not account for emissions of acetone because industries are not required to disclose releases of these compounds to TRI.

- Total emissions reported to TRI in 1998 by facilities within 10 miles of the 1999-2000 UATMP monitoring locations.

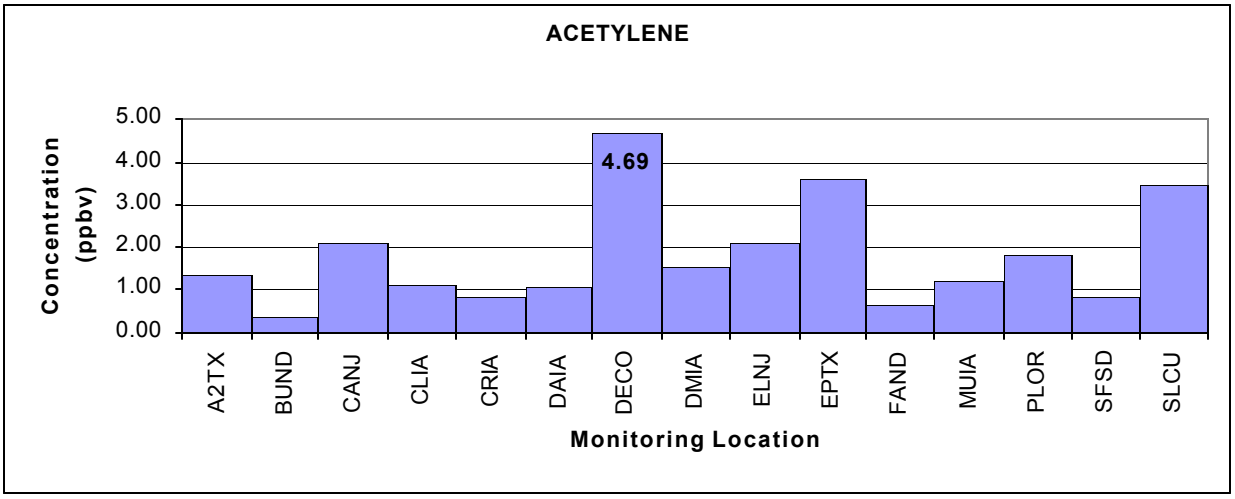
As the table shows, the TRI emissions ranks for the 13 sites were not consistent with the respective rank of the total ambient air concentration of the program-wide prevalent carbonyl compounds. It should be noted that 9 of the 13 monitoring sites did not report any industrial emissions of program-wide prevalent carbonyl compounds. To examine the TRI emissions data more closely,

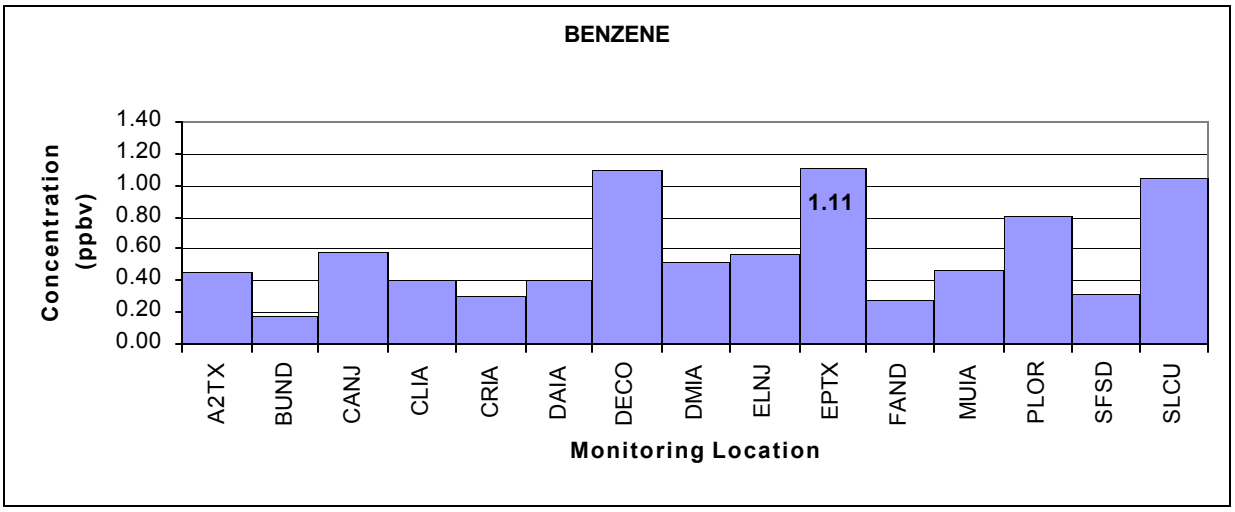
Table 3-16 compares the reported air releases for the individual program-wide prevalent carbonyl compounds (excluding acetone) to the corresponding geometric mean concentrations measured during the 1999-2000 UATMP. The weakness of the relationship between ambient air concentrations and industrial emissions is illustrated by the following:

- DECO and CANJ reported the highest concentrations of the program-wide prevalent carbonyl compounds, but had moderate levels of total industrial emissions reported to TRI and no industrial emissions of program-wide prevalent carbonyl compounds.

To examine the TRI emissions data more closely, Table 3-16 compares the reported air releases for the individual program-wide prevalent carbonyl compounds (excluding acetone) to the corresponding geometric mean concentrations measured during the 1999-2000 UATMP. Many sites did not report TRI emissions. No clear relationship between industrial emissions and ambient air concentrations of carbonyl compounds is demonstrated by the data presented in Table 3-16.

Figure 3-1. Concentrations of the Program-wide Prevalent Hydrocarbons by Site





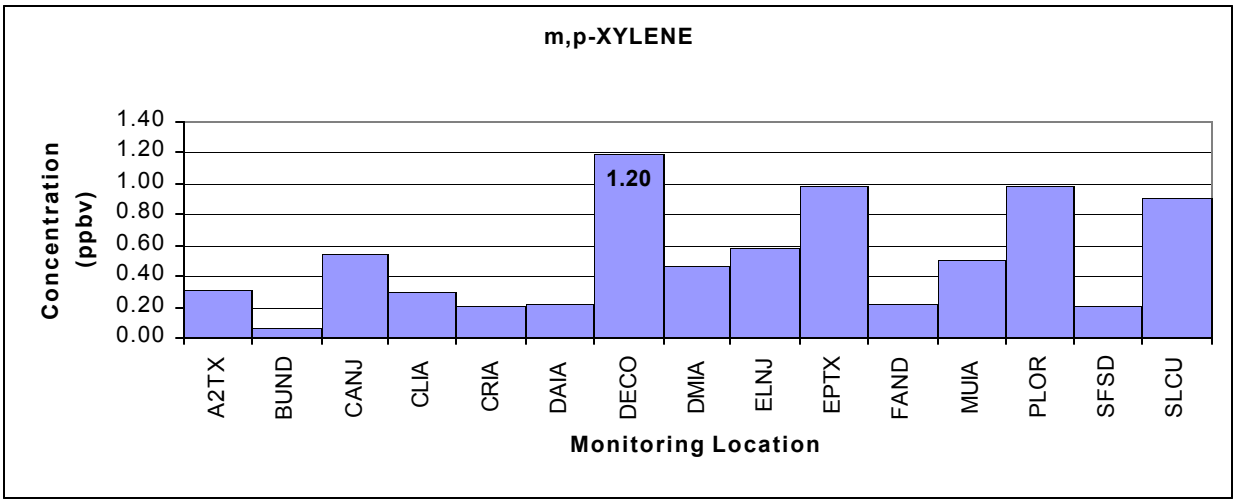
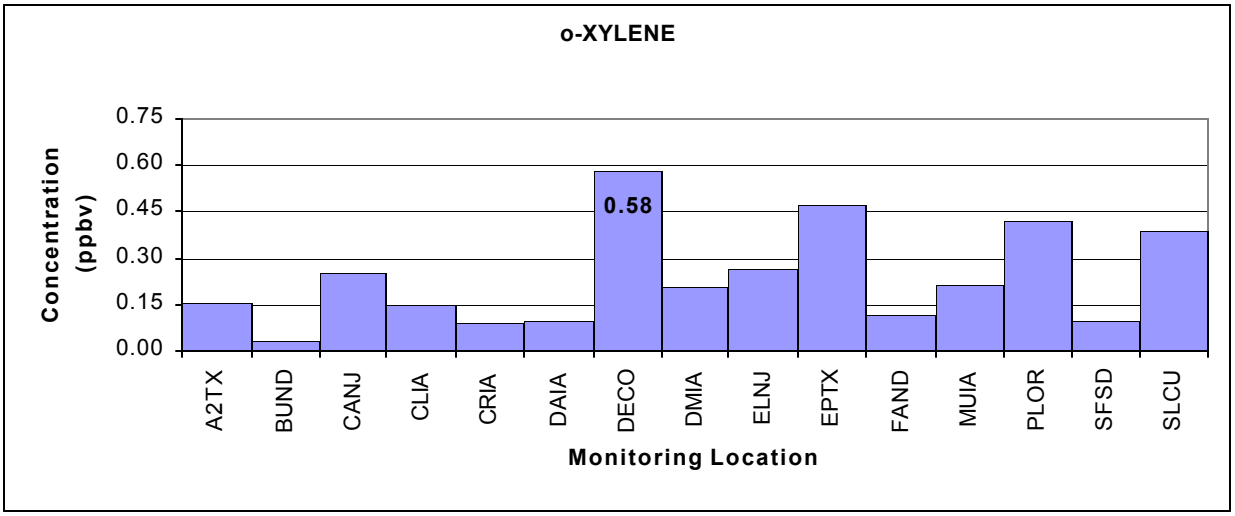
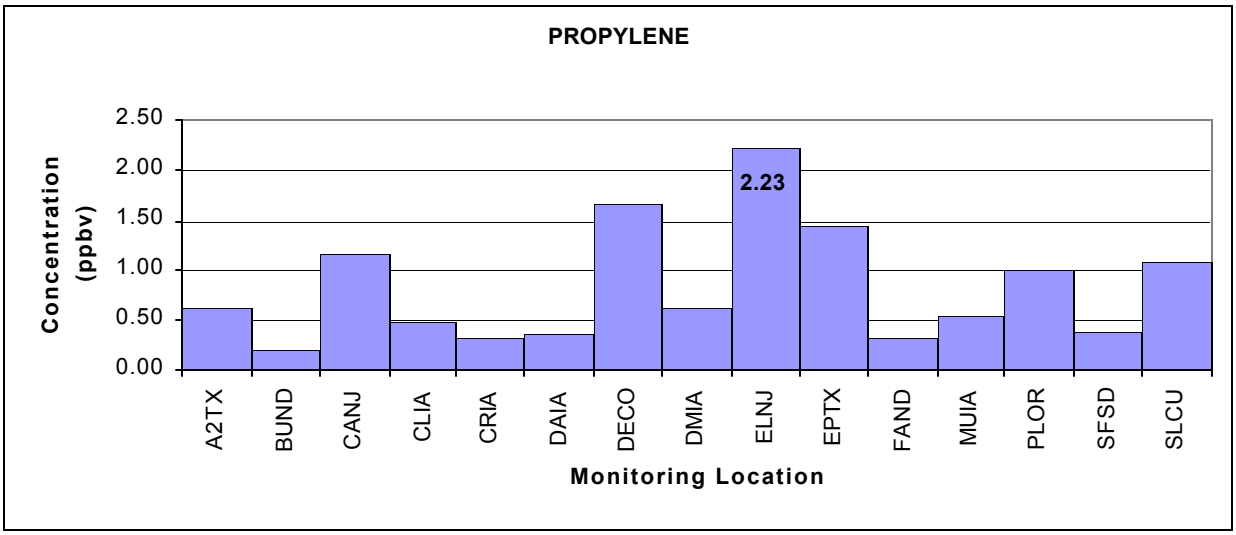


Figure 3-1. (Continued)





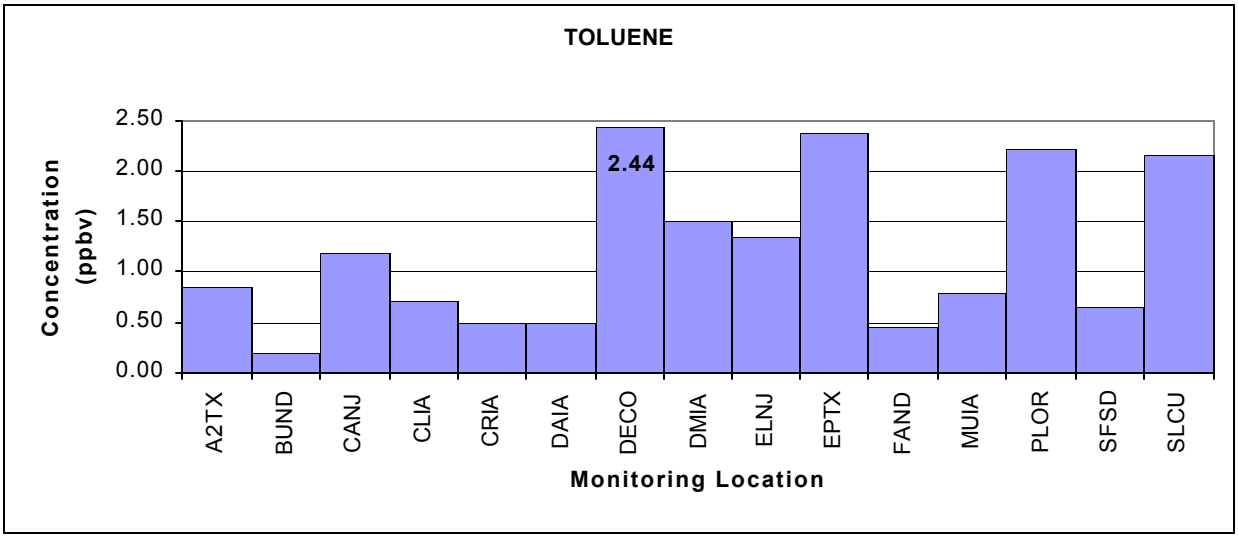
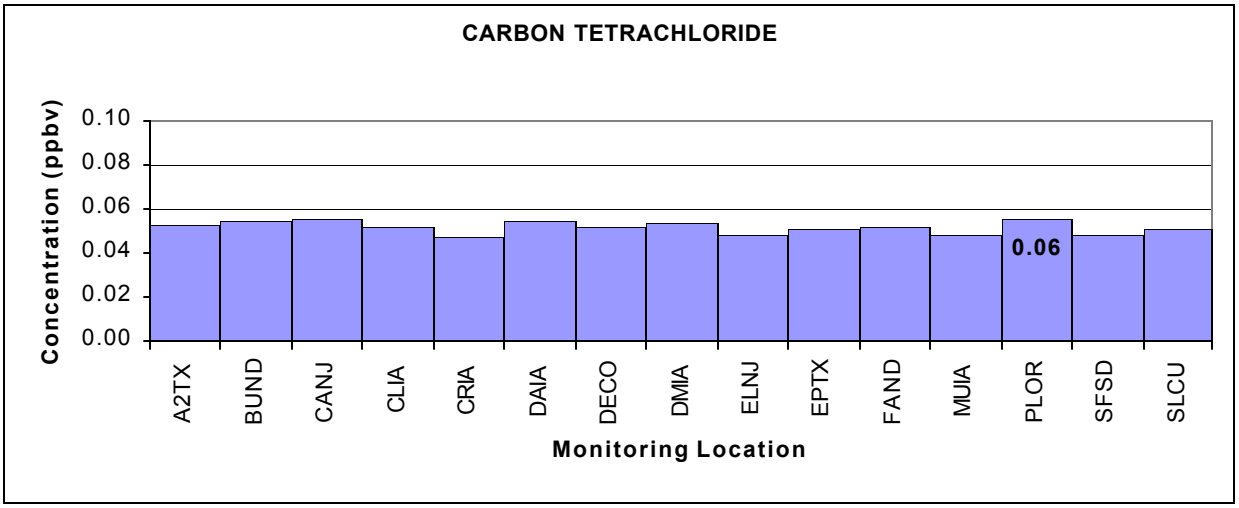
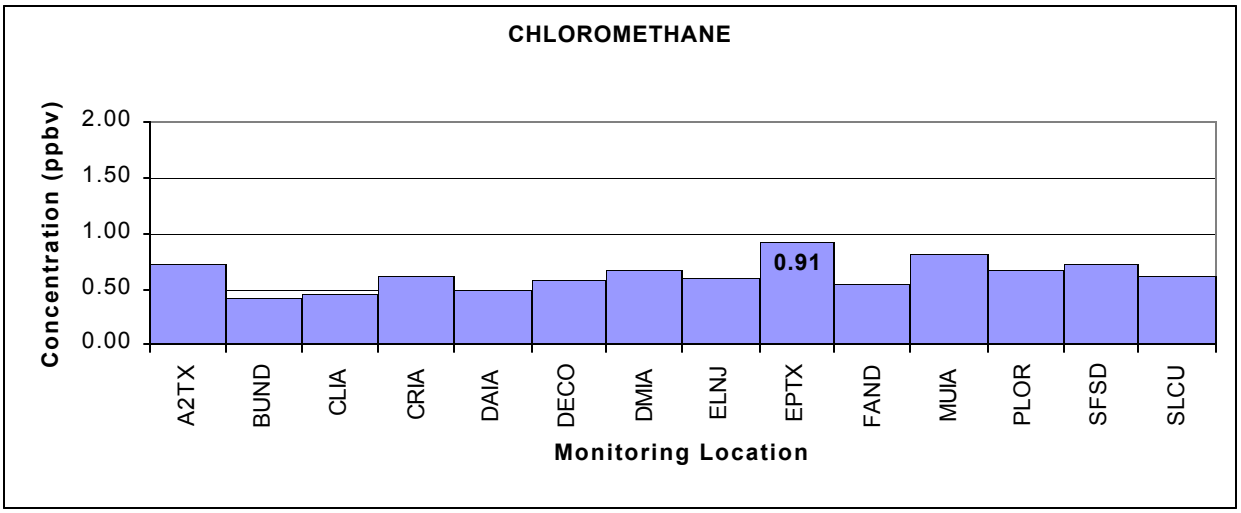
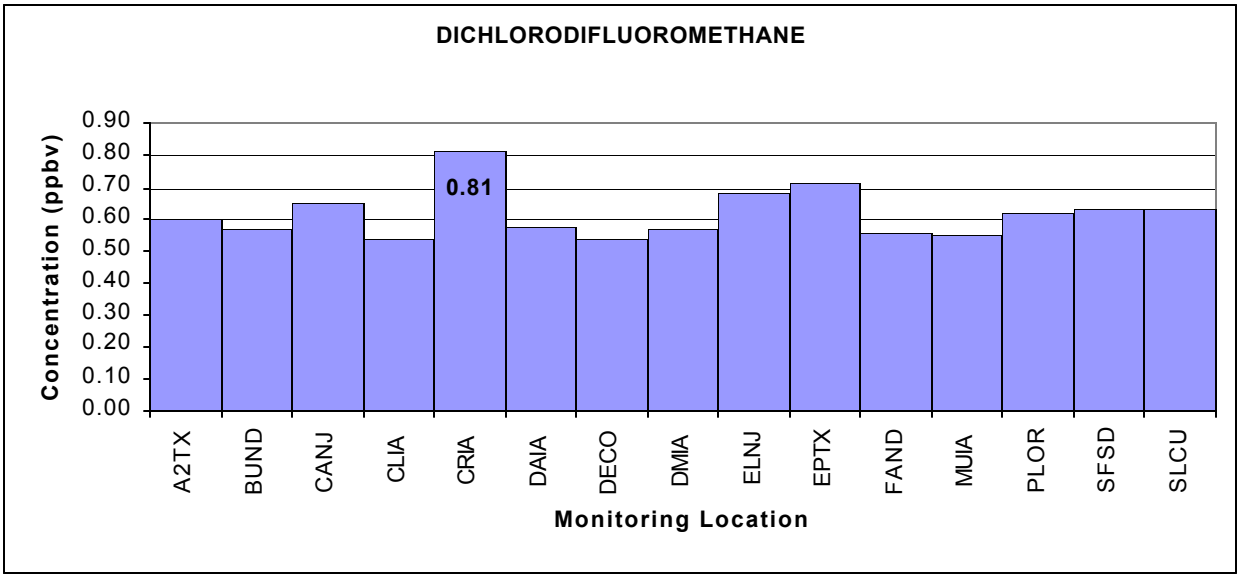


Figure 3-2. Concentrations of the Program-wide Prevalent Halogenated Hydrocarbons by Site







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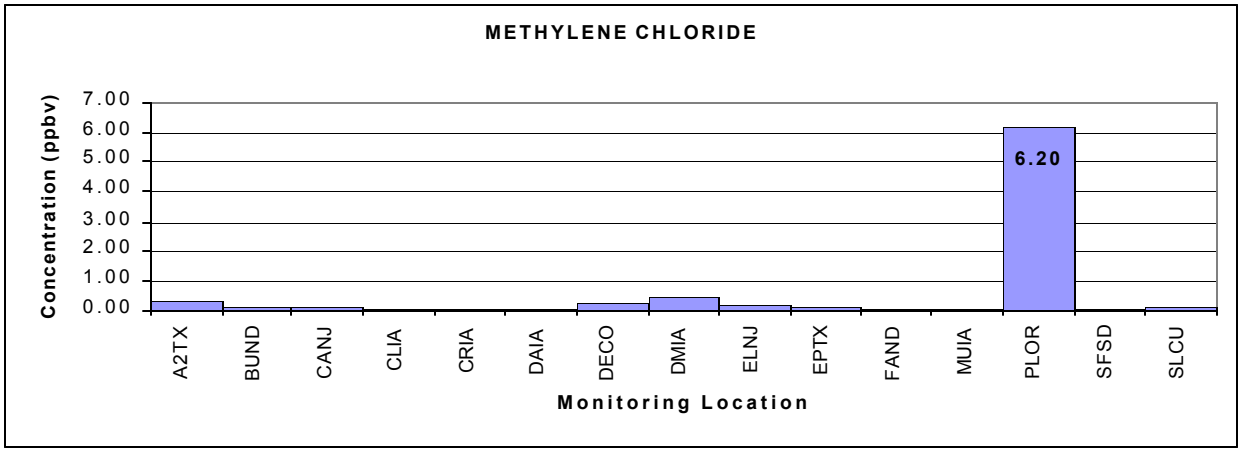
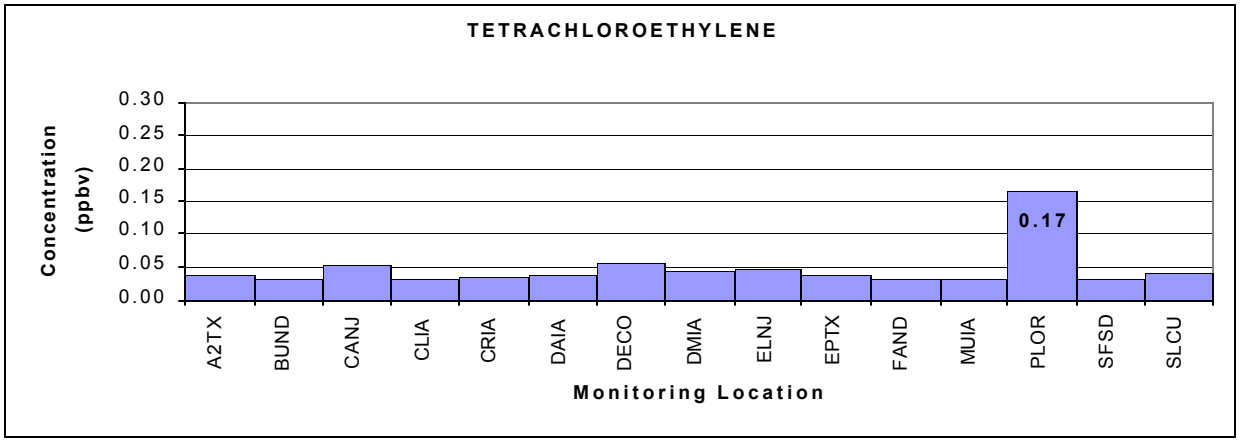
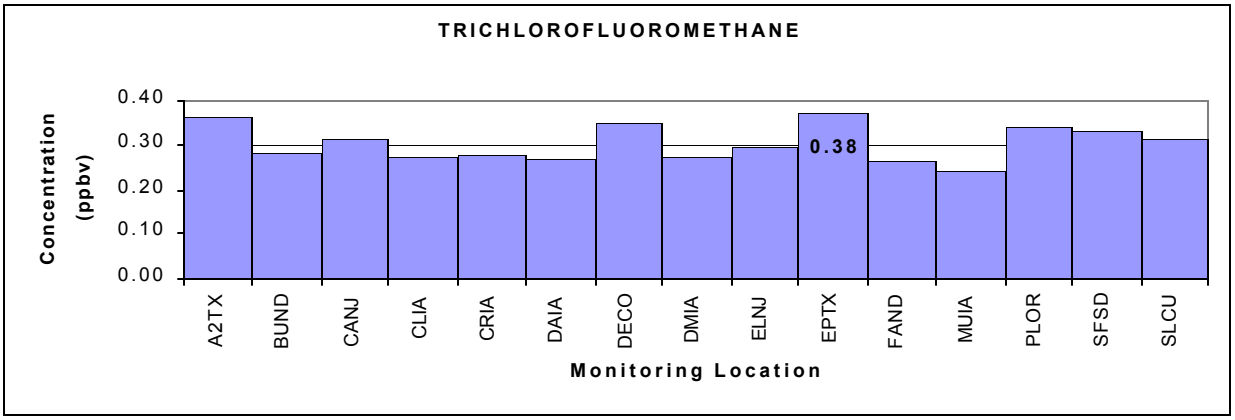






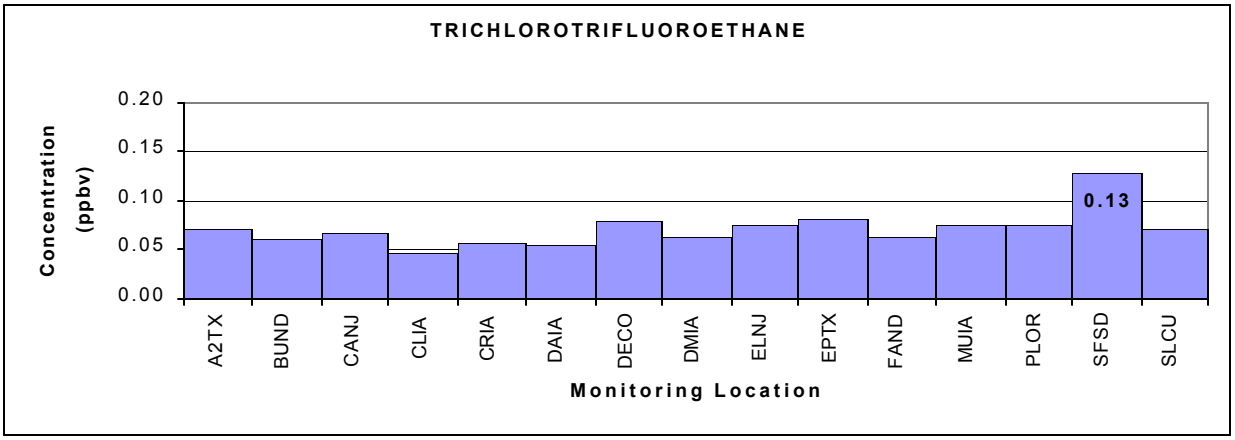
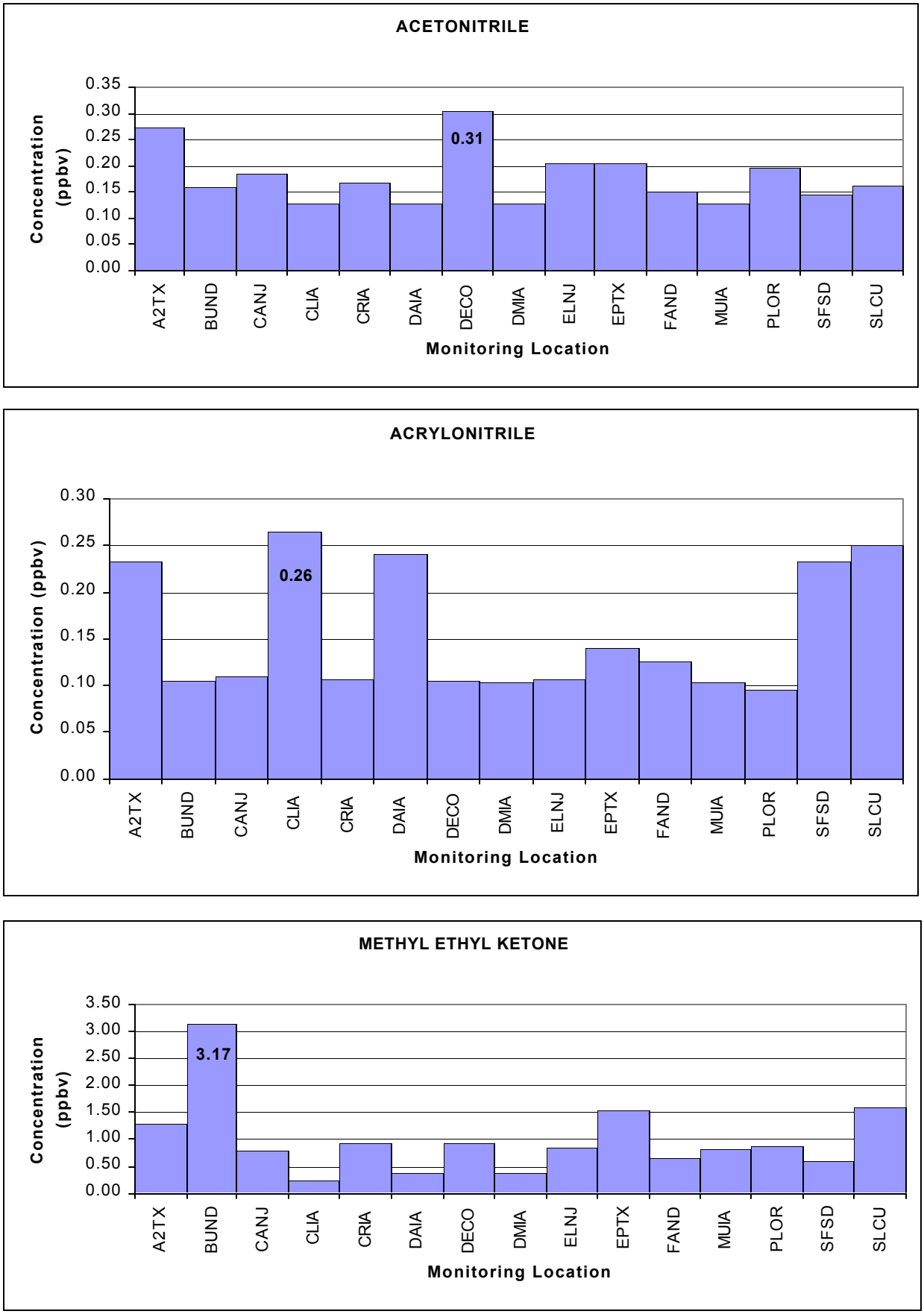


Figure 3-3. Concentrations of the Program-wide Prevalent Polar Hydrocarbons by Site



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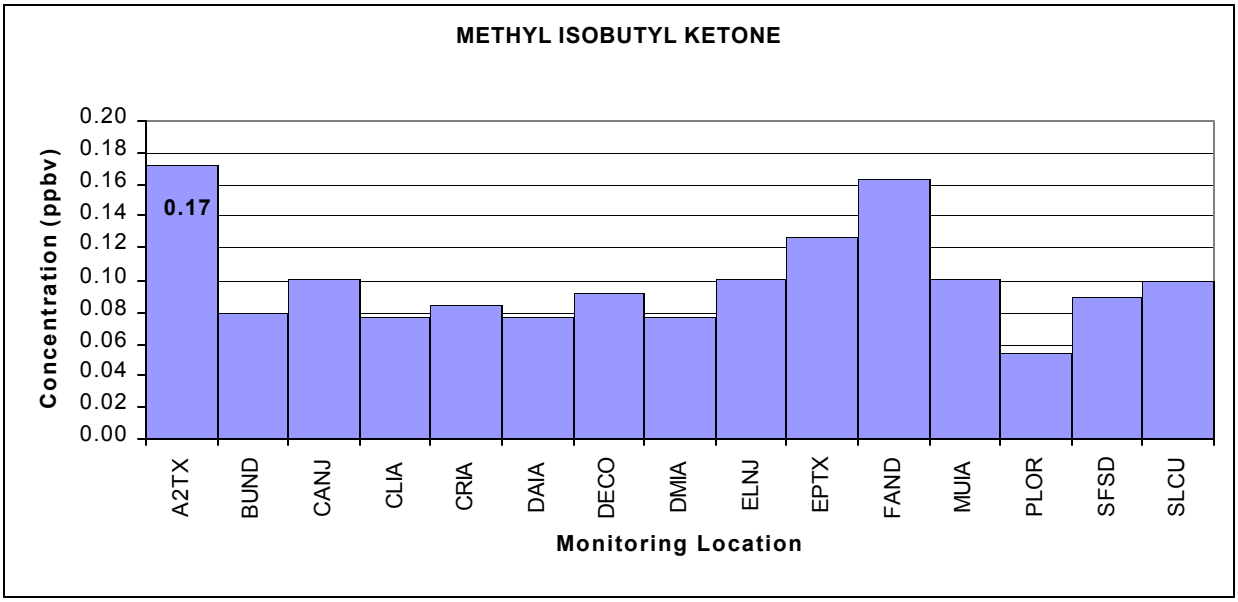


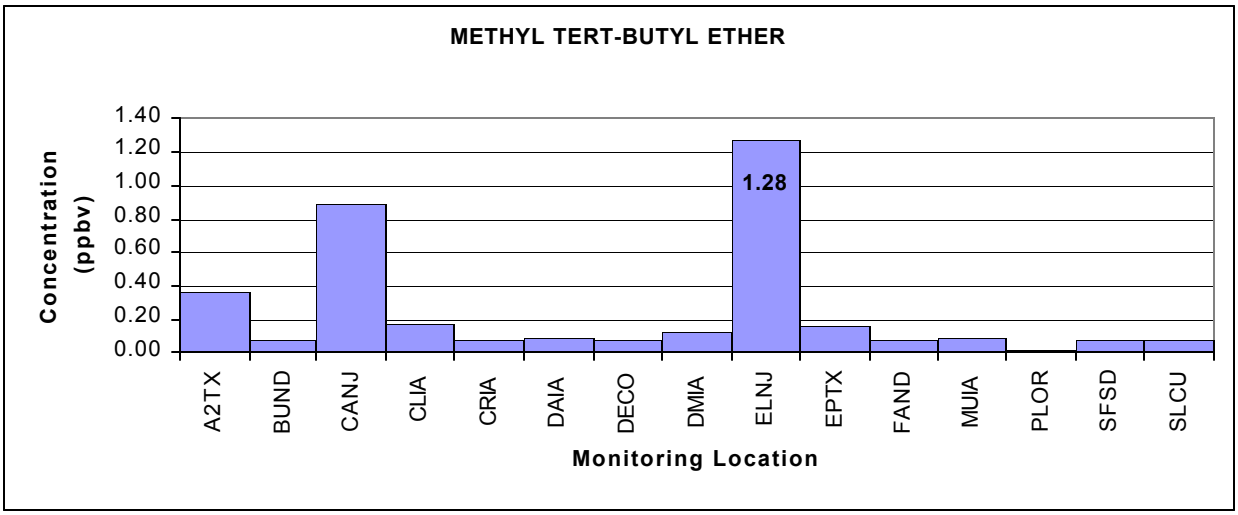
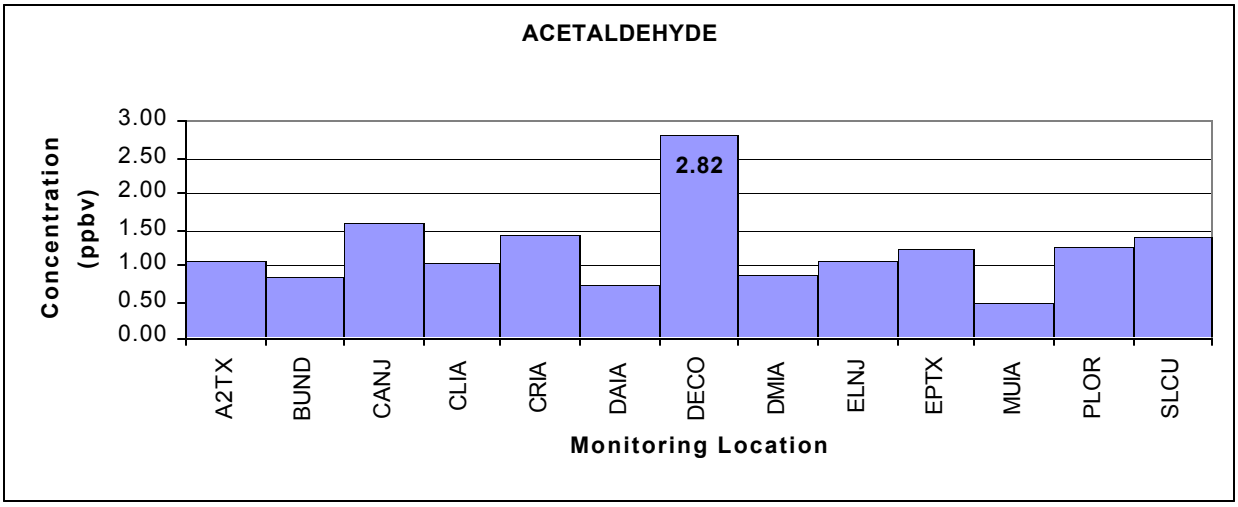
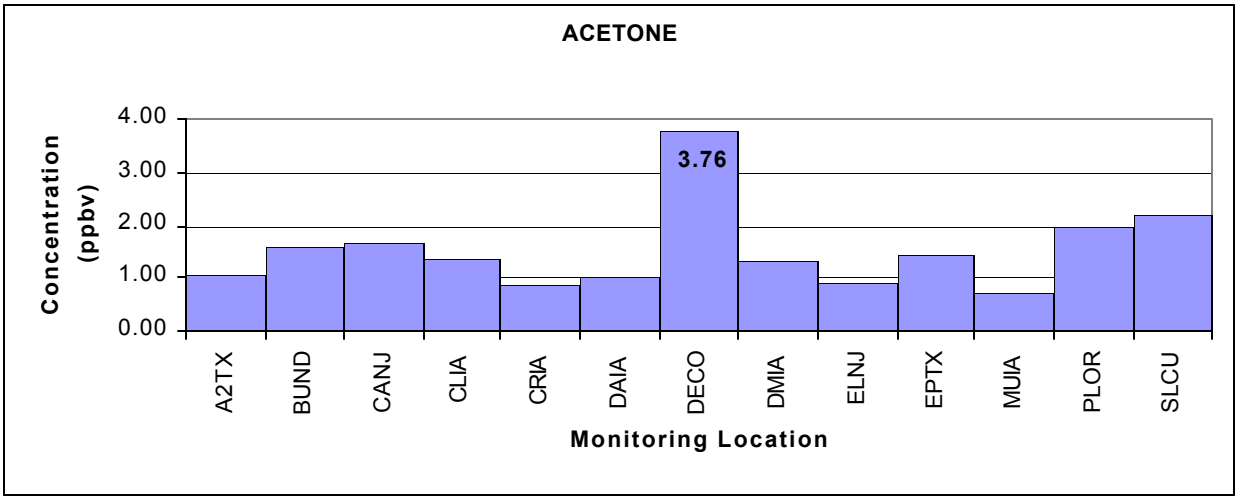


Figure 3-4. Concentrations of the Program-wide Prevalent Carbonyl Compounds by Site





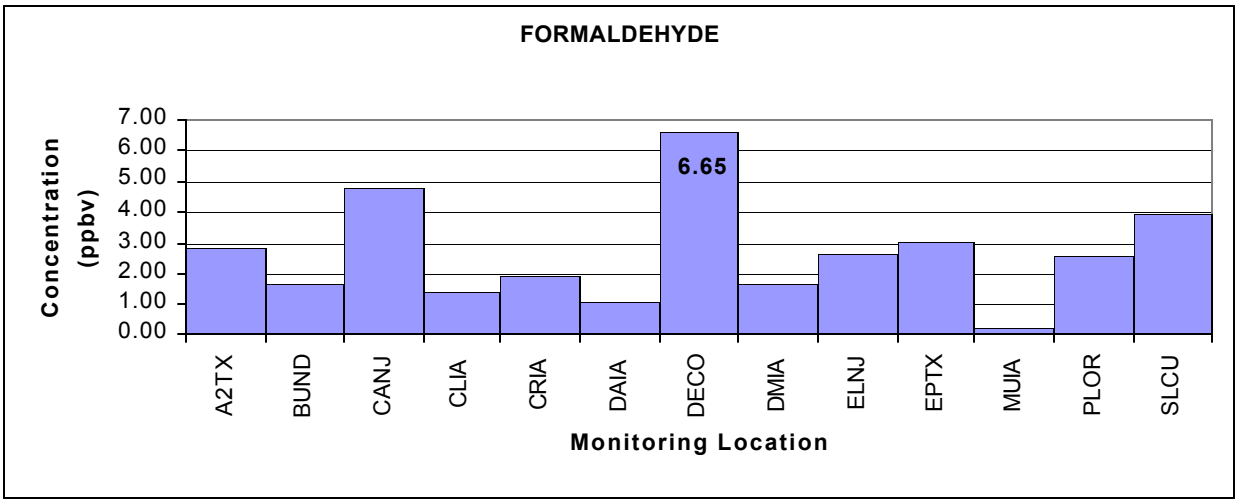
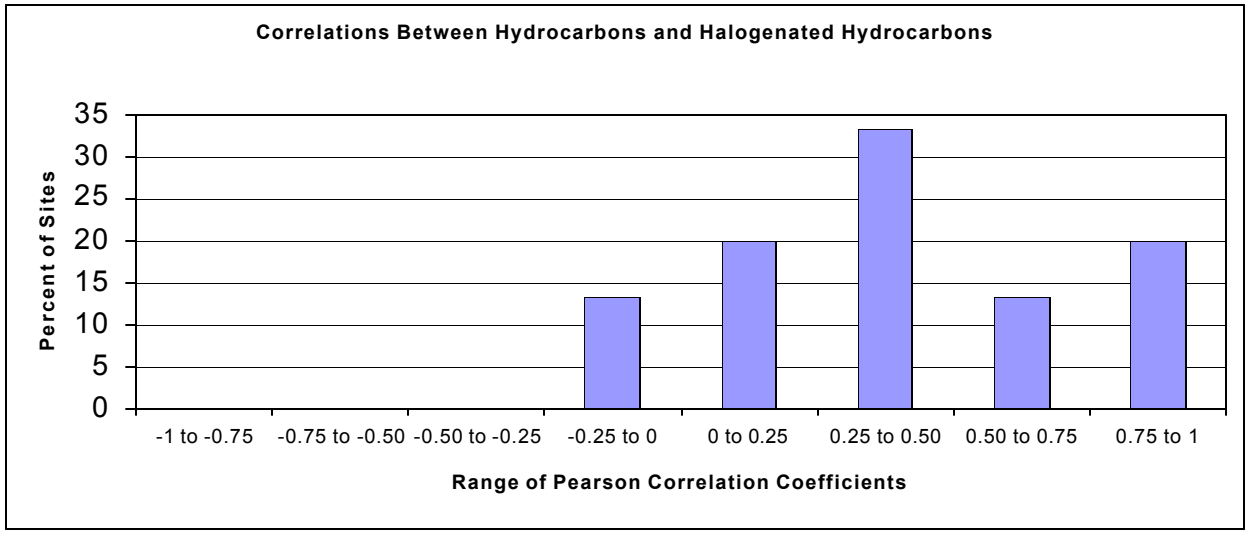
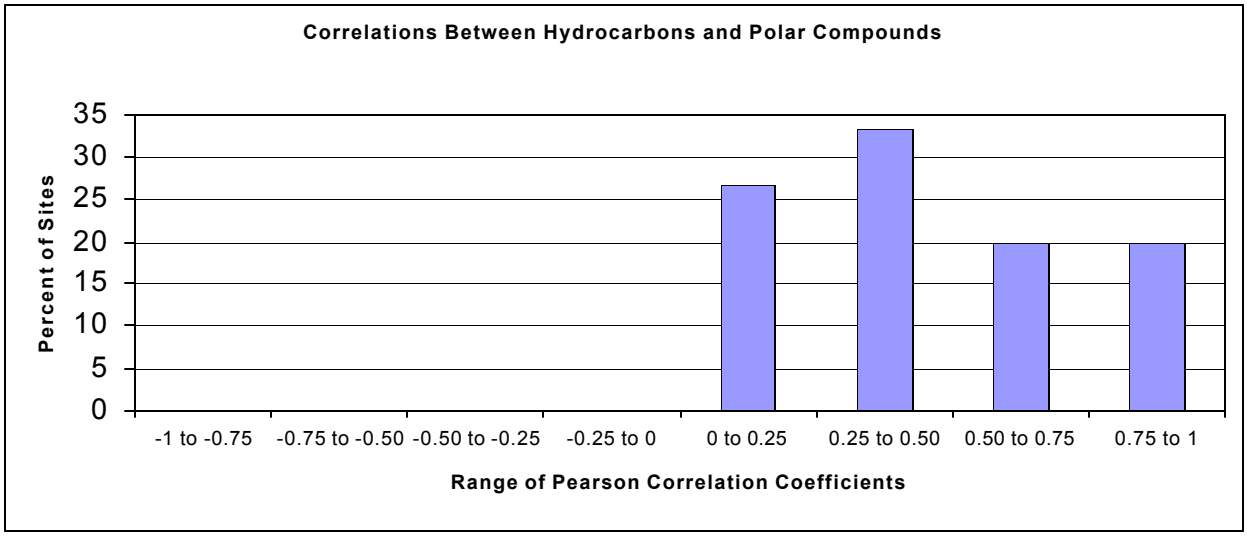


Figure 3-5. Distribution of Pearson Correlation Coefficients Between Hydrocarbons and Other Compound Groups





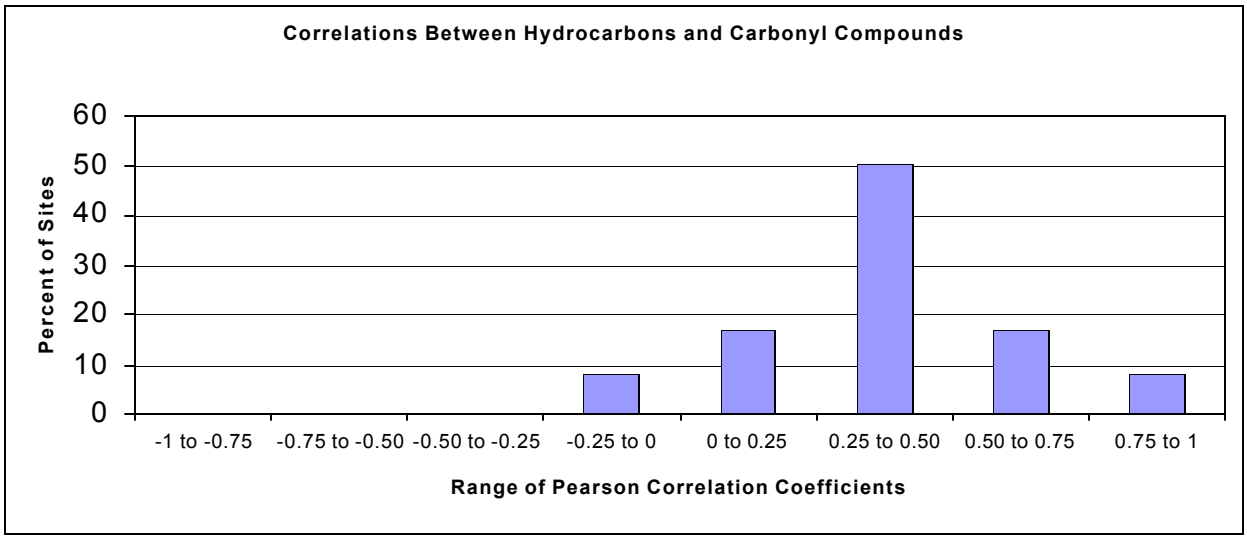


Figure 3-6. Geometric Mean of the Sums of the Program-wide Prevalent Hydrocarbon Concentrations for each Monitoring Location

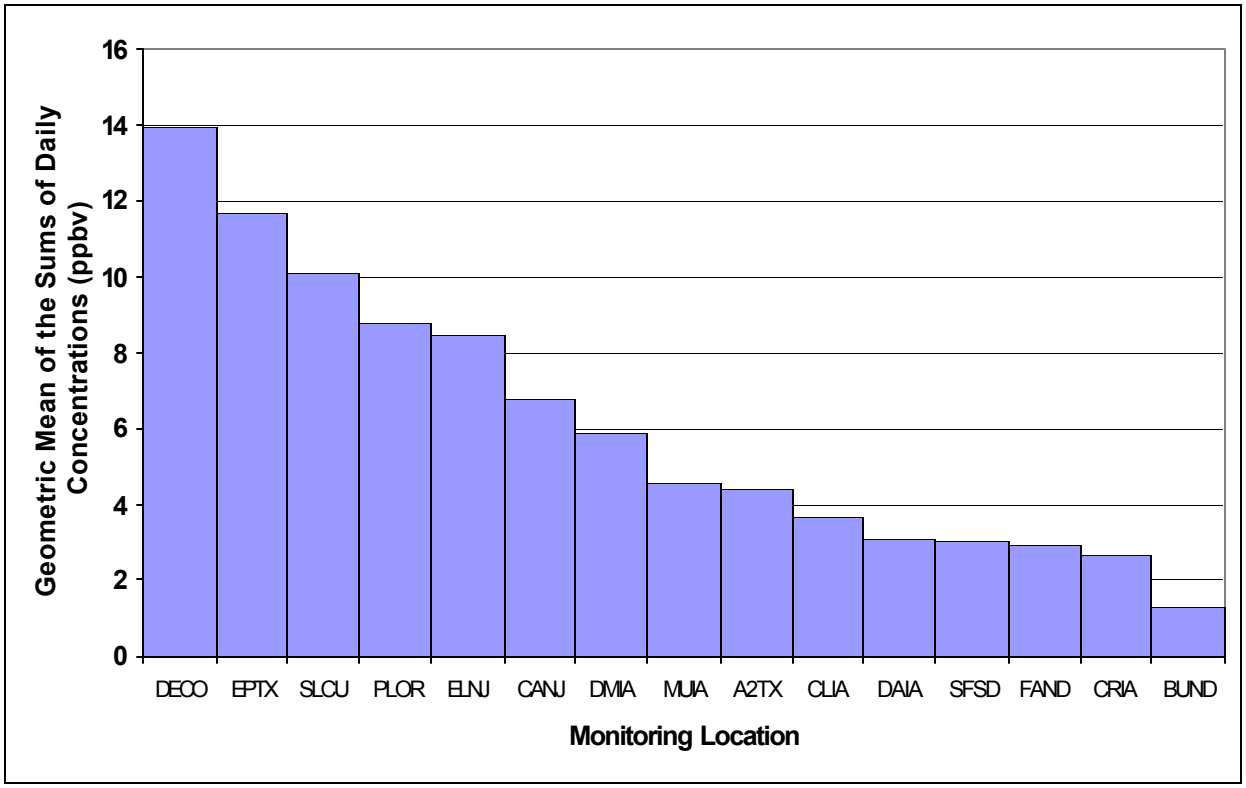


Figure 3-7. Comparison of Concentration Ratios for BTEX Compounds versus Roadside Study (Conner et al., 1995)

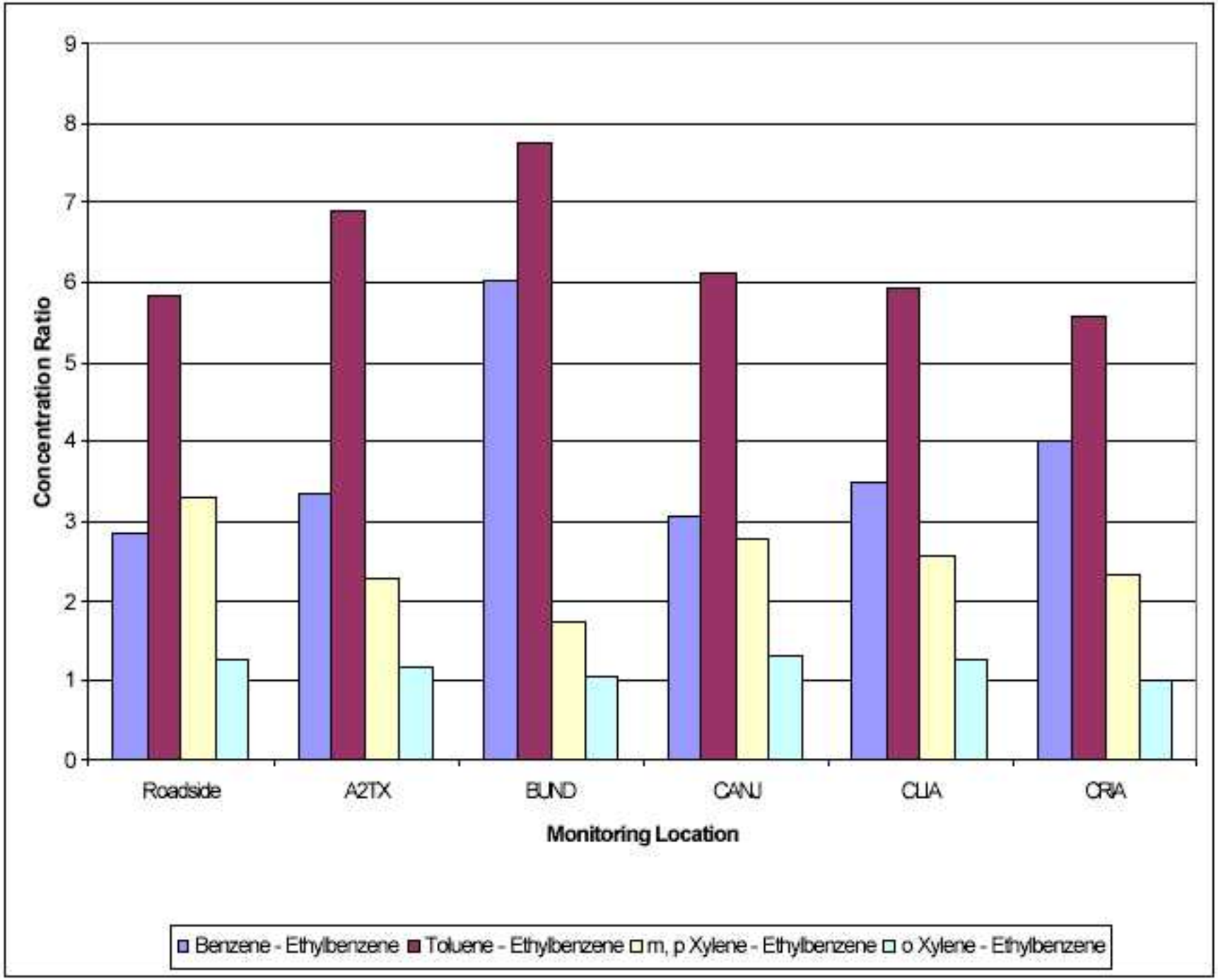


Figure 3-7. (Continued)

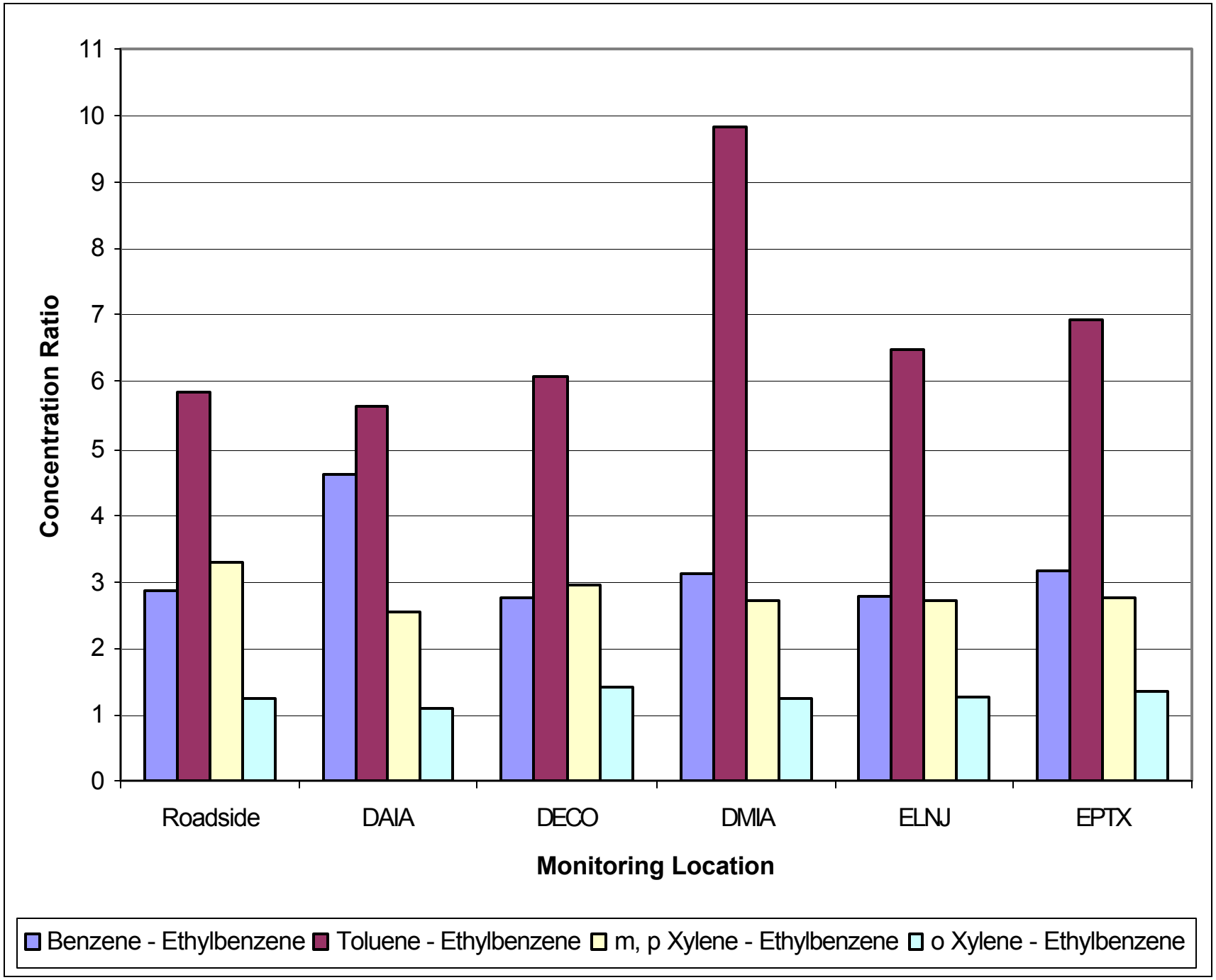


Figure 3-7. (Continued)

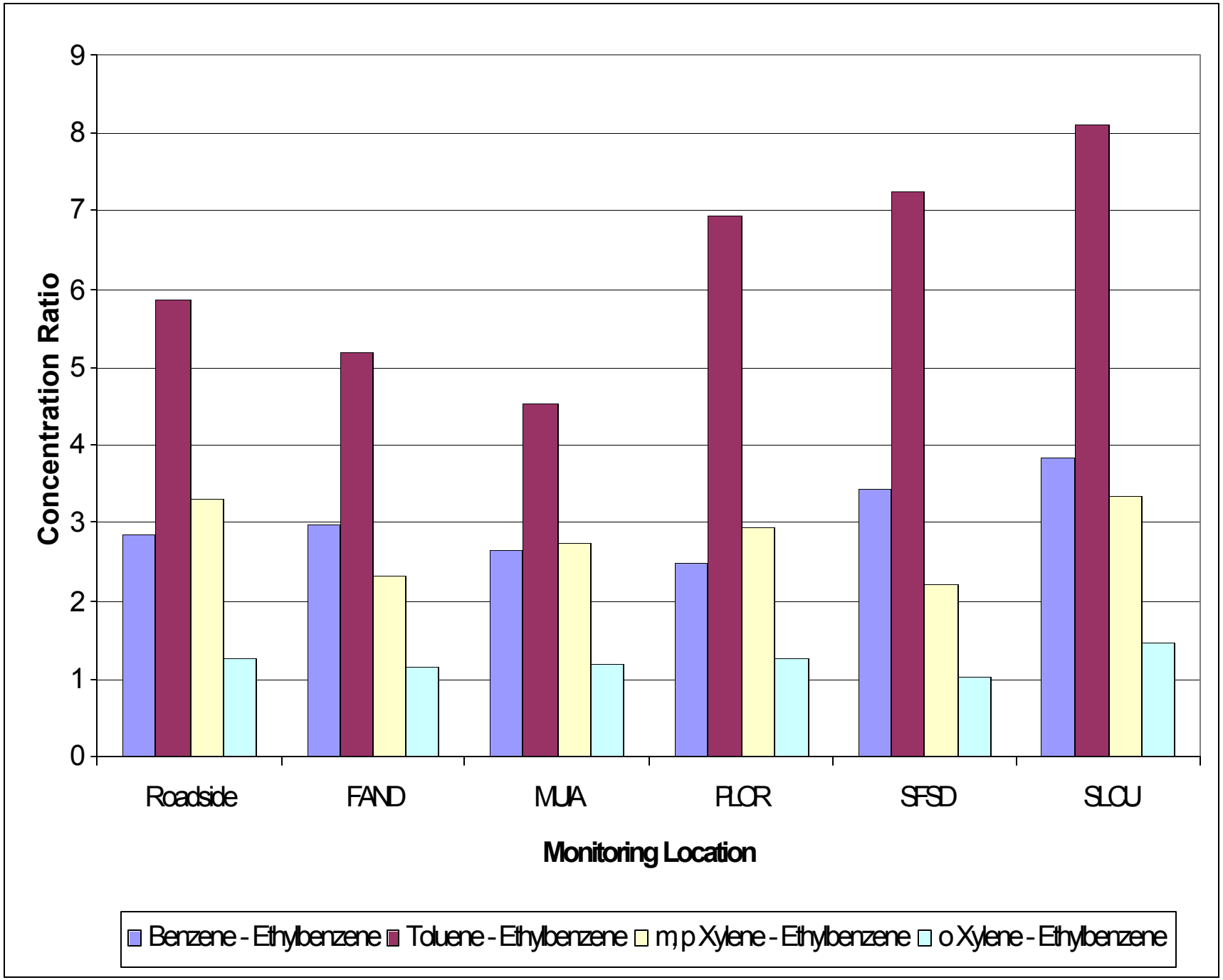


Figure 3-8. Distribution of Pearson Correlation Coefficients Between Halogenated Hydrocarbons and Other Compound Groups

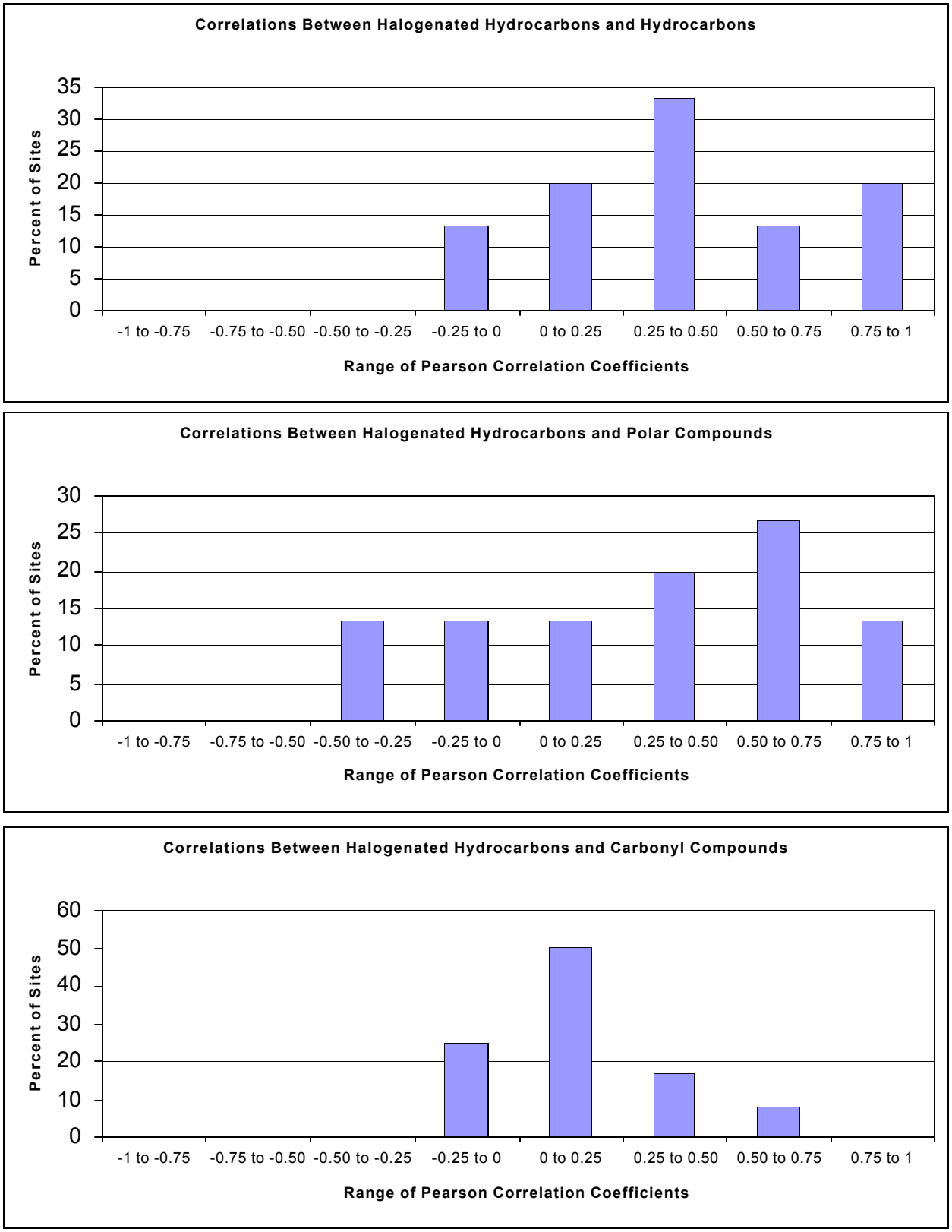


Figure 3-9. Geometric Mean of the Sums of the Program-wide Prevalent Halogenated Hydrocarbon Concentrations for each Monitoring Location

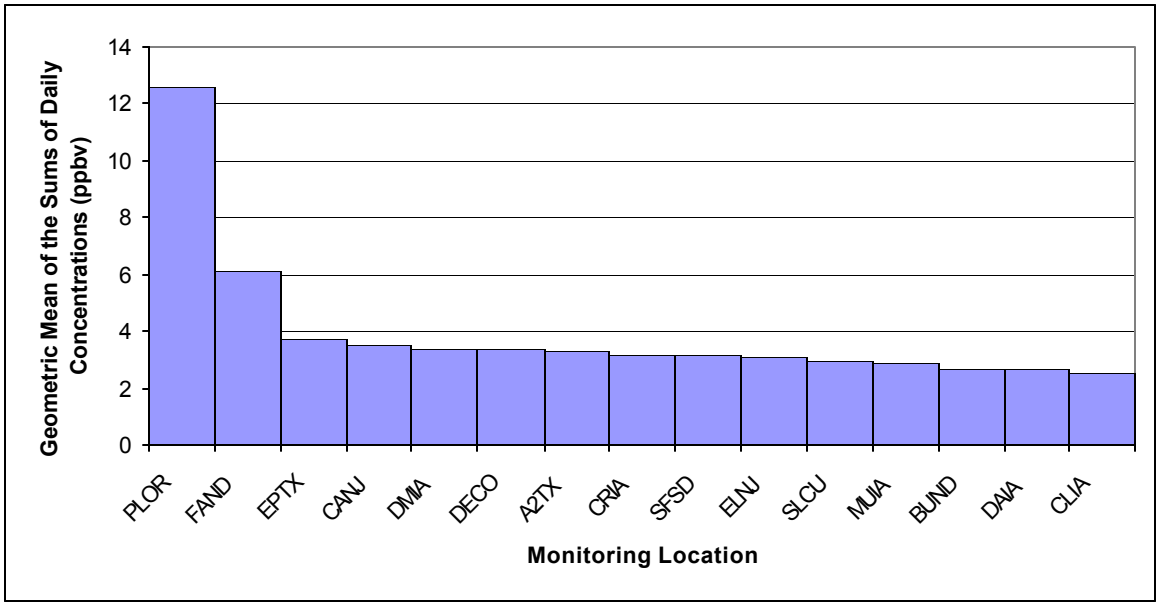
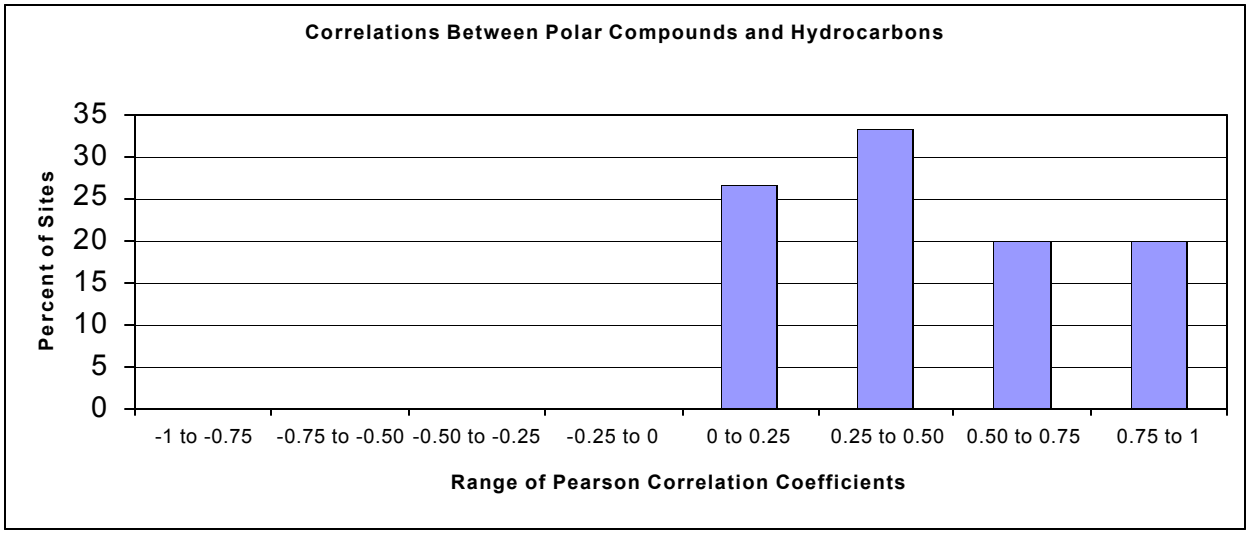
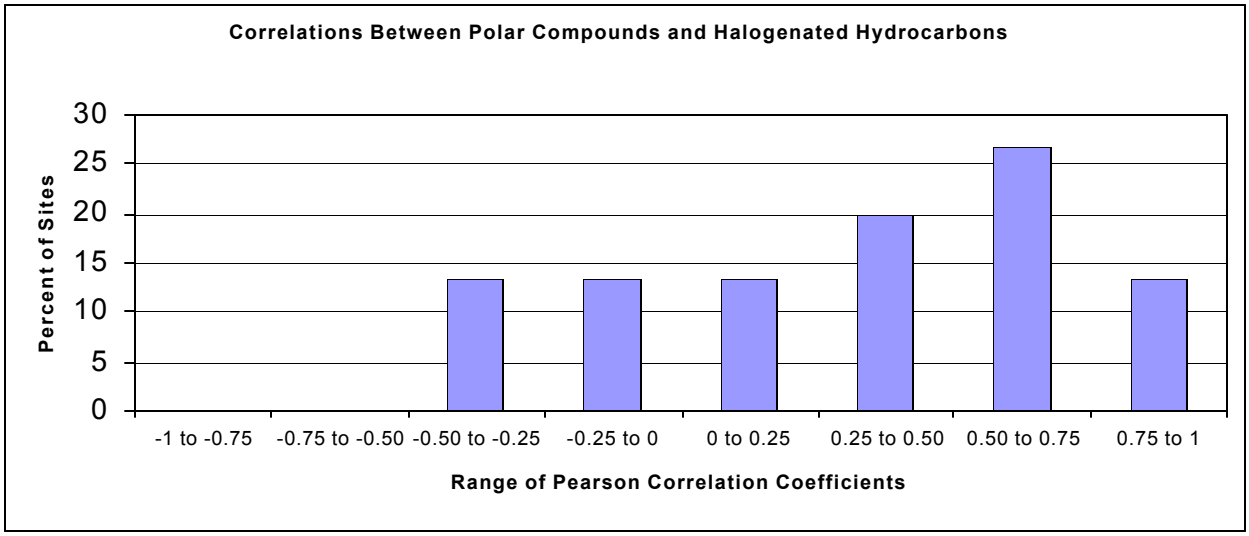


Figure 3-10. Distribution of Pearson Correlation Coefficients Between Polar Compounds and Other Compound Groups





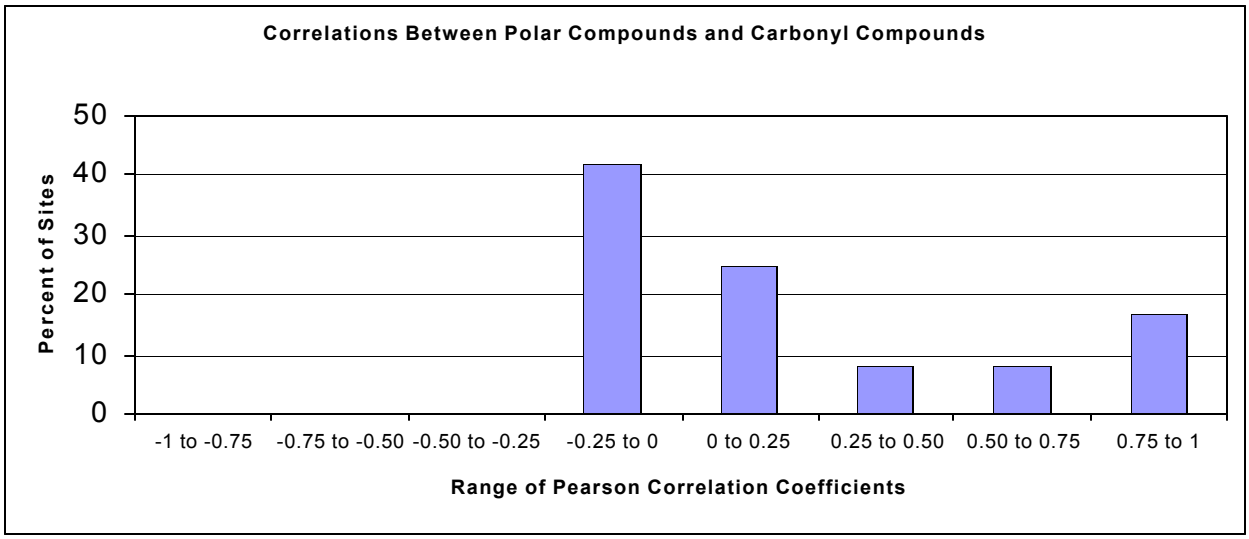


Figure 3-11. Geometric Mean of the Sums of the Program-wide Prevalent Polar Compound Concentrations for each Monitoring Location

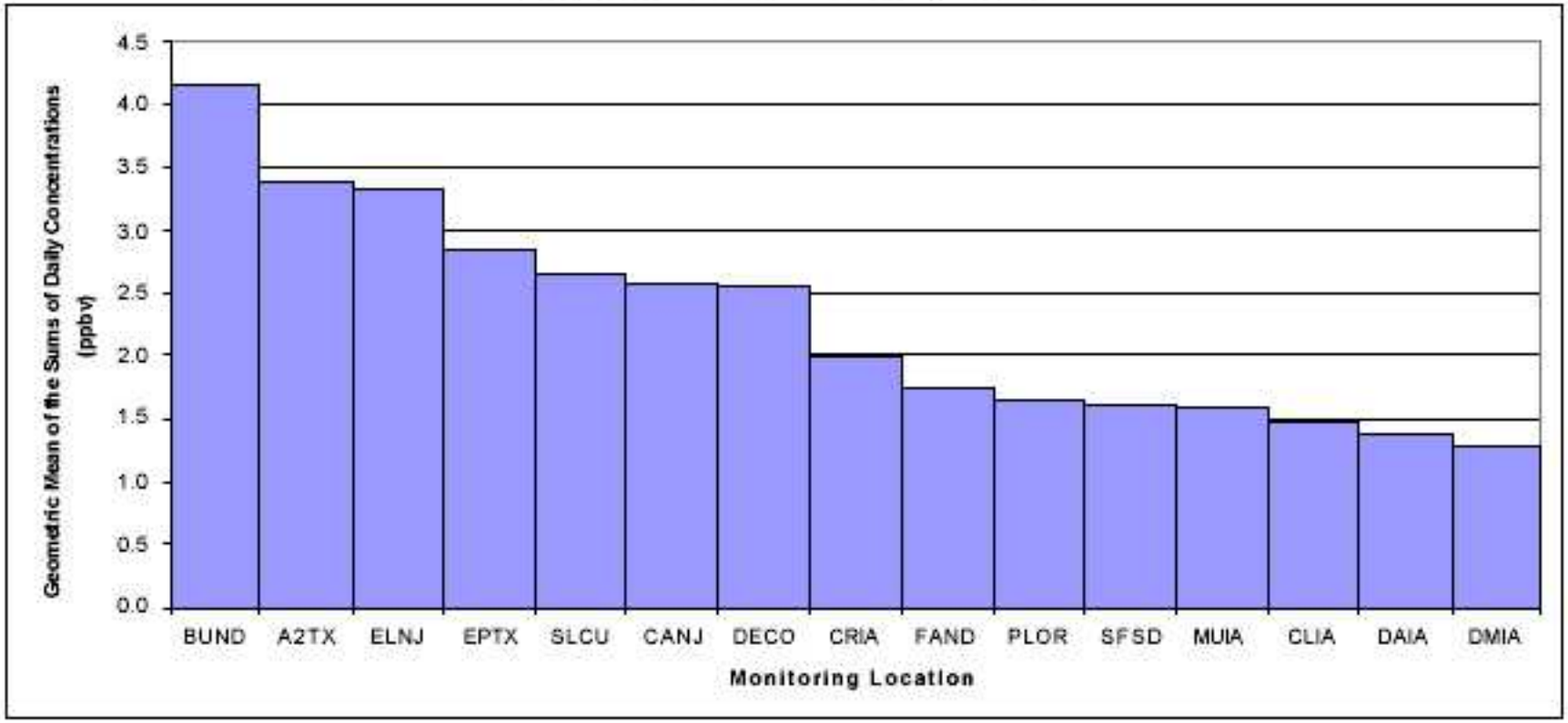


Figure 3-12. Distribution of Pearson Correlation Coefficients Between Carbonyl Compounds and Other Compound Groups

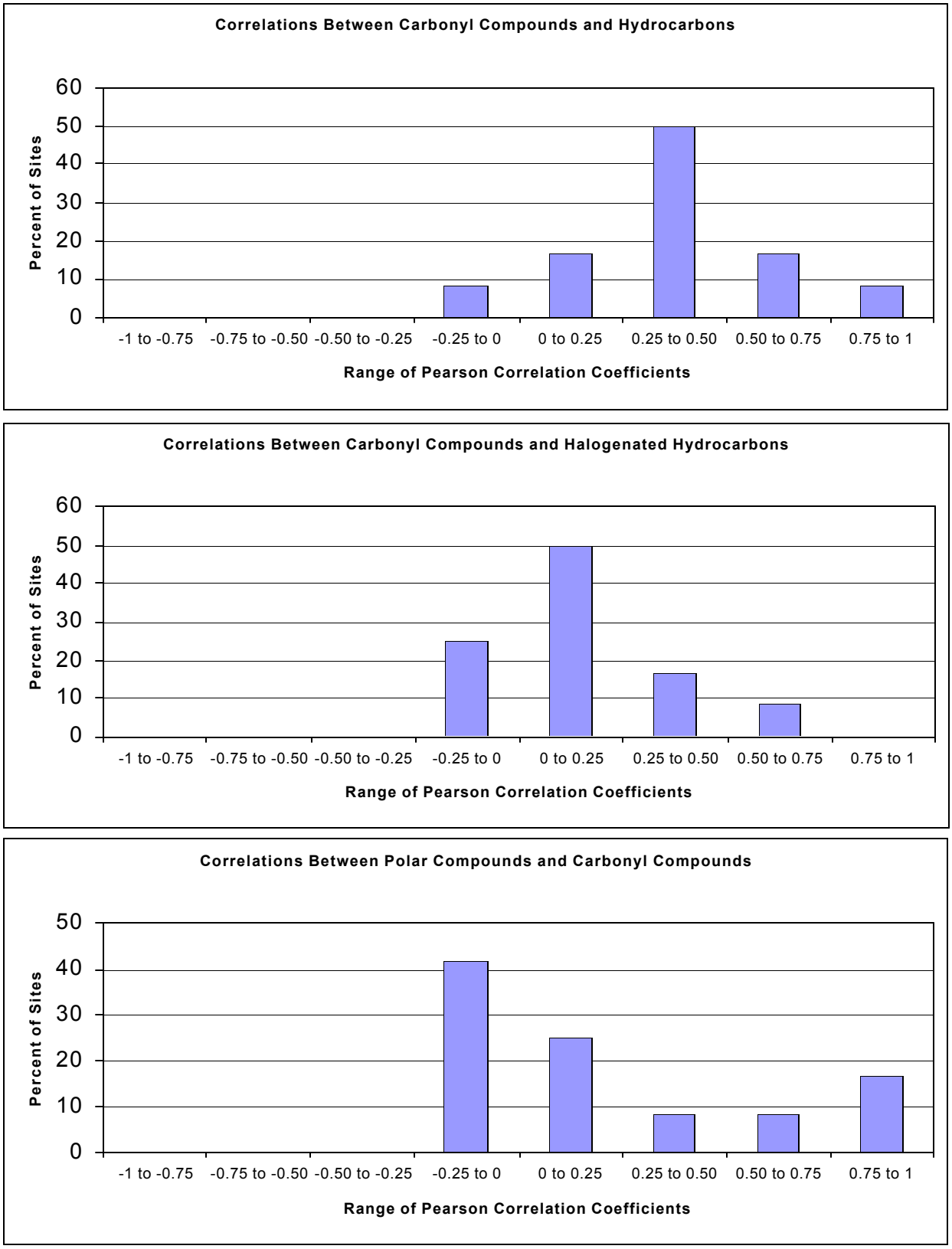


Figure 3-13. Geometric Mean of the Sums of the Program-wide Prevalent Carbonyl Compound Concentrations for each Monitoring Location

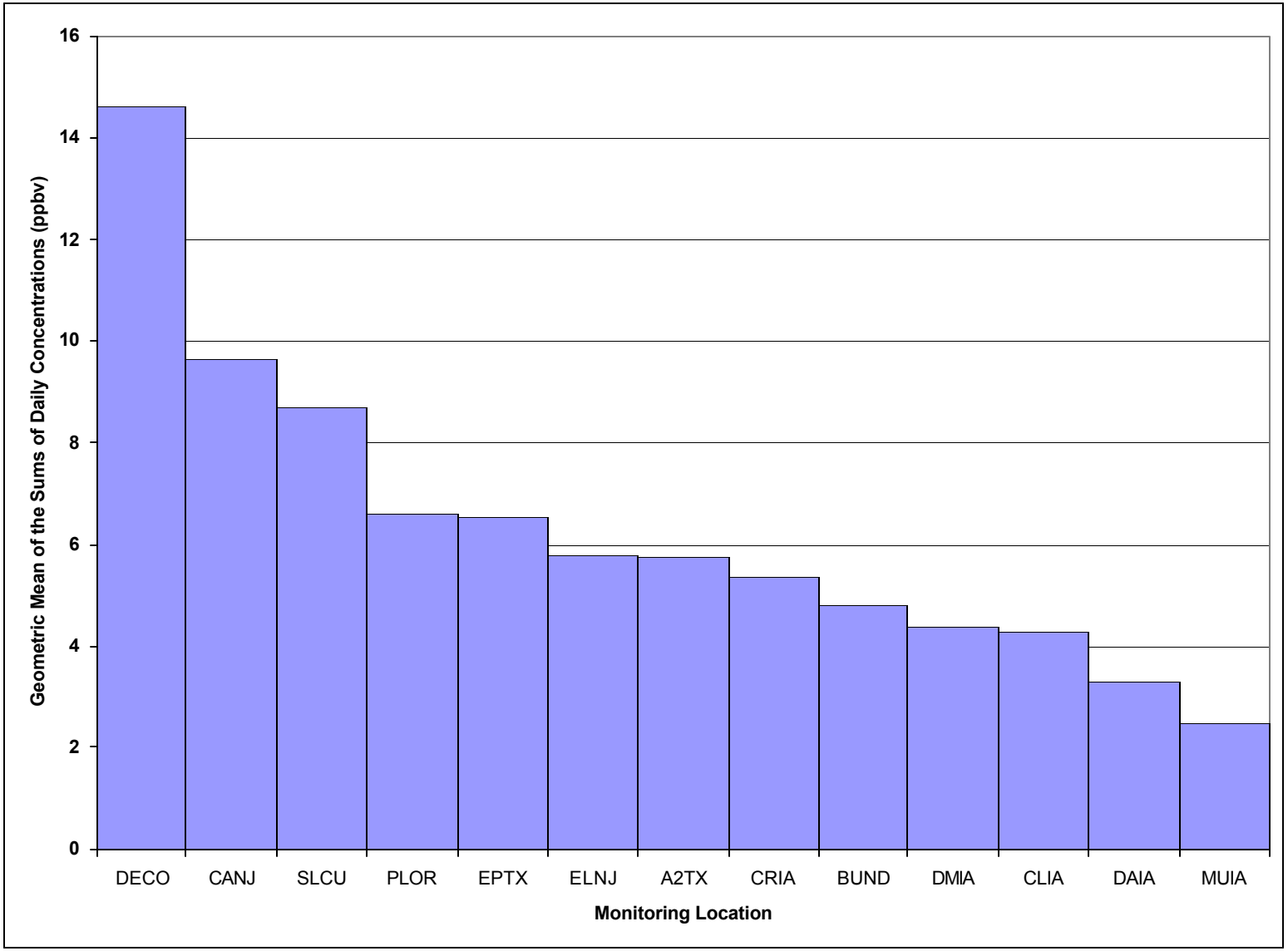


Table 3-1. Sampling Detect Summaries of the VOC Concentrations

Chemical[1]	Samples with Conc. >DL[2]	Number of Stations			
		Concentration <1 ppbv	Concentration ? 1 but <5 ppbv	Concentration ? 5 but <10 ppbv	Concentration ? 10 ppbv
Hydrocarbons					
Acetylene	**387**	**1**	**6**	**5**	**3**
Benzene	**389**	**6**	**9**	**0**	**0**
1,3-Butadiene	152	15	0	0	0
Ethylbenzene	380	10	5	0	0
n-Octane	220	13	2	0	0
Propylene	**389**	**6**	**6**	**3**	**0**
Styrene	214	15	0	0	0
Toluene	**388**	**1**	**8**	**4**	**2**
1,2,4-Trimethylbenzene	370	9	6	1	0
1,3,5-Trimethylbenzene	270	14	1	0	0
***m*-,*p*-Xylene**	**382**	**5**	**10**	**0**	**1**
***o*-Xylene**	**371**	**10**	**5**	**0**	**1**
Halogenated Hydrocarbons					
Bromochloromethane	60	14	0	0	1
Bromodichloromethane	176	15	0	0	0
Bromoform	177	15	0	0	0
Bromomethane	4	14	0	0	1
Carbon Tetrachloride	**207**	**15**	**0**	**0**	**0**
Chlorobenzene	0	15	0	0	0
Chloroethane	2	15	0	0	0
Chloroform	5	14	1	0	0
Chloromethane	**388**	**10**	**4**	**0**	**1**
Chloromethylbenzene	176	15	0	0	0
Chloroprene	1	14	1	0	0
Dibromochloromethane	1	15	0	0	0
1,2-Dibromoethane	0	15	0	0	0
m-Dichlorobenzene	178	14	0	0	1
o-Dichlorobenzene	175	15	0	0	0
p-Dichlorobenzene	26	15	0	0	0

Table 3-1. (Continued)

Chemical[1]	Samples with Conc. >DL[2]	Number of Stations			
		Concentration <1 ppbv	Concentration ? 1 but <5 ppbv	Concentration ? 5 but <10 ppbv	Concentration ? 10 ppbv
Halogenated Hydrocarbons (Continued)					
1,1-Dichloroethane	0	15	0	0	0
1,2-Dichloroethane	0	15	0	0	0
1,1-Dichloroethene	0	15	0	0	0
cis-1,2-Dichloroethylene	1	15	0	0	0
trans-1,2-Dichloroethylene	2	15	0	0	0
1,2-Dichloropropane	0	15	0	0	0
cis-1,3-Dichloropropene	0	15	0	0	0
trans-1,3-Dichloropropene	1	15	0	0	0
Dichlorodifluoromethane	**386**	**10**	**2**	**3**	**0**
Dichlorotetrafluoroethane	5	15	0	0	0
Hexachloro-1,3-Butadiene	178	15	0	0	0
Methylene Chloride	**272**	**8**	**5**	**0**	**2**
1,1,2,2-Tetrachloroethane	1	15	0	0	0
Tetrachloroethylene	**229**	**13**	**2**	**0**	**0**
1,2,4-Trichlorobenzene	7	15	0	0	0
1,1,1-Trichloroethane	222	15	0	0	0
1,1,2-Trichloroethane	176	15	0	0	0
Trichloroethylene	27	15	0	0	0
Trichlorofluoromethane	**388**	**12**	**3**	**0**	**0**
Trichlorotrifluoroethane	**355**	**15**	**0**	**0**	**0**
Vinyl Chloride	0	15	0	0	0
Polar Compounds					
Acetonitrile	**192**	**6**	**4**	**3**	**2**
Acrylonitrile	**230**	**13**	**2**	**0**	**0**
Ethyl Acrylate	176	15	0	0	0
Ethyl *tert*-Butyl Ether	0	15	0	0	0
Methyl Ethyl Ketone	**382**	**2**	**8**	**3**	**2**
Methyl Isobutyl Ketone	**195**	**12**	**2**	**1**	**0**
Methyl Methacrylate	2	14	1	0	0
Methyl *tert*-Butyl Ether	**101**	**10**	**3**	**2**	**0**
tert-Amyl Methyl Ether	179	15	0	0	0

[1] All chemicals in bold script are considered prevalent compounds, as defined in Section 3.1.4 of this report.
[2] A total of 389 VOC samples were taken for the 1999-2000 UATMP.

Table 3-2. Sampling Detect Summaries of the Carbonyl Concentrations

Chemical[1]	Samples with Conc. >DL[2]	Number of Stations			
		Concentration <1 ppbv	Concentration ? 1 but <5 ppbv	Concentration ? 5 but <10 ppbv	Concentration ? 10 ppbv
Acetaldehyde	**290**	**0**	**9**	**4**	**0**
Acetone	**290**	**0**	**8**	**4**	**1**
Benzaldehyde	290	13	0	0	0
Butyr/Isobutyraldehyde	290	12	1	0	0
Crotonaldehyde	169	13	0	0	0
2,5-Dimethylbenzaldehyde	28	13	0	0	0
Formaldehyde	**290**	**1**	**4**	**3**	**5**
Hexaldehyde	288	11	2	0	0
Isovaleraldehyde	166	12	1	0	0
Propionaldehyde	286	13	1	0	0
Tolualdehydes	276	13	0	0	0
Valeraldehyde	286	12	1	0	0

[1] All chemicals in bold script are considered prevalent compounds, as defined in Section 3.1.4 of this report.
[2] A total of 290 carbonyl samples were taken for the 1999-2000 UATMP.

Table 3-3. Range of Detectable Values by Site

UATMP Site (SITE CODE)	Range of Detectable Values (ppbv)	Number of Sampling Days		Number of Detects	Number of Samples > 5ppbv
		Carbonyl	VOC		
Arlington, TX (A2TX)	0.003 - 23.830	28	29	1078	8
Beulah, ND (BUND)	0.003 - 292.300	25	25	608	10
Camden, NJ (CANJ)	0.002 - 202.000	31	31	1168	21
Clinton, IA (CLIA)	0.004 - 3.164	6	6	159	NA
Cedar Rapids, IA (CRIA)	0.004 - 8.581	15	15	424	3
Davenport, IA (DAIA)	0.006 - 2.705	5	5	129	NA
Denver, CO (DECO)	0.009 - 35.210	26	20	692	41
Des Moines, IA (DMIA)	0.003 - 4.000	5	6	154	NA
Elizabeth, NJ (ELNJ)	0.006 - 11.606	23	23	851	13
El Paso, TX (EPTX)	0.003 - 19.560	28	30	1124	28
Fargo, ND (FAND)	0.024 - 60.090	NA	61	1541	22
Muscatine, IA (MUIA)	0.007 - 2.314	5	5	138	NA
Portland, OR (PLOR)	0.004 - 190.000	34	33	990	27
Sioux Falls, SD (SFSD)	0.0275 - 7.242	NA	42	933	2
Salt Lake City, UT (SLCU)	0.004 - 35.932	59	58	2154	48

Table 3-4. Geometric Means by Site

UATMP Site	Geometric Mean (ppbv)			
	Carbonyls	Halogenated Hydrocarbons	Hydrocarbons	Polar
A2TX	5.75	3.32	4.45	3.39
BUND	4.79	2.71	1.31	4.16
CANJ	9.63	3.50	6.78	2.57
CLIA	4.31	2.57	3.66	1.47
CRIA	5.38	3.17	2.70	1.98
DAIA	3.31	2.69	3.11	1.36
DECO	14.62	3.33	13.95	2.56
DMIA	4.39	3.38	5.87	1.27
ELNJ	5.76	3.06	8.47	3.32
EPTX	6.56	3.72	11.67	2.84
FAND	NA	6.16	2.96	1.75
MUIA	2.48	2.94	4.59	1.58
PLOR	6.61	12.58	8.77	1.65
SFSD	NA	3.12	3.04	1.59
SLCU	8.67	2.96	10.13	2.65

Table 3-5. Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Hydrocarbon Concentrations

Meteorological Parameter	Average Correlation	Site With Strongest Positive Correlation (Value)	Site With Strongest Negative Correlation (Value)
Maximum Temperature	-0.068 ± 0.195	MUIA (0.933)	DMIA (-0.768)
Minimum Temperature*	-0.167 ± 0.164	MUIA (0.586)	DMIA (-0.809)
Average Temperature	-0.105 ± 0.181	MUIA (0.778)	DMIA (-0.799)
Wind Speed*	-0.315 ± 0.161	BUND (0.229)	MUIA (-0.834)
Sea Level Pressure	0.142 ± 0.179	DAIA (0.813)	DMIA (-0.476)
Dew Point Temperature	-0.122 ± 0.163	MUIA (0.593)	DMIA (-0.779)
Visibility	-0.100 ± 0.184	CLIA (0.632)	DAIA (-0.775)

* Statistically significant across the 15 sites.

Table 3-6. Ranking of Monitoring Stations by Levels of Total Program-Wide Prevalent Hydrocarbons

Monitoring Location	Geometric Means of the Total Program-Wide Prevalent Hydrocarbon Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Hydrocarbons*** within a 10-Mile Radius of the Monitoring Location[b]		***Total*** Industrial Emissions within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 2000	Conc. Rank	Pounds in 1998	Emissions Rank	Pounds in 1998	Emissions Rank	Total Cars	Rank of Total Cars
A2TX	3.91	8	918,436	1	1,671,457	7	510,892	6
BUND	1.09	15	8,972	15	309,331	13	5,118	15
CANJ	5.98	6	461,804	6	1,738,420	5	1,398,466	2
CLIA	3.22	10	588,120	3	4,904,619	1	31,992	13
CRIA	2.35	13	120,910	12	1,756,732	4	123,901	10
DAIA	2.75	11	202,014	9	822,084	11	207,326	9
DECO	11.85	1	227,107	8	1,415,453	9	900,210	3
DMIA	5.09	7	543,420	4	1,713,460	6	261,646	8
ELNJ	7.68	4	617,920	2	2,362,468	3	1,479,049	1
EPTX	10.39	2	96,823	13	267,480	14	350,810	7
FAND	2.17	14	59,031	14	133,456	15	110,539	11
MUIA	3.83	9	130,094	11	2,803,195	2	25,012	14
PLOR	7.63	5	504,498	5	1,492,427	8	714,232	4
SFSD	2.69	12	152,406	10	495,056	12	103,193	12
SLCU	9.15	3	263,609	7	1,036,718	10	586,967	5

[a] This value was calculated as follows: (1) For each monitoring site, for each sampling event, the concentrations of the program-wide prevalent hydrocarbons were summed. (2) For each monitoring site, the geometric mean of the sampling event totals was calculated.

[b] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000). The emissions reported in the table are the total air releases of the hydrocarbons found to be program-wide prevalent in the 1999-2000 UATMP. Acetylene was not reportable to TRI in 1998.

[c] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000).

[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 275,000,000 and total cars in U.S. of 203,500,000) Information from "Statistical Abstract of the United States", 2001, and the internet link at http://link-usa.com/zipcode/pop.htm

Table 3-7. Comparison of Geometric Means of Program-Wide Prevalent Hydrocarbons with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Benzene			Propylene			Toluene		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
EPTX	1.11	26,820	ELNJ	2.23	90,694	DECO	2.44	107,156
DECO	1.10	11,623	DECO	1.65	86,940	EPTX	2.39	47,473
SLCU	1.03	6,670	EPTX	1.45	5,805	PLOR	2.23	207,663
PLOR	0.80	8,547	CANJ	1.16	73,440	SLCU	2.16	178,766
CANJ	0.57	37,593	SLCU	1.09	17,340	DMIA	1.49	373,073
ELNJ	0.56	39,051	PLOR	1.01	0	ELNJ	1.33	214,353
DMIA	0.53	0	DMIA	0.61	2,428	CANJ	1.18	173,804
MUIA	0.47	0	A2TX	0.61	0	A2TX	0.83	122,695
A2TX	0.45	755	MUIA	0.55	0	MUIA	0.80	5,335
DAIA	0.41	0	CLIA	0.48	579,000	CLIA	0.70	551
CLIA	0.41	8,531	SFSD	0.38	0	SFSD	0.65	23,091
SFSD	0.31	0	DAIA	0.38	941	CRIA	0.50	7,510
CRIA	0.31	0	FAND	0.32	0	DAIA	0.50	74,862
FAND	0.27	0	CRIA	0.32	0	FAND	0.46	22,590
BUND	0.17	7,536	BUND	0.20	0	BUND	0.20	1,436

Table 3-7. (Continued)

m-,p-Xylene			*o*-Xylene			Xylenes (Mixed)
Station Code	**ppbv**	**lbs**	**Station Code**	**ppbv**	**lbs**	**lbs**
DECO	1.20	0	DECO	0.58	0	21,388
EPTX	0.99	0	EPTX	0.48	0	16,725
PLOR	0.99	6,071	PLOR	0.42	0	282,247
SLCU	0.91	0	SLCU	0.39	0	60,833
ELNJ	0.58	1,500	ELNJ	0.27	641	271,681
CANJ	0.54	0	CANJ	0.25	108	176,859
MUIA	0.50	0	MUIA	0.21	0	124,759
DMIA	0.46	0	DMIA	0.21	25,452	142,467
A2TX	0.31	0	A2TX	0.16	0	794,986
CLIA	0.30	0	CLIA	0.15	0	38
FAND	0.23	0	FAND	0.12	0	36,441
DAIA	0.22	0	DAIA	0.10	0	126,211
SFSD	0.21	0	SFSD	0.10	0	124,315
CRIA	0.21	0	CRIA	0.09	0	113,400
BUND	0.06	0	BUND	0.03	0	0

Table 3-8. Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Halogenated Hydrocarbon Concentrations

Meteorological Parameter	Average Correlation	Site With Strongest Positive Correlation (Value)	Site With Strongest Negative Correlation (Value)
Maximum Temperature	-0.031 ± 0.181	ELNJ (0.403)	DMIA (-0.730)
Minimum Temperature	-0.049 ± 0.205	MUIA (0.412)	DMIA (-0.835)
Average Temperature	-0.042 ± 0.200	MUIA (0.406)	DMIA (-0.811)
Wind Speed*	-0.147 ± 0.143	EPTX (0.359)	ELNJ (-0.625)
Sea Level Pressure	-0.061 ± 0.172	DAIA (0.930)	EPTX (-0.239)
Dew Point Temperature	-0.053 ± 0.211	MUIA (0.473)	DMIA (-0.824)
Visibility	-0.150 ± 0.168	CRIA (0.444)	DAIA (-0.886)

* Statistically significant across the 15 sites.

Table 3-9. Ranking of Monitoring Stations by Levels of Total Program-Wide Prevalent Halogenated Hydrocarbons

Monitoring Location	Geometric Means of the Total Program-Wide Prevalent Halogenated Hydrocarbon Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Halogenated Hydrocarbons*** within a 10-Mile Radius of the Monitoring Location[b]		***Total*** Industrial Emissions within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 1999-2000	Conc. Rank	Pounds in 1998	Emissions Rank	Pounds in 1998	Emissions Rank	Total Cars	Rank of Total Cars
A2TX	2.29	4	82,792	2	1,671,457	7	510,892	6
BUND	1.60	12	0	10	309,331	13	5,118	15
CANJ	2.34	3	153	9	1,738,420	5	1,398,466	2
CLIA	1.44	15	0	10	4,904,619	1	31,992	13
CRIA	2.03	8	0	10	1,756,732	4	123,901	10
DAIA	1.56	14	243,172	1	822,084	11	207,326	9
DECO	2.16	6	32,961	4	1,415,453	9	900,210	3
DMIA	2.24	5	13,242	6	1,713,460	6	261,646	8
ELNJ	2.03	9	69,180	3	2,362,468	3	1,479,049	1
EPTX	2.60	2	0	10	267,480	14	350,810	7
FAND	1.59	13	0	10	133,456	15	110,539	11
MUIA	1.81	11	10,200	7	2,803,195	2	25,012	14
PLOR	10.89	1	6,134	8	1,492,427	8	714,232	4
SFSD	2.06	7	0	10	495,056	12	103,193	12
SLCU	1.93	10	23,352	5	1,036,718	10	586,967	5

[a] This value was calculated as follows: (1) For each monitoring site, for each sampling event, the concentrations of the program-wide prevalent hydrocarbons were summed. (2) For each monitoring site, the geometric mean of the sampling event totals was calculated.
[b] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000). The emissions reported in the table are the total air releases of the hydrocarbons found to be program-wide prevalent in the 1999-2000 UATMP. Acetylene was not reportable to TRI in 1998.
[c] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000).
[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 275,000,000 and total cars in U.S. of 203,500,000) Information from "Statistical Abstract of the United States", 2001, and the internet link at http://link-usa.com/zipcode/pop.htm

Table 3-10. Comparison of Geometric Means of Program-Wide Prevalent Halogenated Hydrocarbons with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Chloromethane			Dichlorodifluoromethane		
Station Code	**ppbv**	**lbs**	**Station Code**	**ppbv**	**lbs**
EPTX	0.91	0	CRIA	0.81	0
MUIA	0.81	10,200	EPTX	0.71	0
A2TX	0.73	0	ELNJ	0.69	0
SFSD	0.73	0	CANJ	0.65	0
CANJ	0.70	0	SFSD	0.63	0
DMIA	0.67	0	SLCU	0.63	0
PLOR	0.66	0	PLOR	0.62	0
CRIA	0.63	0	A2TX	0.60	0
SLCU	0.62	0	DAIA	0.57	0
ELNJ	0.60	0	DMIA	0.57	0
DECO	0.59	0	BUND	0.58	0
FAND	0.55	0	FAND	0.57	0
DAIA	0.50	0	MUIA	0.55	0
CLIA	0.46	0	DECO	0.54	5
BUND	0.43	0	CLIA	0.53	0

Table 3-10. (Continued)

Methylene Chloride			Tetrachloroethylene			Trichlorofluoromethane		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
PLOR	6.20	6,125	PLOR	0.17	9	SFSD	0.13	0
DMIA	0.45	13,127	DECO	0.06	0	EPTX	0.08	0
A2TX	0.35	11,397	CANJ	0.05	0	DECO	0.08	0
DECO	0.29	32,956	ELNJ	0.05	3,747	MUIA	0.07	0
ELNJ	0.18	65,433	DMIA	0.04	115	ELNJ	0.07	0
SLCU	0.12	15,982	SLCU	0.04	7,370	PLOR	0.07	0
CANJ	0.10	153	EPTX	0.04	0	A2TX	0.07	0
BUND	0.10	0	DAIA	0.04	243,052	SLCU	0.07	0
EPTX	0.10	0	A2TX	0.04	71,395	CANJ	0.07	0
CRIA	0.05	0	CRIA	0.04	0	DMIA	0.06	0
DAIA	0.05	120	FAND	0.03	0	FAND	0.06	0
SFSD	0.04	0	SFSD	0.03	0	BUND	0.06	0
MUIA	0.04	0	BUND	0.032	0	CRIA	0.06	0
FAND	0.03	0	MUIA	0.032	0	DAIA	0.05	0
CLIA	0.03	0	CLIA	0.032	0	CLIA	0.05	0

Table 3-11. Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Polar Hydrocarbon Concentrations

Meteorological Parameter	Average Correlation	Site With Strongest Positive Correlation (Value)	Site With Strongest Negative Correlation (Value)
Maximum Temperature	-0.085 ± 0.175	FAND (0.418)	DAIA (-0.837)
Minimum Temperature	-0.161 ± 0.165	FAND (0.412)	DAIA (-0.839)
Average Temperature	-0.117 ± 0.170	FAND (0.436)	DAIA (-0.845)
Wind Speed	-0.102 ± 0.177	SFSD (0.411)	CLIA (-0.763)
Sea Level Pressure	0.081 ± 0.207	DAIA (0.921)	DMIA (-0.704)
Dew Point Temperature	-0.161 ± 0.173	FAND (0.446)	DAIA (-0.869)
Visibility	-0.073 ± 0.186	CLIA (0.460)	DAIA (-0.878)

Table 3-12. Ranking of Monitoring Stations by Levels of Total Program-Wide Prevalent Polar Hydrocarbons

Monitoring Location	Geometric Means of the Total Program-Wide Prevalent Polar Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Polar Compounds*** within a 10-Mile Radius of the Monitoring Location[b]		***Total*** Industrial Emissions within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 1999-2000	Conc. Rank	Pounds in 1998	Emissions Rank	Pounds in 1998	Emissions Rank	Total Cars	Rank of Total Cars
A2TX	2.97	2	178,611	2	1,671,457	7	510,892	6
BUND	3.78	1	0	15	309,331	13	5,118	15
CANJ	2.21	6	100,336	3	1,738,420	5	1,398,466	2
CLIA	1.16	13	0	15	4,904,619	1	31,992	13
CRIA	1.56	8	23,413	10	1,756,732	4	123,901	10
DAIA	1.06	14	446	12	822,084	11	207,326	9
DECO	2.15	7	50,176	7	1,415,453	9	900,210	3
DMIA	0.97	15	37,947	9	1,713,460	6	261,646	8
ELNJ	2.94	3	459,045	1	2,362,468	3	1,479,049	1
EPTX	2.45	4	12,816	11	267,480	14	350,810	7
FAND	1.36	10	49,164	8	133,456	15	110,539	11
MUIA	1.27	11	57,840	6	2,803,195	2	25,012	14
PLOR	1.52	9	76,993	4	1,492,427	8	714,232	4
SFSD	1.25	12	0	15	495,056	12	103,193	12
SLCU	2.30	5	75,823	5	1,036,718	10	586,967	5

[a] This value was calculated as follows: (1) For each monitoring site, for each sampling event, the concentrations of the program-wide prevalent hydrocarbons were summed. (2) For each monitoring site, the geometric mean of the sampling event totals was calculated.
[b] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000). The emissions reported in the table are the total air releases of the hydrocarbons found to be program-wide prevalent in the 1999-2000 UATMP. Acetylene was not reportable to TRI in 1998.
[c] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000).
[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 275,000,000 and total cars in U.S. of 203,500,000) Information from "Statistical Abstract of the United States", 2001, and the internet link at http://link-usa.com/zipcode/pop.htm

Table 3-13. Comparison of Geometric Means of Program-Wide Prevalent Polar Compounds with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Acetonitrile			Acrylonitrile			Methyl Ethyl Ketone		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
DECO	0.31	0	CLIA	0.26	0	BUND	3.17	0
A2TX	0.27	0	SLCU	0.25	0	SLCU	1.60	25,699
EPTX	0.21	0	DAIA	0.24	0	EPTX	1.53	11,106
ELNJ	0.21	4,870	A2TX	0.23	0	A2TX	1.27	169,049
PLOR	0.20	0	SFSD	0.23	0	CRIA	0.93	23,413
CANJ	0.18	0	EPTX	0.14	0	DECO	0.92	28,859
CRIA	0.17	0	FAND	0.13	0	PLOR	0.86	76,576
SLCU	0.16	0	CANJ	0.11	0	ELNJ	0.86	114,314
BUND	0.16	0	ELNJ	0.11	500	MUIA	0.80	0
FAND	0.15	0	CRIA	0.11	0	CANJ	0.78	13,307
SFSD	0.15	0	BUND	0.10	0	FAND	0.66	23,234
DAIA	0.13	0	DECO	0.10	0	SFSD	0.59	0
MUIA	0.13	0	MUIA	0.10	57,820	DMIA	0.39	14,472
CLIA	0.13	0	DMIA	0.10	0	DAIA	0.37	340
DMIA	0.13	0	PLOR	0.10	0	CLIA	0.24	0

Table 3-13. (Continued)

Methyl Isobutyl Ketone			Methyl *t*-Butyl Ether		
Station Code	**ppbv**	**lbs**	**Station Code**	**ppbv**	**lbs**
A2TX	0.17	8,562	ELNJ	1.28	313,892
FAND	0.16	25,930	CANJ	0.88	86,530
EPTX	0.13	0	A2TX	0.36	1,000
CANJ	0.10	499	CLIA	0.17	0
MUIA	0.10	20	EPTX	0.16	1,710
ELNJ	0.10	25,469	DMIA	0.13	0
SLCU	0.10	50,124	DAIA	0.09	0
DECO	0.09	502	MUIA	0.09	0
SFSD	0.09	0	DECO	0.09	20,815
CRIA	0.08	0	BUND	0.09	0
BUND	0.08	0	FAND	0.09	0
CLIA	0.08	0	CRIA	0.08	0
DAIA	0.08	106	SFSD	0.08	0
DMIA	0.08	23,475	SLCU	0.08	0
PLOR	0.05	145	PLOR	0.02	332

Table 3-14. Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Carbonyl Compound Concentrations

Meteorological Parameter	Average Correlation	Site With Strongest Positive Correlation (Value)	Site With Strongest Negative Correlation (Value)
Maximum Temperature*	0.308 ± 0.101	DAIA (0.632)	DMIA (-0.053)
Minimum Temperature*	0.147 ± 0.103	DAIA (0.608)	MUIA (-0.146)
Average Temperature*	0.235 ± 0.094	DAIA (0.584)	DMIA (-0.039)
Wind Speed*	-0.439 ± 0.148	None	DAIA (-0.961)
Sea Level Pressure	0.086 ± 0.086	A2TX (0.303)	CANJ (-0.267)
Dew Point Temperature*	0.160 ± 0.113	DAIA (0.578)	MUIA (-0.153)
Visibility	0.059 ± 0.200	CLIA (0.735)	DMIA (-0.523)

* Statistically significant across the 13 sites.

Table 3-15. Ranking of Monitoring Stations by Levels of Total Program-Wide Prevalent Carbonyls

Monitoring Location	Geometric Means of of Total Program-Wide Prevalent Carbonyl Compounds Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Carbonyl Compounds*** within a 10-Mile Radius of the Monitoring Location[b]		***Total*** Industrial Emissions within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 1999-2000	Conc. Rank	Pounds in 1998	Emissions Rank	Pounds in 1998	Emissions Rank	Total Cars	Rank of Total Cars
A2TX	5.14	6	0	5	1,671,457	7	510,892	6
BUND	4.19	9	0	5	309,331	13	5,118	15
CANJ	8.76	2	0	5	1,738,420	5	1,398,466	2
CLIA	3.81	11	0	5	4,904,619	1	31,992	13
CRIA	4.59	8	0	5	1,756,732	4	123,901	10
DAIA	2.92	12	0	5	822,084	11	207,326	9
DECO	13.29	1	0	5	1,415,453	9	900,210	3
DMIA	3.93	10	0	5	1,713,460	6	261,646	8
ELNJ	4.98	7	857	4	2,362,468	3	1,479,049	1
EPTX	5.93	5	0	5	267,480	14	350,810	7
MUIA	1.53	13	7,400	2	2,803,195	2	25,012	14
PLOR	6.02	4	5,476	3	1,492,427	8	714,232	4
SLCU	7.86	3	15,583	1	1,036,718	10	586,967	5

[a] This value was calculated as follows: (1) For each monitoring site, for each sampling event, the concentrations of the program-wide prevalent hydrocarbons were summed. (2) For each monitoring site, the geometric mean of the sampling event totals was calculated.
[b] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000). The emissions reported in the table are the total air releases of the hydrocarbons found to be program-wide prevalent in the 1999-2000 UATMP. Acetylene was not reportable to TRI in 1998.
[c] Industrial emissions were calculated from emissions data for TRI reporting year 1998 (TRI, 2000).
[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 275,000,000 and total cars in U.S. of 203,500,000) Information from "Statistical Abstract of the United States", 2001, and the internet link at http://link-usa.com/zipcode/pop.htm

Table 3-16. Comparison of Geometric Means of Program-Wide Prevalent Carbonyl Compounds with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Acetaldehyde			Acetone			Formaldehyde		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
DECO	2.82	0	DECO	3.76	0	DECO	6.65	0
CANJ	1.52	0	SLCU	2.18	0	CANJ	4.80	0
CRIA	1.42	0	PLOR	1.98	0	SLCU	3.97	15,583
SLCU	1.40	0	CANJ	1.67	0	EPTX	3.06	0
PLOR	1.24	0	BUND	1.58	0	A2TX	2.81	0
EPTX	1.24	0	EPTX	1.43	0	ELNJ	2.68	35
ELNJ	1.07	822	CLIA	1.34	0	PLOR	2.60	5,476
A2TX	1.07	0	DMIA	1.33	0	CRIA	1.87	0
CLIA	1.04	0	A2TX	1.07	0	BUND	1.69	0
DMIA	0.36	0	DAIA	1.02	0	DMIA	1.69	0
BUND	0.32	0	ELNJ	0.91	0	CLIA	1.36	0
DAIA	0.73	0	CRIA	0.88	0	DAIA	1.09	0
MUIA	0.47	0	MUIA	0.72	0	MUIA	0.262	7,400

4.0 Site in Colorado

This section focuses on a few specific meteorological and concentration trends for the UATMP site in Denver, Colorado (DECO). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each "high" sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

4.1 Meteorological and Concentration Averages at the Colorado Site

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for DECO. The average total UATMP daily concentration (at a 95% confidence level) was computed to be 32.032 ppbv (± 7.013 ppbv). Table 4-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report. This site also opted to have total and speciated nonmethane organic compounds (SNMOC) sampled during its air toxic sampling. SNMOC/NMOC compounds are of particular interest because of their role in ozone formation. Readers are encouraged to review EPA's *1999 Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program, Final Report* (EPA, 2000) for more information on SNMOC/NMOC trends and concentrations. Table 4-1 lists the average SNMOC and NMOC measured concentrations at DECO as 322.59 ppbC (± 61.30 ppbC) and 398.16 ppbC (± 90.45 ppbC).

Table 4-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameters, many of which showed generally weak correlations. The strongest correlation was between minimum temperature and the

hydrocarbon concentration (-0.367). The carbonyl compounds tended to have an opposite trend compared to the other groups, with respect to the temperature parameters. It appears that, on average, the selected meteorological parameters were not strongly correlated.

4.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section, however, examines only sampling days which were considered "high" in total concentration. "High" is defined as any daily concentration that was greater than the upper bound of the average site concentration. For DECO, the upper bound concentration was 39.045 ppbv. There were seven days during this reporting period which exceeded this upper bound. Table 4-3 lists these days, along with the meteorological values reported and a weather analysis.

As summarized in Table 4-3, five of the seven "high" days occurred when there was an influence of a High Pressure system. Typically, High Pressure systems feature two ingredients which are needed for good convective mixing: low wind speeds and higher temperatures (especially in the summer). A "Stagnant High Pressure system" can be described as a high pressure system which lingers (or stagnates) around a particular location for a longer than normal period of time, and can cause several days of good mixing.

Another interesting note is that many of the meteorological parameters (daily average temperature, dewpoint temperature, etc.) on these "high" days fall outside the expected range. For example, the average wind speed for the "high" days is typically lower than the timed-period average wind speed. Decreasing wind speeds on the days with High Pressure systems appear to favor the mechanics for mixing of the compounds, thereby increasing concentrations.

SNMOC/NMOC samples were sampled on five of the seven "high" days. Table 4-3 lists their values. While total NMOC concentrations were significantly higher than the average on three of the five days, total SNMOC concentrations were significantly higher than the average on all five of the days. These observations would suggest that VOC and carbonyl compound concentrations on "high" days may be related to significantly higher NMOC/SNMOC.

On average, the difference between the SNMOC and NMOC concentrations was less than 100 ppbC. However, three of the "high" days had differences greater than 100 ppbC. One sampling day (December 14, 2000) had an SNMOC/NMOC difference of nearly 400 ppbC, which suggests the presence of higher-than-normal unspeciated NMOC compounds.

Table 4-1. Average Concentration and Meteorological Parameters at DECO

Site Name	Average UATMP Concentration (ppbv)	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Dewpoint Depression (°F)	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
DECO	32.032 (±7.013)	50.226 (±1.444)	28.942 (±1.211)	1016.370 (±0.609)	9.378 (±0.124)	7.286 (±0.199)	21.284 (±0.901)	322.59 (±61.30)	398.16 (±90.45)

Table 4-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at DECO

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
DECO	Halogenated Hydrocarbons	-0.182	-0.332	0.305	0.021	-0.309	-0.115	-0.238
	Hydrocarbons	-0.240	-0.260	0.091	-0.008	-0.191	-0.192	-0.367
	Polar Compounds	- 0.163	-0.315	0.101	0.124	-0.026	-0.159	-0.166
	Carbonyl Compounds	0.179	0.017	0.184	0.339	-0.244	0.301	0.042

Table 4-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at DECO

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
01/07/00	46.71	28.2	6.9	1025.8	10	6.1	45	9	Stagnant High Pressure System	NA	NA
01/20/00	97.18	37.6	14.6	1019.1	10	6.1	45	9	Stationary Front	NA	NA
10/18/00	45.69	54.1	25.4	1022.6	10	6	75.9	33.1	Stagnant High Pressure System	412.72	481.51
10/27/00	39.13	45.3	31.3	1016.6	10	5.7	63	30	High Pressure Influence	400.41	445.05
11/14/00	46.03	19.5	6.3	1023.2	10	4.6	37	5	High Pressure Influence	519.07	902.75
12/08/00	47.92	33.2	24.7	1018.4	10	3.6	55	24.1	Weather trof influence	486.37	548.95
12/14/00	53.04	30.7	13.2	1016.5	10	9.1	48	5	Rainy Day	639.34	798.10

5.0 Sites in Iowa

This section focuses on a few specific meteorological and concentration trends for the UATMP sites in Iowa (CLIA, CRIA, DAIA, DMIA, and MUIA). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

5.1 Meteorological and Concentration Averages at the Iowa Sites

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for the Iowa sites. The average total UATMP daily concentration (at a 95% confidence level) ranged from 9.626 ppbv (± 3.138 ppbv) at DMIA to 15.131 (± 3.392 ppbv) at CRIA. Table 5-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report. These sites also opted to have total and speciated nonmethane organic compounds (SNMOC) sampled during air toxic sampling. SNMOC/NMOC compounds are of particular interest because of their role in ozone formation. Readers are encouraged to review EPA's *1999 Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program, Final Report* (EPA, 2000) for more information on SNMOC/NMOC trends and concentrations. Table 5-1 lists the average SNMOC and NMOC measured concentrations at the five Iowa sites. The DMIA site measured the highest SNMOC and NMOC concentrations of 171.25 ppbC (± 42.10 ppbC) and 240.28 ppbC (± 90.45 ppbC), respectively.

Table 5-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameter. Many of the correlations were

strong, with the strongest correlation for CLIA between average wind speed and carbonyl compound concentration (-0.848). This scenario was the same for the DAIA site (-0.961). At CRIA, the halogenated hydrocarbons and the average visibility had the strongest correlation (0.444). Halogenated hydrocarbons correlated the strongest with dewpoint temperature (-0.824) at DMIA, while the maximum temperature correlated the strongest at MUIA (0.933). There doesn't appear to be any obvious trend, and the reader should be reminded that the number of sampling days at these sites are less when compared to other sites (refer to Table 3-3).

5.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section examines only sampling days which were considered "high" in total concentration. "High" is defined as any daily concentration that was greater than the upper bound of the average site concentration. The upper bound average concentration and the number of sampling days that exceeded this value are listed below:

? For CLIA,17.871 ppbv (1 sampling day);

? For CRIA,18.972 ppbv (3 sampling days);

? For DAIA, 13.371 ppbv (1 sampling day);

? For DMIA, 12.764 ppbv (3 sampling days); and

? For MUIA, 15.578 ppbv (1 sampling day).

Table 5-3 lists these days, along with the meteorological values reported and a weather analysis. As summarized in Table 5-3, seven of the nine "high" days occurred when there was an influence of a weather front (e.g. - Cold Front). A weather front is a boundary line separating warm and cold air. The wind speeds ahead of a front are typically faster and the wind speeds after a front are typically slower.

After a frontal passage, the air is generally cleaner. The higher than average concentrations for these Iowa sites may be related to the mechanics before frontal passage.

SNMOC/NMOC samples were sampled on eight of the nine "high" days. Table 5-3 lists their values. Only two of the eight days had SNMOC concentrations significantly higher than their averages; only four had NMOC concentrations that were significantly higher. On average, the difference between the SNMOC and NMOC concentrations was less than 100 ppbC, and all of these "high" days were within that range.

Table 5-1. Average Concentration and Meteorological Parameters at the Iowa Sites

Site Name	Average UATMP Concentration (ppbv)	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility	Average Wind Speed (mph)	Dewpoint Depression (°F)	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
CLIA	13.209 (±4.662)	49.265 (±1.739)	39.342 (±1.663)	NA	8.448 (±0.177)	8.321 (±0.311)	9.922 (±0.421)	128.39 (±69.55)	143.28 (±76.31)
CRIA	15.131 (±3.392)	48.841 (±1.733)	40.641 (±1.700)	1017.271 (±0.612)	7.266 (±0.190)	8.444 (±0.289)	8.200 (±0.446)	100.77 (±34.22)	128.33 (±38.37)
DAIA	11.036 (±2.335)	50.019 (±1.739)	40.697 (±1.670)	1017.676 (±0.605)	7.794 (±0.199)	8.708 (±0.301)	9.321 (±0.443)	117.78 (±42.10)	170.70 (±71.10)
DMIA	9.626 (±3.138)	51.560 (±1.733)	40.285 (±1.686)	1017.316 (±0.629)	8.119 (±0.175)	8.363 (±0.260)	11.275 (±0.506)	171.25 (±42.10)	240.28 (±40.48)
MUIA	12.400 (±3.178)	51.665 (±1.827)	40.806 (±1.798)	NA	8.794 (±0.166)	6.491 (±0.307)	10.859 (±0.571)	146.34 (±43.95)	176.08 (±53.37)

Table 5-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at the Iowa Sites

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
CLIA	Halogenated Hydrocarbons	-0.646	-0.693	NA	-0.318	-0.432	-0.480	-0.727
	Hydrocarbons	0.161	-0.055	NA	0.632	-0.782	0.310	-0.017
	Polar Compounds	0.026	-0.149	NA	0.460	-0.763	0.186	-0.132
	Carbonyl Compounds	0.375	0.182	NA	0.735	-0.848	0.528	0.206
CRIA	Halogenated Hydrocarbons	0.327	0.298	-0.072	0.444	-0.258	0.324	0.322
	Hydrocarbons	0.101	0.039	-0.008	0.319	-0.224	0.192	<-0.001
	Polar Compounds	0.103	0.037	0.215	0.421	-0.338	0.145	0.048
	Carbonyl Compounds	0.251	0.136	0.113	0.381	-0.195	0.355	0.154
DAIA	Halogenated Hydrocarbons	-0.688	-0.727	0.930	-0.886	0.177	-0.669	-0.689
	Hydrocarbons	-0.400	-0.457	0.813	-0.775	-0.115	-0.361	-0.413
	Polar Compounds	- 0.845	-0.869	0.921	-0.878	0.370	-0.837	-0.839
	Carbonyl Compounds	0.584	0.578	-0.024	-0.143	-0.961	0.632	0.608

Table 5-2. (Continued)

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
DMIA	Halogenated Hydrocarbons	-0.811	-0.824	-0.237	0.097	0.359	0.373	0.384
	Hydrocarbons	-0.799	-0.779	-0.476	-0.602	0.144	-0.768	-0.809
	Polar Compounds	- 0.410	-0.366	-0.704	-0.772	0.252	-0.475	-0.404
	Carbonyl Compounds	-0.039	0.042	0.223	-0.523	-0.513	-0.053	0.054
MUIA	Halogenated Hydrocarbons	0.406	0.473	NA	-0.543	-0.579	0.322	0.412
	Hydrocarbons	0.778	0.593	NA	0.139	-0.834	0.933	0.586
	Polar Compounds	- 0.201	-0.475	NA	-0.107	-0.393	0.134	-0.462
	Carbonyl Compounds	0.118	-0.153	NA	0.441	-0.654	0.407	-0.146

Table 5-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at the Iowa Sites

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
10/11/00 (CLIA)	24.36	47.8	27.8	NA	10	3.9	66.2	30.2	Stagnant High Pressure system	298.32	330.31
07/17/00 (CRIA)	20.65	72.9	66.2	1015.2	9	5.3	80.6	66.2	Between frontal passages	64.30	95.30
09/27/00 (CRIA)	34.04	58.5	45.4	1019.6	9	5.4	73.9	43	Frontal/trof passage; Influenced by High	320.68	346.94
11/02/00 (CRIA)	23.33	57.0	48.0	1013.8	8	10.1	69.1	44.1	Between frontal and trof passages	82.43	178.24
12/20/00 (DAIA)	13.77	15.1	10.4	NA	3	13.4	15.8	14.0	Frontal passage	107.81	134.17
10/15/00 (DMIA)	14.36	58.1	45.3	1019	10	6.9	79.0	48.0	Frontal passage	212.05	274.99
10/21/00 (DMIA)	15.70	62.1	47.7	1017.2	8	5.8	75.2	51.8	Influenced by Stationary Front	164.36	226.48
12/20/00 (DMIA)	14.42	10	4.4	1017.3	8	7.1	26.1	0.0	Frontal passage	NA	NA
10/11/00 (MUIA)	17.79	49.2	28.4	NA	9	3.1	71.6	32.0	Stagnant High Pressure system	188.88	247.09

6.0 Sites in New Jersey

This section focuses on a few specific meteorological and concentration trends for the UATMP sites in New Jersey (CANJ and ELNJ). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

6.1 Meteorological and Concentration Averages at the New Jersey Sites

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for the New Jersey sites. The average total UATMP daily concentration (at a 95% confidence level) for CANJ was 30.857 ppbv (± 13.505 ppbv), while the average at ELNJ was 21.639 (± 4.257 ppbv). Table 6-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report.

Table 6-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameter. Many of the correlations were weak. The strongest correlation for CANJ was between average wind speed and hydrocarbon concentration (-0.399). This scenario was the same for the ELNJ site, but for polar compounds (-0.663). There doesn't appear to be any obvious trend at these sites.

6.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section only examines sampling days which were considered "high" in total concentration. "High is defined as any daily concentration that was greater than the upper bound of the average site concentration. The upper bound average concentration and the number of sampling days that exceeded this value are listed below:

? For CANJ, 44.362 ppbv (3 sampling days); and

? For ELNJ, 25.896 ppbv (9 sampling days).

Table 6-3 lists these days, along with the meteorological values reported and a weather analysis. As summarized in Table 6-3, eleven of the twelve "high" days occurred when there was an influence of a weather front (e.g. - Cold Front), precipitation, or Trof line. A weather front is a boundary line separating warm and cold air; a Trof line is a boundary line in which the wind shifts. These weather systems are not typical for increasing concentrations, suggesting that the meteorology is not as important at these sites.

The high standard deviation in concentration for CANJ is influenced by an extremely high concentration on March 25, 2000. The value, 234.80 ppbv, is nearly eight times the average for that site. After studying the weather maps and parameters for this day, there does not appear to be any meteorological explanation for this high value.

Table 6-1. Average Concentration and Meteorological Parameters at the New Jersey Sites

Site Name	Average Concentration (ppbv)	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Dewpoint Depression (°F)
CANJ	30.857 (±13.505)	54.610 (±1.436)	43.346 (±1.586)	1017.754 (±0.612)	8.887 (±0.139)	6.986 (±0.277)	11.213 (±0.529)
ELNJ	21.639 (±4.257)	55.258 (±1.416)	43.223 (±1.572)	1017.110 (±0.614)	8.628 (±0.153)	8.712 (±0.281)	12.036 (±0.540)

Table 6-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at the New Jersey Sites

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
CANJ	Halogenated Hydrocarbons	0.024	-0.024	-0.034	0.149	-0.033	0.033	0.009
	Hydrocarbons	-0.202	-0.138	0.293	-0.381	-0.399	-0.172	-0.254
	Polar Compounds	-0.090	-0.173	0.277	0.134	-0.153	0.032	-0.190
	Carbonyl Compounds	0.208	0.064	-0.267	0.213	-0.118	0.316	0.085
ELNJ	Halogenated Hydrocarbons	0.396	0.497	0.049	-0.528	-0.625	0.403	0.301
	Hydrocarbons	0.126	0.199	0.169	-0.214	-0.553	0.162	0.019
	Polar Compounds	0.219	0.232	0.137	-0.131	-0.663	0.194	0.144
	Carbonyl Compounds	0.481	0.559	0.107	-0.443	-0.612	0.451	0.385

Table 6-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at the New Jersey Sites

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary
03/25/00 (CANJ)	234.80	55.9	40.4	1015.9	10	6.2	68.0	44.1	Rainy Day
04/06/00 (CANJ)	64.42	52.2	29.2	1006.7	10	7.7	73.9	34.0	Between frontal passages
10/27/00 (CANJ)	51.23	58.8	52.5	1020.2	5	2.8	70.0	48.9	Rainy Day
02/10/00 (ELNJ)	46.81	41.0	29.8	1016.8	8	5.2	50.0	21.9	Fronts to the north
05/04/00 (ELNJ)	36.50	59.0	48.6	1026.0	10	7.3	71.1	48.9	Between frontal passages
06/17/00 (ELNJ)	26.45	82.4	71.3	1013.9	9	11.7	91	68.0	Rainy Day
07/23/00 (ELNJ)	28.68	72.4	53.7	1019.1	10	6.6	82.9	64.0	Trof passage
08/16/00 (ELNJ)	29.97	76.2	61.0	1012.0	8	10.0	84.9	64.0	Frontal passage
08/28/00 (ELNJ)	30.56	75.3	70.8	1017.3	5	6.3	82.9	64.0	Rainy Day
09/09/00 (ELNJ)	34.25	73.2	64.9	1018.7	7	6.1	87.1	54.0	Influenced by Stationary Front
10/03/00 (ELNJ)	27.96	68.0	60.3	1010.5	6	7.2	82.4	57.2	Frontal passage
10/15/00 (ELNJ)	30.11	67.8	52.4	1016.5	10	6.8	80.6	57.2	Influence by Cold Front
11/08/00 (ELNJ)	30.11	51	42.5	1017.5	9	6.0	62.1	39.9	Influenced by High Pressure

7.0 Sites in North Dakota

This section focuses on a few specific meteorological and concentration trends for the UATMP sites in North Dakota (BUND and FAND). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

7.1 Meteorological and Concentration Averages at the North Dakota Sites

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for the North Dakota sites. The average total UATMP daily concentration (at a 95% confidence level) for BUND was 25.440 ppbv (± 21.742 ppbv), while the average at FAND was 13.250 (± 3.101 ppbv). Table 7-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report. These sites also opted to have total and speciated nonmethane organic compounds (SNMOC) sampled during air toxic sampling. SNMOC/NMOC compounds are of particular interest because of their role in ozone formation. Readers are encouraged to review EPA's *1999 Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program, Final Report* (EPA, 2000) for more information on SNMOC/NMOC trends and concentrations. The FAND site measured the highest SNMOC and NMOC concentrations of 168.78 ppbC (± 35.07 ppbC) and 268.33 ppbC (± 51.02 ppbC), respectively (Table 7-1).

Table 7-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameter. Many of the correlations were weak. The strongest correlation for BUND was between minimum temperature and halogenated

hydrocarbon concentration (0.232). For the FAND site, the strongest correlation is between the dewpoint temperature and the polar compounds (0.446). There doesn't appear to be any obvious trend at these sites.

7.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section examines only sampling days which were considered "high" in total concentration. "High is defined as any daily concentration that was greater than the upper bound of the average site concentration. The upper bound average concentration and the number of sampling days that exceeded this value are listed below:

- For BUND, 47.182 ppbv (1 sampling day); and
- For FAND, 16.351 ppbv (13 sampling days).

Table 7-3 lists these days, along with the meteorological values reported and a weather analysis. As summarized in Table 7-3, twelve of the thirteen "high" days occurred when there was an influence of a weather front (e.g. - Cold Front), precipitation, or Trof line. A weather front is a boundary line separating warm and cold air; a Trof line is a boundary line in which the wind shifts. These weather systems are not typical for increasing concentrations, suggesting that the meteorology is not as important at these sites.

The high standard deviation in concentration for BUND is influenced by an extremely high concentration on March 25, 2000 (similar to the CANJ site in Section 6). The value, 299.81 ppbv, is nearly eight times the average for that site. After studying the weather maps and parameters for this day, there does not appear to be any meteorological explanation for this high value.

SNMOC/NMOC samples were sampled on all fourteen of the "high" days. Table 7-3 lists their values. Eleven of the fourteen days had SNMOC concentrations that were significantly higher than their averages; thirteen had NMOC concentrations that were significantly higher. These observations would suggest that VOC and carbonyl compound concentrations on "high" days may be related to significantly higher NMOC/SNMOC.

On average, the difference between the SNMOC and NMOC concentrations was less than 100 ppbC. However, twelve of the "high" days had differences greater than 100 ppbC. One sampling day in BUND (March 25, 2000) had an SNMOC/NMOC difference nearly 1300 ppbC, which suggests the presence of higher-than-normal unspeciated NMOC compounds.

Table 7-1. Average Concentration and Meteorological Parameters at the North Dakota Sites

Site Name	Average UATMP Concentration	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Dewpoint Depression (°F)	SNMOC Concentration (ppbC)	NMOC Concentrtation (ppbC)
BUND	25.440 (±21.742)	44.159 (±1.828)	34.700 (±1.671)	1016.320 (±0.675)	9.189 (±0.120)	7.810 (±0.313)	9.459 (±0.411)	93.01 (±52.12)	168.15 (±132.65)
FAND	13.250 (±3.101)	43.041 (±1.930)	33.534 (±1.780)	1016.612 (±0.662)	8.977 (±0.143)	9.463 (±0.317)	9.507 (±0.446)	168.78 (±35.07)	268.33 (±51.02)

Table 7-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at the North Dakota Sites

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
BUND	Halogenated Hydrocarbons	0.182	0.216	-0.101	-0.114	0.064	0.119	0.232
	Hydrocarbons	0.065	0.075	-0.175	-0.095	0.229	0.037	0.116
	Polar Compounds	0.032	-0.023	-0.084	0.145	0.079	0.048	0.010
	Carbonyl Compounds	0.124	0.121	0.119	0.197	-0.134	0.177	0.077
FAND	Halogenated Hydrocarbons	0.209	0.222	-0.245	0.044	-0.083	0.176	0.218
	Hydrocarbons	0.228	0.243	-0.096	-0.014	-0.271	0.204	0.203
	Polar Compounds	0.436	0.446	-0.124	0.089	-0.176	0.418	0.412
	Carbonyl Compounds	NA	NA	NA	NA	NA	NA	NA

Table 7-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at the North Dakota Sites

Sampling Day	Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary	SNMOC Concentrtaion (ppbC)	NMOC Concentration (ppbC)
03/25/00 (BUND)	299.81	43.0	28.0	1015.3	10	9.7	60.1	30.0	Between Trof passages	341.27	1674.88
11/20/99 (FAND)	23.66	31.7	23.4	1014.5	10	7.0	43.0	23.0	Fronts to west	155.02	334.35
11/26/99 (FAND)	18.91	30.1	21.8	1003.3	10	10.0	39.9	21.0	Cold Front passage; Influenced by High	129.36	284.68
12/02/99 (FAND)	17.49	33.7	27.7	1011.4	8	6.3	50.0	25.0	High pressure between fronts/trofs	161.58	328.17
12/08/99 (FAND)	81.12	30.8	23.6	1014.6	9	9.1	37.9	23.0	High pressure between fronts/trofs	322.26	953.57
03/07/00 (FAND)	22.69	45.8	38.9	1007.0	6	6.1	63.0	30.0	Rainy Day	285.07	529.97
04/30/00 (FAND)	22.53	56.0	39.7	1018.2	9	8.3	69.1	39.9	Between frontal passages	360.57	591.68
05/06/00 (FAND)	21.72	72.9	52.4	1003.1	10	11.6	96.1	60.1	Between frontal passages	331.33	422.03
05/12/00 (FAND)	23.05	51.9	45.1	1000.3	8	10.6	55.9	44.6	Between frontal passages	299.21	401.06
05/30/00 (FAND)	21.37	59.3	50.8	1012.4	9	7.1	72.0	53.1	High pressure between fronts/trofs	441.26	552.69
07/05/00 (FAND)	34.04	72.7	65.2	1012.4	9	7.3	82.9	64.0	Rainy Day	499.44	639.23
07/11/00 (FAND)	43.25	70.0	64.7	1013.2	9	7.6	82.0	62.1	Between trof passage	659.99	797.93
07/17/00 (FAND)	40.30	61.4	48.8	1020.1	10	10.9	78.1	48.9	Front between Highs	709.54	871.10
07/29/00 (FAND)	34.80	75.5	61.5	1018.6	8	5.2	88.0	57.9	Clear	532.64	630.24

8.0 Site in Oregon

This section focuses on a few specific meteorological and concentration trends for the UATMP site in Portland, Oregon (PLOR). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

8.1 Meteorological and Concentration Averages at the Oregon Site

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for the Oregon site. The average total UATMP daily concentration (at a 95% confidence level) for PLOR was 50.142 ppbv (± 18.485 ppbv). Semivolatile compounds were analyzed at the Oregon site. This data is reported in Appendix G. Table 8-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report.

Table 8-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameter. Many of the correlations were weak. The strongest correlation for PLOR was between maximum temperature and carbonyl compound concentration (0.415). There doesn't appear to be any obvious trend at this site.

8.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section only examines sampling days which were considered "high" in total concentration. "High" is defined as any daily concentration that was greater than the upper bound of the average site concentration. The upper bound average concentration was 68.627 and five sampling days exceeded this value.

Table 8-3 lists these days, along with the meteorological values reported and a weather analysis. As summarized in Table 8-3, three of the five "high" days occurred when there was precipitation, which is not typical for increasing concentrations, suggesting that the meteorology is not as important at this site. Because the total average concentrations for the semivolatiles were low, this data is not included in this table.

Table 8-1. Average Concentration and Meteorological Parameters at the Oregon Site

Site Name	Average UATMP Concentration	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Dewpoint Depression (°F)
PLOR	50.142 (±18.485)	53.998 (±0.935)	44.961 (±0.733)	1018.570 (±0.504)	9.351 (±0.101)	6.539 (±0.246)	9.037 (±0.465)

Table 8-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at the Oregon Site

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
PLOR	Halogenated Hydrocarbons	-0.263	-0.205	0.304	-0.038	0.269	-0.280	-0.217
	Hydrocarbons	-0.090	-0.036	-0.179	-0.317	-0.236	-0.075	-0.143
	Polar Compounds	-0.383	-0.304	0.112	-0.324	0.263	-0.354	-0.356
	Carbonyl Compounds	0.344	0.182	0.073	-0.081	-0.197	0.415	0.174

Table 8-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at the Oregon Site

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary
12/08/99	201.19	43.2	39.4	1021.7	9	8.5	48.0	39.9	Rainy Day
12/14/99	193.40	43.6	39.7	1023.6	10	13.5	46.9	37.9	Rainy Day
12/26/99	198.69	39.4	30.3	1033.3	10	8.4	50.0	27.0	Stagnant High
06/23/00	182.42	60.1	48.0	1019.7	10	7.0	75.4	50.0	Clear
07/05/00	144.71	60.0	54.6	1015.6	7	3.5	75	54	Rainy Day

9.0 Site in South Dakota

This section focuses on a few specific meteorological and concentration trends for the UATMP site in Sioux Falls, South Dakota (SFSD). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

9.1 Meteorological and Concentration Averages at the South Dakota Site

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for the South Dakota site. The average total UATMP daily concentration (at a 95% confidence level) for SFSD was 8.398 ppbv (± 1.066 ppbv). Table 9-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report. This site also opted to have total and speciated nonmethane organic compounds (SNMOC) sampled during air toxic sampling. SNMOC/NMOC compounds are of particular interest because of their role in ozone formation. Readers are encouraged to review EPA's *1999 Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program, Final Report* (EPA, 2000) for more information on SNMOC/NMOC trends and concentrations. Table 9-1 lists the average SNMOC and NMOC measured concentrations at SFSD were 109.59 ppbC (± 16.74 ppbC) and 156.01 ppbC (± 18.55 ppbC).

Table 9-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameter. Many of the correlations were weak. The strongest correlation for SFSD was between average wind speed and polar compound

concentration (0.411). Although carbonyl compound concentrations were not collected for this site, there doesn't appear to be any obvious trend between the meteorology and concentration at this site.

9.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section examines only sampling days which were considered "high" in total concentration. "High" is defined as any daily concentration that was greater than the upper bound of the average site concentration. The upper bound average concentration was 9.464 ppbv and eight sampling days exceeded this value.

Table 9-3 lists these days, along with the meteorological values reported and a weather analysis. As summarized in Table 9-3, seven of the eight "high" days occurred when there was an influence of a weather front (e.g. - Cold Front) or Trof line. A weather front is a boundary line separating warm and cold air; a Trof line is a boundary line in which the wind shifts. These weather systems are not typical for increasing concentrations, suggesting that the meteorology is not as important at this site.

SNMOC/NMOC samples were sampled on all eight of the "high" days. Table 9-3 lists their values. On seven of the nine "high" days, the total NMOC and SNMOC concentrations were significantly higher than their averages. These observations would suggest that VOC and carbonyl concentrations on "high" days may be related to significantly higher NMOC/SNMOC concentrations. On average, the difference between the SNMOC and NMOC concentrations were less than 100 ppbC. However, one of the "high" days had a difference greater than 100 ppbC (April 24, 2001).

Table 9-1. Average Concentration and Meteorological Parameters at the South Dakota Site

Site Name	Average UATMP Concentration	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Dewpoint Depression (°F)	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
SFSD	8.398 (±1.066)	46.952 (±1.822)	36.640 (±1.713)	1016.681 (±0.504)	8.844 (±0.157)	8.542 (±0.322)	10.312 (±0.508)	109.54 (±16.74)	156.01 (±18.55)

Table 9-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at the South Dakota Site

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
SFSD	Halogenated Hydrocarbons	0.186	0.225	-0.138	-0.246	-0.019	0.163	0.214
	Hydrocarbons	-0.249	-0.201	0.127	-0.058	0.122	-0.292	-0.214
	Polar Compounds	-0.166	-0.184	-0.175	-0.038	0.411	-0.214	-0.157
	Carbonyls	NA	NA	NA	NA	NA	NA	NA

Table 9-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at the South Dakota Site

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
04/24/00	13.25	58.4	40.7	1014.5	9	11.1	73.0	36.0	Approaching front	189.33	339.72
05/06/00	10.43	72.1	56.1	1006.4	10	13.5	86.0	59.0	Between frontal passages	87.83	138/09
05/12/00	9.74	55.8	44.2	1005.0	10	14.1	62.6	48.2	Between frontal passages	105.17	154.22
07/05/00	10.31	75.6	69.0	1011.3	9	7.5	84.2	68.0	Between frontal passages	190.44	222.32
09/03/00	17.14	69.0	64.6	1011.8	4	5.5	84.9	60.1	Influenced by Stationary front	283.57	323.81
11/20/00	25.80	9.3	3.4	1027.7	10	14.2	17.1	3.2	Influenced by High Pressure	324.73	352.06
11/26/00	9.51	23.6	20.6	1014.9	9	5.9	34.0	14.0	Trof passage	192.60	222.84
12/14/00	11.89	1.6	-2.7	1025.2	6	4.4	14.0	-9.9	Frontal passage	151.75	250.23

10.0 Sites in Texas

This section focuses on a few specific meteorological and concentration trends for the UATMP sites in Texas (A2TX and EPTX). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

10.1 Meteorological and Concentration Averages at the Texas Sites

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for the Texas sites. The average total UATMP daily concentration (at a 95% confidence level) for A2TX was 18.548 ppbv (± 2.938 ppbv), while the average at EPTX was 27.366 (± 5.190 ppbv). Table 10-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report.

Table 10-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameter. Many of the correlations were weak. The strongest correlation for A2TX was between average wind speed and carbonyl concentration (-0.588). For the EPTX site, the strongest correlation is between the visibility and the carbonyl compound concentration (0.469). There doesn't appear to be any obvious trend at these sites.

10.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section only examines sampling days which were considered "high" in total concentration. "High" is defined as any

daily concentration that was greater than the upper bound of the average site concentration. The upper bound average concentration and the number of sampling days that exceeded this value are listed below:

- For A2TX, 21.486 ppbv (7 sampling days); and
- For EPTX, 32.556 ppbv (10 sampling days).

Table 10-3 lists these days, along with the meteorological values reported for those days and a weather analysis. As summarized in Table 10-3, nine of the seventeen "high" days occurred when there was an influence of a weather front (e.g. - Cold Front), a Low pressure system, or Trof line. A weather front is a boundary line separating warm and cold air; a Trof line is a boundary line in which the wind shifts. These weather systems are not typical for increasing concentrations. Conversely, five "high" days had a High pressure influence, which would favor the "high" concentrations.

Table 10-1. Average Concentration and Meteorological Parameters at the Texas Sites

Site Name	Average UATMP Concentration	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility	Average Wind Speed (mph)	Dewpoint Depression (°F)
A2TX	18.548 (±2.938)	68.168 (±1.424)	51.978 (±1.254)	1016.828 (±0.536)	9.432 (±0.090)	8.872 (±0.285)	16.190 (±0.664)
EPTX	27.366 (±5.190)	65.489 (±1.317)	38.470 (±1.201)	1013.456 (±0.525)	9.890 (±0.031)	6.976 (±0.259)	27.019 (±0.919)

Table 10-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at the Texas Sites

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
A2TX	Halogenated Hydrocarbons	0.046	-0.082	-0.027	0.183	-0.327	0.084	0.032
	Hydrocarbons	-0.314	-0.293	0.406	-0.079	-0.552	-0.302	-0.294
	Polar Compounds	0.042	-0.039	-0.098	0.129	0.036	0.042	0.046
	Carbonyl Compounds	0.016	-0.025	0.303	0.092	-0.588	0.055	-0.029
EPTX	Halogenated Hydrocarbons	0.380	0.282	-0.240	0.097	0.359	0.373	0.384
	Hydrocarbons	-0.250	-0.347	0.321	0.386	-0.396	-0.230	-0.438
	Polar Compounds	0.297	0.360	-0.136	0.032	0.023	0.272	0.268
	Carbonyl Compounds	0.114	0.037	0.150	0.469	-0.460	0.119	-0.007

Table 10-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at the Texas Sites

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary
01/01/00 (A2TX)	26.59	55.8	41.7	1014.6	10	7.4	75.9	41.0	Trof passage
01/13/00 (A2TX)	21.77	60.5	32.5	1023.1	10	12.1	75.0	48.2	Clear
01/25/00 (A2TX)	33.21	43.2	21.0	1021.6	10	7.6	55.0	33.1	Stagnant High pressure
03/25/00 (A2TX)	30.02	74.0	62.5	1015.2	9	8.5	84.2	68.0	Rainy Day
10/03/00 (A2TX)	36.54	82.3	65.3	1009.6	10	14.7	93.2	73.0	Influenced by Trof
11/20/00 (A2TX)	37.47	44.0	32.7	1029.3	9	5.3	55.9	33.1	Influenced by High pressure
12/14/00 (A2TX)	32.95	32.0	28.5	1026.6	8	4.1	46.0	24.1	Influenced by High pressure
11/14/99 (EPTX)	37.67	61.0	41.9	1019.6	10	5.0	77.0	46.9	Stagnant High pressure
12/08/00 (EPTX)	38.47	50.0	21.9	1009.9	10	9.2	64.9	23.0	Between trof passage
01/13/00 (EPTX)	43.00	51.7	21.7	1022.8	10	5.8	70.0	32.0	Clear
01/25/00 (EPTX)	43.92	59.8	30.9	1014.9	10	8.6	71.1	37.9	Under Low pressure
02/06/00 (EPTX)	44.47	48.5	27.4	1020.8	10	3.4	69.8	37.4	Clear
03/13/00 (EPTX)	33.12	29.6	22.2	1012.5	10	4.7	75.0	34.0	Influenced by Trof
04/18/00 (EPTX)	53.77	74.6	28.5	1010.1	10	9.1	91.9	48.0	Between frontal passages
7/17/00 (EPTX)	65.92	84.3	54.8	1009.8	10	8.3	98.1	70.0	Influenced by Trof
10/03/00 (EPTX)	45.50	78.9	38.2	1007.6	10	5.6	95.0	59.0	Stagnant High pressure

Table 10-3. (Continued)

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary
12/14/00 (EPTX)	50.35	46.6	34.1	1019.8	10	3.5	57.0	34.0	Influenced by Trof

11.0 Site in Utah

This section focuses on a few specific meteorological and concentration trends for the UATMP site in Salt Lake City, Utah (SLCU). Daily weather maps were analyzed for synoptic-scale weather events on high toxic concentration sampling days. The archived maps were downloaded from the Unisys Weather website (http://weather.unisys.com).

For each sampling day, the following 12-hour surface maps were retrieved and analyzed: 1) the evening before the sample day; 2) the morning of the sample day; 3) the evening of the sample day; and 4) the morning after the sample day. A weather summary was then determined for each sampling day.

Readers are encouraged to review the figures and tables in Section 3.0 for more information on compound concentrations, compound group concentrations, and emissions from nearby sources.

11.1 Meteorological and Concentration Averages at the Utah Site

The four compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyl compounds) were summed to generate total daily concentrations for the Utah site. The average total UATMP daily concentration (at a 95% confidence level) for SLCU was 28.747 ppbv (± 3.834 ppbv). Table 11-1 also lists the averages for selected meteorological parameters from August 1999 to December 2000. This time period is similar to the time period covered in this report. This site also opted to have total and speciated nonmethane organic compounds (SNMOC) sampled during its air toxic sampling. SNMOC/NMOC compounds are of particular interest because of their role in ozone formation. Readers are encouraged to review EPA's *1999 Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program, Final Report* (EPA, 2000) for more information on SNMOC/NMOC trends and concentrations. Table 11-1 lists the average SNMOC and NMOC measured concentrations at SLCU were 240.72 ppbC (± 40.38 ppbC) and 324.92 ppbC (± 48.38 ppbC).

Table 11-2 is the summary of calculated Pearson Correlation coefficients between the total concentration of the compound group and the meteorological parameter. Many of the correlations were strong. The strongest correlation for SLCU was between average wind speed and hydrocarbon concentration (-0.671).

11.2 Case-study Days

Ideally, a weather map analysis should be performed for each sampling day. This section examines only sampling days which were considered "high" in total concentration. "High" is defined as any daily concentration that was greater than the upper bound of the average site concentration. The upper bound average concentration was 32.581 ppbv and seventeen sampling days that exceeded this value.

Table 11-3 lists these days, along with the meteorological values reported and a weather analysis. As summarized in Table 11-3, thirteen of the seventeen "high" days occurred when there was an influence of a High Pressure system. Typically, High Pressure systems feature two ingredients which are needed for good convective mixing: low wind speeds and higher temperatures (especially in the summer). A "Stagnant High" Pressure system can be described as a High Pressure system which lingers (or stagnates) around a particular location for a longer than normal period of time, and can cause several good days of mixing.

SNMOC/NMOC samples were sampled on all seventeen of the "high" days. Table 11-3 lists their values. Twelve of the seventeen days had significantly higher NMOC concentrations; fourteen days had significantly higher SNMOC concentrations. These observations would suggest that VOC and carbonyl compound concentrations on "high" days may be related to significantly higher NMOC/SNMOC concentrations. On average, the difference between the SNMOC and NMOC concentrations were less than 100 ppbC. However, seven of the "high" days had differences greater than 100 ppbC. The greatest difference between SNMOC and NMOC concentrations occurred on January 31, 2000.

Table 11-1. Average Concentration and Meteorological Parameters at the Utah Site

Site Name	Average UATMP Concentration (ppbv)	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Dewpoint Depression (°F)	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
SLCU	28.747 (±3.834)	53.930 (±1.569)	34.701 (±0.873)	1016.337 (±0.664)	9.189 (±0.147)	7.313 (±0.249)	19.229 (±0.968)	240.72 (±40.38)	324.92 (±48.38)

Table 11-2. Pearson Correlation Coefficients of Concentration with Selected Meteorological Parameters at the Utah Site

Site Name	Compound Type	Average Temperature (°F)	Average Dewpoint Temperature (°F)	Average Sea-Level Pressure (millibar)	Average Visibility (miles)	Average Wind Speed (mph)	Maximum Temperature (°F)	Minimum Temperature (°F)
SLCU	Halogenated Hydrocarbons	-0.201	-0.121	0.293	-0.074	-0.299	-0.187	-0.158
	Hydrocarbons	-0.494	-0.411	0.554	-0.436	-0.671	-0.460	-0.476
	Polar Compounds	-0.656	-0.601	0.610	-0.375	-0.458	-0.639	-0.637
	Carbonyl Compounds	0.301	0.343	-0.032	-0.023	-0.187	0.300	0.305

Table 11-3. Summary of Concentration and Meteorological Parameters for High Sampling Days at the Utah Site

Sampling Day	UATMP Concentration (ppbv)	Ave. Temperature (°F)	Ave. Dewpoint (°F)	Ave. Sea-Level Pressure (millibar)	Ave. Visibility (miles)	Ave. Wind Speed (mph)	Max. Temp. (°F)	Min. Temp. (°F)	Weather Summary	SNMOC Concentration (ppbC)	NMOC Concentration (ppbC)
11/12/99	42.77	47.6	31	1026	10	4.0	64.4	35.6	Stagnant High pressure	500.14	626.55
11/20/99	33.22	42.9	33.2	1017.6	10	6.0	52.0	28.0	Rainy Day	361.69	601.68
01/07/00	36.93	26.6	20.3	1031.5	7	3.1	32.0	12.9	Stagnant High pressure	306.13	488.10
01/19/00	41.11	45.6	29.5	1020.4	7	4.0	55.9	37.0	Stagnant High pressure	438.39	651.75
01/31/00	35.55	30.6	26.7	1018.9	5	3.3	42.1	19.9	Rainy day; High pressure following	320.81	641.67
02/06/00	50.48	36.1	29.5	1025.3	9	4.9	50.0	28.0	Stagnant High pressure	568.99	652.57
03/25/00	39.90	45.9	31.1	1018.1	10	4.2	61.0	32.0	Stagnant High pressure	424.93	513.18
06/11/00	52.61	69.0	42.9	1008.8	10	6.6	82.9	51.1	High between fronts/trofs	381.25	455.53
07/11/00	57.25	73.8	54.0	1012.8	10	5.5	91.0	60.1	Stagnant High pressure	164.32	244.12
07/29/00	32.80	83.1	47.4	1010.7	10	8.0	98.6	66.2	Clear between Low pressures	277.79	336.64
08/04/00	62.39	81.6	54.4	1012.2	9	7.1	95	71.1	Rainy Day	257.46	329.40
09/21/00	33.18	62.3	44.8	1001	10	6.8	73.0	54.0	Rainy Day	284.43	370.34
09/27/00	38.51	58.0	41.7	1020.1	10	5.2	73.4	46.4	Stagnant High pressure	304.17	392.10
11/21/00	67.15	27.9	20.3	1029.6	6	3.4	35.6	21.0	Stagnant High pressure	691.83	766.33
11/26/00	70.68	34.1	26.4	1024.1	8	3.6	43.0	21.9	Stagnant High pressure	314.01	365.64
12/02/00	62.92	31.2	24.2	1026.0	10	3.1	42.8	23.0	Stagnant High pressure	702.30	820.33
12/08/00	64.35	32.4	27.9	1017.7	5	3.3	44.1	24.1	Influenced by High pressure	781.07	876.35

12.0 Data Quality

This section evaluates how precisely and accurately ambient air concentrations were measured during the 1999/2000 UATMP. As indicators of the reliability of experimental measurements, both precision and accuracy should be considered when interpreting ambient air monitoring results. In general, this section shows that the 1999/2000 UATMP monitoring data are of a known and high quality, particularly for the most program-wide prevalent compounds in urban air.

12.1 Precision

Precision refers to the mutual agreement between independent measurements performed according to identical protocols and procedures. To quantify "sampling and analytical precision" (i.e., how precisely the sampling and analytical methods measure ambient air concentrations), the section then compares concentrations measured during analysis of duplicate samples.

Applied to ambient air monitoring data, precision is a measurement of random errors inherent to the process of sampling and analyzing ambient air.

12.1.1 Analytical Precision

Analytical precision is a measurement of random errors associated with laboratory analysis of environmental samples. These errors may result from various factors, but typically originate from random "noise" inherent to analytical instruments. Laboratories can easily evaluate analytical precision by comparing concentrations measured during replicate analysis of the same ambient air samples. This report uses two parameters to quantify random errors indicated by replicate analyses of 1999/2000 UATMP samples:

- ***Average concentration difference*** simply quantifies how replicate analytical results differ, on average, for each compound. When interpreting central tendency estimates for specific compounds sampled during the 1999/2000 UATMP, participating agencies are encouraged to compare central tendencies to the average concentration differences. If a compound's average concentration difference exceeds or nearly equals its central tendency, the analytical method may not be capable of precisely characterizing annual concentrations. Therefore, data interpretations for these compounds should be made with caution.

- ***Relative percent difference (RPD)*** expresses average concentration differences relative to the average concentrations detected during replicate analyses. The RPD is calculated as follows:

$$RPD = \frac{X_1 - X_2}{\bar{X}} \times 100 \qquad \textbf{(1)}$$

Where:

X_1 is the ambient air concentration of a given compound measured in one sample;
X_2 is the concentration of the same compound measured during replicate analysis; and
$\bar{X}$ is the arithmetic mean of X_1 and X_2.

As Equation 1 shows, replicate analyses with low variability have lower RPDs (and better precision), and replicate analyses with high variability have higher RPDs (and poorer precision).

The following approach was employed to estimate how precisely the central laboratory analyzed 1999/2000 UATMP samples:

- RPDs and concentration differences were calculated for every replicate analysis performed during the program. In cases where compounds were not detected during replicate analyses, these parameters were not calculated.
- Second, to make an overall estimate of method precision, program-average RPDs and concentration absolute differences were calculated for each compound by averaging the values from the individual replicate analyses.

Tables 12-1 and 12-2 use both absolute average concentration differences and RPDs to characterize the analytical precision representing all sites for the VOC and carbonyl compound measurements made during the 1999/2000 UATMP, respectively.

Replicate analytical data show that laboratory VOC analysis precision was excellent. The method was most precise when measuring air concentrations for the most program-wide prevalent compounds (i.e., compounds consistently found at levels exceeding their detection limits). For VOC, samples exhibit RPDs ranging from 1.2 percent to 16.3 percent.

In terms of average concentration difference, the precision of the VOC analytical method was fairly uniform across compounds, with few exceptions. The average concentration difference during

replicate analyses for most compounds was 0.25 ppbv or less, though acetonitrile had a slightly greater concentration difference. The relatively high variability for acetonitrile largely resulted from poor agreement in the replicate analysis of one set of samples collected on July 23, 2000, at Elizabeth, NJ. Because this was the only sample where acetonitrile was detected in duplicate, the average concentration difference for all compounds drops from 0.25 ppbv to 0.10 ppbv, if this value is deleted.

Table 12-2 presents replicate analytical data for SNMOC analysis. The RPD was less than 17 percent for every SNMOC compound. The average concentration differences observed upon replicate analyses of SNMOC compounds ranged from 0.03 to 1.01 ppbC.

As Table 12-3 shows, laboratory analysis of carbonyl samples during the 1999/2000 UATMP was consistently more precise than analysis of VOC samples. The RPD was less than 20 percent for every carbonyl compound. The average concentration differences observed upon replicate analyses of carbonyl compounds were less than or equal to 0.07 ppbv.

Replicate analytical data for semivolatile analysis is presented in Table 12-4. The RPD was less than 20 percent for all detected compounds. The average concentration differences observed on the replicate analyses were less than 0.01 ppbv.

Accordingly, random errors during laboratory analysis had minimal impacts on the carbonyl compound concentration data measured during the 1999/2000 UATMP. Overall, replicate analyses of VOC, carbonyl compounds, SNMOC, and semivolatile samples suggest that the corresponding analytical methods consistently measured each compound in air samples within a precision of 25 percent—a precision level well within the UATMP data quality objectives (USEPA, 2001 in revision) and guidelines in the Compendium Methods (USEPA, 1999).

12.1.2 Sampling and Analytical Precision

As the name implies, *sampling and analytical precision* quantifies random errors associated not only with analyzing ambient air samples in the laboratory but also with collecting the samples in the field. This form of precision is most easily evaluated by comparing concentrations measured in duplicate samples collected off the same manifold. During the 1999/2000 UATMP, duplicate samples were

collected on approximately 10 percent of the scheduled sampling days, and most of these samples were analyzed in replicate. To calculate sampling and analytical precision, data analysts first averaged the results from each replicate analysis (if performed), then compared these average concentrations between the two samples in each duplicate. Tables 12-5, 12-6 and 12-7 present average concentration differences and RPDs as estimates of sampling and analytical precision for VOC, SNMOC, and carbonyl compound measurements, respectively. It should be noted that the number of observations from Tables 12-1 through 12-3 are twice as high, representing the replicates of the duplicate samples presented in Tables 12-5 through 12-7.

According to the sampling and analytical data in Table 12-5 and 12-6, concentrations of VOC and SNMOC, respectively, duplicate samples measured during the 1999/2000 UATMP were in excellent agreement. On average, these concentrations differed by 0.25 ppbv or less for UATMP and 0.63 ppbC or less for SNMOC detected during the program. Relative percent differences ranged from 1.7 to 17.7 percent for VOC and 0.96 to 11.2 percent for SNMOC detected. The sampling and analytical precision data in Table 12-5 and 12-6 do not differ significantly from the analytical precision data in Table 12-1 and 12-2, respectively. This similarity suggests that limitations associated with laboratory analysis of the VOC and SNMOC samples during the 1999/2000 UATMP probably outweighed random errors associated with sampling procedures.

Like the duplicate sampling results for VOC and SNMOC, the duplicate sampling results for carbonyl compounds were highly precise. As the data in Table 12-7 show, every carbonyl compound had an RPD for sampling and analytical precision less than or equal to 12 percent. For most compounds, the sampling and analytical RPDs (see Table 12-7) were notably higher than the analytical precision RPDs (see Table 12-3)—a trend that differs from the trend observed for VOC. This observation suggests that random errors associated with collecting air samples and random errors associated with analyzing these samples both contributed significantly to overall imprecision in the carbonyl compound sampling and analytical method. Random sampling errors most likely resulted from trace amounts of carbonyl compounds contaminating the silica gel sampling cartridges before the scheduled sampling days. As the estimates of sampling and analytical precision show, however, such sources of contamination did not have significant impacts—not greater than 0.07 ppbv, on average—on the carbonyl compound monitoring results.

To summarize, duplicate sampling results indicate that the 1999/2000 UATMP air quality measurements generally have precision better than 25 percent—well within the UATMP data quality objectives of 100 percent (USEPA, 1988). This excellent measurement precision suggests that the 1999/2000 UATMP monitoring data offer a precise account of air quality at the selected monitoring locations, especially for the most program-wide prevalent compounds. Although random errors had very small impacts on measurement of the less program-wide prevalent compounds, participating agencies should note that the central tendencies for these compounds have nearly the same magnitude as the average concentration difference. Therefore, central tendency concentrations for these less program-wide prevalent compounds should be interpreted with caution.

12.2 Accuracy

Highly accurate air sampling and analytical methods can measure air concentrations in very close agreement to actual ambient levels. Laboratories typically evaluate their accuracy by analyzing external audit samples and comparing measured concentrations to the known concentrations within the audits.

Accuracy indicates the extent to which experimental measurements represent their corresponding "true" or "actual" values.

EPA/State participants provided three external audit samples for the 1999/2000 UATMP. The results are displayed on Table 12-8. All acceptance criteria were met representing accurate carbonyl compound analytical methods.

The accuracy of the 1999/2000 UATMP monitoring data can also be assessed qualitatively by reviewing the accuracy of the monitoring methods and how they were implemented:

- The sampling and analytical methods used in the 1999/2000 UATMP (i.e., Compendium Methods TO-11A and TO-15) have been approved by EPA for accurately measuring ambient levels of VOC and carbonyl compounds, respectively—an approval that is based on many years of research into the development of ambient air monitoring methodologies.
- When collecting and analyzing ambient air samples, all field sampling staff and laboratory analysts strictly followed quality control and quality assurance guidelines detailed in the respective

monitoring methods. This strict adherence to the well-documented sampling and analytical methods suggests, though certainly does not prove, that the 1999/2000 UATMP monitoring data accurately represent ambient air quality.

Table 12-1. VOC Analytical Precision
(Based on Replicate Analysis of 80 Valid Samples)

Compound[1]	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
Hydrocarbons			
Acetylene	**80**	**2.3**	**0.15**
Benzene	**80**	**2.1**	**0.13**
1,3-Butadiene	15	5.0	0.03[1]
Ethylbenzene	77	2.6	0.01[1]
n-Octane	24	5.6	0.02[1]
Propylene	**80**	**1.8**	**0.04**
Styrene	44	5.0	0.02[1]
Toluene	**80**	**1.6**	**0.06**
1,2,4-Trimethylbenzene	75	3.6	0.02[1]
1,3,5-Trimethylbenzene	58	4.9	0.01[1]
***m*-,*p*-Xylene**	**77**	**2.8**	**0.02**
***o*-Xylene**	**75**	**3.5**	**0.01**
Halogenated Hydrocarbons			
Bromochloromethane	**17**	**1.2**	**0.16**
Bromodichloromethane	0	NA	NA
Bromoform	**0**	**NA**	**NA**
Bromomethane	0	NA	NA
Carbon Tetrachloride	**29**	**4.6**	**0.01[1]**
Chlorobenzene	0	NA	NA
Chloroethane	1	2.6	0.01
Chloroform	0	NA	NA
Chloromethane	**79**	**2.4**	**0.04**
Chloromethylbenzene	0	NA	NA
Chloroprene	0	NA	NA
Dibromochloromethane	0	NA	NA
1,2-Dibromoethane	0	NA	NA
m-Dichlorobenzene	0	NA	NA
o-Dichlorobenzene	0	NA	NA
p-Dichlorobenzene	0	NA	NA
1,1-Dichloroethane	0	NA	NA
1,2-Dichloroethane	0	NA	NA

Table 12-1. (Continued)

Compound[1]	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
1,1-Dichloroethene	0	NA	NA
cis-1,2-Dichloroethylene	0	NA	NA
trans-1,2-Dichloroethylene	0	NA	NA
1,2-Dichloropropane	0	NA	NA
cis-1,3-Dichloropropene	0	NA	NA
trans-1,3-Dichloropropene	0	NA	NA
Dichlorodifluoromethane	**79**	**1.8**	**0.03**
Dichlorotetrafluoroethane	0	NA	NA
Hexachloro-1,3-Butadiene	0	NA	NA
Methylene Chloride	**37**	**6.7**	**0.05**
1,1,2,2-Tetrachloroethane	0	NA	NA
Tetrachloroethylene	**8**	**16.3**	**0.04[1]**
1,2,4-Trichlorobenzene	2	7.4	0.04
1,1,1-Trichloroethane	13	16.0	0.02[1]
1,1,2-Trichloroethane	0	NA	NA
Trichloroethylene	3	10.8	0.01[1]
Trichlorofluoromethane	**80**	**3.8**	**0.03**
Trichlorotrifluoroethane	**60**	**7.7**	**0.01[1]**
Vinyl Chloride	0	NA	NA

Table 12-1. (Continued)

Compound[1]	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
Polar Compounds			
Acetonitrile	**2**	**9.5**	**4.29**
Acrylonitrile	**8**	**4.7**	**0.03**[2]
Ethyl Acrylate	0	NA	NA
Ethyl *tert*-Butyl Ether	0	NA	NA
Methyl Ethyl Ketone	**80**	**7.3**	**0.21**
Methyl Isobutyl Ketone	**5**	**2.9**	**0.10**
Methyl Methacrylate	0	NA	NA
Methyl *tert*-Butyl Ether	**17**	**6.6**	**0.11**
tert-Amyl Methyl Ether	1	0.8	0.07

[1] All chemicals in bold script are considered prevalent compounds, as defined in Section 3.1.4 of this report.
[2] The average concentration for these compounds is less than 5 times the current Method Detection Limits.

Notes: NA = Not applicable. (Precision cannot be evaluated for compounds that were not detected in any of the replicate analyses.)
"Number of observations" equals the number of replicate analyses in which the compound was detected.
Program-wide prevalent compounds are shown in bold font. As discussed in Section 9.1.1, these compounds generally had better analytical precision than the compounds less program-wide prevalent in ambient air (i.e., the compounds in plain font).

Table 12-2. SNMOC Analytical Precision
(Based on Replicate Analysis of 56 Valid Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbC)
Acetylene	56	1.08	0.11
Benzene	56	0.84	0.13
1,3-Butadiene	36	3.12	0.03
n-Butane	55	1.15	0.22
cis-2-Butene	56	1.32	0.03
trans-2-Butene	53	3.21	0.05
Cyclohexane	56	1.68	0.15
Cyclopentane	56	1.65	0.04
Cyclopentene	53	3.70	0.05
n-Decane	56	2.46	0.10
1-Decene	0	NA	NA
m-Diethylbenzene	56	4.13	0.18
p-Diethylbenzene	56	4.19	0.12
2,2-Dimethylbutane	56	1.44	0.05
2,3-Dimethylbutane	56	1.05	0.05
2,3-Dimethylpentane	56	2.01	0.10
2,4-Dimethylpentane	56	1.30	0.05
n-Dodecane	55	4.41	0.30
1-Dodecene	33	5.88	0.27
Ethane	56	0.45	0.12
Ethylbenzene	56	2.60	0.14
2-Ethyl-1-butene	0	NA	NA
Ethylene	56	0.92	0.10
m-Ethyltoluene	56	2.41	0.17
o-Ethyltoluene	56	3.46	0.09
p-Ethyltoluene	56	2.59	0.09
n-Heptane	56	1.25	0.08
1-Heptene	34	4.24	0.05
n-Hexane	53	1.63	0.12

Table 12-2. (Continued)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbC)
1-Hexene	41	2.67	0.06
cis-2-Hexene	17	2.59	0.03
trans-2-Hexene	17	5.72	0.06
Isobutane	56	1.14	0.13
Isobutene/1-Butene	56	1.45	0.09
Isopentane	56	1.09	0.56
Isoprene	56	1.25	0.04
Isopropylbenzene	56	4.03	0.07
2-Methyl-1-butene	48	2.15	0.04
Methylcyclohexane	56	1.53	0.10
Methylcyclopentane	56	1.53	0.06
2-Methyl-1-pentene	17	2.34	0.04
2-Methyl-2-butene	51	1.81	0.04
2-Methylheptane	56	2.39	0.06
2-Methylhexane	56	2.97	0.08
2-Methylpentane	56	2.29	0.23
3-Methyl-1-butene	17	3.97	0.14
3-Methylheptane	56	1.50	0.03
3-Methylhexane	56	2.17	0.27
3-Methylpentane	56	0.84	0.06
4-Methyl-1-pentene	18	5.81	0.04
n-Nonane	56	1.74	0.05
1-Nonene	39	7.32	0.08
n-Octane	56	1.55	0.05
1-Octene	39	3.02	0.03
n-Pentane	56	0.97	0.20
1-Pentene	56	3.88	0.15
cis-2-Pentene	56	1.45	0.03
trans-2-Pentene	56	1.48	0.04
α-Pinene	53	3.00	0.54

Table 12-2. (Continued)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbC)
β-Pinene	43	3.57	0.36
n-Propylbenzene	56	3.00	0.09
Propane	56	0.61	0.17
Propylene	56	0.96	0.06
Propyne	0	NA	NA
Styrene	56	2.95	0.12
Toluene	56	1.18	0.55
n-Tridecane	36	5.60	1.01
1-Tridecene	2	16.65	0.84
1,2,3-Trimethylbenzene	56	3.35	0.14
1,2,4-Trimethylbenzene	56	1.87	0.16
1,3,5-Trimethylbenzene	56	2.40	0.07
2,2,3-Trimethylpentane	30	4.51	0.08
2,2,4-Trimethylpentane	56	1.44	0.13
2,3,4-Trimethylpentane	56	2.41	0.08
n-Undecane	56	2.75	0.27
1-Undecene	42	8.68	0.22
m-Xylene/*p*-Xylene	56	1.69	0.28
o-Xylene	56	1.74	0.10
TNMOC (speciated)	**56**	**0.94**	**6.04**
TNMOC (w/ unknowns)	**56**	**1.09**	**9.13**

Table 12-3. Carbonyl Compound Analytical Precision (Based on Replicate Analysis of 64 Valid Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
Acetaldehyde	**64**	**0.6**	**0.03**
Acetone	**64**	**0.4**	**0.03**
Benzaldehyde	64	2.5	0.01
Butyr/Isobutyraldehyde	60	1.6	0.01
Crotonaldehyde	37	6	0.00
2,5-Dimethylbenzaldehyde	9	4.2	<0.01[1]
Formaldehyde	**64**	**0.5**	**0.07**
Hexaldehyde	64	2.8	0.01
Isovaleraldehyde	43	4.3	0.01
Propionaldehyde	64	4	0.01
Tolualdehydes	52	19	<0.01
Valeraldehyde	62	9	<0.01

[1]The average concentration for these compounds is less than 5 times the current Method Detection Limits.

Notes: "Number of observations" equals the number of replicate analyses in which the compound was detected.
Compounds with program-wide prevalence greater than 75 percent are shown in bold font. As discussed in Section 9.1.1, the analytical precision for these compounds was similar to the analytical precision for compounds less program-wide prevalent in ambient air (i.e., the compounds in plain font).

Table 12-4. Semivolatile Analytical Precision
(Based on Replicate Analysis of 3 Valid Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
Acenaphthene	3	3.75	<0.01
bis(2-Ethylhexyl) phthalate	2	4.96	<0.01
Dibenzofuran	3	3.17	<0.01
Di-*n*-butyl phthalate	3	1.06	<0.01
1,2-Dichlorobenzene	1	0.41	<0.01[1]
1,4-Dichlorobenzene	3	0.89	<0.01
Diethyl phthalate	3	5.56	<0.01
Fluorene	43	4.3	0.01
Propionaldehyde	64	4	0.01
Tolualdehydes	52	19	<0.01
Valeraldehyde	62	9	<0.01

[1]The average concentration for these compounds is less than 5 times the current Method Detection Limits.

Notes: "Number of observations" equals the number of replicate analyses in which the compound was detected.
Compounds with program-wide prevalence greater than 75 percent are shown in bold font. As discussed in Section 9.1.1, the analytical precision for these compounds was similar to the analytical precision for compounds less program-wide prevalent in ambient air (i.e., the compounds in plain font).

Table 12-5. VOC Sampling and Analytical Precision (Based on 41 Valid Duplicate Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
Hydrocarbons			
Acetylene	**40**	**1.7**	**0.05**
Benzene	**41**	**3.1**	**0.03**
1,3-Butadiene	7	7.4	0.04[1]
Ethylbenzene	40	3.6	0.02
n-Octane	17	6.2	0.04[1]
Propylene	**41**	**4.3**	**0.06**
Styrene	22	8.4	0.03
Toluene	**41**	**3.8**	**0.14**
1,2,4-Trimethylbenzene	38	4.9	0.02[1]
1,3,5-Trimethylbenzene	30	5.6	0.01[1]
***m*-,*p*-Xylene**	**39**	**3.9**	**0.05**
***o*-Xylene**	**38**	**3.8**	**0.02**
Halogenated Hydrocarbons			
Bromochloromethane	9	6.7	0.55
Bromodichloromethane	0	NA	NA
Bromoform	0	NA	0.00
Bromomethane	0	NA	NA
Carbon Tetrachloride	**15**	**5.2**	**0.01[1]**
Chlorobenzene	0	NA	NA
Chloroethane	0	NA	NA
Chloroform	0	NA	NA
Chloromethane	**40**	**3.9**	**0.06**
Chloromethylbenzene	0	NA	NA
Chloroprene	0	NA	NA
Dibromochloromethane	0	NA	NA
1,2-Dibromoethane	0	NA	NA
m-Dichlorobenzene	0	NA	NA

Table 12-5. (Continued)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
o-Dichlorobenzene	0	NA	NA
p-Dichlorobenzene	0	NA	NA
1,1-Dichloroethane	0	NA	NA
1,2-Dichloroethane	0	NA	NA
1,1-Dichloroethene	0	NA	NA
cis-1,2-Dichloroethylene	0	NA	NA
trans-1,2-Dichloroethylene	0	NA	NA
1,2-Dichloropropane	0	NA	NA
cis-1,3-Dichloropropene	0	NA	NA
trans-1,3-Dichloropropene	0	NA	NA
Dichlorodifluoromethane	**40**	**2.2**	**0.04**
Dichlorotetrafluoroethane	0	NA	NA
Hexachloro-1,3-Butadiene	0	NA	NA
Methylene Chloride	**18**	**8.9**	**0.62**
1,1,2,2-Tetrachloroethane	0	NA	0.00
Tetrachloroethylene	**5**	**17.7**	**0.04[1]**
1,2,4-Trichlorobenzene	0	NA	NA
1,1,1-Trichloroethane	7	14.2	0.01[1]
1,1,2-Trichloroethane	0	NA	NA
Trichloroethylene	1	17.2	0.03[1]
Trichlorofluoromethane	**41**	**7.3**	**0.08**
Trichlorotrifluoroethane	**31**	**9.3**	**0.02[1]**

Table 12-5. (Continued)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
Vinyl Chloride	0	NA	NA
Polar Compounds			
Acetonitrile	**1**	**17.7**	**4.20**
Acrylonitrile	**3**	**5.9**	**0.04**
Ethyl Acrylate	0	NA	NA
Ethyl *tert*-Butyl Ether	0	NA	NA
Methyl Ethyl Ketone	**41**	**11.2**	**0.24**
Methyl Isobutyl Ketone	**3**	**3.9**	**0.13**
Methyl Methacrylate	0	NA	NA
Methyl *tert*-Butyl Ether	**10**	**4.7**	**0.16**
tert-Amyl Methyl Ether	1	4.5	0.17

[1]The average concentration for these compounds is less than 5 times the current Method Detection Limits.

Notes: NA = Not applicable. (Precision cannot be evaluated for compounds that were not detected in any of the duplicate samples.)
"Number of observations" equals the number of duplicate samples in which the compound was detected.
Program-wide prevalent compounds are shown in bold font. As discussed in Section 9.1.2, these compounds generally had better sampling and analytical precision than the compounds less program-wide prevalent in ambient air (i.e., the compounds in plain font).

Table 12-6. SNMOC Sampling and Analytical Precision (Based on 28 Valid Duplicate Samples)

Compound	Number of observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbC)
Acetylene	28.0	1.21	0.12
Benzene	28.0	2.66	0.25
1,3-Butadiene	19.0	2.38	0.03
n-Butane	28.0	2.22	0.48
cis-2-Butene	28.0	2.03	0.05
trans-2-Butene	25.0	3.68	0.06
Cyclohexane	28.0	8.64	2.73
Cyclopentane	28.0	1.99	0.05
Cyclopentene	26.0	5.86	0.11
m-Diethylbenzene	28.0	6.09	0.24
p-Diethylbenzene	28.0	4.34	0.15
2,2-Dimethylbutane	28.0	1.68	0.07
2,3-Dimethylbutane	28.0	1.14	0.07
2,3-Dimethylpentane	28.0	2.10	0.10
2,4-Dimethylpentane	28.0	1.30	0.05
n-Decane	28.0	3.41	0.15
1-Decene	0.0	NA	NA
n-Dodecane	28.0	8.74	0.98
1-Dodecene	15.0	7.78	0.33
Ethane	28.0	0.96	0.20
Ethylbenzene	28.0	3.04	0.16
2-Ethyl-1-butene	0.0	NA	NA
Ethylene	28.0	2.23	0.23
m-Ethyltoluene	28.0	3.71	0.25
o-Ethyltoluene	28.0	2.05	0.05
p-Ethyltoluene	28.0	2.85	0.09
n-Heptane	28.0	2.01	0.10
1-Heptene	18.0	4.50	0.05
n-Hexane	26.0	3.02	0.30

Table 12-6. (Continued)

Compound	Number of observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbC)
1-Hexene	22.0	3.88	0.05
cis-2-Hexene	9.0	2.20	0.03
trans-2-Hexene	8.0	2.09	0.05
Isobutane	28.0	3.54	0.40
Isobutene/1-Butene	28.0	2.73	0.14
Isopentane	28.0	3.51	1.39
Isoprene	28.0	2.89	0.09
Isopropylbenzene	28.0	3.29	0.06
2-Methyl-1-butene	23.0	2.55	0.06
2-Methyl-2-butene	24.0	2.44	0.08
3-Methyl-1-butene	8.0	4.29	0.05
Methylcyclohexane	28.0	3.01	0.20
Methylcyclopentane	28.0	1.95	0.11
2-Methylheptane	28.0	2.65	0.06
3-Methylheptane	28.0	2.42	0.05
2-Methylhexane	28.0	3.96	0.11
3-Methylhexane	28.0	3.83	0.36
2-Methylpentane	28.0	4.10	0.38
3-Methylpentane	28.0	1.69	0.15
2-Methyl-1-pentene	8.0	4.59	0.08
4-Methyl-1-pentene	11.0	7.11	0.06
n-Nonane	28.0	1.45	0.05
1-Nonene	18.0	6.20	0.08
n-Octane	28.0	2.05	0.07
1-Octene	16.0	6.24	0.05
n-Pentane	28.0	2.98	0.46
1-Pentene	28.0	2.89	0.08
cis-2-Pentene	28.0	1.58	0.04
trans-2-Pentene	28.0	1.76	0.07
α-Pinene	26.0	7.58	2.01

Table 12-6. (Continued)

Compound	Number of observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbC)
β-Pinene	20.0	11.23	0.84
n-Propylbenzene	28.0	2.76	0.07
Propane	28.0	4.70	0.94
Propylene	28.0	3.39	0.17
Propyne	0.0	NA	NA
Styrene	28.0	4.37	0.19
Toluene	28.0	3.42	0.95
n-Tridecane	18.0	7.51	2.24
1-Tridecene	0.0	NA	NA
1,2,3-Trimethylbenzene	28.0	5.20	0.25
1,2,4-Trimethylbenzene	28.0	2.24	0.16
1,3,5-Trimethylbenzene	28.0	2.30	0.07
2,2,3-Trimethylpentane	15.0	4.90	0.12
2,2,4-Trimethylpentane	28.0	2.77	0.23
2,3,4-Trimethylpentane	28.0	2.28	0.07
n-Undecane	28.0	5.39	0.59
1-Undecene	21.0	8.77	0.28
m-Xylene/*p*-Xylene	28.0	2.42	0.32
o-Xylene	28.0	2.06	0.11
TNMOC (speciated)	**28.0**	**2.27**	**10.81**
TNMOC (w/ unknowns)	**28.0**	**2.32**	**15.14**

Table 12-7. Carbonyl Compound Sampling and Analytical Precision (Based on 32 Valid Duplicate Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
Acetaldehyde	**32**	**1.6**	**0.08**
Acetone	**32**	**3.4**	**0.25**
Benzaldehyde	32	3.3	0.01
Butyr/Isobutyraldehyde	**32**	**2.6**	**0.02**
Crotonaldehyde	2	3.0	0.01
2,5-Dimethylbenzaldehyde	5	11.3	0.01
Formaldehyde	**32**	**2.2**	**0.29**
Hexaldehyde	32	4.5	0.01
Isovaleraldehyde	21	7.7	0.02
Propionaldehyde	32	2.3	0.01
Tolualdehydes	21	10.3	0.01
Valeraldehyde	32	6.5	0.01

[1]The average concentration for these compounds is less than 5 times the current Method Detection Limits.

Notes: "Number of observations" equals the number of replicate analyses in which the compound was detected.
Compounds with program-wide prevalence greater than 75 percent are shown in bold font. As discussed in Section 9.1.2, the analytical precision for these compounds was similar to the analytical precision for compounds less program-wide prevalent in ambient air (i.e., the compounds in plain font).

Table 12-8. 2000 Carbonyl Compound Audit Results

Audit Date	Compound	Sample ID	Concentration (?g/cartridge)		% Difference
			Reported	Actual	
08/06/00	Formaldehyde	1200	4.32	3.50	22.0
		2200	1.03	0.75	30.7
		3200	0.05	0.00	Blank
	Acetaldehyde	1200	3.00	2.50	18.4
		2200	0.71	0.60	11.7
		3200	0.04	0.00	Blank
	Acetone	1200	5.37	4.50	16.7
		2200	1.02	0.80	12.5
		3200	0.12	0.00	Blank
10/27/00	Formaldehyde	1300	1.31	1.00	26.0
		2300	0.05	0.00	Blank
		3300	3.91	2.97	30.0
	Acetaldehyde	1300	1.51	1.20	24.2
		2300	0.02	0.00	Blank
		3300	3.95	3.09	27.2
	Acetone	1300	0.88	0.60	28.3
		2300	0.11	0.00	Blank
		3300	3.33	2.46	29.8

13.0 Conclusions and Recommendations

As indicated throughout this report, UATMP monitoring data offer a wealth of information for evaluating trends and patterns in air quality and should ultimately help a wide range of audiences understand the complex nature of urban air pollution. The following discussion summarizes the main conclusions of this report and presents recommendations for ongoing urban air monitoring efforts.

13.1 Conclusions

Analyses of the 1999-2000 UATMP monitoring data identified the following notable trends and patterns in urban air pollution:

- *Stationary emission sources of toxics*. The Elizabeth, NJ site had the greatest number of stationary sources within a 10-mile radius reporting to the Toxic Release Inventory (143 facilities). However, this site ranked fourth in average hydrocarbon concentration, third in polar compound concentration, ninth in halogenated hydrocarbon concentration, and seventh in carbonyl compound concentration. The Beulah, ND site had the fewest number of stationary sources (3 facilities).

- *Mobile emission sources of toxics*. It was estimated that the Elizabeth, NJ site had the highest number of cars within a 10-mile radius (1,479,049 cars), while the Beulah, ND site had the fewest (5,118 cars). A comparison of the BTEX compounds (Benzene, Toluene, Ethylbenzene, and Xylenes) with a Roadside speciation profile suggests the high influence of motor vehicles as an emission source. The Denver, CO BTEX profile bor the closest resemblance to the Roadside speciation profile.

- *Ambient air concentrations of hydrocarbons*. Levels of airborne hydrocarbons were highest at the Denver, CO monitoring location and were lowest at the Beulah, ND monitoring location. Only the average minimum temperature and the average wind speed had significant Pearson correlations with the average hydrocarbon concentrations across all participating sites. Acetylene consistently had the highest concentration among 10 of the fifteen sites. Although this compound is not a hazardous air pollutant, it is an important tracer compound for vehicle exhaust.

- *Ambient air concentrations of halogenated hydrocarbons*. Unlike the concentration range seen for the hydrocarbons, little variation was demonstrated for concentrations and no strong trends were exhibited in the 1999-2000 UATMP halogenated hydrocarbons data. Levels of airborne halogenated hydrocarbons were highest at the Portland, OR monitoring site. Only average wind speed had a significant Pearson correlation with the average halogenated hydrocarbon concentration across all participating sites. Chloromethane had the highest

concentration among 7 of the fifteen sites, while dichlorodifluoromethane was the highest among five sites.

- *Ambient air concentrations of polar compounds*. Although the Beulah, ND had the fewest stationary sources, population, and estimated cars, this monitoring site measured the highest average polar compound concentration in the 1999-2000 UATMP season. Polar compounds did not correlate well with the selected meteorological parameters, as none of those had a significant correlation across all participating sites. The polar compound concentrations correlated well with the hydrocarbon concentrations. Methyl ethyl ketone had the highest concentrations among 12 of the fifteen sites.

- *Ambient air concentrations of carbonyl compounds*. Levels of airborne carbonyl compound concentrations were highest at the Denver, CO monitoring location. The selected meteorological parameters correlated well with the carbonyl compound concentrations, as all the temperature and wind speed parameters had significant Pearson correlations with the average carbonyl compound concentrations across all participating sites. Formaldehyde had the highest concentrations among 12 of the thirteen sites.

- *Specific meteorological trends for participating states*. Compound group concentrations were correlated with the selected meteorological parameters. On days in which the average concentrations were considered High (a day in which the concentration was higher than the average concentration), a weather map analysis was performed. The following specific meteorological trends resulted from analysis of the 1999-2000 UATMP monitoring data:

  ? Colorado and Utah: High concentrations days for air toxics were strongly related to the presence of High Pressure weather systems.

  ? Iowa and New Jersey: Toxic concentrations correlated well with wind speed. High concentration days were related to the presence of fronts, Trofs, or Low Pressures.

  ? North Dakota, South Dakota, and Texas: High concentration days for air toxics were strongly related to the presence of fronts, Trofs, or Low Pressures.

  ? Oregon: High concentration days for air toxics occurred on days when there was precipitation.

13.2 Recommendations

In light of the lessons learned from the 1999-2000 UATMP, a number of recommendations for future ambient air monitoring are warranted:

- *Continue to identify and implement improvements to the sampling and analytical methods.* The improvements made to the analytical methods prior to the 1999-2000 UATMP allowed for measurement of ambient air concentrations of 11 compounds that were not measured during previous programs. This improvement provides sponsoring agencies and a variety of interested parties with important information about air quality within their urban areas. Further research is encouraged to identify other method improvements that would allow the UATMP to characterize an even wider range of components in urban air pollution.

? *Continue to strive to develop standard conventions for interpreting air monitoring data.* The lack of consistent approaches to present and summarize ambient air monitoring data complicates or invalidates comparisons between different studies. Additional research should be conducted on the feasibility of establishing standard approaches for analyzing and reporting air monitoring data.

? *Prepare a report* characterizing all years of the UATMP and then update it yearly to better assess Trends and better understand the nature of U.S. urban air pollution.

? *Consider more rigorous study of the impact of automobile emissions on ambient air quality using the complete UATMP data set.* Because the UATMP has monitoring sites where years of continuous data are collected, a real opportunity exists to evaluate the importance and impact of automobile emissions on ambient air quality. Suggested areas of study include:

1. *Signature Compound Assessment.* Sample data from each site should be evaluated to look for signature compounds from mobile sources—that is, species typically associated with <u>only</u> diesel and/or gasoline combustion. If the appropriate compounds are included in the UATMP speciation, sites lacking these compounds can be excluded from subsequent analyses. Desert Research Institute can provide a listing of potential signature compounds for mobile sources.

2. *Micro-Climate Assessment.* An assessment is needed of the immediate micro-climate for a representative "urban" and "rural" site, to determine a reasonable geographic radius of influence. It is absolutely critical to determine a rough estimate of the maximum radius of concern (R_{max}) in order to know what sources need to be included in the characterization. A value for R_{max} may be determined with relatively little effort using simple dispersion models, such as CALINZ4 for urban settings. In these models R_{max} would be defined for non-reactive species such as CO or PM. Since most/all of the toxic compounds of concern have some level of reactivity, R_{max} would actually be somewhat less. Therefore this method would provide a conservative estimate for R_{max}.

3. *Identify Roadways of Concern.* All roadways within a distance of R_{max} should be identified for each site. Local area maps are best suited for this purpose.

4. *Estimate Traffic Volumes*. Data from the Highway Performance Monitoring System (HPMS) or the Bureau of Transportation Statistics could be used to estimate annual average traffic counts, as well as the split between gasoline and diesel vehicles, for interstate and other major highways. Local transportation planning organizations should be able to provide counts for other urban roads. Rural non-interstate roads will probably require qualitative assessment, based on local resident estimates or short-duration observation. Note that obtaining the precise split between gasoline and diesel vehicles for any given roadway is a lower priority – national default values could be used instead.

5. *Parking Lot Characterizations*. Several monitoring locations are situated in or near parking lots. Evaporative emissions from parked gasoline vehicles could have a very significant impact on the monitors for these sites (depending upon the species of concern). Therefore we recommend determining the size of the lots in question in terms of number of spaces, as well as an average occupancy rate with total vehicles per day (to determine the number of start episodes). The occupancy rate should be a 24 hour annual average, and can be established either through observation or local "experts" (e.g., the lot operator). Also, it should be determined if the parking is covered or open—covered lots can significantly decrease crankcase temperatures and therefore lower evaporative emissions rates.

6. *Site-Specific Information*. Additional information could be collected as needed to improve the quality of discussions of air quality at specific sites. For example, for the El Paso site the UATMP could obtain a vehicle count split for US versus Mexican vehicles. Mexican vehicles have dramatically higher pollution rates and should be considered separately. This estimate could be obtained from the EPA or Texas Natural Resource Conservation Commission Border Liaisons.

? *Encourage continued participation in the UATMP*. Ongoing ambient air monitoring at fixed locations can provide insight into long-term trends in urban air quality and the potential for urban air pollution to cause adverse health effects among the general population. Therefore, state and local agencies should be strongly encouraged either to develop and implement their own ambient air monitoring programs or to participate in future UATMP monitoring efforts.

14.0 References

ATSDR, 1993. "Toxicological Profile for Methylene Chloride." U.S. Department of Health & Human Services, Agency for Toxic Substances and Disease Registry. April, 1993.

ATSDR, 1994. "Toxicological Profile for Carbon Tetrachloride." U.S. Department of Health & Human Services, Agency for Toxic Substances and Disease Registry. September, 1997.

ATSDR, 1995. "Toxicological Profile for 1,1,1-Trichloroethane." U.S. Department of Health & Human Services, Agency for Toxic Substances and Disease Registry. August, 1995.

ATSDR, 1997a. "Toxicological Profile for Chloromethane." U.S. Department of Health & Human Services, Agency for Toxic Substances and Disease Registry. September, 1997.

ATSDR, 1997b. "Toxicological Profile for Tetrachloroethylene." U.S. Department of Health & Human Services, Agency for Toxic Substances and Disease Registry. September, 1997.

Conner, et al., 1995. "Transportation-Related Volatile Hydrocarbon Source Profiles Measured in Atlanta." Teri L. Conner, William A. Lonneman, Robert L. Seila. Journal of the Air and Waste Management Association, 45: 383-394. 1995.

ERG, 1997. "1995 Urban Air Toxics Monitoring Program - Final Report." Eastern Research Group. Prepared for U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. January, 1997.

Fujita, et al., 1994. "Validation of the Chemical Mass Balance Receptor Model Applied to Hydrocarbon Source Apportionment in the Southern California Air Quality Study." Eric M. Fujita, John G. Watson, Judith C. Chow, and Zhiqiang Lu. Environmental Science and Technology, 28:1633-1649. 1994.

Gilbert, 1987. "Statistical Methods for Environmental Pollution Monitoring." Richard O. Gilbert. Van Nostrand Reinhold Publishers. 1987.

Godish, 1997. "Air Quality." Thad Godish. Lewis Publishers. 1997.

Graedel, 1978. "Chemical Compounds in the Atmosphere." T.E. Graedel. Academic Press. 1978.

Harnett, 1982. "Statistical Methods." Donald L. Harnett, Addison-Wesley Publishing Company, Third Edition. 1982.

Radian, 1990. "1989 Urban Air Toxics Monitoring Program - Final Report." Radian Corporation. Prepared for U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. September, 1990.

Radian, 1991. "1990 Urban Air Toxics Monitoring Program - Final Report." Radian Corporation. Prepared for U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. June, 1991.

Radian, 1996. "1994 Urban Air Toxics Monitoring Program - Final Report." Radian Corporation. Prepared for U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. June, 1996.

Ramamoorthy and Ramamoorthy, 1997. "Chlorinated Organic Compounds in the Environment: Regulatory and Monitoring Assessment." Sub Ramamoorthy and Sita Ramamoorthy. Lewis Publishers. 1997.

Scheff, 1993. "Receptor Modelling of Volatile Organic Compounds. 1. Emission Inventory and Validation." Peter A. Scheff and Richard A. Wadden. Environmental Science and Technology, 27: 617-625. 1993.

Seinfeld, 1986. "Atmospheric Chemistry and Physics of Air Pollution." John H. Seinfeld. John Wiley & Sons, Inc. 1986.

USDOC, 1993. "1990 Census of Population and Housing." U.S. Department of Commerce, Bureau of the Census. July, 1993.

USEPA, 1986. "Guideline on Air Quality Models." U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards. July, 1986.

USEPA, 1988. "Data Quality Objectives for the Urban Air Toxics Monitoring Program (Stages I and II)." U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards. June, 1988.

USEPA, 1995. "Toxic Chemical Release Inventory Reporting Form R and Instructions." Revised 1994 Version. U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. March, 1995.

USEPA, 1997. "National Air Pollutant Emission Trends, 1900 - 1996." U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards. December, 1997.

USEPA, 1999. "Compendium Method TO-11A: Determination of Formaldehyde in Ambient Air Using Adsorbent Cartridge Followed by High Performance Liquid Chromatography (HPLC)." U.S. Environmental Protection Agency, Center for Environmental Research and Information. EPA/625/R-96/010b. January, 1999.

USEPA, 1999. "Compendium Method TO-15: Determination of Volatile Organic Compounds (VOC) in Ambient Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)." U.S. Environmental Protection Agency, Center for Environmental Research and Information. EPA/625/R-96/010b. January, 1999.

USEPA, 2000. "Toxics Release Inventory." United States Environmental Protection Agency, Office of Pollution Prevention and Toxics. Downloaded from the internet at: www.epa.gov/tri/tri98/data.

USEPA, 2000. "1999 Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program." July 2000.

AIRS Site Descriptions for the 1999/2000 UATMP Monitoring Stations
Appendix A

A2TX – Arlington, TX

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 48 TEXAS AQCR: 215 METROPOLITAN DALLAS-FORT
County: 439 TARRANT MSA : 2800 FORT WORTH-ARLINGTON, TX
Site : 0057 CMSA: 0031 DALLAS-FORT WORTH, TX

Elevation (MSL) : METERS Date Established : 98/02/19
Land Use : 1 RESIDENTIAL Date Last Updated: 01/09/15
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 04000 ARLINGTON

Latitude : +32:42:25:0000 Longitude : - 97:05:37:0000
Method of Determ.: MAP Est. of Accuracy : 2.00000DEG
Datum : 83 NAD 83 Scale : 24000A

UTM = Zone : 14 Easting : 678691 Northing : 3620216

Address : 1101 E. ARKANSAS LANE
Support Agency : 001 TEXAS NATURAL RESOURCES CONSERVATION COMMISSION
Location Descrip.: NORTH OF LEXINGTON & EAST ARKANSAS INTERSECTION

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 48-439-0057 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Type	Direction	Traffic Flow	Street Name Year
1	6	N	17472	1998 EAST ARKANSAS

BUND - Beulah, ND

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 38 NORTH DAKOTA AQCR: 172 NORTH DAKOTA
County: 057 MERCER MSA : 0000 NOT IN AN MSA
Site : 0004 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 630 METERS Date Established : 98/12/13
Land Use : 4 AGRICULTURAL Date Last Updated: 01/09/15
Location Setting : 3 RURAL Date Terminated : / /
City : 00000 NOT IN A CITY

Latitude : +47:17:55:0000 Longitude : -101:46:01:0000
Method of Determ.: SUR-GPS Est. of Accuracy : 0.01000SEC
Datum : 00 DATUM UNKNOW Scale : NA

UTM = Zone : 14 Easting : 290816 Northing : 5241843

Address : BEULAH NORTH
Support Agency : 001 NORTH DAKOTA STATE DEPARTMENT OF HEALTH
Location Descrip.: LICATED IN A WILDLIFE MANAGEMENT AREA

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 38-057-0004 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Road	Type	Direction To Street	Traffic Flow	Flow Year	Street Name
1	5	N	1000	1998		HIGHWAY 200
2	6	W	100	1998		COUNTY ROAD
3	5	S	250	1998		CITY STREET

CANJ – Camden, NJ

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 34 NEW JERSEY AQCR: 045 METROPOLITAN PHILADELPHIA
County: 007 CAMDEN MSA : 6160 PHILADELPHIA, PA-NJ
Site : 0003 CMSA: 0077 PHIL-WIL-AT.C,PA-NJ-DE-MD

Elevation (MSL) : 6 METERS Date Established : 68/01/01
Land Use : 1 RESIDENTIAL Date Last Updated: 01/10/11
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 10000 CAMDEN

Latitude : +39:55:22:0000 Longitude : - 75:05:50:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 18 Easting : 491692 Northing : 4419012

Address : COPEWOOD E. DAVIS STS; TRAILER
Support Agency : 001 NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTIO
Location Descrip.:

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 34-007-0003 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Road	Type	Direction To Street	Traffic Flow	Flow Year	Street Name
1	4	E	45000	1986		ROUTE 130
2	5	NE	14000	1986		HADDON AVENUE
3	6		3000			

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 34-007-0003
Met-Site-Id.: - - Direction: Type: 1 Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
			(---------- METERS ----------)				

CLIA – Clinton, IA

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 19 IOWA AQCR: 069 METROPOLITAN QUAD CITIES
County: 045 CLINTON MSA : 0000 NOT IN AN MSA
Site : 0021 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : METERS Date Established : 98/12/10
Land Use : 1 RESIDENTIAL Date Last Updated: 01/09/15
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 14430 CLINTON

Latitude : +41:52:29:9000 Longitude : - 90:10:38:8000
Method of Determ.: 24000C Est. of Accuracy : 1.00000DEG
Datum : 27 NAD 27 Scale : 24000A

UTM = Zone : 15 Easting : 734251 Northing : 4639507

Address : 50 FT WEST OF ROOSEVELT STREET
Support Agency : 003 UNIVERSITY HYGENIC LABORATORY
Location Descrip.: CLINTON RAINBOW PARK 50 FT. W. OF ROOSEVELT STR.

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 19-045-0021 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Type	Direction	Traffic Flow	Flow Year	Street Name
1	6	W	500	1997	ROOSEVELT STREET

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 19-045-0021
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
			(---------- METERS ----------				)

CRIA – Cedar Rapids, IA

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 19 IOWA AQCR: 088 NORTHEAST IOWA
County: 113 LINN MSA : 1360 CEDAR RAPIDS, IA
Site : 0039 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : METERS Date Established : 00/06/01
Land Use : 3 INDUSTRIAL Date Last Updated: 01/09/15
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 12000 CEDAR RAPIDS

Latitude : +41:56:03:0000 Longitude : - 91:40:57:0000
Method of Determ.: NAV-GPS Est. of Accuracy : 0.00001DEG
Datum : 00 DATUM UNKNOW Scale : UNKNWN

UTM = Zone : 15 Easting : 609222 Northing : 4643086

Address : 4400 6TH ST SW
Support Agency : 002 LINN COUNTY HEALTH DEPARTMENT
Location Descrip.: HAWKEYE DOWNS SOUTHWEST CORNER

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 19-113-0039 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Type	Direction	Traffic Flow	Street Name Year
1	4	E	15600	1999 6TH ST SW

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

DAIA – Davenport, IA

State : 19 IOWA AQCR: 069 METROPOLITAN QUAD CITIES
County: 163 SCOTT MSA : 1960 DAVENPORT-MOLINE-ROCK ISL
Site : 0015 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 213 METERS Date Established : 82/03/01
Land Use : 1 RESIDENTIAL Date Last Updated: 01/09/15
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 19000 DAVENPORT

Latitude : +41:31:48:0000 Longitude : - 90:35:15:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 15 Easting : 701274 Northing : 4600192

Address : 10TH ST. AND VINE
Support Agency : 003 UNIVERSITY HYGENIC LABORATORY
Location Descrip.:

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 19-163-0015 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	6		1000		

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 19-163-0015
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
		(---------- METERS ----------)					

DECO – Denver, CO

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 08 COLORADO AQCR: 036 METROPOLITAN DENVER
County: 031 DENVER MSA : 2080 DENVER, CO
Site : 0002 CMSA: 0034 DENVER-BOULDER-GREELEY,CO

Elevation (MSL) : 1591 METERS Date Established : 65/01/01
Land Use : 2 COMMERCIAL Date Last Updated: 01/10/01
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 20000 DENVER

Latitude : +39:45:04:0000 Longitude : -104:59:14:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 13 Easting : 501084 Northing : 4399952

Address : 2105 BROADWAY - CAMP
Support Agency : 001 COLORADO DEPARTMENT OF HEALTH
Location Descrip.:

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 08-031-0002 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Road	Type	Direction To Street	Traffic Flow	Flow Year	Street Name
1	4	E	17200	1995	BROADWAY	
2	6	SW	1000	1995	21 ST_STREET	
3	4	NW	10000	1995	CHAMPA	
4	4	SE	8000	1995	STOUT	
5	5	NW	8000	1995	CURTIS	

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 08-031-0002
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
		(---------- METERS ----------)					

DMIA – Des Moines, IA

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 19 IOWA AQCR: 092 SOUTH CENTRAL IOWA
County: 153 POLK MSA : 2120 DES MOINES, IA
Site : 0030 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : METERS Date Established : 00/10/01
Land Use : 2 COMMERCIAL Date Last Updated: 01/09/15
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 21000 DES MOINES

Latitude : +41:36:11:0000 Longitude : - 93:38:35:0000
Method of Determ.: MAP Est. of Accuracy : 1.00000DEG
Datum : 27 NAD 27 Scale : 24000C

UTM = Zone : 15 Easting : 446419 Northing : 4605700

Address : 1907 CARPENTER, DES MOINES IOWA
Support Agency : 001 POLK COUNTY PHYSICAL PLANNING
Location Descrip.: AIR TOXICS SAMPLER ERG LOCATED ON TOP OF BUILDING IN ENCLOSU

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 19-153-0030 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Type	Direction	Traffic Flow	Street Name Year
1	6	S	12400	1996 CARPENTER

ELNJ – Elizabeth, NJ

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 34 NEW JERSEY AQCR: 043 NEW JERSEY-NEW YORK-CONNE
County: 039 UNION MSA : 5640 NEWARK, NJ
Site : 0004 CMSA: 0070 NY-N.NJ-L.IS,NY-NJ-CT-PA

Elevation (MSL) : 15 METERS Date Established : 72/01/01
Land Use : 3 INDUSTRIAL Date Last Updated: 01/10/11
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 21000 ELIZABETH

Latitude : +40:38:28:0000 Longitude : - 74:12:28:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 18 Easting : 566989 Northing : 4499009

Address : NEW JERSEY TURNPIKE INTERCHANGE 13
Support Agency : 001 NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTIO
Location Descrip.:

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 34-039-0004 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Road	Type	Direction To Street	Traffic Flow	Flow Year	Street Name
1	2		44000			
2	2		126000			

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 34-039-0004
Met-Site-Id.: - - Direction: Type: 1 Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
			(---------- METERS ----------)				

EPTX – El Paso, TX

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 48 TEXAS AQCR: 153 EL PASO-LAS CRUCES-ALAMOG
County: 141 EL PASO MSA : 2320 EL PASO, TX
Site : 0027 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 1140 METERS Date Established : 73/01/01
Land Use : 2 COMMERCIAL Date Last Updated: 01/09/15
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 24000 EL PASO

Latitude : +31:45:46:0000 Longitude : -106:29:12:0000
Method of Determ.: SUR-GPS Est. of Accuracy : 2.00000MIN
Datum : 83 NAD 83 Scale : 24000A

UTM = Zone : 13 Easting : 359206 Northing : 3514917

Address : 500 NORTH CAMPBELL ST.
Support Agency : 001 TEXAS NATURAL RESOURCES CONSERVATION COMMISSION
Location Descrip.: NORTH OF CAMPBELL & FRANKLIN INTERSECTION

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 48-141-0027 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	4	W	14650	1992	CAMPBELL
2	4	S	5640	1992	FRANKLIN
3	4	NW	25000	1979	MISSOURI STREET
4	3	NE	160040	1992	IH-10

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 48-141-0027
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
		(---------- METERS ----------)					

FAND – Fargo, ND

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 38 NORTH DAKOTA AQCR: 130 METROPOLITAN FARGO-MOORHE
County: 017 CASS MSA : 2520 FARGO-MOORHEAD, ND-MN
Site : 1004 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 275 METERS Date Established : 98/05/13
Land Use : 4 AGRICULTURAL Date Last Updated: 01/09/15
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 25700 FARGO

Latitude : +46:56:01:0300 Longitude : - 96:51:16:5600
Method of Determ.: SUR-GPS Est. of Accuracy : 0.00100SEC
Datum : 00 DATUM UNKNOW Scale : NA

UTM = Zone : 14 Easting : 663322 Northing : 5199803

Address : FARGO NW
Support Agency : 001 NORTH DAKOTA STATE DEPARTMENT OF HEALTH
Location Descrip.: NDSU WEED RESEARCH FACILITY

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 38-017-1004 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Road	Type	Direction To Street	Traffic Flow	Flow Year	Street Name
1	5	S	550	1989		19TH AVE N.
2	1	E	8790	1989		INTERSTATE 94
3	5	N	975	1989		COUNTY 20

MUIA – Muscatine, IA

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 19 IOWA AQCR: 069 METROPOLITAN QUAD CITIES
County: 139 MUSCATINE MSA : 0000 NOT IN AN MSA
Site : 0020 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 544 METERS Date Established : 89/12/11
Land Use : 3 INDUSTRIAL Date Last Updated: 01/09/15
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 55110 MUSCATINE

Latitude : +41:24:28:0000 Longitude : - 91:03:45:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 15 Easting : 661947 Northing : 4585625

Address : OREGON ST. AND EARL AVENUE
Support Agency : 003 UNIVERSITY HYGENIC LABORATORY
Location Descrip.:

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 19-139-0020 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Road	Type	Direction To Street	Traffic Flow	Flow Year	Street Name
1	4		800			
2	1		2000			

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 19-139-0020
Met-Site-Id.: - - Direction: Type: 1 Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
		(---------- METERS ----------)					

PLOR – Portland, OR

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 41 OREGON AQCR: 193 PORTLAND
County: 051 MULTNOMAH MSA : 6440 PORTLAND-VANCOUVER, OR-WA
Site : 0244 CMSA: 0079 PORTLAND-SALEM, OR-WA

Elevation (MSL) : 25 METERS Date Established : 98/12/17
Land Use : 2 COMMERCIAL Date Last Updated: 01/09/15
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 59000 PORTLAND

Latitude : +45:32:06:0000 Longitude : -122:41:56:0000
Method of Determ.: 24000B Est. of Accuracy : 0.01316MIN
Datum : 83 NAD 83 Scale : 24000B

UTM = Zone : 10 Easting : 523511 Northing : 5042211

Address : 1706 NW 24TH AVENUE
Support Agency : 001 OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Location Descrip.: SE CORNER OF P.O. PARKING LOT AND SW CORNER OF NEIGHBORING
B

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 41-051-0244 State or Local Site Id: 2614244

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	6	S	500	1989	SAVIER STREET

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 41-051-0244
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
		(---------- METERS ----------)					

SFSD – Sioux Falls, SD

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 46 SOUTH DAKOTA AQCR: 087 METROPOLITAN SIOUX FALLS
County: 099 MINNEHAHA MSA : 7760 SIOUX FALLS, SD
Site : 0007 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : METERS Date Established : 99/01/01
Land Use : 1 RESIDENTIAL Date Last Updated: 01/09/15
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 59020 SIOUX FALLS

Latitude : +43:32:12:0000 Longitude : - 96:40:50:0000
Method of Determ.: 25000A Est. of Accuracy : 0.00100MIN
Datum : 27 NAD 27 Scale : 24000A

UTM = Zone : 14 Easting : 687408 Northing : 4822812

Address : BAHNSON AVE
Support Agency : 001 SOUTH DAKOTA DEPT ENVIRONMENTAL PROTECTION AIR QUALITY
Location Descrip.: NEAR HILLTOP WATERTOWER

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 46-099-0007 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Type	Direction	Traffic Flow	Flow Year	Street Name
1	5	E	4320	1999	BAHNSON AVE

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 3/3

Site-Id : 46-099-0007
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

Open Path #	Land Use	Direction To Trans.	Max.Beam Height	Min.Beam Height	Receiver Height	Transmitter Height	Beam Length
		(---------- METERS ----------)					

SLCU – Salt Lake City, UT

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

State : 49 UTAH AQCR: 220 WASATCH FRONT
County: 035 SALT LAKE MSA : 7160 SALT LAKE CITY-OGDEN, UT
Site : 3007 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 1295 METERS Date Established : 99/01/21
Land Use : 1 RESIDENTIAL Date Last Updated: 01/09/15
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 83445 WEST VALLEY

Latitude : +40:42:11:0000 Longitude : -111:58:04:0000
Method of Determ.: MAP Est. of Accuracy : 2.00000SEC
Datum : 27 NAD 27 Scale : 24000C

UTM = Zone : 12 Easting : 418241 Northing : 4506036

Address : 3275 W 3100 S, WEST VALLEY CITY, UTAH
Support Agency : 001 UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
Location Descrip.: UTM COORDINATES = PROBE LOCATION

10/12/01 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 2/3

Site-Id : 49-035-3007 State or Local Site Id: WV

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Street Road	Type	Direction To Street	Traffic Flow	Flow Year	Street Name
1	5	N	10160	1995		3100 SOUTH
2	5	E	10385	1995		3200 WEST

1999/2000 Summary of Invalidated VOC Samples
Appendix B

ERG ID	Comments	Date Sampled	Invalid Reason
		Arlington, TX	
17243		2/6/2000	Zero pressure
17578		5/12/2000	Zero pressure
NA		8/4/2000	Not sampled
18381		9/9/2000	Zero pressure
NA		10/27/2000	Not sampled
		Beulah, ND	
17933	Duplicate 1	7/23/2000	Void by laboratory
17934	Duplicate 2	7/23/2000	Void by laboratory
18629		10/21/2000	Canister leaked
		Camden, NJ	
17380		3/13/2000	Zero pressure
17571	Duplicate 1	6/5/2000	Zero pressure
17573	Duplicate 2	6/5/2000	Zero pressure
NA		9/211/00	Not sampled
NA		11/8/2000	Not sampled
18953	Duplicate 1	12/26/2000	Vacuum too high
18955	Duplicate 2	12/26/2000	Vacuum too high
		Cedar Rapids, IA	
18234		8/10/2000	Zero pressure
18198		8/22/2000	Zero pressure
19320		8/28/2000	Zero pressure
		Clinton, IA	
NA		11/26/2000	Not Sampled
		Davenport, IA	
18593		10/11/2000	Sampler error
NA		11/26/2000	Not Sampled
		Denver, CO	
14208		1/14/2000	Zero pressure
17233		1/25/2000	Zero pressure
17245		1/31/2000	Zero pressure
18558		10/3/2000	Sampling error
18827		12/2/2000	Sampling error
		Des Moines, IA	
18809		11/30/2000	Zero pressure
		Elizabeth, NJ	
17337		2/22/2000	No carbonyl sample taken
17595	Duplicate 1	6/5/2000	Zero pressure
17597	Duplicate 2	6/5/2000	Zero pressure
NA		8/4/2000	Not sampled
NA		10/27/2000	Not sampled

1999/2000 Summary of Invalidated VOC Samples
Appendix B

ERG ID	Comments	Date Sampled	Invalid Reason
		Arlington, TX	
NA		4/6/2000	Not sampled
18084	Duplicate 1	7/29/2000	Zero pressure
18086	Duplicate 2	7/29/2000	Zero pressure
18145		8/4/2000	Zero pressure
NA		10/15/2000	Not sampled
NA		10/27/2000	Not sampled
		Fargo, ND	
17851	Duplicate 1	6/29/2000	Zero pressure
17853	Duplicate 2	6/29/2000	Zero pressure
18076	Duplicate 1	8/4/2000	Zero pressure
18077	Duplicate 2	8/4/2000	Zero pressure
18103		8/10/2000	Sample lost by laboratory
NA		9/9/2000	Not sampled
		Muscatine, IA	
NA		11/26/2000	Not Sampled
NA		12/20/2000	Not Sampled
		Portland, OR	
16481		8/22/2000	Zero pressure
16880		10/3/2000	Zero pressure
17299		2/24/2000	Sampling error
		Salt Lake City, UT	
17134		12/9/1999	Void by laboratory
17599	Duplicate 1	5/24/2000	Sample lost by laboratory
17560	Duplicate 2	5/24/2000	Sample lost by laboratory
17557		6/5/2000	Sample lost by laboratory
17693	Duplicate 2	6/23/2000	Void by laboratory
17698		6/29/2000	Zero pressure
17974	Duplicate 2	7/23/2000	Void by laboratory
18338		9/3/2000	Canister leaks
18394		9/12/2000	Canister leaks
18460	Duplicate 2	9/27/2000	Zero pressure
		Sioux Falls, SD	
17568		5/24/2000	Zero pressure
17541	Duplicate 1	5/30/2000	Vacuum too High
17542	Duplicate 2	5/30/2000	Vacuum too High
17682		6/17/2000	Zero pressure
17988	Duplicate 1	7/29/2000	Vacuum too High
17989	Duplicate 2	7/29/2000	Vacuum too High
NA		10/15/2000	Not sampled

1999/2000 Summary of Invalidated Carbonyl Samples
Appendix C

ERG ID	Comments	Date Sampled	Invalid Reason
		Arlington, TX	
17244		2/6/2000	Canister was void
17579		5/12/2001	Canister was void
18382		9/9/2000	Canister was void
		Beulah, ND	
18247		8/28/2000	Sampling error
18630		10/21/2000	Canister was void
		Camden, NJ	
17381		3/18/2000	Canister was void
18819		12/2/2000	Canister was void
18954	Duplicate 1	12/26/2000	Canister was void
18956	Duplicate 2	12/26/2000	Canister was void
		Cedar Rapids, IA	
18235		8/10/2000	Canister was void
18199	Duplicate 1	8/22/2000	Canister was void
18200	Duplicate 2	8/22/2000	Canister was void
18321		8/28/2001	Canister was void
		Clinton, IA	
NA		11/26/2000	Not Sampled
		Davenport, IA	
NA		11/26/2000	Not Sampled
		Denver, CO	
18559		10/3/2000	Sampling error
18681		11/2/2000	Void by laboratory
18828		12/2/2000	Sampling error
		Des Moines, IA	
18810		11/30/2000	Canister was void
18906		12/8/2000	Void by laboratory
18945		12/14/2000	Canister was void
		Elizabeth, NJ	
17338		2/22/2000	No carbonyl sample taken
		El Paso, TX	
18085	Duplicate 1	7/29/2000	Canister was void
18087	Duplicate 2	7/29/2000	Canister was void
18146		8/4/2000	Canister was void
18736		11/8/2000	Carbonyl was not shipped to laboratory
18751		11/14/2000	Carbonyl was not shipped to laboratory

1999/2000 Summary of Invalidated Carbonyl Samples
Appendix C

ERG ID	Comments	Date Sampled	Invalid Reason
		Arlington, TX	
NA		11/26/2000	Not Sampled
NA		12/20/2000	Not Sampled
		Portland, OR	
16482		8/22/2000	Canister was void
		Salt Lake City, UT	
17561		5/24/2000	Void by laboratory
17699		6/29/2000	Canister void
18395		9/12/2000	Canister void
18461	Duplicate 1	9/27/2000	Canister void

1999/2000 Summary of Invalidated SNMOC Samples
Appendix D

ERG ID	Comments	Date Sampled	Invalid Reason
		Beulah, ND	
17933		7/23/2000	Void by laboratory
17934		7/23/2000	Void by laboratory
18629		10/21/2000	Canister leaked
		Cedar Rapids, IA	
18234		8/10/2000	Zero pressure
18198		8/22/2000	Zero pressure
19320		8/28/2000	Zero pressure
		Clinton, IA	
NA		11/26/2000	Not Sampled
		Davenport, IA	
18593		10/11/2000	Sampler error
NA		11/26/2000	Not Sampled
		Denver, CO	
14208		1/14/2000	Zero pressure
17233		1/25/2000	Zero pressure
17245		1/31/2000	Zero pressure
18558		10/3/2000	Sampling error
18827		12/2/2000	Sampling error
		Des Moines, IA	
18809		11/30/2000	Zero pressure
18944		12/14/2000	Zero pressure
		Fargo, ND	
17851	Duplicate 1	6/29/2000	Zero pressure
17853	Duplicate 2	6/29/2000	Zero pressure
18076	Duplicate 1	8/4/2000	Zero pressure
18077	Duplicate 2	8/4/2000	Zero pressure
		Muscatine, IA	
NA		11/26/2000	Not Sampled
NA		12/20/2000	Not Sampled
		Salt Lake City, UT	
17134		12/9/1999	Void by laboratory
17599	Duplicate 1	5/24/2000	Sample lost by laboratory
17560	Duplicate 2	5/24/2000	Sample lost by laboratory
17557		6/5/2000	Sample lost by laboratory
17693		6/23/2000	Void by laboratory
17698		6/29/2000	Zero pressure
17974	Duplicate 2	7/23/2000	Void by laboratory
18338		9/3/2000	Canister leaks
18394		9/12/2000	Canister leaks
18460	Duplicate 2	9/27/2000	Zero pressure

1999/2000 Summary of Invalidated SNMOC Samples
Appendix D

ERG ID	Comments	Date Sampled	Invalid Reason
		Sioux Falls, SD	
17317		3/1/2000	Void by laboratory
17568		5/24/2000	Zero pressure
17541	Duplicate 1	5/30/2000	Vacuum too High
17542	Duplicate 2	5/30/2000	Vacuum too High
17682		6/17/2000	Zero pressure
17988	Duplicate 1	7/29/2000	Vacuum too High
17989	Duplicate 2	7/29/2000	Vacuum too High
NA		10/15/2000	Not sampled

1999/2000 Summary of Invalidated SVOC Samples
Appendix E

ERG ID	Comments	Date Sampled	Invalid Reason
		Portland, OR	
16480		8/22/2000	Canister was void
16725		9/15/2000	Sampling error
16726	Field Blank	9/15/2000	Sampling error

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
A2TX	29	1,1 - Dichloroethane	29	0%	0.02	0.04	0.02	0.03	0.02	0.01	0.44
A2TX	29	1,1 - Dichloroethene	29	0%	0.02	0.05	0.02	0.03	0.03	0.02	0.53
A2TX	29	1,1,1 - Trichloroethane	9	69%	0.02	0.12	0.03	0.04	0.04	0.02	0.48
A2TX	29	1,1,2 - Trichloroethane	10	66%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
A2TX	29	1,1,2,2 - Tetrachloroethane	29	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
A2TX	29	1,2 - Dibromoethane	29	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
A2TX	29	1,2 - Dichloroethane	29	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
A2TX	29	1,2 - Dichloropropane	29	0%	0.03	0.04	0.03	0.03	0.03	0.00	0.08
A2TX	29	1,2,4 - Trichlorobenzene	29	0%	0.02	0.03	0.02	0.03	0.03	0.00	0.11
A2TX	29	1,2,4 - Trimethylbenzene	0	100%	0.07	0.46	0.13	0.18	0.15	0.10	0.58
A2TX	29	1,3,5 - Trimethylbenzene	10	66%	0.02	0.19	0.05	0.07	0.06	0.04	0.62
A2TX	29	1,3-Butadiene	21	28%	0.02	0.35	0.03	0.06	0.04	0.07	1.19
A2TX	29	**Acetonitrile**	8	72%	0.13	23.83	0.17	1.44	0.27	4.44	3.08
A2TX	29	**Acetylene**	0	100%	0.45	7.69	1.21	1.77	1.32	1.74	0.98
A2TX	29	**Acrylonitrile**	6	79%	0.10	1.42	0.11	0.34	0.23	0.32	0.93
A2TX	29	**Benzene**	0	100%	0.22	1.12	0.44	0.49	0.45	0.22	0.45
A2TX	29	Bromochloromethane	29	0%	0.04	0.06	0.04	0.04	0.04	0.01	0.27
A2TX	29	Bromodichloromethane	10	66%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
A2TX	29	Bromoform	10	66%	0.04	0.04	0.04	0.04	0.04	0.00	0.04
A2TX	29	Bromomethane	29	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.43
A2TX	29	**Carbon tetrachloride**	11	62%	0.03	0.11	0.05	0.06	0.05	0.02	0.43
A2TX	29	Chlorobenzene	29	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.13
A2TX	29	Chloroethane	28	3%	0.02	0.08	0.02	0.03	0.03	0.01	0.39
A2TX	29	Chloroform	29	0%	0.01	0.03	0.01	0.02	0.02	0.01	0.31
A2TX	29	**Chloromethane**	0	100%	0.43	1.33	0.74	0.75	0.73	0.17	0.23
A2TX	29	Chloromethylbenzene	10	66%	0.04	0.05	0.05	0.05	0.04	0.01	0.16
A2TX	29	Chloroprene	29	0%	0.04	0.05	0.04	0.04	0.04	0.01	0.13
A2TX	29	*cis* - 1,2 - Dichloroethylene	29	0%	0.02	0.05	0.02	0.03	0.02	0.01	0.52
A2TX	29	*cis* - 1,3 - Dichloropropene	29	0%	0.03	0.05	0.03	0.04	0.04	0.01	0.20
A2TX	29	Dibromochloromethane	29	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
A2TX	29	**Dichlorodifluoromethane**	0	100%	0.30	1.10	0.63	0.62	0.60	0.16	0.25
A2TX	29	Dichlorotetrafluoroethane	28	3%	0.02	0.03	0.02	0.02	0.02	0.00	0.18
A2TX	29	Ethyl acrylate	10	66%	0.08	0.13	0.13	0.11	0.11	0.02	0.19
A2TX	29	Ethyl *tert* butyl ether	29	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.02
A2TX	29	Ethylbenzene	0	100%	0.05	0.42	0.12	0.16	0.14	0.09	0.58
A2TX	29	Hexachloro - 1,3 - butadiene	10	66%	0.03	0.07	0.07	0.06	0.05	0.02	0.36
A2TX	29	*m* - Dichlorobenzene	10	66%	0.03	0.04	0.04	0.03	0.03	0.01	0.15
A2TX	29	***m,p* - Xylene**	0	100%	0.09	1.07	0.26	0.37	0.31	0.23	0.62

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
A2TX	29	**Methyl ethyl ketone**	0	100%	0.53	8.21	1.13	1.61	1.27	1.51	0.94
A2TX	29	**Methyl isobutyl ketone**	8	72%	0.08	4.47	0.11	0.38	0.17	0.82	2.15
A2TX	29	Methyl methacrylate	29	0%	0.07	0.09	0.07	0.08	0.08	0.01	0.11
A2TX	29	**Methyl *tert*-butyl ether**	2	93%	0.07	2.40	0.33	0.48	0.36	0.47	0.97
A2TX	29	**Methylene chloride**	0	100%	0.14	0.95	0.35	0.38	0.35	0.17	0.46
A2TX	29	*n*-Octane	12	59%	0.02	0.27	0.03	0.07	0.05	0.07	0.96
A2TX	29	*o* - Dichlorobenzene	10	66%	0.03	0.04	0.04	0.04	0.03	0.01	0.14
A2TX	29	*o* - Xylene	0	100%	0.04	0.48	0.14	0.19	0.16	0.11	0.60
A2TX	29	*p* - Dichlorobenzene	24	17%	0.01	0.18	0.03	0.05	0.04	0.04	0.84
A2TX	29	**Propylene**	0	100%	0.25	2.00	0.52	0.71	0.61	0.43	0.61
A2TX	29	Styrene	14	52%	0.02	0.36	0.04	0.07	0.05	0.07	0.98
A2TX	29	*tert*-Amyl methyl ether	8	72%	0.06	0.18	0.08	0.08	0.08	0.03	0.34
A2TX	29	**Tetrachloroethylene**	9	69%	0.03	0.15	0.03	0.04	0.04	0.03	0.68
A2TX	29	**Toluene**	0	100%	0.27	6.38	0.69	1.25	0.83	1.50	1.20
A2TX	29	*trans* - 1,2 - Dichloroethylene	29	0%	0.02	0.03	0.02	0.02	0.02	0.01	0.30
A2TX	29	*trans* - 1,3 - Dichloropropene	29	0%	0.05	0.06	0.05	0.05	0.05	0.00	0.09
A2TX	29	Trichloroethylene	26	10%	0.03	0.07	0.03	0.03	0.03	0.01	0.34
A2TX	29	**Trichlorofluoromethane**	0	100%	0.16	1.70	0.33	0.42	0.36	0.29	0.69
A2TX	29	**Trichlorotrifluoroethane**	3	90%	0.02	0.17	0.07	0.08	0.07	0.03	0.42
A2TX	29	Vinyl chloride	29	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.10
BUND	25	1,1 - Dichloroethane	25	0%	0.02	0.04	0.04	0.04	0.04	0.01	0.20
BUND	25	1,1 - Dichloroethene	25	0%	0.02	0.05	0.05	0.05	0.04	0.01	0.23
BUND	25	1,1,1 - Trichloroethane	18	28%	0.02	0.09	0.03	0.03	0.03	0.02	0.46
BUND	25	1,1,2 - Trichloroethane	22	12%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
BUND	25	1,1,2,2 - Tetrachloroethane	25	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
BUND	25	1,2 - Dibromoethane	25	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.10
BUND	25	1,2 - Dichloroethane	25	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
BUND	25	1,2 - Dichloropropane	25	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.05
BUND	25	1,2,4 - Trichlorobenzene	24	4%	0.02	0.04	0.03	0.03	0.03	0.00	0.11
BUND	25	1,2,4 - Trimethylbenzene	14	44%	0.02	0.08	0.04	0.04	0.04	0.02	0.39
BUND	25	1,3,5 - Trimethylbenzene	24	4%	0.02	0.04	0.04	0.03	0.03	0.01	0.18
BUND	25	1,3-Butadiene	25	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.02
BUND	25	**Acetonitrile**	20	20%	0.13	1.41	0.13	0.21	0.16	0.28	1.33
BUND	25	**Acetylene**	0	100%	0.14	1.00	0.32	0.41	0.35	0.23	0.57
BUND	25	**Acrylonitrile**	22	12%	0.10	0.11	0.10	0.10	0.10	0.00	0.03
BUND	25	**Benzene**	0	100%	0.09	0.80	0.16	0.19	0.17	0.14	0.73
BUND	25	Bromochloromethane	25	0%	0.04	0.06	0.06	0.06	0.06	0.01	0.14
BUND	25	Bromodichloromethane	22	12%	0.03	0.03	0.03	0.03	0.03	0.00	0.02

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
BUND	25	Bromoform	22	12%	0.04	0.04	0.04	0.04	0.04	0.00	0.03
BUND	25	Bromomethane	25	0%	0.02	0.05	0.05	0.04	0.04	0.01	0.20
BUND	25	**Carbon tetrachloride**	11	56%	0.03	0.12	0.05	0.06	0.05	0.03	0.43
BUND	25	Chlorobenzene	25	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.08
BUND	25	Chloroethane	25	0%	0.02	0.04	0.04	0.04	0.04	0.01	0.14
BUND	25	Chloroform	25	0%	0.01	0.03	0.03	0.02	0.02	0.00	0.16
BUND	25	**Chloromethane**	1	96%	0.03	0.66	0.49	0.47	0.43	0.12	0.25
BUND	25	Chloromethylbenzene	22	12%	0.04	0.05	0.04	0.04	0.04	0.00	0.13
BUND	25	Chloroprene	25	0%	0.04	0.05	0.05	0.05	0.05	0.00	0.08
BUND	25	*cis* - 1,2 - Dichloroethylene	25	0%	0.02	0.05	0.05	0.04	0.04	0.01	0.22
BUND	25	*cis* - 1,3 - Dichloropropene	25	0%	0.03	0.05	0.05	0.05	0.05	0.01	0.11
BUND	25	Dibromochloromethane	25	0%	0.02	0.04	0.04	0.04	0.04	0.00	0.12
BUND	25	**Dichlorodifluoromethane**	0	100%	0.42	1.51	0.54	0.58	0.57	0.19	0.33
BUND	25	Dichlorotetrafluoroethane	24	4%	0.02	0.04	0.02	0.02	0.02	0.00	0.16
BUND	25	Ethyl acrylate	22	12%	0.08	0.13	0.08	0.09	0.09	0.01	0.16
BUND	25	Ethyl *tert* butyl ether	25	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.01
BUND	25	Ethylbenzene	7	72%	0.02	0.23	0.03	0.04	0.03	0.04	0.99
BUND	25	Hexachloro - 1,3 - butadiene	21	16%	0.03	0.07	0.03	0.03	0.03	0.01	0.41
BUND	25	*m* - Dichlorobenzene	22	12%	0.03	0.04	0.03	0.03	0.03	0.00	0.13
BUND	25	***m,p* - Xylene**	7	72%	0.02	0.50	0.06	0.08	0.06	0.09	1.20
BUND	25	**Methyl ethyl ketone**	0	100%	1.05	292.30	2.72	14.66	3.17	56.71	3.87
BUND	25	**Methyl isobutyl ketone**	22	12%	0.08	0.11	0.08	0.08	0.08	0.01	0.13
BUND	25	Methyl methacrylate	25	0%	0.07	0.09	0.09	0.09	0.09	0.01	0.07
BUND	25	**Methyl *tert*-butyl ether**	25	0%	0.07	0.09	0.09	0.09	0.09	0.00	0.05
BUND	25	**Methylene chloride**	2	92%	0.03	0.54	0.10	0.14	0.10	0.13	0.92
BUND	25	*n*-Octane	21	16%	0.02	0.07	0.03	0.03	0.03	0.01	0.31
BUND	25	*o* - Dichlorobenzene	22	12%	0.03	0.04	0.03	0.03	0.03	0.00	0.12
BUND	25	*o* - Xylene	13	48%	0.02	0.12	0.02	0.04	0.03	0.03	0.69
BUND	25	*p* - Dichlorobenzene	25	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.09
BUND	25	**Propylene**	0	100%	0.05	0.51	0.20	0.21	0.20	0.09	0.42
BUND	25	Styrene	24	4%	0.03	0.07	0.03	0.04	0.04	0.01	0.21
BUND	25	*tert*-Amyl methyl ether	22	12%	0.06	0.08	0.06	0.06	0.06	0.01	0.10
BUND	25	**Tetrachloroethylene**	21	16%	0.03	0.03	0.03	0.03	0.03	0.00	0.02
BUND	25	**Toluene**	0	100%	0.10	2.70	0.16	0.33	0.20	0.55	1.66
BUND	25	*trans* - 1,2 - Dichloroethylene	25	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.15
BUND	25	*trans* - 1,3 - Dichloropropene	25	0%	0.05	0.06	0.06	0.05	0.05	0.00	0.06
BUND	25	Trichloroethylene	25	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.10
BUND	25	**Trichlorofluoromethane**	0	100%	0.18	0.57	0.26	0.29	0.28	0.08	0.28

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
BUND	25	**Trichlorotrifluoroethane**	3	88%	0.02	0.11	0.07	0.06	0.06	0.02	0.33
BUND	25	Vinyl chloride	25	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.06
CANJ	31	1,1 - Dichloroethane	31	0%	0.02	0.04	0.02	0.03	0.02	0.01	0.45
CANJ	31	1,1 - Dichloroethene	31	0%	0.02	0.05	0.02	0.03	0.02	0.02	0.53
CANJ	31	1,1,1 - Trichloroethane	11	65%	0.02	0.09	0.03	0.04	0.03	0.01	0.40
CANJ	31	1,1,2 - Trichloroethane	10	68%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CANJ	31	1,1,2,2 - Tetrachloroethane	31	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
CANJ	31	1,2 - Dibromoethane	31	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
CANJ	31	1,2 - Dichloroethane	31	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
CANJ	31	1,2 - Dichloropropane	31	0%	0.03	0.04	0.03	0.03	0.03	0.00	0.08
CANJ	31	1,2,4 - Trichlorobenzene	30	3%	0.02	0.07	0.02	0.03	0.03	0.01	0.29
CANJ	31	1,2,4 - Trimethylbenzene	0	100%	0.12	4.21	0.21	0.38	0.25	0.71	1.85
CANJ	31	1,3,5 - Trimethylbenzene	4	87%	0.03	1.47	0.08	0.14	0.09	0.25	1.82
CANJ	31	1,3-Butadiene	19	39%	0.02	0.34	0.03	0.09	0.06	0.09	0.98
CANJ	31	**Acetonitrile**	10	68%	0.13	7.07	0.17	0.40	0.18	1.22	3.05
CANJ	31	**Acetylene**	0	100%	0.85	6.12	2.09	2.41	2.08	1.36	0.56
CANJ	31	**Acrylonitrile**	10	68%	0.10	0.11	0.11	0.11	0.11	0.00	0.04
CANJ	31	**Benzene**	0	100%	0.28	1.56	0.52	0.63	0.57	0.29	0.47
CANJ	31	Bromochloromethane	31	0%	0.04	0.06	0.04	0.04	0.04	0.01	0.27
CANJ	31	Bromodichloromethane	10	68%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
CANJ	31	Bromoform	10	68%	0.04	0.04	0.04	0.04	0.04	0.00	0.04
CANJ	31	Bromomethane	28	10%	0.02	13.46	0.02	0.47	0.04	2.37	5.00
CANJ	31	**Carbon tetrachloride**	11	65%	0.03	0.10	0.05	0.06	0.06	0.02	0.40
CANJ	31	Chlorobenzene	31	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.13
CANJ	31	Chloroethane	31	0%	0.02	0.04	0.02	0.03	0.03	0.01	0.26
CANJ	31	Chloroform	31	0%	0.01	0.03	0.01	0.02	0.02	0.01	0.31
CANJ	31	**Chloromethane**	0	100%	0.46	1.02	0.67	0.71	0.70	0.13	0.18
CANJ	31	Chloromethylbenzene	10	68%	0.04	0.05	0.05	0.05	0.05	0.01	0.16
CANJ	31	Chloroprene	31	0%	0.04	0.05	0.04	0.04	0.04	0.01	0.13
CANJ	31	*cis* - 1,2 - Dichloroethylene	31	0%	0.02	0.05	0.02	0.03	0.02	0.01	0.52
CANJ	31	*cis* - 1,3 - Dichloropropene	31	0%	0.03	0.05	0.03	0.04	0.04	0.01	0.20
CANJ	31	Dibromochloromethane	31	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
CANJ	31	**Dichlorodifluoromethane**	0	100%	0.50	0.95	0.66	0.66	0.65	0.09	0.14
CANJ	31	Dichlorotetrafluoroethane	30	3%	0.02	0.03	0.02	0.02	0.02	0.00	0.18
CANJ	31	Ethyl acrylate	10	68%	0.08	0.13	0.13	0.11	0.11	0.02	0.18
CANJ	31	Ethyl *tert* butyl ether	31	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.02
CANJ	31	Ethylbenzene	0	100%	0.08	0.86	0.18	0.22	0.19	0.15	0.65
CANJ	31	Hexachloro - 1,3 - butadiene	10	68%	0.03	0.12	0.07	0.06	0.05	0.02	0.38

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
CANJ	31	*m* - Dichlorobenzene	10	68%	0.03	0.04	0.04	0.03	0.03	0.00	0.15
CANJ	31	***m,p* - Xylene**	0	100%	0.25	3.03	0.46	0.64	0.54	0.51	0.79
CANJ	31	**Methyl ethyl ketone**	0	100%	0.42	1.44	0.77	0.82	0.78	0.28	0.34
CANJ	31	**Methyl isobutyl ketone**	10	68%	0.08	0.53	0.11	0.11	0.10	0.08	0.70
CANJ	31	Methyl methacrylate	31	0%	0.07	0.09	0.07	0.08	0.08	0.01	0.11
CANJ	31	**Methyl *tert*-butyl ether**	0	100%	0.27	3.17	0.83	1.04	0.88	0.64	0.62
CANJ	31	**Methylene chloride**	7	77%	0.02	202.00	0.09	6.63	0.10	35.67	5.38
CANJ	31	*n*-Octane	10	68%	0.02	1.22	0.06	0.13	0.07	0.21	1.71
CANJ	31	*o* - Dichlorobenzene	10	68%	0.03	0.04	0.04	0.04	0.04	0.01	0.14
CANJ	31	*o* - Xylene	0	100%	0.11	1.70	0.21	0.31	0.25	0.28	0.91
CANJ	31	*p* - Dichlorobenzene	23	26%	0.02	0.25	0.03	0.06	0.05	0.05	0.87
CANJ	31	**Propylene**	0	100%	0.32	5.41	1.07	1.40	1.16	1.01	0.72
CANJ	31	Styrene	15	52%	0.02	0.31	0.03	0.07	0.05	0.06	0.88
CANJ	31	*tert*-Amyl methyl ether	10	68%	0.05	0.13	0.08	0.07	0.07	0.01	0.18
CANJ	31	**Tetrachloroethylene**	8	74%	0.03	1.31	0.03	0.12	0.05	0.26	2.19
CANJ	31	**Toluene**	0	100%	0.53	4.80	1.08	1.34	1.18	0.80	0.60
CANJ	31	*trans* - 1,2 - Dichloroethylene	31	0%	0.02	0.03	0.02	0.02	0.02	0.01	0.30
CANJ	31	*trans* - 1,3 - Dichloropropene	31	0%	0.05	0.06	0.05	0.05	0.05	0.00	0.09
CANJ	31	Trichloroethylene	27	13%	0.03	0.11	0.03	0.04	0.03	0.02	0.51
CANJ	31	**Trichlorofluoromethane**	0	100%	0.23	0.42	0.30	0.31	0.31	0.05	0.15
CANJ	31	**Trichlorotrifluoroethane**	5	84%	0.02	0.12	0.08	0.07	0.07	0.03	0.37
CANJ	31	Vinyl chloride	31	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.09
CLIA	6	1,1 - Dichloroethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	1,1 - Dichloroethene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
CLIA	6	1,1,1 - Trichloroethane	4	33%	0.03	0.04	0.03	0.03	0.03	0.00	0.15
CLIA	6	1,1,2 - Trichloroethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	1,1,2,2 - Tetrachloroethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	1,2 - Dibromoethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	1,2 - Dichloroethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	1,2 - Dichloropropane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	1,2,4 - Trichlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	1,2,4 - Trimethylbenzene	0	100%	0.06	0.42	0.14	0.17	0.13	0.12	0.73
CLIA	6	1,3,5 - Trimethylbenzene	3	50%	0.02	0.13	0.04	0.05	0.04	0.04	0.76
CLIA	6	1,3-Butadiene	5	17%	0.03	0.18	0.03	0.06	0.04	0.05	0.94
CLIA	6	**Acetonitrile**	6	0%	0.13	0.13	0.13	0.13	0.13	0.00	0.00
CLIA	6	**Acetylene**	0	100%	0.48	2.63	1.02	1.30	1.11	0.74	0.57
CLIA	6	**Acrylonitrile**	2	67%	0.10	0.78	0.28	0.35	0.26	0.25	0.70
CLIA	6	**Benzene**	0	100%	0.19	0.93	0.39	0.46	0.41	0.23	0.50

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
CLIA	6	Bromochloromethane	6	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
CLIA	6	Bromodichloromethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	Bromoform	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	Bromomethane	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
CLIA	6	**Carbon tetrachloride**	4	33%	0.04	0.09	0.04	0.06	0.05	0.02	0.38
CLIA	6	Chlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	Chloroethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	Chloroform	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	**Chloromethane**	0	100%	0.38	0.56	0.45	0.46	0.46	0.06	0.14
CLIA	6	Chloromethylbenzene	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	Chloroprene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
CLIA	6	*cis* - 1,2 - Dichloroethylene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
CLIA	6	*cis* - 1,3 - Dichloropropene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
CLIA	6	Dibromochloromethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	**Dichlorodifluoromethane**	0	100%	0.47	0.58	0.54	0.54	0.53	0.04	0.08
CLIA	6	Dichlorotetrafluoroethane	6	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
CLIA	6	Ethyl acrylate	6	0%	0.08	0.08	0.08	0.08	0.08	0.00	0.00
CLIA	6	Ethyl *tert* butyl ether	6	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.00
CLIA	6	Ethylbenzene	0	100%	0.05	0.33	0.11	0.14	0.12	0.09	0.64
CLIA	6	Hexachloro - 1,3 - butadiene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	*m* - Dichlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	***m,p* - Xylene**	0	100%	0.11	0.89	0.30	0.36	0.30	0.25	0.69
CLIA	6	**Methyl ethyl ketone**	2	67%	0.08	0.93	0.30	0.37	0.24	0.30	0.82
CLIA	6	**Methyl isobutyl ketone**	6	0%	0.08	0.08	0.08	0.08	0.08	0.00	0.00
CLIA	6	Methyl methacrylate	6	0%	0.09	0.09	0.09	0.09	0.09	0.00	0.00
CLIA	6	**Methyl *tert*-butyl ether**	4	33%	0.09	0.97	0.09	0.30	0.17	0.33	1.11
CLIA	6	**Methylene chloride**	5	17%	0.03	0.09	0.03	0.04	0.03	0.02	0.59
CLIA	6	*n*-Octane	4	33%	0.03	0.08	0.03	0.04	0.04	0.02	0.45
CLIA	6	*o* - Dichlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	*o* - Xylene	0	100%	0.07	0.47	0.14	0.18	0.15	0.13	0.72
CLIA	6	*p* - Dichlorobenzene	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	**Propylene**	0	100%	0.21	1.21	0.46	0.56	0.48	0.33	0.58
CLIA	6	Styrene	4	33%	0.02	0.29	0.03	0.08	0.05	0.10	1.26
CLIA	6	*tert*-Amyl methyl ether	6	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
CLIA	6	**Tetrachloroethylene**	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	**Toluene**	0	100%	0.24	1.68	0.70	0.82	0.70	0.44	0.54
CLIA	6	*trans* - 1,2 - Dichloroethylene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CLIA	6	*trans* - 1,3 - Dichloropropene	6	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
CLIA	6	Trichloroethylene	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
CLIA	6	**Trichlorofluoromethane**	0	100%	0.21	0.41	0.26	0.28	0.27	0.06	0.23
CLIA	6	**Trichlorotrifluoroethane**	2	67%	0.03	0.06	0.05	0.05	0.05	0.01	0.20
CLIA	6	Vinyl chloride	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CRIA	15	1,1 - Dichloroethane	15	0%	0.02	0.04	0.04	0.04	0.03	0.01	0.30
CRIA	15	1,1 - Dichloroethene	15	0%	0.02	0.05	0.05	0.04	0.04	0.01	0.34
CRIA	15	1,1,1 - Trichloroethane	8	47%	0.02	0.06	0.03	0.03	0.03	0.01	0.29
CRIA	15	1,1,2 - Trichloroethane	11	27%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
CRIA	15	1,1,2,2 - Tetrachloroethane	15	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
CRIA	15	1,2 - Dibromoethane	15	0%	0.03	0.04	0.04	0.04	0.04	0.01	0.14
CRIA	15	1,2 - Dichloroethane	15	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
CRIA	15	1,2 - Dichloropropane	15	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.07
CRIA	15	1,2,4 - Trichlorobenzene	15	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.09
CRIA	15	1,2,4 - Trimethylbenzene	1	93%	0.02	0.28	0.06	0.09	0.07	0.06	0.71
CRIA	15	1,3,5 - Trimethylbenzene	12	20%	0.02	0.10	0.04	0.04	0.04	0.02	0.47
CRIA	15	1,3-Butadiene	13	13%	0.03	0.06	0.03	0.04	0.04	0.01	0.23
CRIA	15	**Acetonitrile**	11	27%	0.13	3.48	0.13	0.36	0.17	0.84	2.32
CRIA	15	**Acetylene**	1	93%	0.32	3.99	0.82	1.05	0.84	0.89	0.85
CRIA	15	**Acrylonitrile**	11	27%	0.10	0.11	0.10	0.11	0.11	0.00	0.04
CRIA	15	**Benzene**	0	100%	0.15	0.83	0.29	0.35	0.31	0.18	0.53
CRIA	15	Bromochloromethane	15	0%	0.04	0.06	0.06	0.05	0.05	0.01	0.21
CRIA	15	Bromodichloromethane	11	27%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
CRIA	15	Bromoform	11	27%	0.04	0.04	0.04	0.04	0.04	0.00	0.04
CRIA	15	Bromomethane	15	0%	0.02	0.05	0.05	0.04	0.04	0.01	0.30
CRIA	15	**Carbon tetrachloride**	8	47%	0.03	0.12	0.04	0.05	0.05	0.02	0.47
CRIA	15	Chlorobenzene	15	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.11
CRIA	15	Chloroethane	15	0%	0.02	0.04	0.04	0.04	0.04	0.01	0.20
CRIA	15	Chloroform	15	0%	0.01	0.03	0.03	0.02	0.02	0.01	0.23
CRIA	15	**Chloromethane**	0	100%	0.47	1.03	0.57	0.65	0.63	0.18	0.28
CRIA	15	Chloromethylbenzene	11	27%	0.04	0.05	0.04	0.04	0.04	0.01	0.17
CRIA	15	Chloroprene	15	0%	0.04	0.05	0.05	0.05	0.05	0.01	0.11
CRIA	15	*cis* - 1,2 - Dichloroethylene	15	0%	0.02	0.05	0.05	0.04	0.04	0.01	0.34
CRIA	15	*cis* - 1,3 - Dichloropropene	15	0%	0.03	0.05	0.05	0.05	0.05	0.01	0.16
CRIA	15	Dibromochloromethane	15	0%	0.03	0.04	0.04	0.04	0.04	0.01	0.14
CRIA	15	**Dichlorodifluoromethane**	1	93%	0.55	6.64	0.63	1.14	0.81	1.54	1.35
CRIA	15	Dichlorotetrafluoroethane	15	-7%	0.02	0.02	0.02	0.02	0.02	0.00	0.12
CRIA	15	Ethyl acrylate	11	27%	0.08	0.13	0.08	0.09	0.09	0.02	0.21
CRIA	15	Ethyl *tert* butyl ether	15	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.01

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
CRIA	15	Ethylbenzene	0	100%	0.03	1.30	0.07	0.17	0.09	0.31	1.82
CRIA	15	Hexachloro - 1,3 - butadiene	11	27%	0.03	0.07	0.03	0.04	0.04	0.02	0.47
CRIA	15	*m* - Dichlorobenzene	11	27%	0.03	0.04	0.03	0.03	0.03	0.00	0.16
CRIA	15	***m,p* - Xylene**	0	100%	0.07	3.72	0.18	0.44	0.21	0.89	2.02
CRIA	15	**Methyl ethyl ketone**	0	100%	0.28	6.98	1.00	1.29	0.93	1.56	1.21
CRIA	15	**Methyl isobutyl ketone**	11	27%	0.08	0.11	0.08	0.08	0.08	0.01	0.16
CRIA	15	Methyl methacrylate	14	7%	0.07	1.45	0.09	0.17	0.10	0.34	1.96
CRIA	15	**Methyl *tert*-butyl ether**	15	0%	0.07	0.09	0.09	0.08	0.08	0.01	0.07
CRIA	15	**Methylene chloride**	9	40%	0.02	1.42	0.03	0.14	0.05	0.34	2.40
CRIA	15	*n*-Octane	13	13%	0.02	0.05	0.03	0.03	0.03	0.01	0.26
CRIA	15	*o* - Dichlorobenzene	11	27%	0.03	0.04	0.03	0.03	0.03	0.00	0.15
CRIA	15	*o* - Xylene	1	93%	0.02	0.79	0.07	0.14	0.09	0.19	1.37
CRIA	15	*p* - Dichlorobenzene	15	0%	0.03	0.04	0.04	0.04	0.04	0.01	0.12
CRIA	15	**Propylene**	0	100%	0.15	0.63	0.30	0.34	0.32	0.14	0.41
CRIA	15	Styrene	13	13%	0.03	0.20	0.03	0.05	0.04	0.05	0.91
CRIA	15	*tert*-Amyl methyl ether	11	27%	0.06	0.08	0.06	0.07	0.07	0.01	0.12
CRIA	15	**Tetrachloroethylene**	10	33%	0.03	0.14	0.03	0.04	0.04	0.03	0.69
CRIA	15	**Toluene**	0	100%	0.14	4.73	0.42	0.80	0.50	1.14	1.41
CRIA	15	*trans* - 1,2 - Dichloroethylene	15	0%	0.02	0.03	0.03	0.03	0.03	0.01	0.22
CRIA	15	*trans* - 1,3 - Dichloropropene	15	0%	0.05	0.06	0.06	0.05	0.05	0.00	0.08
CRIA	15	Trichloroethylene	15	0%	0.03	0.04	0.04	0.03	0.03	0.00	0.15
CRIA	15	**Trichlorofluoromethane**	0	100%	0.18	0.61	0.26	0.29	0.28	0.10	0.35
CRIA	15	**Trichlorotrifluoroethane**	4	73%	0.02	0.11	0.06	0.06	0.06	0.03	0.44
CRIA	15	Vinyl chloride	15	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.08
DAIA	5	1,1 - Dichloroethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	1,1 - Dichloroethene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DAIA	5	1,1,1 - Trichloroethane	3	40%	0.03	0.04	0.03	0.03	0.03	0.01	0.19
DAIA	5	1,1,2 - Trichloroethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	1,1,2,2 - Tetrachloroethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	1,2 - Dibromoethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	1,2 - Dichloroethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	1,2 - Dichloropropane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	1,2,4 - Trichlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	1,2,4 - Trimethylbenzene	0	100%	0.06	0.15	0.13	0.12	0.11	0.04	0.30
DAIA	5	1,3,5 - Trimethylbenzene	1	80%	0.04	0.06	0.04	0.04	0.04	0.01	0.21
DAIA	5	1,3-Butadiene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.06
DAIA	5	**Acetonitrile**	5	0%	0.13	0.13	0.13	0.13	0.13	0.00	0.00
DAIA	5	**Acetylene**	0	100%	0.47	2.69	0.91	1.30	1.10	0.77	0.59

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DAIA	5	**Acrylonitrile**	2	60%	0.10	0.47	0.40	0.30	0.24	0.16	0.54
DAIA	5	**Benzene**	0	100%	0.24	0.57	0.42	0.43	0.41	0.11	0.25
DAIA	5	Bromochloromethane	5	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
DAIA	5	Bromodichloromethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	Bromoform	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	Bromomethane	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DAIA	5	**Carbon tetrachloride**	1	80%	0.04	0.10	0.05	0.06	0.05	0.02	0.38
DAIA	5	Chlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	Chloroethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	Chloroform	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	**Chloromethane**	0	100%	0.43	0.55	0.55	0.50	0.50	0.05	0.10
DAIA	5	Chloromethylbenzene	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	Chloroprene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DAIA	5	*cis* - 1,2 - Dichloroethylene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DAIA	5	*cis* - 1,3 - Dichloropropene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DAIA	5	Dibromochloromethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	**Dichlorodifluoromethane**	0	100%	0.54	0.68	0.54	0.57	0.57	0.05	0.09
DAIA	5	Dichlorotetrafluoroethane	5	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
DAIA	5	Ethyl acrylate	5	0%	0.08	0.08	0.08	0.08	0.08	0.00	0.00
DAIA	5	Ethyl *tert* butyl ether	5	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.00
DAIA	5	Ethylbenzene	0	100%	0.05	0.12	0.10	0.09	0.09	0.02	0.27
DAIA	5	Hexachloro - 1,3 - butadiene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	*m* - Dichlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	***m,p* - Xylene**	0	100%	0.09	0.33	0.27	0.24	0.22	0.08	0.33
DAIA	5	**Methyl ethyl ketone**	0	100%	0.21	1.06	0.21	0.48	0.37	0.35	0.73
DAIA	5	**Methyl isobutyl ketone**	5	0%	0.08	0.08	0.08	0.08	0.08	0.00	0.00
DAIA	5	Methyl methacrylate	5	0%	0.09	0.09	0.09	0.09	0.09	0.00	0.00
DAIA	5	**Methyl *tert*-butyl ether**	5	0%	0.09	0.09	0.09	0.09	0.09	0.00	0.00
DAIA	5	**Methylene chloride**	3	40%	0.03	0.12	0.03	0.06	0.05	0.04	0.65
DAIA	5	*n*-Octane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	*o* - Dichlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	*o* - Xylene	0	100%	0.05	0.14	0.10	0.11	0.10	0.03	0.33
DAIA	5	*p* - Dichlorobenzene	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	**Propylene**	0	100%	0.19	0.58	0.41	0.40	0.38	0.12	0.31
DAIA	5	Styrene	4	20%	0.03	0.04	0.03	0.04	0.04	0.00	0.06
DAIA	5	*tert*-Amyl methyl ether	5	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
DAIA	5	**Tetrachloroethylene**	4	20%	0.03	0.08	0.03	0.04	0.04	0.02	0.47
DAIA	5	**Toluene**	0	100%	0.20	0.72	0.65	0.54	0.50	0.19	0.34

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DAIA	5	*trans* - 1,2 - Dichloroethylene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DAIA	5	*trans* - 1,3 - Dichloropropene	5	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
DAIA	5	Trichloroethylene	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DAIA	5	**Trichlorofluoromethane**	0	100%	0.22	0.39	0.23	0.28	0.27	0.07	0.24
DAIA	5	**Trichlorotrifluoroethane**	2	60%	0.03	0.08	0.07	0.06	0.05	0.02	0.33
DAIA	5	Vinyl chloride	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DECO	20	1,1 - Dichloroethane	20	0%	0.02	0.04	0.04	0.04	0.04	0.01	0.18
DECO	20	1,1 - Dichloroethene	20	0%	0.02	0.05	0.05	0.05	0.05	0.01	0.21
DECO	20	1,1,1 - Trichloroethane	12	40%	0.03	0.05	0.03	0.03	0.03	0.01	0.20
DECO	20	1,1,2 - Trichloroethane	18	10%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DECO	20	1,1,2,2 - Tetrachloroethane	20	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
DECO	20	1,2 - Dibromoethane	20	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.09
DECO	20	1,2 - Dichloroethane	20	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
DECO	20	1,2 - Dichloropropane	20	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.05
DECO	20	1,2,4 - Trichlorobenzene	20	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.06
DECO	20	1,2,4 - Trimethylbenzene	0	100%	0.09	1.36	0.98	0.93	0.84	0.31	0.33
DECO	20	1,3,5 - Trimethylbenzene	0	100%	0.05	0.49	0.34	0.32	0.29	0.10	0.33
DECO	20	1,3-Butadiene	0	100%	0.05	0.46	0.20	0.21	0.18	0.10	0.49
DECO	20	**Acetonitrile**	16	20%	0.13	35.21	0.13	2.96	0.31	7.91	2.67
DECO	20	**Acetylene**	0	100%	1.77	11.22	4.30	5.28	4.69	2.64	0.50
DECO	20	**Acrylonitrile**	18	10%	0.10	0.11	0.10	0.10	0.10	0.00	0.03
DECO	20	**Benzene**	0	100%	0.38	2.21	1.05	1.19	1.10	0.46	0.39
DECO	20	Bromochloromethane	20	0%	0.04	0.06	0.06	0.06	0.06	0.01	0.13
DECO	20	Bromodichloromethane	18	10%	0.03	0.03	0.03	0.03	0.03	0.00	0.02
DECO	20	Bromoform	18	10%	0.04	0.04	0.04	0.04	0.04	0.00	0.03
DECO	20	Bromomethane	20	0%	0.02	0.05	0.05	0.04	0.04	0.01	0.18
DECO	20	**Carbon tetrachloride**	10	50%	0.01	0.10	0.04	0.06	0.05	0.03	0.46
DECO	20	Chlorobenzene	20	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.07
DECO	20	Chloroethane	20	0%	0.02	0.04	0.04	0.04	0.04	0.00	0.13
DECO	20	Chloroform	20	0%	0.01	0.03	0.03	0.02	0.02	0.00	0.14
DECO	20	**Chloromethane**	0	100%	0.48	0.87	0.57	0.59	0.59	0.09	0.16
DECO	20	Chloromethylbenzene	18	10%	0.04	0.05	0.04	0.04	0.04	0.00	0.12
DECO	20	Chloroprene	20	0%	0.04	0.05	0.05	0.05	0.05	0.00	0.07
DECO	20	*cis* - 1,2 - Dichloroethylene	20	0%	0.02	0.05	0.05	0.05	0.04	0.01	0.20
DECO	20	*cis* - 1,3 - Dichloropropene	20	0%	0.03	0.05	0.05	0.05	0.05	0.01	0.10
DECO	20	Dibromochloromethane	20	0%	0.03	0.04	0.04	0.04	0.04	0.00	0.09
DECO	20	**Dichlorodifluoromethane**	0	100%	0.06	0.86	0.62	0.58	0.54	0.15	0.26
DECO	20	Dichlorotetrafluoroethane	20	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.09

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DECO	20	Ethyl acrylate	18	10%	0.08	0.13	0.08	0.09	0.09	0.01	0.15
DECO	20	Ethyl *tert* butyl ether	20	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.01
DECO	20	Ethylbenzene	0	100%	0.10	1.21	0.38	0.46	0.41	0.23	0.51
DECO	20	Hexachloro - 1,3 - butadiene	18	10%	0.03	0.07	0.03	0.03	0.03	0.01	0.39
DECO	20	*m* - Dichlorobenzene	18	10%	0.03	0.04	0.03	0.03	0.03	0.00	0.12
DECO	20	***m,p* - Xylene**	0	100%	0.23	2.95	1.17	1.34	1.20	0.59	0.44
DECO	20	**Methyl ethyl ketone**	1	95%	0.08	1.91	1.08	1.08	0.92	0.45	0.42
DECO	20	**Methyl isobutyl ketone**	15	25%	0.08	0.27	0.08	0.10	0.09	0.05	0.50
DECO	20	Methyl methacrylate	20	0%	0.07	0.09	0.09	0.09	0.09	0.01	0.06
DECO	20	**Methyl *tert*-butyl ether**	20	0%	0.07	0.09	0.09	0.09	0.09	0.00	0.05
DECO	20	**Methylene chloride**	0	100%	0.05	3.32	0.21	0.57	0.29	0.86	1.52
DECO	20	*n*-Octane	0	100%	0.07	0.43	0.17	0.20	0.18	0.10	0.48
DECO	20	*o* - Dichlorobenzene	18	10%	0.03	0.04	0.03	0.03	0.03	0.00	0.11
DECO	20	*o* - Xylene	0	100%	0.11	1.57	0.61	0.65	0.58	0.30	0.46
DECO	20	*p* - Dichlorobenzene	20	0%	0.02	0.04	0.04	0.04	0.04	0.01	0.18
DECO	20	**Propylene**	0	100%	0.48	3.79	1.73	1.80	1.65	0.73	0.41
DECO	20	Styrene	1	95%	0.03	0.26	0.09	0.11	0.10	0.06	0.53
DECO	20	*tert*-Amyl methyl ether	18	10%	0.06	0.08	0.06	0.06	0.06	0.01	0.09
DECO	20	**Tetrachloroethylene**	9	55%	0.03	0.23	0.04	0.08	0.06	0.06	0.84
DECO	20	**Toluene**	0	100%	0.56	5.41	2.49	2.72	2.44	1.19	0.44
DECO	20	*trans* - 1,2 - Dichloroethylene	20	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.14
DECO	20	*trans* - 1,3 - Dichloropropene	20	0%	0.05	0.06	0.06	0.06	0.06	0.00	0.05
DECO	20	Trichloroethylene	19	5%	0.03	0.20	0.04	0.04	0.04	0.04	0.80
DECO	20	**Trichlorofluoromethane**	0	100%	0.26	0.80	0.33	0.37	0.35	0.13	0.35
DECO	20	**Trichlorotrifluoroethane**	0	100%	0.05	0.14	0.08	0.08	0.08	0.02	0.25
DECO	20	Vinyl chloride	20	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.05
DMIA	6	1,1 - Dichloroethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	1,1 - Dichloroethene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DMIA	6	1,1,1 - Trichloroethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	1,1,2 - Trichloroethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	1,1,2,2 - Tetrachloroethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	1,2 - Dibromoethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	1,2 - Dichloroethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	1,2 - Dichloropropane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	1,2,4 - Trichlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	1,2,4 - Trimethylbenzene	0	100%	0.17	0.28	0.21	0.21	0.21	0.04	0.18
DMIA	6	1,3,5 - Trimethylbenzene	0	100%	0.05	0.08	0.06	0.06	0.06	0.01	0.16
DMIA	6	1,3-Butadiene	4	33%	0.03	0.04	0.03	0.04	0.04	0.00	0.04

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DMIA	6	**Acetonitrile**	6	0%	0.13	0.13	0.13	0.13	0.13	0.00	0.00
DMIA	6	**Acetylene**	0	100%	1.16	4.00	1.36	1.76	1.58	1.01	0.57
DMIA	6	**Acrylonitrile**	6	0%	0.10	0.10	0.10	0.10	0.10	0.00	0.00
DMIA	6	**Benzene**	0	100%	0.38	0.73	0.53	0.54	0.53	0.11	0.21
DMIA	6	Bromochloromethane	6	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
DMIA	6	Bromodichloromethane	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	Bromoform	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	Bromomethane	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DMIA	6	**Carbon tetrachloride**	3	50%	0.04	0.08	0.05	0.06	0.05	0.02	0.33
DMIA	6	Chlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	Chloroethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	Chloroform	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	**Chloromethane**	0	100%	0.56	0.88	0.65	0.68	0.67	0.11	0.16
DMIA	6	Chloromethylbenzene	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	Chloroprene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DMIA	6	*cis* - 1,2 - Dichloroethylene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DMIA	6	*cis* - 1,3 - Dichloropropene	6	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
DMIA	6	Dibromochloromethane	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	**Dichlorodifluoromethane**	0	100%	0.53	0.68	0.55	0.57	0.57	0.05	0.09
DMIA	6	Dichlorotetrafluoroethane	6	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
DMIA	6	Ethyl acrylate	6	0%	0.08	0.08	0.08	0.08	0.08	0.00	0.00
DMIA	6	Ethyl *tert* butyl ether	6	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.00
DMIA	6	Ethylbenzene	0	100%	0.14	0.21	0.17	0.17	0.17	0.02	0.12
DMIA	6	Hexachloro - 1,3 - butadiene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	*m* - Dichlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	***m,p* - Xylene**	0	100%	0.36	0.58	0.46	0.47	0.46	0.08	0.17
DMIA	6	**Methyl ethyl ketone**	1	83%	0.08	0.69	0.55	0.47	0.39	0.21	0.45
DMIA	6	**Methyl isobutyl ketone**	6	0%	0.08	0.08	0.08	0.08	0.08	0.00	0.00
DMIA	6	Methyl methacrylate	6	0%	0.09	0.09	0.09	0.09	0.09	0.00	0.00
DMIA	6	**Methyl *tert*-butyl ether**	5	17%	0.09	0.74	0.09	0.20	0.13	0.24	1.23
DMIA	6	**Methylene chloride**	0	100%	0.20	1.74	0.38	0.60	0.45	0.53	0.88
DMIA	6	*n*-Octane	2	67%	0.02	0.10	0.03	0.04	0.04	0.03	0.61
DMIA	6	*o* - Dichlorobenzene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	*o* - Xylene	0	100%	0.13	0.26	0.22	0.21	0.21	0.04	0.20
DMIA	6	*p* - Dichlorobenzene	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	**Propylene**	0	100%	0.47	0.86	0.59	0.62	0.61	0.12	0.19
DMIA	6	Styrene	1	83%	0.03	0.34	0.26	0.22	0.17	0.12	0.54
DMIA	6	*tert*-Amyl methyl ether	6	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DMIA	6	**Tetrachloroethylene**	5	17%	0.03	0.22	0.03	0.06	0.04	0.07	1.11
DMIA	6	**Toluene**	0	100%	0.93	2.71	1.22	1.62	1.49	0.70	0.43
DMIA	6	*trans* - 1,2 - Dichloroethylene	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
DMIA	6	*trans* - 1,3 - Dichloropropene	6	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
DMIA	6	Trichloroethylene	6	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
DMIA	6	**Trichlorofluoromethane**	0	100%	0.22	0.43	0.25	0.28	0.27	0.07	0.25
DMIA	6	**Trichlorotrifluoroethane**	1	83%	0.03	0.11	0.06	0.07	0.06	0.03	0.38
DMIA	6	Vinyl chloride	6	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
ELNJ	23	1,1 - Dichloroethane	23	0%	0.02	0.04	0.02	0.03	0.03	0.01	0.43
ELNJ	23	1,1 - Dichloroethene	23	0%	0.02	0.05	0.02	0.03	0.03	0.02	0.50
ELNJ	23	1,1,1 - Trichloroethane	7	70%	0.02	0.06	0.03	0.03	0.03	0.01	0.24
ELNJ	23	1,1,2 - Trichloroethane	10	57%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
ELNJ	23	1,1,2,2 - Tetrachloroethane	23	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
ELNJ	23	1,2 - Dibromoethane	23	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.18
ELNJ	23	1,2 - Dichloroethane	23	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
ELNJ	23	1,2 - Dichloropropane	23	0%	0.03	0.04	0.03	0.03	0.03	0.00	0.08
ELNJ	23	1,2,4 - Trichlorobenzene	22	4%	0.02	0.10	0.02	0.03	0.03	0.02	0.52
ELNJ	23	1,2,4 - Trimethylbenzene	0	100%	0.08	0.83	0.23	0.28	0.24	0.17	0.60
ELNJ	23	1,3,5 - Trimethylbenzene	3	87%	0.03	0.27	0.08	0.10	0.08	0.06	0.59
ELNJ	23	1,3-Butadiene	10	57%	0.03	0.31	0.05	0.10	0.07	0.09	0.87
ELNJ	23	**Acetonitrile**	9	61%	0.13	8.08	0.17	0.67	0.21	1.78	2.65
ELNJ	23	**Acetylene**	0	100%	0.95	7.15	1.87	2.51	2.11	1.62	0.65
ELNJ	23	**Acrylonitrile**	10	57%	0.07	0.11	0.11	0.11	0.11	0.01	0.08
ELNJ	23	**Benzene**	0	100%	0.29	1.40	0.49	0.61	0.56	0.27	0.44
ELNJ	23	Bromochloromethane	23	0%	0.04	0.06	0.04	0.05	0.05	0.01	0.27
ELNJ	23	Bromodichloromethane	10	57%	0.03	0.03	0.03	0.03	0.03	0.00	0.04
ELNJ	23	Bromoform	10	57%	0.04	0.04	0.04	0.04	0.04	0.00	0.05
ELNJ	23	Bromomethane	23	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.42
ELNJ	23	**Carbon tetrachloride**	11	52%	0.03	0.12	0.04	0.05	0.05	0.02	0.42
ELNJ	23	Chlorobenzene	23	0%	0.02	0.03	0.02	0.03	0.03	0.00	0.13
ELNJ	23	Chloroethane	23	0%	0.02	0.04	0.02	0.03	0.03	0.01	0.26
ELNJ	23	Chloroform	22	4%	0.01	0.04	0.01	0.02	0.02	0.01	0.37
ELNJ	23	**Chloromethane**	0	100%	0.43	0.81	0.62	0.61	0.60	0.09	0.15
ELNJ	23	Chloromethylbenzene	10	57%	0.04	0.05	0.05	0.04	0.04	0.01	0.17
ELNJ	23	Chloroprene	23	0%	0.04	0.05	0.04	0.04	0.04	0.01	0.13
ELNJ	23	*cis* - 1,2 - Dichloroethylene	22	4%	0.02	0.05	0.02	0.03	0.03	0.02	0.48
ELNJ	23	*cis* - 1,3 - Dichloropropene	23	0%	0.03	0.05	0.03	0.04	0.04	0.01	0.20
ELNJ	23	Dibromochloromethane	23	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
ELNJ	23	**Dichlorodifluoromethane**	0	100%	0.42	0.87	0.69	0.69	0.69	0.10	0.14
ELNJ	23	Dichlorotetrafluoroethane	22	4%	0.01	0.04	0.02	0.02	0.02	0.01	0.28
ELNJ	23	Ethyl acrylate	10	57%	0.08	0.13	0.13	0.11	0.10	0.02	0.20
ELNJ	23	Ethyl *tert* butyl ether	23	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.02
ELNJ	23	Ethylbenzene	0	100%	0.07	0.90	0.21	0.26	0.21	0.19	0.74
ELNJ	23	Hexachloro - 1,3 - butadiene	10	57%	0.03	0.08	0.07	0.05	0.05	0.02	0.40
ELNJ	23	*m* - Dichlorobenzene	10	57%	0.03	0.04	0.04	0.03	0.03	0.01	0.17
ELNJ	23	***m,p* - Xylene**	0	100%	0.21	2.50	0.54	0.70	0.58	0.50	0.72
ELNJ	23	**Methyl ethyl ketone**	0	100%	0.42	2.60	0.84	0.96	0.86	0.50	0.53
ELNJ	23	**Methyl isobutyl ketone**	9	61%	0.08	0.24	0.11	0.11	0.10	0.04	0.39
ELNJ	23	Methyl methacrylate	23	0%	0.03	0.09	0.07	0.08	0.07	0.01	0.17
ELNJ	23	**Methyl *tert*-butyl ether**	0	100%	0.30	8.99	1.43	1.79	1.28	1.79	1.00
ELNJ	23	**Methylene chloride**	2	91%	0.02	0.77	0.21	0.26	0.18	0.20	0.76
ELNJ	23	*n*-Octane	4	83%	0.02	0.38	0.10	0.11	0.08	0.09	0.80
ELNJ	23	*o* - Dichlorobenzene	10	57%	0.03	0.04	0.04	0.03	0.03	0.01	0.16
ELNJ	23	*o* - Xylene	0	100%	0.08	0.96	0.25	0.32	0.27	0.20	0.63
ELNJ	23	*p* - Dichlorobenzene	21	9%	0.03	0.07	0.03	0.04	0.04	0.01	0.24
ELNJ	23	**Propylene**	0	100%	0.45	9.28	2.71	2.99	2.23	2.20	0.73
ELNJ	23	Styrene	13	43%	0.02	0.43	0.03	0.07	0.05	0.08	1.27
ELNJ	23	*tert*-Amyl methyl ether	10	57%	0.05	0.08	0.08	0.07	0.07	0.01	0.13
ELNJ	23	**Tetrachloroethylene**	6	74%	0.03	0.16	0.03	0.06	0.05	0.04	0.66
ELNJ	23	**Toluene**	0	100%	0.42	8.82	1.20	1.81	1.33	1.79	0.99
ELNJ	23	*trans* - 1,2 - Dichloroethylene	23	0%	0.02	0.03	0.02	0.02	0.02	0.01	0.30
ELNJ	23	*trans* - 1,3 - Dichloropropene	23	0%	0.05	0.06	0.05	0.05	0.05	0.00	0.09
ELNJ	23	Trichloroethylene	20	13%	0.03	0.11	0.03	0.04	0.03	0.02	0.58
ELNJ	23	**Trichlorofluoromethane**	0	100%	0.21	0.38	0.30	0.30	0.29	0.04	0.13
ELNJ	23	**Trichlorotrifluoroethane**	0	100%	0.04	0.40	0.07	0.09	0.07	0.07	0.82
ELNJ	23	Vinyl chloride	23	0%	0.02	0.03	0.02	0.03	0.03	0.00	0.10
EPTX	30	1,1 - Dichloroethane	30	0%	0.02	0.04	0.02	0.03	0.02	0.01	0.44
EPTX	30	1,1 - Dichloroethene	30	0%	0.02	0.05	0.02	0.03	0.03	0.02	0.52
EPTX	30	1,1,1 - Trichloroethane	7	77%	0.02	0.10	0.03	0.04	0.04	0.02	0.44
EPTX	30	1,1,2 - Trichloroethane	11	63%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
EPTX	30	1,1,2,2 - Tetrachloroethane	30	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
EPTX	30	1,2 - Dibromoethane	30	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
EPTX	30	1,2 - Dichloroethane	30	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
EPTX	30	1,2 - Dichloropropane	30	0%	0.03	0.04	0.03	0.03	0.03	0.00	0.08
EPTX	30	1,2,4 - Trichlorobenzene	30	0%	0.02	0.03	0.02	0.03	0.03	0.00	0.11
EPTX	30	1,2,4 - Trimethylbenzene	0	100%	0.08	1.10	0.42	0.48	0.39	0.29	0.60

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
EPTX	30	1,3,5 - Trimethylbenzene	3	90%	0.02	0.36	0.13	0.16	0.13	0.10	0.61
EPTX	30	1,3-Butadiene	9	70%	0.02	0.66	0.18	0.23	0.14	0.19	0.82
EPTX	30	**Acetonitrile**	9	70%	0.13	4.35	0.17	0.45	0.21	0.93	2.07
EPTX	30	**Acetylene**	0	100%	0.96	12.52	4.15	4.71	3.61	3.17	0.67
EPTX	30	**Acrylonitrile**	8	73%	0.10	1.59	0.11	0.21	0.14	0.31	1.49
EPTX	30	**Benzene**	0	100%	0.33	2.72	1.31	1.30	1.11	0.68	0.53
EPTX	30	Bromochloromethane	30	0%	0.04	0.06	0.04	0.05	0.04	0.01	0.27
EPTX	30	Bromodichloromethane	11	63%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
EPTX	30	Bromoform	11	63%	0.04	0.04	0.04	0.04	0.04	0.00	0.04
EPTX	30	Bromomethane	30	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.42
EPTX	30	**Carbon tetrachloride**	14	53%	0.02	0.14	0.04	0.06	0.05	0.03	0.53
EPTX	30	Chlorobenzene	30	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.13
EPTX	30	Chloroethane	30	0%	0.02	0.04	0.02	0.03	0.03	0.01	0.26
EPTX	30	Chloroform	30	0%	0.01	0.03	0.01	0.02	0.02	0.01	0.31
EPTX	30	**Chloromethane**	0	100%	0.54	10.18	0.78	1.22	0.91	1.73	1.42
EPTX	30	Chloromethylbenzene	11	63%	0.04	0.05	0.05	0.05	0.04	0.01	0.16
EPTX	30	Chloroprene	30	0%	0.04	0.05	0.04	0.04	0.04	0.01	0.13
EPTX	30	*cis* - 1,2 - Dichloroethylene	30	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.51
EPTX	30	*cis* - 1,3 - Dichloropropene	30	0%	0.03	0.05	0.03	0.04	0.04	0.01	0.20
EPTX	30	Dibromochloromethane	30	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
EPTX	30	**Dichlorodifluoromethane**	0	100%	0.47	9.97	0.64	0.97	0.71	1.68	1.72
EPTX	30	Dichlorotetrafluoroethane	30	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.16
EPTX	30	Ethyl acrylate	11	63%	0.08	0.13	0.13	0.11	0.11	0.02	0.19
EPTX	30	Ethyl *tert* butyl ether	30	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.02
EPTX	30	Ethylbenzene	0	100%	0.07	1.03	0.39	0.45	0.36	0.27	0.61
EPTX	30	Hexachloro - 1,3 - butadiene	11	63%	0.03	0.07	0.07	0.06	0.05	0.02	0.37
EPTX	30	*m* - Dichlorobenzene	11	63%	0.03	0.04	0.04	0.03	0.03	0.01	0.16
EPTX	30	***m,p* - Xylene**	0	100%	0.17	2.95	1.11	1.25	0.99	0.79	0.63
EPTX	30	**Methyl ethyl ketone**	0	100%	0.60	19.56	1.28	2.33	1.53	3.63	1.56
EPTX	30	**Methyl isobutyl ketone**	9	70%	0.08	6.25	0.11	0.33	0.13	1.10	3.29
EPTX	30	Methyl methacrylate	30	0%	0.07	0.09	0.07	0.08	0.08	0.01	0.11
EPTX	30	**Methyl *tert*-butyl ether**	16	47%	0.07	1.28	0.09	0.24	0.16	0.27	1.11
EPTX	30	**Methylene chloride**	8	73%	0.02	2.04	0.09	0.24	0.10	0.42	1.77
EPTX	30	*n*-Octane	6	80%	0.02	0.90	0.11	0.16	0.10	0.17	1.08
EPTX	30	*o* - Dichlorobenzene	11	63%	0.03	0.04	0.04	0.04	0.03	0.01	0.15
EPTX	30	*o* - Xylene	0	100%	0.09	1.33	0.51	0.60	0.48	0.37	0.62
EPTX	30	*p* - Dichlorobenzene	19	37%	0.02	0.36	0.04	0.07	0.06	0.07	0.95
EPTX	30	**Propylene**	0	100%	0.31	5.13	1.63	1.77	1.45	1.06	0.60

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
EPTX	30	Styrene	9	70%	0.03	0.48	0.07	0.11	0.08	0.10	0.94
EPTX	30	*tert*-Amyl methyl ether	11	63%	0.06	0.08	0.08	0.07	0.07	0.01	0.12
EPTX	30	**Tetrachloroethylene**	10	67%	0.03	0.14	0.03	0.04	0.04	0.03	0.71
EPTX	30	**Toluene**	0	100%	0.41	13.50	2.46	3.19	2.39	2.56	0.80
EPTX	30	*trans* - 1,2 - Dichloroethylene	30	0%	0.02	0.03	0.02	0.02	0.02	0.01	0.30
EPTX	30	*trans* - 1,3 - Dichloropropene	30	0%	0.05	0.06	0.05	0.05	0.05	0.00	0.09
EPTX	30	Trichloroethylene	23	23%	0.03	0.14	0.03	0.04	0.04	0.03	0.75
EPTX	30	**Trichlorofluoromethane**	0	100%	0.22	1.66	0.32	0.43	0.38	0.33	0.75
EPTX	30	**Trichlorotrifluoroethane**	1	97%	0.03	0.70	0.08	0.10	0.08	0.11	1.13
EPTX	30	Vinyl chloride	30	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.10
FAND	61	1,1 - Dichloroethane	61	0%	0.02	0.04	0.02	0.03	0.02	0.01	0.44
FAND	61	1,1 - Dichloroethene	61	0%	0.02	0.05	0.02	0.03	0.03	0.02	0.52
FAND	61	1,1,1 - Trichloroethane	23	62%	0.02	0.06	0.03	0.03	0.03	0.01	0.27
FAND	61	1,1,2 - Trichloroethane	23	62%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
FAND	61	1,1,2,2 - Tetrachloroethane	61	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
FAND	61	1,2 - Dibromoethane	61	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.18
FAND	61	1,2 - Dichloroethane	61	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
FAND	61	1,2 - Dichloropropane	61	0%	0.03	0.04	0.03	0.03	0.03	0.00	0.08
FAND	61	1,2,4 - Trichlorobenzene	60	2%	0.02	0.11	0.02	0.03	0.03	0.01	0.39
FAND	61	1,2,4 - Trimethylbenzene	1	98%	0.04	2.92	0.21	0.50	0.26	0.64	1.28
FAND	61	1,3,5 - Trimethylbenzene	22	64%	0.02	0.74	0.06	0.13	0.07	0.16	1.25
FAND	61	1,3-Butadiene	58	5%	0.02	0.07	0.03	0.03	0.03	0.01	0.18
FAND	61	**Acetonitrile**	23	62%	0.13	0.17	0.17	0.15	0.15	0.02	0.13
FAND	61	**Acetylene**	0	100%	0.25	1.78	0.67	0.71	0.63	0.35	0.50
FAND	61	**Acrylonitrile**	23	62%	0.07	0.53	0.11	0.14	0.13	0.10	0.68
FAND	61	**Benzene**	0	100%	0.07	3.38	0.26	0.33	0.27	0.41	1.25
FAND	61	Bromochloromethane	1	98%	0.06	60.09	1.22	4.92	1.59	8.94	1.82
FAND	61	Bromodichloromethane	23	62%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
FAND	61	Bromoform	22	64%	0.04	0.15	0.04	0.05	0.04	0.01	0.30
FAND	61	Bromomethane	61	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.43
FAND	61	**Carbon tetrachloride**	28	54%	0.03	0.29	0.04	0.06	0.05	0.04	0.65
FAND	61	Chlorobenzene	61	0%	0.02	0.03	0.02	0.03	0.02	0.00	0.13
FAND	61	Chloroethane	60	2%	0.02	0.06	0.02	0.03	0.03	0.01	0.29
FAND	61	Chloroform	60	2%	0.01	1.17	0.01	0.04	0.02	0.15	3.90
FAND	61	**Chloromethane**	0	100%	0.27	0.95	0.57	0.56	0.55	0.13	0.22
FAND	61	Chloromethylbenzene	23	62%	0.04	0.05	0.05	0.05	0.04	0.01	0.17
FAND	61	Chloroprene	60	2%	0.04	1.04	0.04	0.06	0.04	0.13	2.18
FAND	61	*cis* - 1,2 - Dichloroethylene	61	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.51

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
FAND	61	*cis* - 1,3 - Dichloropropene	61	0%	0.03	0.05	0.03	0.04	0.04	0.01	0.20
FAND	61	Dibromochloromethane	60	2%	0.03	0.30	0.03	0.04	0.03	0.03	0.96
FAND	61	**Dichlorodifluoromethane**	0	100%	0.30	0.73	0.57	0.57	0.56	0.08	0.14
FAND	61	Dichlorotetrafluoroethane	61	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.16
FAND	61	Ethyl acrylate	23	62%	0.08	0.13	0.13	0.11	0.11	0.02	0.19
FAND	61	Ethyl *tert* butyl ether	61	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.02
FAND	61	Ethylbenzene	1	98%	0.02	0.70	0.11	0.13	0.10	0.10	0.81
FAND	61	Hexachloro - 1,3 - butadiene	23	62%	0.03	0.12	0.07	0.06	0.05	0.02	0.39
FAND	61	*m* - Dichlorobenzene	22	64%	0.03	0.10	0.04	0.03	0.03	0.01	0.31
FAND	61	***m,p* - Xylene**	0	100%	0.06	1.98	0.23	0.29	0.23	0.28	0.95
FAND	61	**Methyl ethyl ketone**	2	97%	0.08	6.66	0.67	1.06	0.66	1.33	1.25
FAND	61	**Methyl isobutyl ketone**	21	66%	0.08	2.30	0.11	0.32	0.16	0.48	1.48
FAND	61	Methyl methacrylate	60	2%	0.07	0.12	0.07	0.08	0.08	0.01	0.13
FAND	61	**Methyl *tert*-butyl ether**	60	2%	0.07	6.31	0.07	0.18	0.09	0.79	4.34
FAND	61	**Methylene chloride**	45	26%	0.02	0.58	0.03	0.05	0.03	0.08	1.55
FAND	61	*n*-Octane	37	39%	0.02	1.69	0.03	0.09	0.05	0.22	2.34
FAND	61	*o* - Dichlorobenzene	23	62%	0.03	0.04	0.04	0.03	0.03	0.01	0.15
FAND	61	*o* - Xylene	1	98%	0.02	0.90	0.12	0.15	0.12	0.14	0.94
FAND	61	*p* - Dichlorobenzene	61	0%	0.03	0.04	0.03	0.04	0.04	0.01	0.15
FAND	61	**Propylene**	0	100%	0.19	0.73	0.29	0.34	0.32	0.13	0.37
FAND	61	Styrene	20	67%	0.02	0.98	0.09	0.16	0.09	0.22	1.38
FAND	61	*tert*-Amyl methyl ether	22	64%	0.06	0.90	0.08	0.09	0.07	0.10	1.22
FAND	61	**Tetrachloroethylene**	23	62%	0.03	0.09	0.03	0.03	0.03	0.01	0.22
FAND	61	**Toluene**	1	98%	0.03	4.11	0.44	0.64	0.46	0.67	1.05
FAND	61	*trans* - 1,2 - Dichloroethylene	60	2%	0.02	0.10	0.02	0.02	0.02	0.01	0.51
FAND	61	*trans* - 1,3 - Dichloropropene	60	2%	0.05	0.27	0.05	0.05	0.05	0.03	0.52
FAND	61	Trichloroethylene	61	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.18
FAND	61	**Trichlorofluoromethane**	1	98%	0.02	0.70	0.27	0.28	0.26	0.09	0.31
FAND	61	**Trichlorotrifluoroethane**	7	89%	0.02	0.12	0.07	0.07	0.06	0.02	0.32
FAND	61	Vinyl chloride	61	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.10
MUIA	5	1,1 - Dichloroethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	1,1 - Dichloroethene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
MUIA	5	1,1,1 - Trichloroethane	4	20%	0.03	0.05	0.03	0.03	0.03	0.01	0.28
MUIA	5	1,1,2 - Trichloroethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	1,1,2,2 - Tetrachloroethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	1,2 - Dibromoethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	1,2 - Dichloroethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	1,2 - Dichloropropane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
MUIA	5	1,2,4 - Trichlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	1,2,4 - Trimethylbenzene	0	100%	0.09	0.54	0.29	0.27	0.23	0.16	0.57
MUIA	5	1,3,5 - Trimethylbenzene	0	100%	0.04	0.29	0.10	0.12	0.09	0.09	0.74
MUIA	5	1,3-Butadiene	2	60%	0.03	0.07	0.05	0.05	0.05	0.01	0.28
MUIA	5	**Acetonitrile**	5	0%	0.13	0.13	0.13	0.13	0.13	0.00	0.00
MUIA	5	**Acetylene**	0	100%	0.54	1.65	1.50	1.34	1.25	0.41	0.31
MUIA	5	**Acrylonitrile**	5	0%	0.10	0.10	0.10	0.10	0.10	0.00	0.00
MUIA	5	**Benzene**	0	100%	0.23	0.66	0.54	0.49	0.47	0.15	0.30
MUIA	5	Bromochloromethane	5	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
MUIA	5	Bromodichloromethane	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	Bromoform	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	Bromomethane	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
MUIA	5	**Carbon tetrachloride**	3	40%	0.04	0.08	0.04	0.05	0.05	0.02	0.30
MUIA	5	Chlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	Chloroethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	Chloroform	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	**Chloromethane**	0	100%	0.72	0.97	0.79	0.81	0.81	0.09	0.11
MUIA	5	Chloromethylbenzene	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	Chloroprene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
MUIA	5	*cis* - 1,2 - Dichloroethylene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
MUIA	5	*cis* - 1,3 - Dichloropropene	5	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
MUIA	5	Dibromochloromethane	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	**Dichlorodifluoromethane**	0	100%	0.52	0.64	0.53	0.56	0.55	0.05	0.08
MUIA	5	Dichlorotetrafluoroethane	5	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
MUIA	5	Ethyl acrylate	5	0%	0.08	0.08	0.08	0.08	0.08	0.00	0.00
MUIA	5	Ethyl *tert* butyl ether	5	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.00
MUIA	5	Ethylbenzene	0	100%	0.11	0.31	0.22	0.20	0.18	0.08	0.38
MUIA	5	Hexachloro - 1,3 - butadiene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	*m* - Dichlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	***m,p* - Xylene**	0	100%	0.26	0.95	0.62	0.56	0.50	0.25	0.45
MUIA	5	**Methyl ethyl ketone**	0	100%	0.50	1.47	0.67	0.86	0.80	0.35	0.40
MUIA	5	**Methyl isobutyl ketone**	4	20%	0.08	0.31	0.08	0.12	0.10	0.09	0.76
MUIA	5	Methyl methacrylate	5	0%	0.09	0.09	0.09	0.09	0.09	0.00	0.00
MUIA	5	**Methyl *tert*-butyl ether**	5	0%	0.09	0.09	0.09	0.09	0.09	0.00	0.00
MUIA	5	**Methylene chloride**	3	40%	0.03	0.07	0.03	0.04	0.04	0.02	0.41
MUIA	5	*n*-Octane	2	60%	0.03	0.08	0.04	0.05	0.04	0.02	0.39
MUIA	5	*o* - Dichlorobenzene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	*o* - Xylene	0	100%	0.08	0.39	0.30	0.25	0.21	0.11	0.46

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
MUIA	5	*p* - Dichlorobenzene	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	**Propylene**	0	100%	0.30	0.68	0.62	0.57	0.55	0.14	0.24
MUIA	5	Styrene	1	80%	0.03	0.39	0.10	0.14	0.10	0.13	0.91
MUIA	5	*tert*-Amyl methyl ether	5	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
MUIA	5	**Tetrachloroethylene**	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	**Toluene**	0	100%	0.30	1.43	1.08	0.92	0.80	0.40	0.44
MUIA	5	*trans* - 1,2 - Dichloroethylene	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
MUIA	5	*trans* - 1,3 - Dichloropropene	5	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
MUIA	5	Trichloroethylene	5	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
MUIA	5	**Trichlorofluoromethane**	0	100%	0.22	0.28	0.24	0.24	0.24	0.02	0.09
MUIA	5	**Trichlorotrifluoroethane**	0	100%	0.06	0.09	0.08	0.08	0.07	0.01	0.14
MUIA	5	Vinyl chloride	5	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	1,1 - Dichloroethane	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	1,1 - Dichloroethene	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	1,1,1 - Trichloroethane	19	42%	0.02	0.08	0.03	0.04	0.04	0.02	0.39
PLOR	33	1,1,2 - Trichloroethane	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	1,1,2,2 - Tetrachloroethane	32	3%	0.02	0.04	0.03	0.03	0.03	0.00	0.11
PLOR	33	1,2 - Dibromoethane	33	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	1,2 - Dichloroethane	33	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	33	1,2 - Dichloropropane	33	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	33	1,2,4 - Trichlorobenzene	33	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	33	1,2,4 - Trimethylbenzene	0	100%	0.07	1.39	0.36	0.43	0.35	0.26	0.62
PLOR	33	1,3,5 - Trimethylbenzene	3	91%	0.02	0.43	0.14	0.15	0.12	0.09	0.58
PLOR	33	1,3-Butadiene	14	58%	0.03	0.26	0.07	0.10	0.06	0.08	0.83
PLOR	33	**Acetonitrile**	26	21%	0.11	5.10	0.11	0.59	0.20	1.13	1.90
PLOR	33	**Acetylene**	0	100%	0.40	6.44	1.62	2.24	1.81	1.51	0.67
PLOR	33	**Acrylonitrile**	18	45%	0.03	0.81	0.03	0.22	0.10	0.26	1.17
PLOR	33	**Benzene**	0	100%	0.28	1.99	0.75	0.89	0.80	0.39	0.45
PLOR	33	Bromochloromethane	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	Bromodichloromethane	33	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	Bromoform	33	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
PLOR	33	Bromomethane	32	3%	0.02	0.04	0.02	0.02	0.02	0.00	0.17
PLOR	33	**Carbon tetrachloride**	17	48%	0.02	0.11	0.05	0.06	0.06	0.03	0.46
PLOR	33	Chlorobenzene	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	Chloroethane	33	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	Chloroform	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	**Chloromethane**	0	100%	0.44	0.83	0.66	0.67	0.66	0.12	0.18
PLOR	33	Chloromethylbenzene	33	0%	0.09	0.09	0.09	0.09	0.09	0.00	0.00

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
PLOR	33	Chloroprene	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	*cis* - 1,2 - Dichloroethylene	33	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	33	*cis* - 1,3 - Dichloropropene	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	Dibromochloromethane	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	**Dichlorodifluoromethane**	0	100%	0.46	0.83	0.61	0.62	0.62	0.09	0.15
PLOR	33	Dichlorotetrafluoroethane	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	Ethyl acrylate	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	Ethyl *tert* butyl ether	33	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	Ethylbenzene	0	100%	0.08	1.01	0.34	0.41	0.34	0.25	0.62
PLOR	33	Hexachloro - 1,3 - butadiene	33	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
PLOR	33	*m* - Dichlorobenzene	33	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	33	***m,p* - Xylene**	0	100%	0.20	3.40	1.06	1.22	0.99	0.80	0.66
PLOR	33	**Methyl ethyl ketone**	0	100%	0.23	2.25	0.76	0.98	0.86	0.52	0.53
PLOR	33	**Methyl isobutyl ketone**	27	18%	0.04	0.59	0.04	0.10	0.05	0.14	1.47
PLOR	33	Methyl methacrylate	33	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	**Methyl *tert*-butyl ether**	32	3%	0.02	0.23	0.02	0.02	0.02	0.04	1.69
PLOR	33	**Methylene chloride**	0	100%	0.59	190.00	4.54	31.96	6.20	57.68	1.80
PLOR	33	*n*-Octane	9	73%	0.04	0.90	0.11	0.16	0.11	0.18	1.17
PLOR	33	*o* - Dichlorobenzene	33	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	33	*o* - Xylene	0	100%	0.10	1.32	0.46	0.51	0.42	0.31	0.60
PLOR	33	*p* - Dichlorobenzene	33	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	33	**Propylene**	0	100%	0.47	2.18	0.91	1.12	1.01	0.51	0.46
PLOR	33	Styrene	16	52%	0.02	0.70	0.06	0.10	0.07	0.12	1.23
PLOR	33	*tert*-Amyl methyl ether	33	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	**Tetrachloroethylene**	8	76%	0.05	1.18	0.14	0.27	0.17	0.29	1.06
PLOR	33	**Toluene**	0	100%	0.37	15.48	2.34	2.89	2.23	2.63	0.91
PLOR	33	*trans* - 1,2 - Dichloroethylene	33	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	33	*trans* - 1,3 - Dichloropropene	33	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	33	Trichloroethylene	28	15%	0.03	0.09	0.03	0.04	0.03	0.01	0.41
PLOR	33	**Trichlorofluoromethane**	0	100%	0.20	0.90	0.31	0.36	0.34	0.15	0.42
PLOR	33	**Trichlorotrifluoroethane**	2	94%	0.01	0.20	0.08	0.08	0.07	0.04	0.43
PLOR	33	Vinyl chloride	33	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
SFSD	42	1,1 - Dichloroethane	42	0%	0.02	0.04	0.04	0.03	0.03	0.01	0.40
SFSD	42	1,1 - Dichloroethene	42	0%	0.02	0.05	0.05	0.03	0.03	0.02	0.46
SFSD	42	1,1,1 - Trichloroethane	18	57%	0.02	0.09	0.03	0.03	0.03	0.01	0.39
SFSD	42	1,1,2 - Trichloroethane	22	48%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
SFSD	42	1,1,2,2 - Tetrachloroethane	42	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
SFSD	42	1,2 - Dibromoethane	42	0%	0.03	0.04	0.04	0.04	0.04	0.01	0.17

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SFSD	42	1,2 - Dichloroethane	42	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
SFSD	42	1,2 - Dichloropropane	42	0%	0.03	0.04	0.04	0.03	0.03	0.00	0.08
SFSD	42	1,2,4 - Trichlorobenzene	40	5%	0.02	0.07	0.03	0.03	0.03	0.01	0.24
SFSD	42	1,2,4 - Trimethylbenzene	3	93%	0.02	0.80	0.08	0.10	0.08	0.12	1.15
SFSD	42	1,3,5 - Trimethylbenzene	27	36%	0.02	0.28	0.04	0.04	0.04	0.04	0.91
SFSD	42	1,3-Butadiene	36	14%	0.03	0.54	0.03	0.05	0.04	0.08	1.57
SFSD	42	**Acetonitrile**	22	48%	0.13	0.17	0.13	0.15	0.15	0.02	0.14
SFSD	42	**Acetylene**	0	100%	0.42	7.24	0.77	1.07	0.87	1.07	1.00
SFSD	42	**Acrylonitrile**	7	83%	0.10	0.92	0.22	0.30	0.23	0.23	0.74
SFSD	42	**Benzene**	0	100%	0.18	1.40	0.30	0.34	0.31	0.19	0.55
SFSD	42	Bromochloromethane	42	0%	0.04	0.06	0.06	0.05	0.05	0.01	0.26
SFSD	42	Bromodichloromethane	22	48%	0.03	0.03	0.03	0.03	0.03	0.00	0.04
SFSD	42	Bromoform	22	48%	0.04	0.04	0.04	0.04	0.04	0.00	0.05
SFSD	42	Bromomethane	42	0%	0.02	0.05	0.05	0.03	0.03	0.01	0.39
SFSD	42	**Carbon tetrachloride**	24	43%	0.03	0.14	0.04	0.05	0.05	0.03	0.48
SFSD	42	Chlorobenzene	42	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.13
SFSD	42	Chloroethane	42	0%	0.02	0.04	0.04	0.03	0.03	0.01	0.25
SFSD	42	Chloroform	40	5%	0.01	0.28	0.03	0.03	0.02	0.04	1.47
SFSD	42	**Chloromethane**	0	100%	0.41	1.36	0.72	0.76	0.73	0.25	0.32
SFSD	42	Chloromethylbenzene	22	48%	0.04	0.05	0.04	0.04	0.04	0.01	0.18
SFSD	42	Chloroprene	42	0%	0.04	0.05	0.05	0.04	0.04	0.01	0.13
SFSD	42	*cis* - 1,2 - Dichloroethylene	42	0%	0.02	0.05	0.05	0.03	0.03	0.02	0.46
SFSD	42	*cis* - 1,3 - Dichloropropene	42	0%	0.03	0.05	0.05	0.04	0.04	0.01	0.20
SFSD	42	Dibromochloromethane	42	0%	0.03	0.04	0.04	0.03	0.03	0.01	0.17
SFSD	42	**Dichlorodifluoromethane**	1	98%	0.46	5.04	0.57	0.72	0.63	0.70	0.97
SFSD	42	Dichlorotetrafluoroethane	41	2%	0.01	0.03	0.02	0.02	0.02	0.00	0.20
SFSD	42	Ethyl acrylate	22	48%	0.02	0.13	0.08	0.10	0.10	0.02	0.24
SFSD	42	Ethyl *tert* butyl ether	42	0%	0.01	0.07	0.07	0.07	0.07	0.01	0.13
SFSD	42	Ethylbenzene	1	98%	0.02	0.60	0.10	0.12	0.10	0.09	0.80
SFSD	42	Hexachloro - 1,3 - butadiene	21	50%	0.03	0.07	0.03	0.05	0.04	0.02	0.43
SFSD	42	*m* - Dichlorobenzene	22	48%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
SFSD	42	***m,p* - Xylene**	0	100%	0.04	1.74	0.21	0.27	0.21	0.26	0.97
SFSD	42	**Methyl ethyl ketone**	1	98%	0.08	2.02	0.61	0.71	0.59	0.40	0.56
SFSD	42	**Methyl isobutyl ketone**	22	48%	0.08	0.11	0.08	0.09	0.09	0.02	0.17
SFSD	42	Methyl methacrylate	42	0%	0.07	0.09	0.09	0.08	0.08	0.01	0.11
SFSD	42	**Methyl *tert*-butyl ether**	42	0%	0.07	0.09	0.09	0.08	0.08	0.01	0.08
SFSD	42	**Methylene chloride**	24	43%	0.02	0.25	0.03	0.06	0.04	0.05	0.90
SFSD	42	*n*-Octane	26	38%	0.02	0.13	0.03	0.04	0.03	0.03	0.70

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SFSD	42	*o* - Dichlorobenzene	22	48%	0.03	0.04	0.03	0.03	0.03	0.01	0.16
SFSD	42	*o* - Xylene	3	93%	0.02	0.82	0.10	0.13	0.10	0.12	0.98
SFSD	42	*p* - Dichlorobenzene	42	0%	0.02	0.04	0.03	0.04	0.04	0.01	0.16
SFSD	42	**Propylene**	0	100%	0.19	3.09	0.36	0.45	0.38	0.43	0.96
SFSD	42	Styrene	23	45%	0.02	0.79	0.03	0.10	0.06	0.15	1.50
SFSD	42	*tert*-Amyl methyl ether	22	48%	0.06	0.08	0.06	0.07	0.07	0.01	0.13
SFSD	42	**Tetrachloroethylene**	22	48%	0.03	0.05	0.03	0.03	0.03	0.00	0.07
SFSD	42	**Toluene**	0	100%	0.23	4.03	0.54	0.85	0.65	0.79	0.93
SFSD	42	*trans* - 1,2 - Dichloroethylene	42	0%	0.02	0.03	0.03	0.02	0.02	0.01	0.28
SFSD	42	*trans* - 1,3 - Dichloropropene	42	0%	0.05	0.06	0.06	0.05	0.05	0.00	0.09
SFSD	42	Trichloroethylene	42	0%	0.03	0.04	0.04	0.03	0.03	0.01	0.17
SFSD	42	**Trichlorofluoromethane**	0	100%	0.05	1.62	0.29	0.41	0.33	0.33	0.82
SFSD	42	**Trichlorotrifluoroethane**	1	98%	0.02	0.27	0.14	0.14	0.13	0.06	0.40
SFSD	42	Vinyl chloride	42	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.10
SLCU	58	1,1 - Dichloroethane	58	0%	0.02	0.04	0.02	0.03	0.02	0.01	0.44
SLCU	58	1,1 - Dichloroethene	58	0%	0.02	0.05	0.02	0.03	0.03	0.02	0.52
SLCU	58	1,1,1 - Trichloroethane	18	69%	0.02	0.07	0.03	0.04	0.03	0.01	0.31
SLCU	58	1,1,2 - Trichloroethane	21	64%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
SLCU	58	1,1,2,2 - Tetrachloroethane	58	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.05
SLCU	58	1,2 - Dibromoethane	58	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
SLCU	58	1,2 - Dichloroethane	58	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.01
SLCU	58	1,2 - Dichloropropane	58	0%	0.03	0.04	0.03	0.03	0.03	0.00	0.08
SLCU	58	1,2,4 - Trichlorobenzene	57	2%	0.02	0.05	0.02	0.03	0.03	0.00	0.16
SLCU	58	1,2,4 - Trimethylbenzene	0	100%	0.06	1.45	0.30	0.37	0.30	0.28	0.74
SLCU	58	1,3,5 - Trimethylbenzene	7	88%	0.02	0.51	0.10	0.13	0.10	0.10	0.77
SLCU	58	1,3-Butadiene	16	72%	0.03	0.65	0.13	0.17	0.11	0.15	0.89
SLCU	58	**Acetonitrile**	21	64%	0.13	2.34	0.17	0.19	0.16	0.29	1.49
SLCU	58	**Acetylene**	1	98%	0.65	18.62	3.09	4.63	3.42	3.97	0.86
SLCU	58	**Acrylonitrile**	11	81%	0.09	0.99	0.26	0.35	0.25	0.28	0.79
SLCU	58	**Benzene**	0	100%	0.33	3.64	0.98	1.20	1.03	0.73	0.61
SLCU	58	Bromochloromethane	58	0%	0.04	0.06	0.04	0.05	0.04	0.01	0.27
SLCU	58	Bromodichloromethane	21	64%	0.03	0.03	0.03	0.03	0.03	0.00	0.03
SLCU	58	Bromoform	21	64%	0.04	0.04	0.04	0.04	0.04	0.00	0.04
SLCU	58	Bromomethane	58	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.43
SLCU	58	**Carbon tetrachloride**	26	55%	0.03	0.10	0.04	0.05	0.05	0.02	0.41
SLCU	58	Chlorobenzene	58	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.13
SLCU	58	Chloroethane	58	0%	0.02	0.04	0.02	0.03	0.03	0.01	0.26
SLCU	58	Chloroform	57	2%	0.01	0.63	0.01	0.03	0.02	0.08	2.76

1999/2000 Summary Tables for VOC Monitoring - Appendix F

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SLCU	58	**Chloromethane**	0	100%	0.38	0.95	0.61	0.63	0.62	0.12	0.18
SLCU	58	Chloromethylbenzene	21	64%	0.04	0.05	0.05	0.05	0.04	0.01	0.16
SLCU	58	Chloroprene	58	0%	0.04	0.05	0.04	0.04	0.04	0.01	0.13
SLCU	58	*cis* - 1,2 - Dichloroethylene	58	0%	0.02	0.05	0.02	0.03	0.03	0.01	0.51
SLCU	58	*cis* - 1,3 - Dichloropropene	58	0%	0.03	0.05	0.03	0.04	0.04	0.01	0.20
SLCU	58	Dibromochloromethane	58	0%	0.03	0.04	0.03	0.03	0.03	0.01	0.17
SLCU	58	**Dichlorodifluoromethane**	1	98%	0.45	0.87	0.63	0.63	0.63	0.08	0.12
SLCU	58	Dichlorotetrafluoroethane	58	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.16
SLCU	58	Ethyl acrylate	21	64%	0.08	0.13	0.13	0.11	0.11	0.02	0.19
SLCU	58	Ethyl *tert* butyl ether	58	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.02
SLCU	58	Ethylbenzene	0	100%	0.07	1.05	0.25	0.33	0.27	0.22	0.66
SLCU	58	Hexachloro - 1,3 - butadiene	21	64%	0.03	0.07	0.07	0.06	0.05	0.02	0.37
SLCU	58	*m* - Dichlorobenzene	21	64%	0.03	0.04	0.04	0.03	0.03	0.01	0.16
SLCU	58	***m,p* - Xylene**	0	100%	0.19	3.87	0.83	1.14	0.91	0.82	0.72
SLCU	58	**Methyl ethyl ketone**	0	100%	0.54	3.33	1.69	1.74	1.60	0.67	0.38
SLCU	58	**Methyl isobutyl ketone**	19	67%	0.05	0.33	0.11	0.10	0.10	0.04	0.36
SLCU	58	Methyl methacrylate	58	0%	0.07	0.09	0.07	0.08	0.08	0.01	0.11
SLCU	58	**Methyl *tert*-butyl ether**	57	2%	0.07	0.18	0.07	0.08	0.08	0.01	0.18
SLCU	58	**Methylene chloride**	9	84%	0.02	2.29	0.12	0.23	0.12	0.37	1.63
SLCU	58	*n*-Octane	18	69%	0.02	0.37	0.07	0.10	0.07	0.08	0.85
SLCU	58	*o* - Dichlorobenzene	22	62%	0.02	0.04	0.04	0.03	0.03	0.01	0.16
SLCU	58	*o* - Xylene	0	100%	0.09	1.64	0.36	0.49	0.39	0.35	0.72
SLCU	58	*p* - Dichlorobenzene	58	0%	0.01	0.04	0.03	0.04	0.04	0.01	0.18
SLCU	58	**Propylene**	0	100%	0.38	4.30	1.05	1.33	1.09	0.90	0.68
SLCU	58	Styrene	17	71%	0.02	0.39	0.08	0.10	0.07	0.08	0.79
SLCU	58	*tert*-Amyl methyl ether	21	64%	0.06	0.08	0.08	0.07	0.07	0.01	0.12
SLCU	58	**Tetrachloroethylene**	14	76%	0.02	0.23	0.03	0.05	0.04	0.04	0.86
SLCU	58	**Toluene**	0	100%	0.41	7.75	2.32	2.61	2.16	1.66	0.64
SLCU	58	*trans* - 1,2 - Dichloroethylene	57	2%	0.02	0.33	0.02	0.03	0.02	0.04	1.52
SLCU	58	*trans* - 1,3 - Dichloropropene	58	0%	0.05	0.06	0.05	0.05	0.05	0.00	0.09
SLCU	58	Trichloroethylene	54	7%	0.02	0.06	0.03	0.03	0.03	0.01	0.26
SLCU	58	**Trichlorofluoromethane**	0	100%	0.20	0.82	0.30	0.32	0.31	0.10	0.31
SLCU	58	**Trichlorotrifluoroethane**	3	95%	0.03	0.16	0.07	0.07	0.07	0.02	0.31
SLCU	58	Vinyl chloride	58	0%	0.02	0.03	0.02	0.02	0.02	0.00	0.10

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
BUND	25	1,2,3-Trimethylbenzene	24	4%	0.12	0.62	0.21	0.23	0.21	0.10	0.45
BUND	25	1,2,4-Trimethylbenzene	25	0%	0.22	0.84	0.53	0.52	0.50	0.15	0.30
BUND	25	1,3,5-Trimethylbenzene	25	0%	0.11	0.49	0.24	0.27	0.25	0.10	0.36
BUND	25	1-Decene	25	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
BUND	25	1-Dodecene	23	8%	0.10	0.49	0.42	0.34	0.30	0.13	0.38
BUND	25	1-Heptene	24	4%	0.10	0.57	0.23	0.24	0.22	0.10	0.41
BUND	25	1-Hexene	8	68%	0.31	0.74	0.59	0.56	0.55	0.10	0.19
BUND	25	1-Nonene	24	4%	0.13	0.36	0.35	0.29	0.27	0.09	0.32
BUND	25	1-Octene	25	0%	0.11	0.32	0.20	0.23	0.21	0.09	0.39
BUND	25	1-Pentene	4	84%	0.18	0.50	0.33	0.34	0.33	0.07	0.21
BUND	25	1-Tridecene	25	0%	0.42	0.42	0.42	0.42	0.42	0.00	0.00
BUND	25	1-Undecene	25	0%	0.10	0.42	0.42	0.41	0.40	0.06	0.15
BUND	25	2,2,3-Trimethylpentane	24	4%	0.35	0.44	0.35	0.35	0.35	0.02	0.05
BUND	25	2,2,4-Trimethylpentane	5	80%	0.26	3.49	0.49	0.64	0.53	0.60	0.95
BUND	25	2,2-Dimethylbutane	10	60%	0.29	0.85	0.50	0.53	0.51	0.13	0.26
BUND	25	2,3,4-Trimethylpentane	18	28%	0.12	0.90	0.27	0.31	0.29	0.15	0.47
BUND	25	2,3-Dimethylbutane	18	28%	0.30	0.94	0.50	0.55	0.53	0.14	0.26
BUND	25	2,3-Dimethylpentane	20	20%	0.28	1.42	0.50	0.53	0.51	0.21	0.39
BUND	25	2,4-Dimethylpentane	20	20%	0.21	0.70	0.41	0.44	0.42	0.12	0.28
BUND	25	2-Ethyl-1-butene	25	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
BUND	25	2-Methyl-1-butene	24	4%	0.10	0.47	0.26	0.25	0.24	0.07	0.27
BUND	25	2-Methyl-1-pentene	25	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
BUND	25	2-Methyl-2-butene	24	4%	0.10	0.65	0.40	0.31	0.27	0.15	0.47
BUND	25	2-Methylheptane	15	40%	0.12	0.50	0.29	0.30	0.29	0.10	0.32
BUND	25	2-Methylhexane	21	16%	0.12	2.10	0.20	0.30	0.24	0.37	1.25
BUND	25	2-Methylpentane	1	96%	0.24	3.16	0.59	0.81	0.67	0.62	0.77
BUND	25	3-Methyl-1-butene	25	0%	0.13	0.37	0.37	0.36	0.35	0.05	0.13
BUND	25	3-Methylheptane	19	24%	0.12	0.56	0.29	0.30	0.28	0.09	0.30
BUND	25	3-Methylhexane	12	52%	0.17	6.14	0.34	0.85	0.52	1.17	1.38
BUND	25	3-Methylpentane	6	76%	0.36	1.92	0.59	0.65	0.61	0.29	0.45
BUND	25	4-Methyl-1-pentene	25	0%	0.46	0.46	0.46	0.46	0.46	0.00	0.00
BUND	25	a-Pinene	3	88%	0.25	3.63	0.64	0.92	0.68	0.86	0.93
BUND	25	b-Pinene	20	20%	0.12	1.30	0.29	0.35	0.30	0.26	0.75
BUND	25	cis-2-Butene	23	8%	0.14	0.52	0.35	0.35	0.34	0.09	0.25
BUND	25	cis-2-Hexene	13	48%	0.37	2.34	0.39	0.68	0.59	0.44	0.65
BUND	25	cis-2-Pentene	21	16%	0.15	0.54	0.33	0.34	0.32	0.09	0.28
BUND	25	Cyclohexane	7	72%	0.21	257.19	0.74	22.13	1.67	66.61	3.01
BUND	25	Cyclopentane	2	92%	0.21	1.76	0.37	0.46	0.40	0.36	0.77
BUND	25	Cyclopentene	22	12%	0.09	0.58	0.30	0.28	0.25	0.12	0.44

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
BUND	25	Ethane	0	100%	2.30	12.49	4.37	5.47	4.68	3.18	0.58
BUND	25	Ethylene	0	100%	0.79	2.90	1.11	1.21	1.15	0.43	0.35
BUND	25	Isobutane	0	100%	0.42	8.02	1.16	1.94	1.37	1.92	0.99
BUND	25	Isobutene/1-Butene	0	100%	0.46	2.01	0.77	0.81	0.78	0.28	0.34
BUND	24	Isopentane	1	96%	0.89	33.70	5.17	6.26	4.17	6.66	1.07
BUND	25	Isoprene	13	48%	0.11	1.63	0.31	0.41	0.34	0.33	0.80
BUND	25	Isopropylbenzene	23	8%	0.13	0.75	0.31	0.34	0.32	0.14	0.40
BUND	25	m-Diethylbenzene	22	12%	0.14	0.98	0.31	0.38	0.34	0.20	0.53
BUND	25	Methylcyclohexane	8	68%	0.28	2.50	0.43	0.58	0.49	0.47	0.81
BUND	25	Methylcyclopentane	2	92%	0.29	1.52	0.48	0.52	0.49	0.24	0.46
BUND	25	m-Ethyltoluene	19	24%	0.14	1.19	0.38	0.43	0.38	0.23	0.52
BUND	25	m-Xylene/p-Xylene	6	76%	0.16	4.31	0.72	0.84	0.69	0.76	0.90
BUND	25	n-Butane	0	100%	0.87	10.39	2.20	3.27	2.50	2.52	0.77
BUND	25	n-Decane	4	84%	0.13	3.82	0.37	0.50	0.38	0.68	1.37
BUND	25	n-Dodecane	20	20%	0.14	4.41	0.25	0.47	0.31	0.82	1.74
BUND	25	n-Heptane	4	84%	0.32	4.19	0.45	0.61	0.49	0.74	1.22
BUND	25	n-Hexane	1	96%	0.37	2.96	0.67	0.94	0.81	0.58	0.62
BUND	25	n-Nonane	19	24%	0.15	1.11	0.29	0.33	0.30	0.18	0.55
BUND	25	n-Pentane	0	100%	0.65	247.61	1.30	11.81	1.87	48.17	4.08
BUND	25	n-Propylbenzene	25	0%	0.14	0.48	0.25	0.27	0.26	0.09	0.32
BUND	25	n-Tridecane	23	8%	0.12	2.95	0.42	0.50	0.34	0.65	1.31
BUND	25	n-Undecane	17	32%	0.22	5.64	0.36	0.60	0.40	1.05	1.76
BUND	25	o-Ethyltoluene	25	0%	0.13	0.48	0.25	0.27	0.26	0.08	0.28
BUND	25	o-Xylene	12	52%	0.23	0.90	0.38	0.41	0.38	0.16	0.40
BUND	25	p-Diethylbenzene	25	0%	0.11	0.46	0.16	0.20	0.18	0.09	0.47
BUND	25	p-Ethyltoluene	24	4%	0.14	0.66	0.35	0.35	0.33	0.11	0.33
BUND	25	Propane	0	100%	2.17	25.42	4.03	6.77	5.18	5.80	0.86
BUND	25	Propyne	25	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
BUND	25	trans-2-Butene	18	28%	0.15	0.43	0.24	0.25	0.25	0.07	0.26
BUND	25	trans-2-Hexene	25	0%	0.39	0.39	0.39	0.39	0.39	0.00	0.00
BUND	25	trans-2-Pentene	13	48%	0.14	0.66	0.27	0.28	0.27	0.10	0.36
CLIA	6	1,2,3-Trimethylbenzene	4	33%	0.22	0.80	0.34	0.42	0.38	0.20	0.48
CLIA	6	1,2,4-Trimethylbenzene	2	67%	0.71	3.44	1.24	1.49	1.27	0.93	0.62
CLIA	6	1,3,5-Trimethylbenzene	4	33%	0.29	1.38	0.50	0.61	0.53	0.37	0.60
CLIA	6	1-Decene	6	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
CLIA	6	1-Dodecene	6	0%	0.12	0.42	0.42	0.34	0.31	0.12	0.36
CLIA	6	1-Heptene	6	0%	0.16	0.31	0.28	0.26	0.25	0.06	0.22
CLIA	6	1-Hexene	1	83%	0.46	1.09	0.70	0.74	0.71	0.20	0.27
CLIA	6	1-Nonene	5	17%	0.12	0.37	0.26	0.26	0.24	0.09	0.35

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
CLIA	6	1-Octene	6	0%	0.11	0.32	0.30	0.25	0.24	0.08	0.33
CLIA	6	1-Pentene	0	100%	0.31	1.34	0.41	0.57	0.49	0.36	0.63
CLIA	6	1-Tridecene	6	0%	0.42	0.42	0.42	0.42	0.42	0.00	0.00
CLIA	6	1-Undecene	6	0%	0.42	0.42	0.42	0.42	0.42	0.00	0.00
CLIA	6	2,2,3-Trimethylpentane	5	17%	0.13	0.62	0.26	0.30	0.26	0.16	0.55
CLIA	6	2,2,4-Trimethylpentane	0	100%	0.55	4.43	1.33	1.72	1.40	1.26	0.73
CLIA	6	2,2-Dimethylbutane	0	100%	0.49	1.69	0.77	0.85	0.78	0.40	0.47
CLIA	6	2,3,4-Trimethylpentane	2	67%	0.28	1.26	0.54	0.60	0.53	0.32	0.54
CLIA	6	2,3-Dimethylbutane	1	83%	0.53	2.20	0.86	1.03	0.92	0.55	0.54
CLIA	6	2,3-Dimethylpentane	2	67%	0.53	1.77	0.87	0.94	0.86	0.42	0.44
CLIA	6	2,4-Dimethylpentane	2	67%	0.46	1.44	0.72	0.77	0.71	0.33	0.43
CLIA	6	2-Ethyl-1-butene	6	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
CLIA	6	2-Methyl-1-butene	3	50%	0.21	1.79	0.31	0.56	0.40	0.56	1.00
CLIA	6	2-Methyl-1-pentene	6	0%	0.26	0.52	0.52	0.48	0.46	0.10	0.20
CLIA	6	2-Methyl-2-butene	3	50%	0.11	2.59	0.42	0.75	0.47	0.84	1.11
CLIA	6	2-Methylheptane	1	83%	0.18	0.92	0.44	0.48	0.43	0.23	0.47
CLIA	6	2-Methylhexane	1	83%	0.25	1.60	0.66	0.71	0.60	0.44	0.61
CLIA	6	2-Methylpentane	0	100%	0.44	6.10	1.73	2.22	1.65	1.82	0.82
CLIA	6	3-Methyl-1-butene	5	17%	0.37	2.14	0.37	0.66	0.49	0.66	1.00
CLIA	6	3-Methylheptane	2	67%	0.28	0.70	0.37	0.41	0.39	0.14	0.35
CLIA	6	3-Methylhexane	1	83%	0.28	1.96	0.72	0.85	0.71	0.54	0.64
CLIA	6	3-Methylpentane	0	100%	0.65	4.53	1.48	1.83	1.52	1.26	0.69
CLIA	6	4-Methyl-1-pentene	6	0%	0.13	0.46	0.46	0.41	0.37	0.12	0.30
CLIA	6	a-Pinene	3	50%	0.12	1.14	0.35	0.55	0.40	0.42	0.76
CLIA	6	b-Pinene	4	33%	0.27	0.85	0.29	0.41	0.37	0.21	0.51
CLIA	6	cis-2-Butene	3	50%	0.30	1.16	0.47	0.57	0.52	0.28	0.49
CLIA	6	cis-2-Hexene	6	0%	0.26	0.39	0.39	0.37	0.36	0.05	0.13
CLIA	6	cis-2-Pentene	3	50%	0.25	1.25	0.44	0.54	0.46	0.34	0.62
CLIA	6	Cyclohexane	3	50%	0.33	34.82	0.52	6.26	1.04	12.78	2.04
CLIA	6	Cyclopentane	0	100%	0.29	1.17	0.52	0.58	0.53	0.28	0.49
CLIA	6	Cyclopentene	3	50%	0.31	0.89	0.42	0.47	0.44	0.20	0.42
CLIA	6	Ethane	0	100%	4.11	11.45	7.83	7.86	7.44	2.47	0.31
CLIA	6	Ethylene	0	100%	1.62	15.67	5.57	7.95	5.86	5.69	0.72
CLIA	6	Isobutane	0	100%	0.91	11.12	2.64	3.98	2.97	3.34	0.84
CLIA	6	Isobutene/1-Butene	0	100%	0.92	2.63	1.33	1.52	1.44	0.54	0.36
CLIA	6	Isopentane	0	100%	4.09	36.63	9.15	12.93	9.72	11.05	0.85
CLIA	6	Isoprene	2	67%	0.26	0.78	0.44	0.46	0.43	0.17	0.37
CLIA	6	Isopropylbenzene	6	0%	0.17	0.48	0.34	0.34	0.32	0.10	0.30
CLIA	6	m-Diethylbenzene	6	0%	0.19	0.64	0.32	0.40	0.36	0.17	0.42

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
CLIA	6	Methylcyclohexane	1	83%	0.36	1.17	0.61	0.65	0.61	0.25	0.39
CLIA	6	Methylcyclopentane	0	100%	0.42	2.69	1.00	1.17	0.99	0.72	0.62
CLIA	6	m-Ethyltoluene	2	67%	0.44	2.30	0.71	0.95	0.80	0.64	0.67
CLIA	6	m-Xylene/p-Xylene	0	100%	1.17	7.57	2.40	3.07	2.57	2.09	0.68
CLIA	6	n-Butane	0	100%	2.36	28.38	8.19	10.77	8.29	8.27	0.77
CLIA	6	n-Decane	0	100%	0.29	1.97	0.48	0.83	0.65	0.62	0.74
CLIA	6	n-Dodecane	4	33%	0.28	4.04	0.37	0.98	0.54	1.37	1.39
CLIA	6	n-Heptane	0	100%	0.47	1.64	0.79	0.87	0.80	0.38	0.44
CLIA	6	n-Hexane	0	100%	0.84	4.82	1.70	2.10	1.81	1.28	0.61
CLIA	6	n-Nonane	1	83%	0.23	1.29	0.47	0.61	0.53	0.34	0.56
CLIA	6	n-Pentane	0	100%	1.45	12.27	3.66	4.73	3.78	3.52	0.74
CLIA	6	n-Propylbenzene	5	17%	0.23	0.78	0.35	0.40	0.37	0.18	0.45
CLIA	6	n-Tridecane	5	17%	0.14	1.16	0.25	0.40	0.29	0.36	0.89
CLIA	6	n-Undecane	1	83%	0.34	5.13	0.45	1.28	0.71	1.73	1.35
CLIA	6	o-Ethyltoluene	4	33%	0.26	1.12	0.40	0.53	0.47	0.29	0.55
CLIA	6	o-Xylene	0	100%	0.58	2.99	1.00	1.28	1.10	0.80	0.63
CLIA	6	p-Diethylbenzene	6	0%	0.12	0.36	0.19	0.21	0.20	0.08	0.37
CLIA	6	p-Ethyltoluene	4	33%	0.29	1.25	0.49	0.60	0.54	0.31	0.51
CLIA	6	Propane	0	100%	3.79	19.58	10.02	10.45	9.22	5.02	0.48
CLIA	6	Propyne	6	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
CLIA	6	trans-2-Butene	2	67%	0.22	0.96	0.34	0.43	0.38	0.25	0.58
CLIA	6	trans-2-Hexene	6	0%	0.39	0.39	0.39	0.39	0.39	0.00	0.00
CLIA	6	trans-2-Pentene	0	100%	0.30	2.04	0.52	0.73	0.57	0.60	0.82
DAIA	5	1,2,3-Trimethylbenzene	0	100%	0.60	1.66	0.90	1.00	0.94	0.36	0.36
DAIA	5	1,2,4-Trimethylbenzene	1	80%	0.60	2.85	1.18	1.45	1.27	0.77	0.53
DAIA	5	1,3,5-Trimethylbenzene	4	20%	0.28	0.69	0.37	0.43	0.41	0.16	0.37
DAIA	5	1-Decene	5	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
DAIA	5	1-Dodecene	4	20%	0.14	0.85	0.42	0.45	0.39	0.23	0.51
DAIA	5	1-Heptene	5	0%	0.31	0.31	0.31	0.31	0.31	0.00	0.00
DAIA	5	1-Hexene	1	80%	0.33	0.74	0.68	0.60	0.58	0.15	0.25
DAIA	5	1-Nonene	3	40%	0.12	1.30	0.35	0.47	0.32	0.43	0.93
DAIA	5	1-Octene	5	0%	0.20	0.32	0.32	0.30	0.29	0.05	0.17
DAIA	5	1-Pentene	0	100%	0.28	0.86	0.40	0.46	0.42	0.21	0.46
DAIA	5	1-Tridecene	5	0%	0.42	0.42	0.42	0.42	0.42	0.00	0.00
DAIA	5	1-Undecene	1	80%	0.28	1.40	0.65	0.69	0.60	0.38	0.55
DAIA	5	2,2,3-Trimethylpentane	4	20%	0.20	0.54	0.27	0.31	0.29	0.12	0.39
DAIA	5	2,2,4-Trimethylpentane	0	100%	0.63	3.23	1.48	1.64	1.44	0.86	0.52
DAIA	5	2,2-Dimethylbutane	0	100%	0.56	1.34	0.72	0.79	0.74	0.29	0.37
DAIA	5	2,3,4-Trimethylpentane	1	80%	0.34	1.13	0.51	0.59	0.54	0.27	0.46

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DAIA	5	2,3-Dimethylbutane	1	80%	0.57	1.97	0.84	1.01	0.92	0.50	0.49
DAIA	5	2,3-Dimethylpentane	1	80%	0.54	1.59	0.79	0.88	0.81	0.37	0.43
DAIA	5	2,4-Dimethylpentane	2	60%	0.45	1.22	0.66	0.70	0.66	0.27	0.39
DAIA	5	2-Ethyl-1-butene	5	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
DAIA	5	2-Methyl-1-butene	0	100%	0.31	1.09	0.47	0.58	0.53	0.27	0.46
DAIA	5	2-Methyl-1-pentene	5	0%	0.13	0.52	0.52	0.44	0.39	0.16	0.36
DAIA	5	2-Methyl-2-butene	1	80%	0.27	1.01	0.60	0.62	0.57	0.24	0.38
DAIA	5	2-Methylheptane	1	80%	0.30	0.76	0.41	0.45	0.42	0.16	0.37
DAIA	5	2-Methylhexane	1	80%	0.26	1.25	0.49	0.62	0.54	0.33	0.54
DAIA	5	2-Methylpentane	0	100%	0.54	4.90	1.66	2.12	1.68	1.47	0.69
DAIA	5	3-Methyl-1-butene	5	0%	0.11	0.37	0.37	0.32	0.29	0.10	0.32
DAIA	5	3-Methylheptane	2	60%	0.29	0.63	0.38	0.40	0.39	0.12	0.29
DAIA	5	3-Methylhexane	0	100%	0.37	1.49	0.71	0.84	0.76	0.38	0.45
DAIA	5	3-Methylpentane	0	100%	0.67	3.19	1.41	1.61	1.42	0.84	0.52
DAIA	5	4-Methyl-1-pentene	5	0%	0.46	0.46	0.46	0.46	0.46	0.00	0.00
DAIA	5	a-Pinene	4	20%	0.16	0.94	0.29	0.39	0.32	0.28	0.71
DAIA	5	b-Pinene	1	80%	0.27	2.64	1.28	1.42	1.14	0.76	0.54
DAIA	5	cis-2-Butene	2	60%	0.39	0.63	0.50	0.49	0.49	0.09	0.18
DAIA	5	cis-2-Hexene	5	0%	0.15	0.39	0.39	0.34	0.32	0.10	0.28
DAIA	5	cis-2-Pentene	2	60%	0.29	0.67	0.41	0.43	0.41	0.13	0.30
DAIA	5	Cyclohexane	2	60%	0.40	0.76	0.51	0.55	0.53	0.13	0.23
DAIA	5	Cyclopentane	0	100%	0.30	0.88	0.52	0.53	0.50	0.19	0.36
DAIA	5	Cyclopentene	3	40%	0.24	0.70	0.40	0.42	0.40	0.15	0.36
DAIA	5	Ethane	0	100%	4.10	17.55	7.72	9.17	8.15	4.61	0.50
DAIA	5	Ethylene	0	100%	1.53	7.33	4.07	4.22	3.69	2.02	0.48
DAIA	5	Isobutane	0	100%	0.95	4.92	2.46	2.60	2.27	1.32	0.51
DAIA	5	Isobutene/1-Butene	0	100%	1.13	2.36	1.75	1.73	1.69	0.39	0.23
DAIA	5	Isopentane	0	100%	3.34	27.31	7.37	10.65	8.27	8.50	0.80
DAIA	5	Isoprene	1	80%	0.30	0.57	0.37	0.39	0.39	0.09	0.23
DAIA	5	Isopropylbenzene	5	0%	0.17	0.43	0.35	0.33	0.31	0.09	0.28
DAIA	5	m-Diethylbenzene	0	100%	0.72	5.08	2.23	2.52	2.06	1.50	0.59
DAIA	5	Methylcyclohexane	1	80%	0.37	0.96	0.52	0.56	0.53	0.21	0.37
DAIA	5	Methylcyclopentane	0	100%	0.45	2.02	0.94	1.07	0.96	0.52	0.48
DAIA	5	m-Ethyltoluene	0	100%	1.04	2.90	1.23	1.52	1.40	0.70	0.46
DAIA	5	m-Xylene/p-Xylene	0	100%	1.03	5.55	2.23	2.63	2.26	1.53	0.58
DAIA	5	n-Butane	0	100%	2.66	18.36	8.02	9.03	7.58	5.14	0.57
DAIA	5	n-Decane	0	100%	0.75	1.77	1.02	1.09	1.04	0.37	0.34
DAIA	5	n-Dodecane	2	60%	0.39	4.12	0.47	1.40	0.87	1.43	1.02
DAIA	5	n-Heptane	0	100%	0.40	1.38	0.66	0.76	0.70	0.33	0.43

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DAIA	5	n-Hexane	0	100%	0.68	3.31	1.66	1.80	1.59	0.85	0.47
DAIA	5	n-Nonane	3	40%	0.26	0.91	0.33	0.44	0.40	0.24	0.54
DAIA	5	n-Pentane	0	100%	1.55	10.10	3.19	4.25	3.48	2.99	0.70
DAIA	5	n-Propylbenzene	2	60%	0.42	1.21	0.59	0.67	0.63	0.28	0.42
DAIA	5	n-Tridecane	4	20%	0.11	0.74	0.14	0.25	0.19	0.24	0.95
DAIA	5	n-Undecane	0	100%	2.41	7.00	2.65	3.46	3.14	1.78	0.51
DAIA	5	o-Ethyltoluene	2	60%	0.41	1.12	0.57	0.66	0.62	0.24	0.37
DAIA	5	o-Xylene	0	100%	0.52	2.32	0.92	1.12	0.99	0.62	0.55
DAIA	5	p-Diethylbenzene	1	80%	0.36	3.07	1.04	1.46	1.16	0.93	0.64
DAIA	5	p-Ethyltoluene	3	40%	0.55	1.48	0.59	0.81	0.75	0.36	0.44
DAIA	5	Propane	0	100%	3.81	15.09	7.98	8.67	7.66	4.16	0.48
DAIA	5	Propyne	5	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
DAIA	5	trans-2-Butene	0	100%	0.30	0.48	0.39	0.39	0.38	0.06	0.17
DAIA	5	trans-2-Hexene	5	0%	0.39	0.39	0.39	0.39	0.39	0.00	0.00
DAIA	5	trans-2-Pentene	0	100%	0.30	1.00	0.46	0.55	0.51	0.24	0.44
DECO	18	1,2,3-Trimethylbenzene	1	94%	0.31	2.72	1.74	1.76	1.62	0.59	0.34
DECO	18	1,2,4-Trimethylbenzene	1	94%	0.54	12.00	7.16	6.88	6.08	2.41	0.35
DECO	18	1,3,5-Trimethylbenzene	1	94%	0.20	4.12	2.91	2.76	2.44	0.89	0.32
DECO	18	1-Decene	18	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
DECO	18	1-Dodecene	16	11%	0.11	0.58	0.35	0.32	0.28	0.14	0.44
DECO	18	1-Heptene	2	89%	0.18	1.74	0.83	0.86	0.77	0.37	0.43
DECO	18	1-Hexene	1	94%	0.43	1.26	0.98	0.96	0.94	0.19	0.20
DECO	18	1-Nonene	4	78%	0.19	0.72	0.46	0.45	0.42	0.14	0.31
DECO	18	1-Octene	15	17%	0.11	0.41	0.25	0.26	0.25	0.07	0.29
DECO	18	1-Pentene	0	100%	0.46	1.52	0.93	0.91	0.87	0.27	0.29
DECO	18	1-Tridecene	18	0%	0.42	0.42	0.42	0.42	0.42	0.00	0.00
DECO	18	1-Undecene	17	6%	0.13	0.47	0.23	0.29	0.26	0.12	0.42
DECO	18	2,2,3-Trimethylpentane	1	94%	0.18	2.33	0.86	0.98	0.85	0.48	0.50
DECO	18	2,2,4-Trimethylpentane	0	100%	1.30	29.57	2.59	4.11	2.85	6.23	1.52
DECO	18	2,2-Dimethylbutane	0	100%	0.71	2.40	1.48	1.51	1.46	0.42	0.28
DECO	18	2,3,4-Trimethylpentane	0	100%	0.54	2.12	1.00	1.05	0.99	0.40	0.38
DECO	18	2,3-Dimethylbutane	0	100%	0.83	3.79	2.20	2.17	2.05	0.71	0.33
DECO	18	2,3-Dimethylpentane	0	100%	0.81	3.73	2.00	2.03	1.93	0.66	0.32
DECO	18	2,4-Dimethylpentane	0	100%	0.70	2.80	1.45	1.45	1.38	0.48	0.33
DECO	18	2-Ethyl-1-butene	18	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
DECO	18	2-Methyl-1-butene	0	100%	0.38	1.92	0.87	0.93	0.85	0.39	0.42
DECO	18	2-Methyl-1-pentene	18	0%	0.13	0.52	0.33	0.37	0.34	0.14	0.39
DECO	18	2-Methyl-2-butene	0	100%	0.42	3.26	1.22	1.36	1.22	0.67	0.50
DECO	18	2-Methylheptane	0	100%	0.39	2.64	1.25	1.31	1.21	0.51	0.39

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DECO	18	2-Methylhexane	0	100%	0.47	5.44	2.39	2.66	2.36	1.18	0.44
DECO	18	2-Methylpentane	0	100%	1.66	15.42	7.66	7.57	6.76	3.32	0.44
DECO	18	3-Methyl-1-butene	14	22%	0.13	1.08	0.37	0.40	0.36	0.20	0.51
DECO	18	3-Methylheptane	0	100%	0.39	2.69	1.09	1.16	1.07	0.49	0.42
DECO	18	3-Methylhexane	0	100%	0.66	6.36	2.94	3.08	2.76	1.32	0.43
DECO	18	3-Methylpentane	0	100%	1.38	10.38	4.96	5.25	4.78	2.16	0.41
DECO	18	4-Methyl-1-pentene	18	0%	0.15	0.46	0.46	0.43	0.41	0.10	0.23
DECO	18	a-Pinene	1	94%	0.18	2.83	1.77	1.72	1.48	0.69	0.40
DECO	18	b-Pinene	8	56%	0.16	1.28	0.35	0.44	0.36	0.31	0.71
DECO	18	cis-2-Butene	0	100%	0.54	2.02	1.06	1.14	1.08	0.38	0.33
DECO	18	cis-2-Hexene	13	28%	0.16	0.62	0.33	0.32	0.30	0.12	0.37
DECO	18	cis-2-Pentene	1	94%	0.39	1.52	0.87	0.87	0.83	0.27	0.31
DECO	18	Cyclohexane	0	100%	0.68	31.06	3.78	5.54	3.52	6.88	1.24
DECO	18	Cyclopentane	0	100%	0.46	2.50	1.27	1.35	1.25	0.50	0.37
DECO	18	Cyclopentene	1	94%	0.31	1.85	0.88	0.95	0.86	0.43	0.45
DECO	18	Ethane	0	100%	7.48	79.49	24.02	29.12	23.73	20.06	0.69
DECO	18	Ethylene	0	100%	3.99	31.44	11.09	13.51	12.14	6.46	0.48
DECO	18	Isobutane	0	100%	2.28	23.97	7.54	9.36	7.73	5.94	0.63
DECO	18	Isobutene/1-Butene	0	100%	1.57	7.87	3.16	3.68	3.41	1.56	0.42
DECO	18	Isopentane	0	100%	13.70	57.51	26.52	31.54	29.51	11.62	0.37
DECO	18	Isoprene	1	94%	0.33	1.59	0.90	0.89	0.83	0.32	0.36
DECO	18	Isopropylbenzene	13	28%	0.29	0.72	0.56	0.55	0.53	0.12	0.21
DECO	18	m-Diethylbenzene	10	44%	0.40	2.54	0.61	0.73	0.66	0.46	0.63
DECO	18	Methylcyclohexane	0	100%	0.58	6.58	3.65	3.82	3.49	1.29	0.34
DECO	18	Methylcyclopentane	0	100%	0.84	7.49	3.30	3.62	3.27	1.57	0.43
DECO	18	m-Ethyltoluene	0	100%	0.62	5.98	3.82	3.83	3.52	1.26	0.33
DECO	18	m-Xylene/p-Xylene	0	100%	1.99	16.68	9.21	9.10	8.37	3.32	0.36
DECO	18	n-Butane	0	100%	8.09	48.05	16.47	20.64	17.53	12.00	0.58
DECO	18	n-Decane	0	100%	0.40	25.09	2.72	3.97	2.75	5.25	1.32
DECO	18	n-Dodecane	1	94%	0.21	4.27	0.90	1.26	0.99	0.99	0.79
DECO	18	n-Heptane	0	100%	0.59	7.36	3.33	3.56	3.15	1.59	0.45
DECO	18	n-Hexane	0	100%	1.43	15.12	7.50	8.05	7.19	3.41	0.42
DECO	18	n-Nonane	1	94%	0.31	13.72	1.61	2.22	1.59	2.85	1.28
DECO	18	n-Pentane	0	100%	2.80	34.21	14.29	16.48	14.50	7.66	0.46
DECO	18	n-Propylbenzene	1	94%	0.35	2.81	1.22	1.26	1.17	0.48	0.39
DECO	18	n-Tridecane	14	22%	0.15	4.71	0.21	0.53	0.30	1.02	1.93
DECO	18	n-Undecane	0	100%	0.66	14.52	2.63	3.70	2.84	3.30	0.89
DECO	18	o-Ethyltoluene	1	94%	0.29	6.06	2.48	2.46	2.17	1.10	0.45
DECO	18	o-Xylene	0	100%	0.75	6.65	3.68	3.71	3.40	1.33	0.36

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DECO	18	p-Diethylbenzene	8	56%	0.23	1.57	0.47	0.50	0.46	0.28	0.56
DECO	18	p-Ethyltoluene	1	94%	0.43	4.73	2.06	2.09	1.90	0.87	0.41
DECO	18	Propane	0	100%	7.88	60.89	17.08	23.50	19.15	16.31	0.69
DECO	18	Propyne	18	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
DECO	18	trans-2-Butene	0	100%	0.51	2.14	0.98	1.14	1.06	0.42	0.37
DECO	18	trans-2-Hexene	18	0%	0.10	0.39	0.39	0.34	0.31	0.10	0.31
DECO	18	trans-2-Pentene	0	100%	0.49	2.56	1.28	1.33	1.23	0.50	0.38
DMIA	6	1,2,3-Trimethylbenzene	6	0%	0.22	0.38	0.28	0.28	0.27	0.05	0.19
DMIA	6	1,2,4-Trimethylbenzene	0	100%	1.34	2.47	1.71	1.86	1.81	0.42	0.23
DMIA	6	1,3,5-Trimethylbenzene	0	100%	0.59	0.94	0.70	0.73	0.72	0.12	0.16
DMIA	6	1-Decene	6	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
DMIA	6	1-Dodecene	5	17%	0.15	0.58	0.42	0.40	0.38	0.12	0.31
DMIA	6	1-Heptene	5	17%	0.22	0.43	0.31	0.30	0.30	0.06	0.21
DMIA	6	1-Hexene	1	83%	0.41	0.80	0.72	0.68	0.67	0.13	0.19
DMIA	6	1-Nonene	6	0%	0.35	0.35	0.35	0.35	0.35	0.00	0.00
DMIA	6	1-Octene	5	17%	0.11	0.88	0.32	0.35	0.28	0.25	0.71
DMIA	6	1-Pentene	0	100%	0.34	0.61	0.43	0.45	0.44	0.09	0.19
DMIA	6	1-Tridecene	6	0%	0.42	0.42	0.42	0.42	0.42	0.00	0.00
DMIA	6	1-Undecene	6	0%	0.12	0.42	0.28	0.29	0.26	0.11	0.38
DMIA	6	2,2,3-Trimethylpentane	3	50%	0.19	0.64	0.36	0.36	0.33	0.16	0.44
DMIA	6	2,2,4-Trimethylpentane	0	100%	1.21	2.21	1.62	1.67	1.64	0.30	0.18
DMIA	6	2,2-Dimethylbutane	0	100%	0.73	1.23	0.95	0.99	0.97	0.18	0.18
DMIA	6	2,3,4-Trimethylpentane	0	100%	0.59	2.19	0.76	1.06	0.94	0.58	0.55
DMIA	6	2,3-Dimethylbutane	0	100%	0.80	2.30	1.17	1.28	1.20	0.48	0.38
DMIA	6	2,3-Dimethylpentane	0	100%	0.79	2.09	0.99	1.15	1.08	0.44	0.38
DMIA	6	2,4-Dimethylpentane	0	100%	0.61	1.82	0.77	0.93	0.87	0.40	0.43
DMIA	6	2-Ethyl-1-butene	6	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
DMIA	6	2-Methyl-1-butene	1	83%	0.23	0.50	0.46	0.41	0.40	0.10	0.24
DMIA	6	2-Methyl-1-pentene	6	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
DMIA	6	2-Methyl-2-butene	1	83%	0.38	0.75	0.65	0.61	0.60	0.12	0.19
DMIA	6	2-Methylheptane	0	100%	0.41	0.75	0.53	0.57	0.56	0.12	0.21
DMIA	6	2-Methylhexane	0	100%	0.59	4.30	0.96	1.47	1.14	1.28	0.87
DMIA	6	2-Methylpentane	0	100%	1.45	14.61	2.80	4.51	3.24	4.55	1.01
DMIA	6	3-Methyl-1-butene	6	0%	0.11	0.37	0.25	0.25	0.22	0.12	0.48
DMIA	6	3-Methylheptane	0	100%	0.43	0.68	0.53	0.54	0.53	0.09	0.16
DMIA	6	3-Methylhexane	0	100%	0.77	5.84	1.20	1.91	1.45	1.77	0.93
DMIA	6	3-Methylpentane	0	100%	1.27	21.66	2.31	5.33	2.97	7.32	1.37
DMIA	6	4-Methyl-1-pentene	6	0%	0.46	0.46	0.46	0.46	0.46	0.00	0.00
DMIA	6	a-Pinene	0	100%	0.50	3.97	1.98	2.02	1.67	1.13	0.56

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DMIA	6	b-Pinene	5	17%	0.20	0.68	0.29	0.34	0.31	0.15	0.46
DMIA	6	cis-2-Butene	2	67%	0.48	0.63	0.54	0.54	0.54	0.05	0.09
DMIA	6	cis-2-Hexene	6	0%	0.12	0.39	0.39	0.31	0.28	0.12	0.37
DMIA	6	cis-2-Pentene	1	83%	0.39	0.53	0.49	0.47	0.47	0.05	0.12
DMIA	6	Cyclohexane	1	83%	0.47	38.96	1.07	7.31	1.62	14.16	1.94
DMIA	6	Cyclopentane	0	100%	0.48	0.81	0.63	0.65	0.64	0.13	0.19
DMIA	6	Cyclopentene	3	50%	0.30	0.64	0.41	0.43	0.42	0.11	0.25
DMIA	6	Ethane	0	100%	5.73	13.93	7.59	8.51	8.16	2.66	0.31
DMIA	6	Ethylene	0	100%	3.24	8.04	4.42	4.75	4.54	1.57	0.33
DMIA	6	Isobutane	0	100%	2.68	4.36	3.24	3.38	3.32	0.65	0.19
DMIA	6	Isobutene/1-Butene	0	100%	1.38	1.78	1.59	1.58	1.58	0.12	0.08
DMIA	6	Isopentane	0	100%	10.65	24.61	17.48	17.54	16.77	5.09	0.29
DMIA	6	Isoprene	0	100%	0.39	0.58	0.41	0.44	0.44	0.07	0.15
DMIA	6	Isopropylbenzene	6	0%	0.17	0.47	0.41	0.38	0.36	0.10	0.27
DMIA	6	m-Diethylbenzene	3	50%	0.30	1.00	0.55	0.61	0.56	0.25	0.41
DMIA	6	Methylcyclohexane	0	100%	0.66	1.46	0.77	0.88	0.85	0.27	0.31
DMIA	6	Methylcyclopentane	0	100%	0.82	22.20	1.54	4.81	2.06	7.78	1.62
DMIA	6	m-Ethyltoluene	0	100%	1.14	1.85	1.38	1.43	1.40	0.29	0.20
DMIA	6	m-Xylene/p-Xylene	0	100%	2.49	7.08	5.42	5.32	5.03	1.61	0.30
DMIA	6	n-Butane	0	100%	6.45	14.08	11.06	11.04	10.71	2.48	0.22
DMIA	6	n-Decane	0	100%	0.30	2.40	0.92	1.17	0.96	0.70	0.60
DMIA	6	n-Dodecane	1	83%	0.42	1.37	0.60	0.79	0.70	0.40	0.51
DMIA	6	n-Heptane	0	100%	0.87	2.19	0.97	1.21	1.14	0.46	0.38
DMIA	6	n-Hexane	0	100%	1.02	56.17	2.92	11.40	3.83	20.04	1.76
DMIA	6	n-Nonane	1	83%	0.31	0.65	0.48	0.50	0.48	0.11	0.23
DMIA	6	n-Pentane	0	100%	3.69	13.37	4.96	6.20	5.58	3.30	0.53
DMIA	6	n-Propylbenzene	4	33%	0.36	0.65	0.48	0.49	0.48	0.10	0.21
DMIA	6	n-Tridecane	5	17%	0.11	0.55	0.22	0.28	0.24	0.16	0.56
DMIA	6	n-Undecane	0	100%	0.54	3.80	1.75	2.04	1.71	1.10	0.54
DMIA	6	o-Ethyltoluene	2	67%	0.42	1.82	0.58	0.75	0.65	0.48	0.65
DMIA	6	o-Xylene	0	100%	1.84	2.88	2.09	2.25	2.22	0.41	0.18
DMIA	6	p-Diethylbenzene	1	83%	0.43	1.14	0.73	0.77	0.72	0.27	0.35
DMIA	6	p-Ethyltoluene	2	67%	0.57	0.90	0.71	0.74	0.73	0.12	0.16
DMIA	6	Propane	0	100%	5.80	16.36	10.64	10.52	9.95	3.42	0.33
DMIA	6	Propyne	6	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
DMIA	6	trans-2-Butene	0	100%	0.40	0.60	0.47	0.49	0.48	0.06	0.12
DMIA	6	trans-2-Hexene	6	0%	0.39	0.39	0.39	0.39	0.39	0.00	0.00
DMIA	6	trans-2-Pentene	0	100%	0.42	0.79	0.64	0.63	0.62	0.12	0.18
FAND	62	1,2,3-Trimethylbenzene	7	89%	0.30	15.30	1.16	2.35	1.43	2.91	1.24

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
FAND	62	1,2,4-Trimethylbenzene	10	84%	0.54	19.25	1.88	3.89	2.32	4.51	1.16
FAND	62	1,3,5-Trimethylbenzene	30	52%	0.14	5.03	0.60	1.11	0.72	1.17	1.05
FAND	62	1-Decene	62	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
FAND	62	1-Dodecene	46	26%	0.10	5.82	0.42	0.71	0.47	0.91	1.28
FAND	62	1-Heptene	54	13%	0.10	1.04	0.23	0.27	0.24	0.15	0.55
FAND	62	1-Hexene	43	31%	0.10	1.07	0.52	0.46	0.39	0.23	0.49
FAND	62	1-Nonene	45	27%	0.11	4.37	0.35	0.45	0.35	0.55	1.24
FAND	62	1-Octene	55	11%	0.11	0.71	0.32	0.29	0.27	0.10	0.35
FAND	62	1-Pentene	7	89%	0.18	5.95	0.39	0.83	0.52	1.15	1.39
FAND	62	1-Tridecene	61	2%	0.42	0.61	0.42	0.43	0.43	0.02	0.06
FAND	62	1-Undecene	20	68%	0.15	3.15	0.61	0.81	0.64	0.62	0.77
FAND	62	2,2,3-Trimethylpentane	60	3%	0.06	1.04	0.35	0.29	0.26	0.14	0.47
FAND	62	2,2,4-Trimethylpentane	1	98%	0.35	7.34	0.76	0.94	0.82	0.88	0.93
FAND	62	2,2-Dimethylbutane	4	94%	0.34	3.09	0.66	0.73	0.69	0.34	0.47
FAND	62	2,3,4-Trimethylpentane	22	65%	0.21	3.74	0.43	0.63	0.48	0.67	1.06
FAND	62	2,3-Dimethylbutane	13	79%	0.37	4.28	0.70	0.79	0.73	0.49	0.61
FAND	62	2,3-Dimethylpentane	14	77%	0.32	1.95	0.71	0.76	0.72	0.26	0.34
FAND	62	2,4-Dimethylpentane	21	66%	0.28	2.46	0.57	0.60	0.57	0.26	0.44
FAND	62	2-Ethyl-1-butene	62	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
FAND	62	2-Methyl-1-butene	47	24%	0.11	2.81	0.23	0.31	0.24	0.39	1.24
FAND	62	2-Methyl-1-pentene	61	2%	0.06	1.04	0.52	0.46	0.40	0.17	0.37
FAND	62	2-Methyl-2-butene	54	13%	0.09	6.11	0.23	0.42	0.26	0.81	1.91
FAND	62	2-Methylheptane	8	87%	0.17	1.44	0.42	0.44	0.42	0.18	0.39
FAND	62	2-Methylhexane	17	73%	0.12	4.03	0.48	0.64	0.50	0.57	0.89
FAND	62	2-Methylpentane	0	100%	0.36	17.48	1.54	1.89	1.47	2.19	1.16
FAND	62	3-Methyl-1-butene	61	2%	0.09	0.66	0.37	0.35	0.33	0.09	0.25
FAND	62	3-Methylheptane	10	84%	0.20	1.83	0.41	0.45	0.42	0.23	0.50
FAND	62	3-Methylhexane	3	95%	0.31	18.40	1.37	2.50	1.36	3.22	1.29
FAND	62	3-Methylpentane	2	97%	0.47	11.17	0.86	1.18	0.97	1.41	1.19
FAND	62	4-Methyl-1-pentene	62	0%	0.08	0.46	0.46	0.41	0.38	0.11	0.28
FAND	62	a-Pinene	4	94%	0.24	379.46	7.01	34.09	8.02	70.68	2.07
FAND	62	b-Pinene	9	85%	0.28	58.75	1.29	5.23	1.52	10.81	2.07
FAND	62	cis-2-Butene	39	37%	0.19	1.75	0.46	0.49	0.46	0.19	0.40
FAND	62	cis-2-Hexene	60	3%	0.10	0.77	0.39	0.39	0.38	0.09	0.23
FAND	62	cis-2-Pentene	31	50%	0.14	3.01	0.40	0.44	0.40	0.34	0.77
FAND	62	Cyclohexane	10	84%	0.28	126.92	1.84	9.01	2.19	22.11	2.45
FAND	62	Cyclopentane	1	98%	0.20	3.36	0.45	0.49	0.45	0.38	0.77
FAND	62	Cyclopentene	47	24%	0.07	0.91	0.37	0.36	0.33	0.15	0.41
FAND	62	Ethane	0	100%	2.11	10.51	4.73	5.14	4.74	2.09	0.41

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
FAND	62	Ethylene	0	100%	0.74	5.56	1.60	1.79	1.62	0.87	0.49
FAND	62	Isobutane	0	100%	0.46	8.22	1.61	1.79	1.47	1.30	0.73
FAND	62	Isobutene/1-Butene	0	100%	0.79	3.29	1.25	1.34	1.29	0.45	0.34
FAND	62	Isopentane	0	100%	1.50	58.19	8.28	11.58	8.41	11.32	0.98
FAND	62	Isoprene	12	81%	0.16	7.18	0.46	0.88	0.61	1.07	1.21
FAND	62	Isopropylbenzene	52	16%	0.15	1.00	0.42	0.44	0.40	0.18	0.42
FAND	62	m-Diethylbenzene	8	87%	0.33	6.12	1.58	2.02	1.65	1.27	0.63
FAND	62	Methylcyclohexane	7	89%	0.33	6.17	0.91	1.26	0.95	1.19	0.94
FAND	62	Methylcyclopentane	0	100%	0.35	7.16	0.69	0.87	0.74	0.87	0.99
FAND	62	m-Ethyltoluene	1	98%	0.41	12.41	1.86	2.78	2.00	2.54	0.92
FAND	62	m-Xylene/p-Xylene	0	100%	0.65	14.96	1.82	2.37	1.96	2.01	0.85
FAND	60	n-Butane	2	97%	0.97	20.00	3.57	4.12	3.29	3.14	0.76
FAND	62	n-Decane	0	100%	0.31	9.92	1.18	1.67	1.26	1.61	0.96
FAND	62	n-Dodecane	4	94%	0.20	22.25	2.78	4.81	2.76	5.23	1.09
FAND	62	n-Heptane	0	100%	0.35	6.13	0.80	1.04	0.85	0.89	0.86
FAND	62	n-Hexane	0	100%	0.44	14.56	1.11	1.42	1.15	1.77	1.25
FAND	62	n-Nonane	4	94%	0.24	11.23	0.93	1.53	1.01	1.75	1.14
FAND	62	n-Pentane	0	100%	0.58	28.56	2.65	4.85	3.36	5.31	1.10
FAND	62	n-Propylbenzene	26	58%	0.17	2.09	0.58	0.73	0.61	0.47	0.65
FAND	62	n-Tridecane	4	94%	0.13	46.60	5.85	10.58	5.34	11.01	1.04
FAND	62	n-Undecane	1	98%	0.30	11.27	2.57	3.27	2.61	2.27	0.70
FAND	62	o-Ethyltoluene	23	63%	0.24	4.45	0.69	1.02	0.79	0.88	0.87
FAND	62	o-Xylene	0	100%	0.37	5.83	0.88	1.15	0.95	0.91	0.79
FAND	62	p-Diethylbenzene	10	84%	0.21	6.33	1.05	1.66	1.12	1.61	0.97
FAND	62	p-Ethyltoluene	24	61%	0.25	4.11	0.79	1.00	0.84	0.72	0.72
FAND	62	Propane	0	100%	2.48	17.39	5.88	6.70	6.06	3.13	0.47
FAND	62	Propyne	62	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
FAND	62	trans-2-Butene	30	52%	0.12	1.55	0.29	0.33	0.30	0.19	0.57
FAND	62	trans-2-Hexene	57	8%	0.11	1.58	0.39	0.42	0.39	0.22	0.51
FAND	62	trans-2-Pentene	5	92%	0.17	6.09	0.38	0.49	0.40	0.73	1.49
MUIA	5	1,2,3-Trimethylbenzene	2	60%	0.34	1.51	0.52	0.66	0.56	0.43	0.66
MUIA	5	1,2,4-Trimethylbenzene	0	100%	1.20	4.23	2.01	2.25	2.01	1.12	0.50
MUIA	5	1,3,5-Trimethylbenzene	2	60%	0.48	2.29	0.81	1.02	0.85	0.66	0.65
MUIA	5	1-Decene	5	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
MUIA	5	1-Dodecene	5	0%	0.11	0.42	0.19	0.26	0.22	0.14	0.52
MUIA	5	1-Heptene	2	60%	0.31	0.51	0.36	0.39	0.38	0.08	0.21
MUIA	5	1-Hexene	0	100%	0.77	0.92	0.90	0.86	0.86	0.06	0.07
MUIA	5	1-Nonene	3	40%	0.24	0.65	0.32	0.39	0.37	0.15	0.37
MUIA	5	1-Octene	4	20%	0.12	0.39	0.19	0.23	0.21	0.11	0.46

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
MUIA	5	1-Pentene	0	100%	0.50	0.88	0.61	0.66	0.65	0.13	0.20
MUIA	5	1-Tridecene	5	0%	0.42	0.42	0.42	0.42	0.42	0.00	0.00
MUIA	5	1-Undecene	4	20%	0.42	0.65	0.42	0.47	0.46	0.09	0.19
MUIA	5	2,2,3-Trimethylpentane	3	40%	0.30	0.57	0.35	0.42	0.40	0.12	0.30
MUIA	5	2,2,4-Trimethylpentane	0	100%	0.70	2.77	1.84	1.90	1.70	0.79	0.42
MUIA	5	2,2-Dimethylbutane	0	100%	0.56	1.39	1.05	1.02	0.97	0.27	0.27
MUIA	5	2,3,4-Trimethylpentane	0	100%	0.41	0.96	0.75	0.72	0.68	0.22	0.31
MUIA	5	2,3-Dimethylbutane	1	80%	0.51	2.14	1.27	1.31	1.18	0.54	0.41
MUIA	5	2,3-Dimethylpentane	0	100%	0.66	1.58	1.18	1.11	1.06	0.33	0.29
MUIA	5	2,4-Dimethylpentane	1	80%	0.51	1.36	0.94	0.92	0.87	0.29	0.31
MUIA	5	2-Ethyl-1-butene	5	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
MUIA	5	2-Methyl-1-butene	1	80%	0.13	1.16	0.58	0.62	0.50	0.34	0.54
MUIA	5	2-Methyl-1-pentene	5	0%	0.30	0.52	0.52	0.48	0.46	0.09	0.19
MUIA	5	2-Methyl-2-butene	1	80%	0.18	1.78	0.77	0.87	0.69	0.52	0.59
MUIA	5	2-Methylheptane	0	100%	0.35	0.87	0.64	0.59	0.56	0.18	0.31
MUIA	5	2-Methylhexane	0	100%	0.31	1.33	0.92	0.81	0.72	0.36	0.45
MUIA	5	2-Methylpentane	0	100%	0.65	5.12	2.62	2.72	2.23	1.49	0.55
MUIA	5	3-Methyl-1-butene	5	0%	0.14	0.37	0.37	0.32	0.30	0.09	0.28
MUIA	5	3-Methylheptane	1	80%	0.32	0.67	0.54	0.50	0.49	0.12	0.24
MUIA	5	3-Methylhexane	0	100%	0.36	1.54	1.06	0.95	0.84	0.42	0.44
MUIA	5	3-Methylpentane	0	100%	0.76	3.72	2.17	2.19	1.94	0.97	0.44
MUIA	5	4-Methyl-1-pentene	5	0%	0.46	0.46	0.46	0.46	0.46	0.00	0.00
MUIA	5	a-Pinene	3	40%	0.25	0.34	0.29	0.29	0.29	0.03	0.10
MUIA	5	b-Pinene	3	40%	0.29	0.81	0.29	0.40	0.36	0.21	0.52
MUIA	5	cis-2-Butene	1	80%	0.42	0.85	0.67	0.68	0.66	0.15	0.23
MUIA	5	cis-2-Hexene	5	0%	0.25	0.39	0.39	0.36	0.36	0.06	0.16
MUIA	5	cis-2-Pentene	1	80%	0.36	0.97	0.63	0.63	0.60	0.20	0.31
MUIA	5	Cyclohexane	1	80%	0.46	15.82	0.57	3.73	1.22	6.05	1.62
MUIA	5	Cyclopentane	0	100%	0.37	0.98	0.65	0.68	0.65	0.20	0.30
MUIA	5	Cyclopentene	1	80%	0.22	1.00	0.59	0.61	0.54	0.27	0.45
MUIA	5	Ethane	0	100%	4.19	15.10	8.52	9.07	8.35	3.59	0.40
MUIA	5	Ethylene	0	100%	1.60	5.36	4.81	4.25	3.91	1.38	0.33
MUIA	5	Isobutane	0	100%	0.83	4.47	3.96	3.16	2.72	1.33	0.42
MUIA	5	Isobutene/1-Butene	0	100%	1.10	2.02	1.77	1.71	1.67	0.33	0.19
MUIA	5	Isopentane	0	100%	11.49	32.90	24.85	22.02	20.41	8.03	0.36
MUIA	5	Isoprene	0	100%	0.35	0.57	0.44	0.45	0.44	0.08	0.18
MUIA	5	Isopropylbenzene	5	0%	0.31	0.59	0.43	0.42	0.41	0.10	0.23
MUIA	5	m-Diethylbenzene	5	0%	0.31	0.64	0.45	0.47	0.45	0.13	0.28
MUIA	5	Methylcyclohexane	0	100%	0.43	0.96	0.76	0.73	0.71	0.17	0.24

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
MUIA	5	Methylcyclopentane	0	100%	0.45	2.31	1.36	1.36	1.19	0.62	0.45
MUIA	5	m-Ethyltoluene	0	100%	0.74	4.25	1.24	1.74	1.40	1.30	0.75
MUIA	5	m-Xylene/p-Xylene	0	100%	2.10	6.29	5.04	4.42	4.02	1.76	0.40
MUIA	5	n-Butane	0	100%	2.46	19.36	15.63	12.87	10.50	5.98	0.46
MUIA	5	n-Decane	0	100%	0.44	1.73	0.86	0.88	0.78	0.46	0.52
MUIA	5	n-Dodecane	2	60%	0.34	2.04	0.54	0.79	0.62	0.63	0.80
MUIA	5	n-Heptane	0	100%	0.46	1.35	0.96	0.94	0.88	0.31	0.33
MUIA	5	n-Hexane	0	100%	0.88	3.68	2.38	2.28	2.06	0.91	0.40
MUIA	5	n-Nonane	2	60%	0.32	0.68	0.47	0.48	0.46	0.14	0.29
MUIA	5	n-Pentane	0	100%	1.16	7.74	4.28	4.67	3.94	2.21	0.47
MUIA	5	n-Propylbenzene	3	40%	0.38	1.46	0.50	0.69	0.60	0.40	0.58
MUIA	5	n-Tridecane	2	60%	0.14	0.55	0.43	0.34	0.29	0.17	0.48
MUIA	5	n-Undecane	0	100%	0.48	2.88	0.74	1.09	0.85	0.90	0.83
MUIA	5	o-Ethyltoluene	2	60%	0.46	1.93	0.70	0.88	0.75	0.54	0.62
MUIA	5	o-Xylene	0	100%	0.83	2.22	2.06	1.65	1.52	0.60	0.36
MUIA	5	p-Diethylbenzene	5	0%	0.19	0.40	0.27	0.27	0.27	0.07	0.26
MUIA	5	p-Ethyltoluene	2	60%	0.53	2.12	0.73	0.97	0.84	0.59	0.61
MUIA	5	Propane	0	100%	5.58	19.11	11.88	11.88	11.04	4.33	0.36
MUIA	5	Propyne	5	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
MUIA	5	trans-2-Butene	0	100%	0.31	0.76	0.55	0.57	0.54	0.16	0.29
MUIA	5	trans-2-Hexene	5	0%	0.39	0.39	0.39	0.39	0.39	0.00	0.00
MUIA	5	trans-2-Pentene	0	100%	0.33	1.59	0.88	0.88	0.78	0.41	0.47
SFSD	42	1,2,3-Trimethylbenzene	12	71%	0.21	2.10	0.61	0.66	0.61	0.30	0.45
SFSD	42	1,2,4-Trimethylbenzene	24	43%	0.28	5.19	0.89	1.06	0.93	0.74	0.70
SFSD	42	1,3,5-Trimethylbenzene	29	31%	0.14	1.99	0.36	0.47	0.40	0.32	0.68
SFSD	42	1-Decene	42	0%	0.29	0.29	0.29	0.29	0.29	0.00	0.00
SFSD	42	1-Dodecene	38	10%	0.11	3.05	0.38	0.40	0.32	0.44	1.09
SFSD	42	1-Heptene	42	0%	0.10	0.31	0.31	0.25	0.24	0.07	0.29
SFSD	42	1-Hexene	21	50%	0.14	1.10	0.52	0.55	0.48	0.24	0.44
SFSD	42	1-Nonene	40	5%	0.10	0.68	0.35	0.30	0.28	0.10	0.35
SFSD	42	1-Octene	42	0%	0.11	0.32	0.22	0.23	0.21	0.08	0.34
SFSD	42	1-Pentene	2	95%	0.24	2.24	0.41	0.51	0.45	0.34	0.67
SFSD	42	1-Tridecene	39	7%	0.42	3.69	0.42	0.50	0.45	0.50	0.99
SFSD	42	1-Undecene	26	38%	0.18	2.06	0.42	0.51	0.44	0.34	0.67
SFSD	42	2,2,3-Trimethylpentane	40	5%	0.15	1.07	0.35	0.30	0.28	0.15	0.49
SFSD	42	2,2,4-Trimethylpentane	0	100%	0.65	8.58	1.17	1.51	1.28	1.32	0.87
SFSD	42	2,2-Dimethylbutane	1	98%	0.42	7.44	0.78	1.05	0.86	1.10	1.05
SFSD	42	2,3,4-Trimethylpentane	5	88%	0.30	3.08	0.47	0.56	0.50	0.43	0.76
SFSD	42	2,3-Dimethylbutane	4	90%	0.51	3.53	0.80	0.95	0.88	0.49	0.51

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SFSD	42	2,3-Dimethylpentane	4	90%	0.46	2.07	0.82	0.90	0.85	0.34	0.38
SFSD	42	2,4-Dimethylpentane	7	83%	0.39	1.59	0.64	0.72	0.68	0.25	0.36
SFSD	42	2-Ethyl-1-butene	42	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
SFSD	42	2-Methyl-1-butene	10	76%	0.19	1.84	0.33	0.37	0.34	0.24	0.66
SFSD	42	2-Methyl-1-pentene	42	0%	0.14	0.52	0.52	0.48	0.47	0.09	0.19
SFSD	42	2-Methyl-2-butene	29	31%	0.11	3.03	0.32	0.42	0.35	0.44	1.03
SFSD	42	2-Methylheptane	5	88%	0.18	0.88	0.45	0.48	0.46	0.15	0.31
SFSD	42	2-Methylhexane	7	83%	0.22	2.20	0.47	0.56	0.47	0.41	0.74
SFSD	42	2-Methylpentane	0	100%	0.79	7.64	1.68	1.96	1.74	1.18	0.60
SFSD	42	3-Methyl-1-butene	41	2%	0.19	0.52	0.37	0.36	0.36	0.04	0.10
SFSD	42	3-Methylheptane	5	88%	0.22	0.98	0.41	0.46	0.44	0.17	0.37
SFSD	42	3-Methylhexane	0	100%	0.33	4.71	1.38	1.47	1.15	0.99	0.68
SFSD	42	3-Methylpentane	0	100%	0.63	5.51	1.06	1.27	1.15	0.77	0.61
SFSD	42	4-Methyl-1-pentene	42	0%	0.10	0.46	0.46	0.44	0.42	0.08	0.19
SFSD	42	a-Pinene	14	67%	0.13	6.15	0.55	1.09	0.64	1.38	1.26
SFSD	42	b-Pinene	13	69%	0.12	4.05	0.62	0.85	0.63	0.73	0.87
SFSD	42	cis-2-Butene	18	57%	0.32	1.70	0.49	0.56	0.53	0.22	0.40
SFSD	42	cis-2-Hexene	41	2%	0.25	1.62	0.39	0.42	0.40	0.19	0.45
SFSD	42	cis-2-Pentene	14	67%	0.21	1.42	0.42	0.52	0.48	0.22	0.43
SFSD	42	Cyclohexane	7	83%	0.24	71.49	1.09	4.76	1.51	12.48	2.62
SFSD	42	Cyclopentane	0	100%	0.28	1.74	0.52	0.59	0.55	0.28	0.47
SFSD	42	Cyclopentene	26	38%	0.11	1.01	0.35	0.39	0.36	0.17	0.44
SFSD	42	Ethane	0	100%	2.97	14.68	4.77	5.93	5.35	2.96	0.50
SFSD	42	Ethylene	0	100%	1.01	25.53	1.96	2.82	2.22	3.69	1.31
SFSD	42	Isobutane	0	100%	0.80	43.31	1.61	2.86	1.80	6.41	2.24
SFSD	42	Isobutene/1-Butene	0	100%	0.99	9.17	1.46	1.80	1.58	1.42	0.79
SFSD	42	Isopentane	0	100%	2.12	59.78	8.93	12.70	9.31	11.75	0.93
SFSD	42	Isoprene	11	74%	0.20	2.70	0.51	0.83	0.64	0.67	0.81
SFSD	42	Isopropylbenzene	35	17%	0.15	0.94	0.35	0.41	0.38	0.17	0.41
SFSD	42	m-Diethylbenzene	9	79%	0.27	2.79	1.11	1.31	1.10	0.71	0.54
SFSD	42	Methylcyclohexane	1	98%	0.30	2.20	0.67	0.76	0.70	0.35	0.47
SFSD	42	Methylcyclopentane	0	100%	0.45	2.81	0.69	0.82	0.75	0.42	0.51
SFSD	42	m-Ethyltoluene	2	95%	0.42	3.36	1.02	1.10	1.01	0.52	0.48
SFSD	42	m-Xylene/p-Xylene	0	100%	0.81	11.22	1.74	2.18	1.87	1.66	0.76
SFSD	42	n-Butane	0	100%	1.83	39.76	3.68	5.79	4.09	7.23	1.25
SFSD	42	n-Decane	1	98%	0.21	11.40	0.70	1.09	0.82	1.66	1.52
SFSD	42	n-Dodecane	22	48%	0.10	14.12	0.37	0.91	0.42	2.20	2.41
SFSD	42	n-Heptane	0	100%	0.43	1.96	0.67	0.75	0.70	0.32	0.43
SFSD	42	n-Hexane	0	100%	0.56	5.04	1.01	1.28	1.15	0.75	0.59

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SFSD	42	n-Nonane	5	88%	0.16	1.40	0.45	0.55	0.50	0.26	0.47
SFSD	42	n-Pentane	0	100%	0.96	13.64	2.33	3.53	2.80	2.90	0.82
SFSD	42	n-Propylbenzene	13	69%	0.16	1.04	0.61	0.63	0.60	0.20	0.31
SFSD	42	n-Tridecane	37	12%	0.11	3.66	0.42	0.44	0.34	0.53	1.22
SFSD	42	n-Undecane	0	100%	0.61	43.88	2.29	3.41	2.38	6.39	1.87
SFSD	42	o-Ethyltoluene	23	45%	0.22	1.73	0.50	0.57	0.53	0.24	0.43
SFSD	42	o-Xylene	0	100%	0.43	4.58	0.77	0.95	0.84	0.66	0.70
SFSD	42	p-Diethylbenzene	6	86%	0.18	1.38	0.75	0.78	0.72	0.29	0.38
SFSD	42	p-Ethyltoluene	21	50%	0.24	1.64	0.66	0.76	0.70	0.32	0.42
SFSD	42	Propane	0	100%	3.94	21.33	8.33	8.74	8.08	3.67	0.42
SFSD	42	Propyne	42	0%	0.38	0.38	0.38	0.38	0.38	0.00	0.00
SFSD	42	trans-2-Butene	3	93%	0.22	1.67	0.36	0.41	0.39	0.22	0.53
SFSD	42	trans-2-Hexene	42	0%	0.27	0.39	0.39	0.39	0.39	0.02	0.05
SFSD	42	trans-2-Pentene	1	98%	0.25	2.39	0.42	0.53	0.48	0.34	0.64
SLCU	58	1,2,3-Trimethylbenzene	2	97%	0.45	3.35	0.91	1.05	0.96	0.51	0.49
SLCU	58	1,2,4-Trimethylbenzene	2	97%	0.79	9.78	2.35	2.98	2.49	1.96	0.66
SLCU	58	1,3,5-Trimethylbenzene	10	83%	0.23	3.77	0.99	1.27	1.04	0.85	0.67
SLCU	58	1-Decene	57	2%	0.29	7.22	0.29	0.41	0.30	0.90	2.22
SLCU	58	1-Dodecene	57	2%	0.10	3.08	0.35	0.36	0.30	0.38	1.04
SLCU	58	1-Heptene	42	28%	0.15	0.81	0.31	0.36	0.34	0.14	0.40
SLCU	58	1-Hexene	31	47%	0.12	1.72	0.47	0.57	0.45	0.38	0.66
SLCU	58	1-Nonene	34	41%	0.12	1.05	0.35	0.40	0.35	0.21	0.53
SLCU	58	1-Octene	52	10%	0.07	0.58	0.24	0.25	0.23	0.10	0.39
SLCU	58	1-Pentene	2	97%	0.13	2.38	0.81	0.99	0.85	0.54	0.55
SLCU	58	1-Tridecene	54	7%	0.10	5.31	0.42	0.51	0.44	0.64	1.25
SLCU	58	1-Undecene	23	60%	0.19	1.85	0.48	0.56	0.48	0.35	0.62
SLCU	58	2,2,3-Trimethylpentane	9	84%	0.21	2.98	0.66	0.89	0.70	0.69	0.77
SLCU	58	2,2,4-Trimethylpentane	0	100%	1.33	23.16	4.65	5.82	4.63	4.64	0.80
SLCU	58	2,2-Dimethylbutane	0	100%	0.58	2.96	1.04	1.20	1.12	0.50	0.42
SLCU	58	2,3,4-Trimethylpentane	0	100%	0.56	8.69	1.87	2.22	1.81	1.67	0.75
SLCU	58	2,3-Dimethylbutane	0	100%	0.83	7.62	2.08	2.44	2.12	1.48	0.61
SLCU	58	2,3-Dimethylpentane	0	100%	0.83	11.75	2.59	3.39	2.78	2.46	0.72
SLCU	58	2,4-Dimethylpentane	0	100%	0.68	7.05	1.72	2.15	1.84	1.40	0.65
SLCU	58	2-Ethyl-1-butene	58	0%	0.52	0.52	0.52	0.52	0.52	0.00	0.00
SLCU	58	2-Methyl-1-butene	0	100%	0.33	3.72	0.99	1.29	1.07	0.86	0.66
SLCU	58	2-Methyl-1-pentene	51	12%	0.11	0.84	0.34	0.37	0.32	0.19	0.51
SLCU	58	2-Methyl-2-butene	3	95%	0.29	5.68	1.27	1.59	1.27	1.13	0.71
SLCU	58	2-Methylheptane	0	100%	0.33	2.30	0.84	0.94	0.85	0.45	0.48
SLCU	58	2-Methylhexane	0	100%	0.33	6.49	1.48	2.02	1.59	1.48	0.74

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SLCU	58	2-Methylpentane	0	100%	0.99	18.09	5.09	6.13	5.13	3.87	0.63
SLCU	58	3-Methyl-1-butene	44	24%	0.10	1.66	0.29	0.34	0.29	0.25	0.72
SLCU	58	3-Methylheptane	0	100%	0.37	2.39	0.87	1.00	0.90	0.50	0.50
SLCU	58	3-Methylhexane	0	100%	0.46	8.90	2.55	3.06	2.67	1.64	0.54
SLCU	58	3-Methylpentane	0	100%	0.96	11.72	3.27	3.88	3.28	2.45	0.63
SLCU	58	4-Methyl-1-pentene	58	0%	0.10	0.46	0.46	0.38	0.34	0.13	0.34
SLCU	58	a-Pinene	23	60%	0.18	3.48	0.39	0.56	0.45	0.53	0.95
SLCU	58	b-Pinene	17	71%	0.19	1.20	0.46	0.51	0.46	0.24	0.48
SLCU	58	cis-2-Butene	2	97%	0.47	3.13	0.89	1.07	0.96	0.57	0.53
SLCU	58	cis-2-Hexene	42	28%	0.09	2.22	0.32	0.42	0.31	0.37	0.88
SLCU	58	cis-2-Pentene	0	100%	0.42	2.29	0.89	0.96	0.88	0.45	0.47
SLCU	58	Cyclohexane	0	100%	0.55	149.85	2.71	9.52	3.67	22.13	2.33
SLCU	58	Cyclopentane	0	100%	0.43	2.61	0.88	1.02	0.92	0.51	0.50
SLCU	58	Cyclopentene	38	34%	0.12	3.91	0.36	0.51	0.38	0.61	1.21
SLCU	58	Ethane	0	100%	2.24	42.17	6.50	10.12	7.47	8.85	0.87
SLCU	58	Ethylene	0	100%	2.23	40.34	6.79	10.15	7.72	8.50	0.84
SLCU	58	Isobutane	0	100%	1.30	36.29	4.13	6.72	4.86	6.57	0.98
SLCU	58	Isobutene/1-Butene	0	100%	1.47	16.25	2.84	3.66	3.12	2.61	0.71
SLCU	58	Isopentane	0	100%	3.60	76.42	14.31	19.20	15.15	14.74	0.77
SLCU	58	Isoprene	2	97%	0.31	2.92	0.85	0.99	0.86	0.54	0.55
SLCU	58	Isopropylbenzene	52	10%	0.18	0.83	0.39	0.41	0.39	0.14	0.34
SLCU	58	m-Diethylbenzene	4	93%	0.28	3.22	1.50	1.53	1.37	0.66	0.43
SLCU	58	Methylcyclohexane	0	100%	0.57	6.53	1.73	2.14	1.85	1.29	0.60
SLCU	58	Methylcyclopentane	0	100%	0.69	8.93	2.24	2.71	2.27	1.80	0.66
SLCU	58	m-Ethyltoluene	0	100%	0.87	5.33	1.86	2.23	1.99	1.14	0.51
SLCU	58	m-Xylene/p-Xylene	0	100%	1.71	26.59	6.65	8.51	6.97	5.72	0.67
SLCU	58	n-Butane	0	100%	3.74	105.58	11.52	18.67	13.05	18.99	1.02
SLCU	58	n-Decane	0	100%	0.64	5.11	1.18	1.45	1.28	0.82	0.57
SLCU	58	n-Dodecane	31	47%	0.11	4.49	0.42	0.51	0.40	0.58	1.14
SLCU	58	n-Heptane	0	100%	0.68	7.97	1.95	2.44	2.04	1.62	0.67
SLCU	58	n-Hexane	0	100%	0.99	17.14	4.33	5.34	4.38	3.60	0.67
SLCU	58	n-Nonane	0	100%	0.41	3.18	0.88	0.99	0.89	0.51	0.52
SLCU	58	n-Pentane	0	100%	2.24	34.32	8.19	10.21	8.43	6.78	0.66
SLCU	58	n-Propylbenzene	8	86%	0.39	1.49	0.69	0.79	0.75	0.28	0.35
SLCU	58	n-Tridecane	49	16%	0.05	5.99	0.29	0.42	0.31	0.75	1.78
SLCU	58	n-Undecane	0	100%	1.12	8.05	2.48	2.88	2.67	1.26	0.44
SLCU	58	o-Ethyltoluene	7	88%	0.34	2.85	0.92	1.13	0.98	0.64	0.57
SLCU	58	o-Xylene	0	100%	0.74	9.78	2.48	3.14	2.61	2.07	0.66
SLCU	58	p-Diethylbenzene	4	93%	0.38	3.30	0.73	0.96	0.84	0.56	0.59

1999/2000 Summary Tables for SNMOC Monitoring - Appendix G

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SLCU	58	p-Ethyltoluene	1	98%	0.58	2.54	1.16	1.28	1.19	0.50	0.39
SLCU	58	Propane	0	100%	3.06	42.00	7.91	10.80	8.79	8.01	0.74
SLCU	58	Propyne	58	0%	0.32	0.38	0.38	0.38	0.38	0.01	0.02
SLCU	58	trans-2-Butene	0	100%	0.35	4.31	0.72	1.01	0.83	0.76	0.75
SLCU	58	trans-2-Hexene	51	12%	0.13	1.11	0.35	0.34	0.30	0.17	0.50
SLCU	58	trans-2-Pentene	0	100%	0.41	3.99	1.20	1.46	1.26	0.85	0.58

1999/2000 Summary Tables for Carbonyl Monitoring - Appendix H

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
A2TX	28	2,5-Dimethylbenzaldehyde	25	11%	0.00	0.01	0.00	0.00	0.00	0.00	0.51
A2TX	28	Acetaldehyde	0	100%	0.59	2.31	1.01	1.12	1.07	0.40	0.36
A2TX	28	Acetone	0	100%	0.39	3.37	1.00	1.25	1.07	0.74	0.59
A2TX	28	Benzaldehyde	0	100%	0.04	0.26	0.07	0.09	0.08	0.04	0.52
A2TX	28	Butyr/Isobutyraldehyde	0	100%	0.09	0.35	0.19	0.21	0.19	0.08	0.38
A2TX	28	Crotonaldehyde	18	36%	0.00	0.14	0.00	0.02	0.00	0.03	2.05
A2TX	28	Formaldehyde	0	100%	1.17	5.18	2.71	3.02	2.81	1.10	0.36
A2TX	28	Hexaldehyde	0	100%	0.03	0.18	0.07	0.07	0.07	0.03	0.45
A2TX	28	Isovaleraldehyde	9	68%	0.00	0.11	0.01	0.02	0.01	0.02	1.15
A2TX	28	Propionaldehyde	0	100%	0.06	0.37	0.13	0.15	0.14	0.07	0.47
A2TX	28	Tolualdehydes	1	96%	0.00	0.14	0.04	0.04	0.03	0.03	0.72
A2TX	28	Valeraldehyde	0	100%	0.02	0.10	0.04	0.05	0.04	0.02	0.42
BUND	25	2,5-Dimethylbenzaldehyde	24	4%	0.00	0.01	0.00	0.00	0.00	0.00	0.62
BUND	25	Acetaldehyde	0	100%	0.35	6.46	0.72	1.20	0.82	1.43	1.19
BUND	25	Acetone	0	100%	0.76	6.39	1.40	1.87	1.58	1.31	0.70
BUND	25	Benzaldehyde	0	100%	0.00	0.22	0.02	0.05	0.02	0.06	1.35
BUND	25	Butyr/Isobutyraldehyde	0	100%	0.04	3.29	0.26	0.40	0.20	0.63	1.60
BUND	25	Crotonaldehyde	13	48%	0.00	0.05	0.00	0.01	0.01	0.01	1.14
BUND	25	Formaldehyde	0	100%	0.70	10.97	1.63	2.54	1.69	3.01	1.19
BUND	25	Hexaldehyde	0	100%	0.00	3.35	0.07	0.38	0.09	0.87	2.28
BUND	25	Isovaleraldehyde	23	8%	0.00	0.01	0.00	0.00	0.00	0.00	0.88
BUND	25	Propionaldehyde	0	100%	0.03	0.95	0.07	0.13	0.08	0.19	1.46
BUND	25	Tolualdehydes	5	80%	0.00	0.17	0.02	0.03	0.02	0.04	1.36
BUND	25	Valeraldehyde	2	92%	0.00	1.46	0.03	0.15	0.03	0.36	2.33
CANJ	31	2,5-Dimethylbenzaldehyde	28	10%	0.00	0.01	0.00	0.00	0.00	0.00	0.90
CANJ	31	Acetaldehyde	0	100%	0.37	4.58	1.49	1.78	1.58	0.92	0.52
CANJ	31	Acetone	0	100%	0.27	47.82	1.63	3.29	1.67	8.21	2.49
CANJ	31	Benzaldehyde	0	100%	0.04	0.27	0.09	0.10	0.09	0.05	0.53
CANJ	31	Butyr/Isobutyraldehyde	0	100%	0.13	0.48	0.24	0.27	0.25	0.10	0.37
CANJ	31	Crotonaldehyde	20	35%	0.00	0.21	0.00	0.02	0.01	0.04	2.46
CANJ	31	Formaldehyde	0	100%	2.39	11.91	4.69	5.34	4.80	2.59	0.49
CANJ	31	Hexaldehyde	1	97%	0.00	0.33	0.07	0.09	0.06	0.08	0.87
CANJ	31	Isovaleraldehyde	14	55%	0.00	0.30	0.02	0.04	0.01	0.06	1.49
CANJ	31	Propionaldehyde	1	97%	0.00	0.63	0.17	0.20	0.16	0.13	0.62
CANJ	31	Tolualdehydes	1	97%	0.00	0.20	0.03	0.04	0.03	0.04	0.92
CANJ	31	Valeraldehyde	0	100%	0.03	0.31	0.06	0.09	0.07	0.06	0.69
CLIA	6	2,5-Dimethylbenzaldehyde	4	33%	0.00	0.02	0.00	0.01	0.00	0.01	1.30

1999/2000 Summary Tables for Carbonyl Monitoring - Appendix H

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
CLIA	6	Acetaldehyde	0	100%	0.29	2.83	0.95	1.30	1.04	0.83	0.63
CLIA	6	Acetone	0	100%	0.79	3.16	1.22	1.48	1.34	0.77	0.52
CLIA	6	Benzaldehyde	0	100%	0.01	0.08	0.04	0.04	0.04	0.02	0.49
CLIA	6	Butyr/Isobutyraldehyde	0	100%	0.04	0.37	0.14	0.16	0.12	0.11	0.68
CLIA	6	Crotonaldehyde	0	100%	0.01	0.07	0.03	0.03	0.02	0.02	0.67
CLIA	6	Formaldehyde	0	100%	0.66	3.11	1.18	1.56	1.36	0.84	0.54
CLIA	6	Hexaldehyde	0	100%	0.03	0.19	0.09	0.09	0.08	0.05	0.53
CLIA	6	Isovaleraldehyde	2	67%	0.00	0.07	0.01	0.02	0.01	0.02	1.22
CLIA	6	Propionaldehyde	0	100%	0.03	0.21	0.09	0.10	0.08	0.06	0.59
CLIA	6	Tolualdehydes	0	100%	0.01	0.17	0.04	0.05	0.03	0.05	1.05
CLIA	6	Valeraldehyde	0	100%	0.01	0.10	0.04	0.05	0.03	0.03	0.67
CRIA	15	2,5-Dimethylbenzaldehyde	14	7%	0.00	0.00	0.00	0.00	0.00	0.00	0.23
CRIA	15	Acetaldehyde	0	100%	0.49	8.58	1.15	1.94	1.42	2.00	1.03
CRIA	15	Acetone	0	100%	0.19	2.88	0.94	1.07	0.88	0.66	0.62
CRIA	15	Benzaldehyde	0	100%	0.01	0.27	0.06	0.08	0.05	0.08	0.98
CRIA	15	Butyr/Isobutyraldehyde	0	100%	0.08	0.62	0.17	0.27	0.22	0.17	0.64
CRIA	15	Crotonaldehyde	9	40%	0.00	0.07	0.00	0.01	0.01	0.02	1.59
CRIA	15	Formaldehyde	0	100%	0.81	4.01	1.72	2.08	1.87	0.95	0.46
CRIA	15	Hexaldehyde	0	100%	0.02	0.42	0.11	0.15	0.11	0.11	0.73
CRIA	15	Isovaleraldehyde	2	87%	0.00	0.66	0.04	0.09	0.03	0.16	1.80
CRIA	15	Propionaldehyde	0	100%	0.05	0.41	0.16	0.19	0.17	0.10	0.52
CRIA	15	Tolualdehydes	1	93%	0.00	0.10	0.03	0.04	0.03	0.03	0.65
CRIA	15	Valeraldehyde	0	100%	0.02	0.11	0.06	0.06	0.05	0.03	0.51
DAIA	5	2,5-Dimethylbenzaldehyde	5	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAIA	5	Acetaldehyde	0	100%	0.28	2.06	0.71	0.89	0.73	0.61	0.68
DAIA	5	Acetone	0	100%	0.75	1.24	1.04	1.03	1.02	0.17	0.16
DAIA	5	Benzaldehyde	0	100%	0.02	0.09	0.03	0.05	0.04	0.03	0.62
DAIA	5	Butyr/Isobutyraldehyde	0	100%	0.03	0.17	0.06	0.08	0.06	0.05	0.63
DAIA	5	Crotonaldehyde	0	100%	0.01	0.06	0.02	0.03	0.02	0.02	0.77
DAIA	5	Formaldehyde	0	100%	0.45	2.71	1.18	1.29	1.09	0.76	0.59
DAIA	5	Hexaldehyde	1	80%	0.00	0.09	0.06	0.05	0.03	0.03	0.60
DAIA	5	Isovaleraldehyde	3	40%	0.00	0.02	0.00	0.01	0.00	0.01	1.02
DAIA	5	Propionaldehyde	1	80%	0.00	0.11	0.06	0.06	0.03	0.04	0.70
DAIA	5	Tolualdehydes	0	100%	0.04	0.10	0.06	0.07	0.07	0.02	0.31
DAIA	5	Valeraldehyde	1	80%	0.00	0.09	0.03	0.03	0.02	0.03	0.91
DECO	26	2,5-Dimethylbenzaldehyde	21	19%	0.00	0.07	0.00	0.01	0.00	0.02	1.97
DECO	26	Acetaldehyde	0	100%	1.35	6.03	2.92	3.00	2.82	1.12	0.37

1999/2000 Summary Tables for Carbonyl Monitoring - Appendix H

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
DECO	26	Acetone	0	100%	1.69	6.05	3.97	3.96	3.76	1.20	0.30
DECO	26	Benzaldehyde	0	100%	0.07	0.29	0.12	0.13	0.12	0.05	0.38
DECO	26	Butyr/Isobutyraldehyde	0	100%	0.14	0.88	0.37	0.40	0.36	0.18	0.45
DECO	26	Crotonaldehyde	0	100%	0.01	0.18	0.04	0.06	0.05	0.05	0.79
DECO	26	Formaldehyde	0	100%	3.28	11.52	6.88	6.99	6.65	2.16	0.31
DECO	26	Hexaldehyde	0	100%	0.05	0.69	0.18	0.23	0.18	0.16	0.70
DECO	26	Isovaleraldehyde	16	38%	0.00	0.35	0.00	0.04	0.01	0.09	2.16
DECO	26	Propionaldehyde	0	100%	0.12	0.54	0.30	0.30	0.27	0.11	0.37
DECO	26	Tolualdehydes	0	100%	0.03	0.35	0.11	0.13	0.11	0.07	0.56
DECO	26	Valeraldehyde	0	100%	0.04	0.18	0.12	0.11	0.10	0.04	0.39
DMIA	5	2,5-Dimethylbenzaldehyde	5	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DMIA	5	Acetaldehyde	0	100%	0.49	1.39	0.98	0.92	0.86	0.34	0.37
DMIA	5	Acetone	0	100%	1.23	1.55	1.31	1.34	1.33	0.11	0.08
DMIA	5	Benzaldehyde	0	100%	0.05	0.08	0.07	0.07	0.07	0.01	0.13
DMIA	5	Butyr/Isobutyraldehyde	0	100%	0.10	0.24	0.14	0.15	0.15	0.05	0.31
DMIA	5	Crotonaldehyde	0	100%	0.00	0.08	0.02	0.02	0.01	0.03	1.13
DMIA	5	Formaldehyde	0	100%	1.00	2.70	1.90	1.79	1.69	0.59	0.33
DMIA	5	Hexaldehyde	0	100%	0.02	0.10	0.06	0.06	0.05	0.03	0.46
DMIA	5	Isovaleraldehyde	5	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DMIA	5	Propionaldehyde	0	100%	0.04	0.13	0.05	0.06	0.06	0.03	0.51
DMIA	5	Tolualdehydes	0	100%	0.02	0.07	0.05	0.05	0.05	0.02	0.30
DMIA	5	Valeraldehyde	0	100%	0.02	0.07	0.03	0.04	0.03	0.02	0.53
ELNJ	23	2,5-Dimethylbenzaldehyde	21	9%	0.00	0.04	0.00	0.00	0.00	0.01	1.87
ELNJ	23	Acetaldehyde	0	100%	0.08	3.50	1.46	1.35	1.07	0.81	0.60
ELNJ	23	Acetone	0	100%	0.05	2.92	1.12	1.12	0.91	0.61	0.54
ELNJ	23	Benzaldehyde	0	100%	0.02	0.32	0.05	0.08	0.06	0.07	0.93
ELNJ	23	Butyr/Isobutyraldehyde	0	100%	0.03	0.57	0.20	0.24	0.20	0.13	0.53
ELNJ	23	Crotonaldehyde	9	61%	0.00	0.09	0.01	0.02	0.01	0.02	1.19
ELNJ	23	Formaldehyde	0	100%	1.00	11.61	2.56	3.38	2.68	2.47	0.73
ELNJ	23	Hexaldehyde	0	100%	0.03	0.22	0.06	0.07	0.06	0.04	0.65
ELNJ	23	Isovaleraldehyde	10	57%	0.00	0.17	0.02	0.04	0.01	0.05	1.28
ELNJ	23	Propionaldehyde	1	96%	0.00	0.50	0.20	0.19	0.13	0.13	0.67
ELNJ	23	Tolualdehydes	1	96%	0.00	0.11	0.03	0.04	0.03	0.03	0.81
ELNJ	23	Valeraldehyde	0	100%	0.02	0.37	0.09	0.10	0.07	0.09	0.89
EPTX	28	2,5-Dimethylbenzaldehyde	24	14%	0.00	0.03	0.00	0.00	0.00	0.01	1.53
EPTX	28	Acetaldehyde	0	100%	0.24	3.90	1.37	1.46	1.24	0.80	0.55
EPTX	28	Acetone	0	100%	0.07	3.31	1.63	1.67	1.43	0.72	0.43

1999/2000 Summary Tables for Carbonyl Monitoring - Appendix H

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
EPTX	28	Benzaldehyde	0	100%	0.02	0.18	0.08	0.08	0.07	0.04	0.48
EPTX	28	Butyr/Isobutyraldehyde	0	100%	0.05	0.51	0.18	0.21	0.18	0.12	0.55
EPTX	28	Crotonaldehyde	12	57%	0.00	0.11	0.01	0.02	0.01	0.02	1.32
EPTX	28	Formaldehyde	0	100%	0.60	8.45	2.99	3.42	3.06	1.60	0.47
EPTX	28	Hexaldehyde	0	100%	0.02	0.39	0.05	0.06	0.05	0.07	1.10
EPTX	28	Isovaleraldehyde	6	79%	0.00	0.12	0.04	0.05	0.02	0.04	0.87
EPTX	28	Propionaldehyde	0	100%	0.05	0.50	0.15	0.17	0.14	0.12	0.68
EPTX	28	Tolualdehydes	0	100%	0.02	0.24	0.06	0.07	0.06	0.04	0.66
EPTX	28	Valeraldehyde	0	100%	0.01	0.09	0.03	0.04	0.03	0.02	0.50
MUIA	5	2,5-Dimethylbenzaldehyde	5	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUIA	5	Acetaldehyde	0	100%	0.11	2.31	0.34	0.78	0.47	0.80	1.03
MUIA	5	Acetone	0	100%	0.46	1.35	0.68	0.77	0.72	0.31	0.40
MUIA	5	Benzaldehyde	0	100%	0.01	0.18	0.11	0.10	0.08	0.06	0.56
MUIA	5	Butyr/Isobutyraldehyde	0	100%	0.05	0.55	0.14	0.19	0.14	0.18	0.94
MUIA	5	Crotonaldehyde	0	100%	0.01	0.05	0.01	0.02	0.01	0.02	0.83
MUIA	5	Formaldehyde	0	100%	0.10	0.44	0.27	0.30	0.26	0.12	0.41
MUIA	5	Hexaldehyde	0	100%	0.07	0.27	0.08	0.13	0.11	0.08	0.61
MUIA	5	Isovaleraldehyde	2	60%	0.00	1.08	0.02	0.22	0.02	0.43	1.92
MUIA	5	Propionaldehyde	0	100%	0.02	0.09	0.04	0.05	0.05	0.03	0.52
MUIA	5	Tolualdehydes	0	100%	0.10	0.69	0.19	0.26	0.20	0.22	0.84
MUIA	5	Valeraldehyde	1	80%	0.00	0.16	0.04	0.07	0.04	0.06	0.84
PLOR	34	2,5-Dimethylbenzaldehyde	32	6%	0.00	0.03	0.00	0.00	0.00	0.01	2.08
PLOR	34	Acetaldehyde	0	100%	0.47	3.63	1.16	1.39	1.24	0.69	0.50
PLOR	34	Acetone	0	100%	0.58	5.81	1.92	2.29	1.98	1.23	0.54
PLOR	34	Benzaldehyde	0	100%	0.03	0.23	0.07	0.08	0.07	0.04	0.52
PLOR	34	Butyr/Isobutyraldehyde	0	100%	0.09	0.47	0.20	0.22	0.20	0.10	0.47
PLOR	34	Crotonaldehyde	18	47%	0.00	0.03	0.00	0.01	0.00	0.01	0.94
PLOR	34	Formaldehyde	0	100%	1.08	9.83	2.54	2.93	2.60	1.65	0.56
PLOR	34	Hexaldehyde	0	100%	0.02	0.42	0.05	0.07	0.06	0.07	1.02
PLOR	34	Isovaleraldehyde	6	82%	0.00	0.12	0.02	0.03	0.01	0.03	0.99
PLOR	34	Propionaldehyde	1	97%	0.00	0.36	0.11	0.14	0.11	0.08	0.62
PLOR	34	Tolualdehydes	2	94%	0.00	0.14	0.04	0.04	0.03	0.03	0.77
PLOR	34	Valeraldehyde	0	100%	0.02	0.17	0.05	0.06	0.05	0.04	0.65
SLCU	59	2,5-Dimethylbenzaldehyde	54	8%	0.00	0.04	0.00	0.00	0.00	0.01	1.95
SLCU	59	Acetaldehyde	0	100%	0.36	6.98	1.33	1.73	1.40	1.34	0.77
SLCU	59	Acetone	0	100%	0.62	6.04	2.12	2.43	2.18	1.18	0.49
SLCU	59	Benzaldehyde	0	100%	0.03	0.55	0.08	0.12	0.10	0.10	0.81

1999/2000 Summary Tables for Carbonyl Monitoring - Appendix H

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
SLCU	59	Butyr/Isobutyraldehyde	0	100%	0.06	0.57	0.23	0.27	0.23	0.14	0.52
SLCU	59	Crotonaldehyde	22	63%	0.00	0.17	0.01	0.02	0.01	0.04	1.65
SLCU	59	Formaldehyde	0	100%	0.92	35.93	3.40	6.04	3.97	7.68	1.27
SLCU	59	Hexaldehyde	0	100%	0.02	1.41	0.07	0.17	0.09	0.25	1.52
SLCU	59	Isovaleraldehyde	26	56%	0.00	0.61	0.03	0.09	0.02	0.13	1.43
SLCU	59	Propionaldehyde	0	100%	0.03	0.74	0.13	0.19	0.14	0.17	0.87
SLCU	59	Tolualdehydes	3	95%	0.00	0.54	0.04	0.07	0.04	0.08	1.24
SLCU	59	Valeraldehyde	0	100%	0.01	0.64	0.05	0.09	0.06	0.12	1.28

1999/2000 Summary Tables for SVOC Monitoring - Appendix I

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
PLOR	34	1,2,4,5-Tetrachlorobenzene	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	1,2,4-Trichlorobenzene	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	1,2-Dichlorobenzene	34	0%	0.02	0.03	0.03	0.03	0.03	0.00	0.03
PLOR	34	1,3-Dichlorobenzene	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	1,3-Dintrobenzene	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	1,4-Dichlorobenzene	19	54%	0.01	0.12	0.03	0.05	0.04	0.03	0.63
PLOR	34	1,4-Naphthoquinone	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	1-Naphthylamine	34	0%	0.01	0.01	0.01	0.01	0.01	0.00	0.00
PLOR	34	2,3,4,6-Tetrachlorophenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2,4,5-Trichlorphenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2,4,6-Trichlorophenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2,4-Dichlorophenol	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	2,4-Dimethylphenol	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	2,4-Dinitrophenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2,4-Dinitrotoluene	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2,6-Dichlorophenol	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	2,6-Dinitrotoluene	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2-Acetylaminofluorene	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	2-Chloronaphthalene	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	2-Chlorophenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2-Methylnaphthalene	3	111%	0.03	0.49	0.15	0.17	0.12	0.13	0.74
PLOR	34	2-Methylphenol	33	4%	0.02	0.08	0.02	0.02	0.02	0.01	0.40
PLOR	34	2-Naphthylamine	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2-Nitroaniline	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	2-Nitrophenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	2-Picoline	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	3&4-Methylphenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	3,3'-Dichlorobenzidine	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	3,3'-Dimethylbenzidine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	3-Methylcholanthrene	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	3-Nitroaniline	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	4,6-Dinitro-2-methylphenol	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	4-Aminobiphenyl	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	4-Bromophenyl phenyl ether	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	4-Chloro-3-methylphenol	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	4-Chloroaniline	33	4%	0.04	0.08	0.04	0.04	0.04	0.01	0.16
PLOR	34	4-Chlorophenyl-phenyl ether	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	4-Dimethylaminoazobenzene	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00

1999/2000 Summary Tables for SVOC Monitoring - Appendix I

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
PLOR	34	4-Nitroaniline	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	4-Nitrophenol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	5-Nitro-o-toluidine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	7,12-Dimethylbenz(a)anthracene	31	11%	0.05	0.24	0.05	0.06	0.05	0.04	0.73
PLOR	34	Acenaphthene	18	57%	0.00	0.44	0.01	0.05	0.02	0.08	1.67
PLOR	34	Acenaphthylene	32	7%	0.02	0.04	0.02	0.02	0.02	0.00	0.17
PLOR	34	Acetophenone	31	11%	0.03	0.54	0.03	0.06	0.04	0.10	1.66
PLOR	34	Aniline	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Anthracene	34	0%	0.01	0.04	0.04	0.04	0.04	0.01	0.17
PLOR	34	Azobenzene	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Benzidine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Benzo(a)anthracene	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	Benzo(a)pyrene	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Benzo(b)fluoranthene	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Benzo(g,h,i)perylene	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Benzo(k)fluoranthene	34	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
PLOR	34	Benzyl alcohol	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	bis (2-Chloroethyl)ether	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	bis(2-Chloroethoxy)methane	31	11%	0.03	0.10	0.03	0.04	0.04	0.01	0.34
PLOR	34	bis(2-Chloroisopropyl)ether	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	bis(2-Ethylhexyl)phthalate	30	14%	0.01	0.08	0.03	0.03	0.03	0.01	0.40
PLOR	34	Butyl benzyl phthalate	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	Carbazole	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	Chlorobenzilate	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Chrysene	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	Diallate	34	0%	0.05	0.12	0.12	0.12	0.12	0.01	0.10
PLOR	34	Dibenz(a,h)anthracene	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Dibenzofuran	25	32%	0.00	0.08	0.02	0.03	0.02	0.02	0.61
PLOR	34	Diethyl phthalate	30	14%	0.01	0.05	0.02	0.02	0.02	0.01	0.33
PLOR	34	Dimethyl phthalate	31	11%	0.02	0.75	0.02	0.07	0.03	0.16	2.31
PLOR	34	Di-n-butyl phthalate	13	75%	0.02	0.16	0.04	0.05	0.04	0.03	0.58
PLOR	34	Di-n-octyl phthalate	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	Dinoseb	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Diphenylamine	34	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
PLOR	34	Ethyl methanesulfonate	34	0%	0.07	0.07	0.07	0.07	0.07	0.00	0.00
PLOR	34	Fluoranthene	32	7%	0.01	0.13	0.03	0.04	0.04	0.02	0.50
PLOR	34	Fluorene	27	25%	0.01	0.07	0.02	0.03	0.02	0.02	0.59
PLOR	34	Hexachlorobenzene	33	4%	0.03	0.05	0.03	0.03	0.03	0.00	0.07

1999/2000 Summary Tables for SVOC Monitoring - Appendix I

Site	Samples	Compound	Number of Nondetects	Frequency of Detects	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation	Coefficient of Variation
PLOR	34	Hexachlorobutadiene	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	Hexachlorocyclopentadiene	34	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	34	Hexachloroethane	34	0%	0.01	0.01	0.01	0.01	0.01	0.00	0.00
PLOR	34	Hexachloropropene	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Indeno(1,2,3-cd)pyrene	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	Isodrin	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Isophorone	34	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	34	Isosafrole	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Methyl methanesulfonate	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Naphthalene	3	111%	0.04	0.92	0.32	0.34	0.26	0.23	0.68
PLOR	34	Nitrobenzene	34	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
PLOR	34	N-Nitrosodibutylamine	34	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	34	N-Nitrosodiethylamine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	N-Nitrosodimethylamine	34	0%	0.06	0.06	0.06	0.06	0.06	0.00	0.00
PLOR	34	N-Nitrosodipropylamine	34	0%	0.05	0.05	0.05	0.05	0.05	0.00	0.00
PLOR	34	N-Nitrosomethylethylamine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	N-Nitrosopiperidine	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	N-Nitrosopyrrolidine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	o-Toluidine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Pentachlorobenzene	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	Pentachloroethane	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Pentachloronitrobenzene	34	0%	0.02	0.02	0.02	0.02	0.02	0.00	0.00
PLOR	34	Pentachlorophenol	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Phenacetin	34	0%	0.04	0.04	0.04	0.04	0.04	0.00	0.00
PLOR	34	Phenanthrene	18	57%	0.01	0.13	0.02	0.04	0.03	0.03	0.76
PLOR	34	Phenol	7	96%	0.03	0.54	0.14	0.19	0.14	0.15	0.76
PLOR	34	Pronamide	34	0%	0.03	0.03	0.03	0.03	0.03	0.00	0.00
PLOR	34	Pyrene	34	0%	0.00	0.03	0.03	0.02	0.02	0.00	0.14
PLOR	34	Pyridine	34	0%	0.12	0.12	0.12	0.12	0.12	0.00	0.00
PLOR	34	Safrole	32	7%	0.12	0.26	0.12	0.13	0.13	0.03	0.26

1999/2000 VOC Raw Monitoring Data - Arlington, TX
Appendix J

SAMPLE SITE #	A2TX 17067	A2TX 17078	A2TX 17116	A2TX 17177	A2TX 17173	A2TX 17203	A2TX 17224	A2TX 17243
SAMPLE DATE	11/19/1999	11/26/1999	12/8/1999	12/20/1999	1/1/2000	1/13/2000	1/25/2000	2/6/2000
ANALYSIS DATE	11/24/1999	12/21/1999	12/22/1999	1/19/2000	2/3/2000	2/3/2000	2/16/2000	Void
FILE NAME	L9LW027	L9LU008	L9LU020	L0AS013	L0BC008	L9BC005	L0BP015	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.51	1.35	1.32	0.84	2.54	1.91	3.33	
PROPYLENE	1.04	0.68	1.16	0.43	1.12	1.01	1.60	
DICHLORODIFLUOROMETHANE	0.76	0.66	0.69	0.36	1.10	0.81	0.72	
CHLOROMETHANE	0.96	0.89	0.88	0.43	1.33	1.01	0.85	
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	
1,3-BUTADIENE	0.10	0.02 U	0.03 U	ND	ND	ND	0.08	
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROFLUOROMETHANE	0.39	0.32	0.34	0.17	0.88	0.39	0.35	
ACRYLONITRILE	0.85	0.70	0.83	0.27	0.53	ND	0.71	
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	
METHYLENE CHLORIDE	0.39	0.47	0.54	0.71	0.62	0.48	0.59	
TRICHLOROTRIFLUOROETHANE	0.12	0.17	0.12	0.05	0.11	0.10	0.10	
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
METHYL tert-BUTYL ETHER	0.78	0.33	0.29	0.14	ND	0.52	0.83	
METHYL ETHYL KETONE	1.17	1.76	1.56	1.01	3.17	4.27	8.21	
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
1,1,1 - TRICHLOROETHANE	0.06	0.06	0.06	ND	0.12	ND	ND	
BENZENE	0.64	0.44	0.59	0.22	0.88	0.58	0.70	
CARBON TETRACHLORIDE	0.11	0.06 U	0.11	0.03 U	0.10	0.09	0.04 U	
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE	0.17	0.37	0.53	ND	0.66	0.80	4.47	
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
TOLUENE	0.99	0.58	0.89	0.28	2.76	0.85	1.21	
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	
N-OCTANE	0.10	0.06	0.08 U	0.04 U	0.17	0.06 U	0.11	
TETRACHLOROETHYLENE	0.03 U	0.07	ND	ND	ND	ND	ND	
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
ETHYLBENZENE	0.17	0.12	0.14	0.06 U	0.26	0.29	0.23	
m,p - XYLENE	0.47	0.25	0.30	0.14	0.64	0.77	0.61	
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	
STYRENE	0.07 U	0.07 U	0.08 U	ND	ND	0.09 U	0.17	
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
o - XYLENE	0.23	0.15	0.17	0.08	0.32	0.40	0.33	
1,3,5-TRIMETHYLBENZENE	0.09	0.09	0.09	0.03 U	0.12	0.15	0.14	
1,2,4-TRIMETHYLBENZENE	0.23	0.18	0.18	0.07 U	0.24	0.30	0.30	
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	
p - DICHLOROBENZENE	0.01 U	ND	ND	ND	ND	ND	ND	
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Arlington, TX
Appendix J

SAMPLE SITE #	A2TX 17247		A2TX 17270		A2TX 17308		A2TX 17335		A2TX 17378		A2TX 17426 D1		A2TX 17426 R1		A2TX 17428 D2	
SAMPLE DATE	2/7/2000		2/18/2000		3/1/2000		3/13/2000		3/25/2000		4/6/2000		4/6/2000		4/6/2000	
ANALYSIS DATE	2/22/2000		3/7/2000		3/21/2000		4/3/2000		4/4/2000		4/18/2000		4/19/2000		4/18/2000	
FILE NAME	L0BV007		L0CG007		L0CU014		L0DC008		L0DC018		L0DR007		L0DS007		L0DR008	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.76		1.21		1.62		1.09		3.15		0.65		0.70		0.65	
PROPYLENE	0.70		0.53		0.58		0.51		1.28		0.23		0.24		0.27	
DICHLORODIFLUOROMETHANE	0.64		0.65		0.59		0.58		0.65		0.56		0.58		0.57	
CHLOROMETHANE	0.62		0.78		0.65		0.72		0.85		0.53		0.61		0.62	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND		0.10		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		4.91		ND		4.00		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.58		0.29		0.27		0.31		0.54		0.26		0.26		0.27	
ACRYLONITRILE	0.33		ND		ND		ND		1.42		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	0.21		0.32		0.41		0.33		0.95		ND		ND		0.26	
TRICHLOROTRIFLUOROETHANE	0.07		0.11		0.06		0.06		0.04		0.07		0.04		0.07	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	0.25		0.27		0.69		0.32		0.45		ND		ND		ND	
METHYL ETHYL KETONE	1.11		0.54		1.04		0.92		1.43		0.51		0.51		0.61	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.06	U	ND		ND		ND		0.03	U	ND		ND		ND	
BENZENE	0.60		0.44		0.49		0.45		0.77		0.26		0.27		0.25	
CARBON TETRACHLORIDE	0.04	U	0.05	U	0.04	U	0.04	U	0.05	U	0.04	U	ND		0.04	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		0.07		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	1.78		0.45		0.81		0.44		6.25		0.27		0.27		0.25	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	0.13		ND		ND		ND		0.26		ND		ND		ND	
TETRACHLOROETHYLENE	ND		ND		ND		ND		0.10		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.16		0.09	U	0.16		0.09	U	0.36		0.04	U	0.05	U	0.05	U
m,p - XYLENE	0.44		0.21		0.38		0.19		0.68		0.11		0.08		0.10	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.06	U	ND		0.02	U	ND		0.36		ND		ND		ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.23		0.11		0.21		0.11		0.33		0.03		0.05		0.03	
1,3,5-TRIMETHYLBENZENE	0.07		0.03	U	0.06	U	0.05	U	0.11		ND		ND		ND	
1,2,4-TRIMETHYLBENZENE	0.16		0.11		0.18		0.11		0.29		0.06	U	0.08	U	0.06	U
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Arlington, TX
Appendix J

SAMPLE SITE #	A2TX 17428 R2		A2TX 17451		A2TX 17477		A2TX 17578	A2TX 17609 D1		A2TX 17609 R1	A2TX 17611 D2		A2TX 17611 R2
SAMPLE DATE	4/6/2000		4/18/2000		4/30/2000		5/12/2000	6/17/2000		6/17/2000	6/17/2000		6/17/2000
ANALYSIS DATE	4/19/2000		5/3/2000		5/3/2000		Void	6/23/2000		Void	6/24/2000		Void
FILE NAME	L0DS008		L0EB020		L0EB024			L0FW016			L0FW017		
UNITS	ppbv		ppbv		ppbv		ppbv	ppbv		ppbv	ppbv		ppbv
ACETYLENE	0.73		1.43		1.18			0.81			0.83		
PROPYLENE	0.29		0.51		0.48			0.52			0.63		
DICHLORODIFLUOROMETHANE	0.58		0.41		0.30			0.58			0.53		
CHLOROMETHANE	0.72		0.83		0.73			0.84			0.82		
DICHLOROTETRAFLUOROETHANE	ND		ND		ND			ND			ND		
VINYL CHLORIDE	ND		ND		ND			ND			ND		
1,3-BUTADIENE	ND		ND		ND			ND			ND		
BROMOMETHANE	ND		ND		ND			ND			ND		
CHLOROETHANE	ND		ND		ND			ND			ND		
ACETONITRILE	ND		ND		ND			ND			0.99		
TRICHLOROFLUOROMETHANE	0.27		0.25		0.67			0.24			0.23		
ACRYLONITRILE	ND		0.68		0.44			ND			ND		
1,1-DICHLOROETHENE	ND		ND		ND			ND			ND		
METHYLENE CHLORIDE	0.24		0.36		0.27			0.32			ND		
TRICHLOROTRIFLUOROETHANE	0.07		0.11		0.08			0.03			0.07		
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND			ND			ND		
1,1 - DICHLOROETHANE	ND		ND		ND			ND			ND		
METHYL tert-BUTYL ETHER	ND		0.35		0.24			0.40			0.41		
METHYL ETHYL KETONE	0.50		3.22		1.26			0.81			1.11		
CHLOROPRENE	ND		ND		ND			ND			ND		
cis-1,2-DICHLOROETHYLENE	ND		ND		ND			ND			ND		
BROMOCHLOROMETHANE	ND		ND		ND			ND			ND		
CHLOROFORM	ND		ND		ND			ND			ND		
ETHYL tert-BUTYL ETHER	ND		ND		ND			ND			ND		
1,2 - DICHLOROETHANE	ND		ND		ND			ND			ND		
1,1,1 - TRICHLOROETHANE	ND		0.03	U	0.02	U		ND			ND		
BENZENE	0.27		0.42		0.49			0.34			0.34		
CARBON TETRACHLORIDE	ND		0.07	U	0.10			ND			ND		
tert-AMYL METHYL ETHER	ND		ND		ND			ND			ND		
1,2 - DICHLOROPROPANE	ND		ND		ND			ND			ND		
ETHYL ACRYLATE	ND		ND		ND			ND			ND		
BROMODICHLOROMETHANE	ND		ND		ND			ND			ND		
TRICHLOROETHYLENE	ND		ND		ND			ND			ND		
METHYL METHACRYLATE	ND		ND		ND			ND			ND		
cis -1,3 - DICHLOROPROPENE	ND		ND		ND			ND			ND		
METHYL ISOBUTYL KETONE	ND		1.22		0.24			ND			0.14		
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND			ND			ND		
1,1,2 - TRICHLOROETHANE	ND		ND		ND			ND			ND		
TOLUENE	0.27		0.55		0.56			1.51			1.51		
DIBROMOCHLOROMETHANE	ND		ND		ND			ND			ND		
1,2-DIBROMOETHANE	ND		ND		ND			ND			ND		
N-OCTANE	ND		0.03	U	0.03	U		0.30			0.25		
TETRACHLOROETHYLENE	ND		ND		ND			ND			ND		
CHLOROBENZENE	ND		ND		ND			ND			ND		
ETHYLBENZENE	0.05	U	0.12		0.12			0.15			0.13		
m,p - XYLENE	0.08	U	0.25		0.25			0.30			0.28		
BROMOFORM	ND		ND		ND			ND			ND		
STYRENE	ND		0.04	U	0.05	U		ND			ND		
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND			ND			ND		
o - XYLENE	0.03		0.14		0.13			0.16			0.15		
1,3,5-TRIMETHYLBENZENE	0.02	U	0.07		0.06	U		0.05	U		0.05	U	
1,2,4-TRIMETHYLBENZENE	0.06	U	0.14		0.12			0.12	U		0.14		
m - DICHLOROBENZENE	ND		ND		ND			ND			ND		
CHLOROMETHYLBENZENE	ND		ND		ND			ND			ND		
p - DICHLOROBENZENE	ND		ND		ND			ND			ND		
o - DICHLOROBENZENE	ND		ND		ND			ND			ND		
1,2,4-TRICHLOROBENZENE	ND		ND		ND			ND			ND		
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND			ND			ND		

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Arlington, TX
Appendix J

SAMPLE SITE #	A2TX 17769 D1	A2TX 17769 R1	A2TX 17771 D2	A2TX 17771 R2	A2TX 17824	A2TX 17976 D1	A2TX 17976 R1	A2TX 17978 D2
SAMPLE DATE	6/29/2000	6/29/2000	6/29/2000	6/29/2000	7/11/2000	7/23/2000	7/23/2000	7/23/2000
ANALYSIS DATE	7/19/2000	7/20/2000	7/18/2000	7/19/2000	7/20/2000	8/2/2000	8/15/2000	8/2/2000
FILE NAME	L0GS009	L0GT009	L0GQ017	L0GS010	L0GS018	L0HB013	L0HN025	L0HB014
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.13	1.08	1.08	1.03	0.64	0.72	0.82	0.75
PROPYLENE	0.54	0.52	0.56	0.52	0.37	0.43	0.48	0.39
DICHLORODIFLUOROMETHANE	0.59	0.57	0.66	0.61	0.58	0.62	0.64	0.62
CHLOROMETHANE	0.75	0.65	0.81	0.74	0.80	0.79	0.78	0.59
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.36	0.33	0.42	0.41	0.31	0.27	0.28	0.37
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.24	0.13 U	0.30	0.26	0.42	0.28	0.28	ND
TRICHLOROTRIFLUOROETHANE	0.05	ND	0.08	0.04	0.06	0.05	ND	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	1.02	0.73	0.77	0.69	0.31	0.40	0.42	0.40
METHYL ETHYL KETONE	1.92	0.96	0.73	0.76	0.79	0.53	0.56	0.61
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.49	0.48	0.39	0.37	0.32	0.34	0.34	0.31
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.06 U	0.06 U	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	1.25	1.21	1.27	1.24	6.38	0.76	0.76	0.98
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	0.06 U	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.22	0.22	0.21	0.20	0.21	0.13 U	0.13 U	0.15
m,p - XYLENE	0.56	0.55	0.53	0.53	0.36	0.27	0.24	0.31
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.04 U	0.04 U	0.07 U	0.07 U	0.16	ND	ND	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.31	0.27	0.28	0.27	0.16	0.11	0.11	0.14
1,3,5-TRIMETHYLBENZENE	0.15	0.15	0.13	0.12	0.05 U	ND	ND	0.04 U
1,2,4-TRIMETHYLBENZENE	0.37	0.38	0.36	0.34	0.16	0.11 U	0.12 U	0.16
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Arlington, TX
Appendix J

SAMPLE SITE #	A2TX 17978 R2	A2TX	SLCU 17497	A2TX 18249	A2TX 18381	A2TX 18427	A2TX 18532	A2TX 18588
SAMPLE DATE	7/23/2000	8/4/2000	8/16/2000	8/28/2000	9/9/2000	9/21/2000	10/3/2000	10/15/2000
ANALYSIS DATE	8/15/2000	Not Sampled	8/28/2000	9/11/2000	Void	10/12/2000	10/27/2000	11/6/2000
FILE NAME	L0HN026		L0H!011	L0IK012		L0JK024	L0JZ020	L0KF013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.86		0.65	0.66		0.60	0.45	0.50
PROPYLENE	0.42		0.42	0.52		0.37	0.34	0.36
DICHLORODIFLUOROMETHANE	0.62		0.84	0.73		0.65	0.56	0.42
CHLOROMETHANE	0.63		0.85	0.86		0.76	0.67	0.57
DICHLOROTETRAFLUOROETHANE	ND		ND	ND		ND	ND	ND
VINYL CHLORIDE	ND		ND	ND		ND	ND	ND
1,3-BUTADIENE	ND		ND	ND		ND	ND	ND
BROMOMETHANE	ND		ND	ND		ND	ND	ND
CHLOROETHANE	ND		ND	ND		ND	ND	ND
ACETONITRILE	ND		ND	ND		ND	23.83	4.73
TRICHLOROFLUOROMETHANE	0.43		0.62	1.70		0.33	0.28	0.16
ACRYLONITRILE	ND		ND	ND		ND	0.47	0.36
1,1-DICHLOROETHENE	ND		ND	ND		ND	ND	ND
METHYLENE CHLORIDE	ND		0.33	0.43		0.35	0.24	0.29
TRICHLOROTRIFLUOROETHANE	ND		ND	0.07 U		0.09	0.08	0.02 U
trans - 1,2 - DICHLOROETHYLENE	ND		ND	ND		ND	ND	ND
1,1 - DICHLOROETHANE	ND		ND	ND		ND	ND	ND
METHYL tert-BUTYL ETHER	0.47		0.43	0.40		0.33	0.17 U	0.28
METHYL ETHYL KETONE	0.83		0.66	0.81		1.35	0.69	1.74
CHLOROPRENE	ND		ND	ND		ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND		ND	ND		ND	ND	ND
BROMOCHLOROMETHANE	ND		ND	ND		ND	ND	ND
CHLOROFORM	ND		ND	ND		ND	ND	ND
ETHYL tert-BUTYL ETHER	ND		ND	ND		ND	ND	ND
1,2 - DICHLOROETHANE	ND		ND	ND		ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND		ND	ND		ND	ND	ND
BENZENE	0.33		0.34	0.33		0.29	0.27	0.28
CARBON TETRACHLORIDE	ND		ND	ND		0.04 U	0.07 U	ND
tert-AMYL METHYL ETHER	ND		ND	ND		ND	ND	ND
1,2 - DICHLOROPROPANE	ND		ND	ND		ND	ND	ND
ETHYL ACRYLATE	ND		ND	ND		ND	ND	ND
BROMODICHLOROMETHANE	ND		ND	ND		ND	ND	ND
TRICHLOROETHYLENE	ND		ND	ND		ND	ND	ND
METHYL METHACRYLATE	ND		ND	ND		ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND		ND	ND		ND	ND	ND
METHYL ISOBUTYL KETONE	0.23		ND	ND		ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND		ND	ND		ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND		ND	ND		ND	ND	ND
TOLUENE	1.07		0.69	0.62		0.44	0.39	0.33
DIBROMOCHLOROMETHANE	ND		ND	ND		ND	ND	ND
1,2-DIBROMOETHANE	ND		ND	ND		ND	ND	ND
N-OCTANE	ND		ND	ND		ND	ND	ND
TETRACHLOROETHYLENE	ND		ND	ND		ND	ND	ND
CHLOROBENZENE	ND		ND	ND		ND	ND	ND
ETHYLBENZENE	0.16		0.09	0.11		0.10	0.10	0.09
m,p - XYLENE	0.26		0.21	0.26		0.23	0.20	0.17
BROMOFORM	ND		ND	ND		ND	ND	ND
STYRENE	0.06 U		ND	ND		ND	0.03 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND		ND	ND		ND	ND	ND
o - XYLENE	0.12		0.06 U	0.14		0.11	0.09	0.09
1,3,5-TRIMETHYLBENZENE	0.04 U		ND	0.02 U		ND	ND	ND
1,2,4-TRIMETHYLBENZENE	0.14		0.11	0.10		0.10	0.09	0.10
m - DICHLOROBENZENE	ND		ND	ND		ND	ND	ND
CHLOROMETHYLBENZENE	ND		ND	ND		ND	ND	ND
p - DICHLOROBENZENE	ND		ND	ND		ND	ND	ND
o - DICHLOROBENZENE	ND		ND	ND		ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND		ND	ND		ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND		ND	ND		ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Arlington, TX
Appendix J

SAMPLE SITE #	A2TX	A2TX 18716		A2TX 18765		A2TX 18816		A2TX 18934		A2TX 18984	
SAMPLE DATE	10/27/2000	11/8/2000		11/20/2000		12/2/2000		12/14/2000		12/26/2000	
ANALYSIS DATE	Not Sampled	11/14/2000		12/6/2000		12/18/2000		1/5/2001		1/10/2001	
FILE NAME		L0KN012		L0LE025		L0LR015		L1AE006		L1AJ008	
UNITS	ppbv	ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE		1.18		7.39		1.36		7.69		1.62	
PROPYLENE		0.40		2.00		0.42		1.48		0.43	
DICHLORODIFLUOROMETHANE		0.61		0.73		0.51		0.67		0.43	
CHLOROMETHANE		0.66		0.69		0.50		0.56		0.54	
DICHLOROTETRAFLUOROETHANE		ND		ND		ND		0.03	U	ND	
VINYL CHLORIDE		ND		ND		ND		ND		ND	
1,3-BUTADIENE		0.04	U	0.35		0.07	U	0.27		0.08	
BROMOMETHANE		ND		ND		ND		ND		ND	
CHLOROETHANE		ND		0.08		ND		ND		ND	
ACETONITRILE		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE		0.45		0.60		0.28		0.27		0.20	
ACRYLONITRILE		0.37		ND		ND		ND		0.28	
1,1-DICHLOROETHENE		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE		0.33		0.41		0.33		0.39		0.19	
TRICHLOROTRIFLUOROETHANE		0.07		0.06	U	0.09		0.11		0.07	U
trans - 1,2 - DICHLOROETHYLENE		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER		0.28		2.40		0.24		1.61		0.31	
METHYL ETHYL KETONE		0.76		1.96		1.27		1.61		1.13	
CHLOROPRENE		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE		ND		ND		ND		ND		ND	
CHLOROFORM		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE		ND		0.05	U	0.05	U	0.06		0.02	U
BENZENE		0.36		1.12		0.52		0.99		0.35	
CARBON TETRACHLORIDE		0.05	U	0.05	U	0.08	U	0.08		0.06	U
tert-AMYL METHYL ETHER		ND		0.18		ND		0.18		ND	
1,2 - DICHLOROPROPANE		ND		ND		ND		ND		ND	
ETHYL ACRYLATE		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE		ND		ND		ND		0.06	U	ND	
METHYL METHACRYLATE		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE		ND		0.48		ND		ND		0.21	
trans - 1,3 - DICHLOROPROPENE		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE		ND		ND		ND		ND		ND	
TOLUENE		0.43		2.08		0.47		1.67		0.42	
DIBROMOCHLOROMETHANE		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE		ND		ND		ND		ND		ND	
N-OCTANE		ND		0.16		0.06	U	0.21		0.05	U
TETRACHLOROETHYLENE		ND		0.15		ND		0.12		ND	
CHLOROBENZENE		ND		ND		ND		ND		ND	
ETHYLBENZENE		0.11		0.42		0.11		0.35		0.08	
m,p - XYLENE		0.24		1.07		0.24		0.78		0.22	
BROMOFORM		ND		ND		ND		ND		ND	
STYRENE		0.03	U	0.18		0.03	U	0.13		0.04	U
1,1,2,2 - TETRACHLOROETHANE		ND		ND		ND		ND		ND	
o - XYLENE		0.12		0.48		0.14		0.43		0.12	
1,3,5-TRIMETHYLBENZENE		0.04	U	0.19		0.05	U	0.13		0.03	U
1,2,4-TRIMETHYLBENZENE		0.12		0.46		0.10		0.40		0.08	
m - DICHLOROBENZENE		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE		0.15		0.17		0.13		0.18		0.05	U
o - DICHLOROBENZENE		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE		ND		ND		ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Beulah, ND
Appendix J

SAMPLE SITE #	BUND 17387		BUND 17764		BUND 17933 D1	BUND 17934 D2	BUND 18009	BUND 18136	BUND 18159		BUND 18202	
SAMPLE DATE	3/25/2000		7/5/2000		7/23/2000	7/23/2000	7/29/2000	8/10/2000	8/16/2000		8/22/2000	
ANALYSIS DATE	4/4/2000		7/19/2000		Void	Void	8/21/2000	8/21/2000	8/28/2000		8/28/2000	
FILE NAME	L0DC019		L0GS006				LOHU14	L0HU015	L0H!008		L0H!015	
UNITS	ppbv		ppbv		ppbv	ppbv	ppbv	ppbv	ppbv		ppbv	
ACETYLENE	0.91		0.41				0.26	0.32	0.25		0.25	
PROPYLENE	0.26		0.28				0.24	0.27	0.21		0.18	
DICHLORODIFLUOROMETHANE	0.58		0.56				0.55	0.53	0.54		0.58	
CHLOROMETHANE	ND		0.59				0.55	0.66	0.50		0.44	
DICHLOROTETRAFLUOROETHANE	ND		ND				ND	ND	ND		ND	
VINYL CHLORIDE	ND		ND				ND	ND	ND		ND	
1,3-BUTADIENE	ND		ND				ND	ND	ND		ND	
BROMOMETHANE	ND		ND				ND	ND	ND		ND	
CHLOROETHANE	ND		ND				ND	ND	ND		ND	
ACETONITRILE	ND		ND				ND	ND	ND		1.41	
TRICHLOROFLUOROMETHANE	0.29		0.28				0.38	0.21	0.25		0.25	
ACRYLONITRILE	ND		ND				ND	ND	ND		ND	
1,1-DICHLOROETHENE	ND		ND				ND	ND	ND		ND	
METHYLENE CHLORIDE	0.09	U	0.11				0.27	0.33	ND		ND	
TRICHLOROTRIFLUOROETHANE	0.04		ND				ND	ND	0.04	U	0.04	U
trans - 1,2 - DICHLOROETHYLENE	ND		ND				ND	ND	ND		ND	
1,1 - DICHLOROETHANE	ND		ND				ND	ND	ND		ND	
METHYL tert-BUTYL ETHER	ND		ND				ND	ND	ND		ND	
METHYL ETHYL KETONE	292		9				8	5	3		4	
CHLOROPRENE	ND		ND				ND	ND	ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND				ND	ND	ND		ND	
BROMOCHLOROMETHANE	ND		ND				ND	ND	ND		ND	
CHLOROFORM	ND		ND				ND	ND	ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND				ND	ND	ND		ND	
1,2 - DICHLOROETHANE	ND		ND				ND	ND	ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND				ND	ND	ND		ND	
BENZENE	0.26		0.17				0.10	0.11	0.16		0.13	
CARBON TETRACHLORIDE	0.04	U	ND				ND	ND	ND		ND	
tert-AMYL METHYL ETHER	ND		ND				ND	ND	ND		ND	
1,2 - DICHLOROPROPANE	ND		ND				ND	ND	ND		ND	
ETHYL ACRYLATE	ND		ND				ND	ND	ND		ND	
BROMODICHLOROMETHANE	ND		ND				ND	ND	ND		ND	
TRICHLOROETHYLENE	ND		ND				ND	ND	ND		ND	
METHYL METHACRYLATE	ND		ND				ND	ND	ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND				ND	ND	ND		ND	
METHYL ISOBUTYL KETONE	ND		ND				ND	ND	ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND				ND	ND	ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND				ND	ND	ND		ND	
TOLUENE	0.49		0.23				0.17	0.11	1.49		0.31	
DIBROMOCHLOROMETHANE	ND		ND				ND	ND	ND		ND	
1,2-DIBROMOETHANE	ND		ND				ND	ND	ND		ND	
N-OCTANE	ND		ND				ND	ND	ND		ND	
TETRACHLOROETHYLENE	ND		ND				ND	ND	ND		ND	
CHLOROBENZENE	ND		ND				ND	ND	ND		ND	
ETHYLBENZENE	0.04	U	0.03	U			ND	ND	0.03	U	0.03	U
m,p - XYLENE	0.09		0.06	U			ND	ND	0.10		ND	
BROMOFORM	ND		ND				ND	ND	ND		ND	
STYRENE	ND		ND				ND	ND	ND		ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND				ND	ND	ND		ND	
o - XYLENE	0.04		ND				ND	ND	0.10		ND	
1,3,5-TRIMETHYLBENZENE	ND		ND				ND	ND	ND		ND	
1,2,4-TRIMETHYLBENZENE	ND		0.07	U			ND	ND	ND		ND	
m - DICHLOROBENZENE	ND		ND				ND	ND	ND		ND	
CHLOROMETHYLBENZENE	ND		ND				ND	ND	ND		ND	
p - DICHLOROBENZENE	ND		ND				ND	ND	ND		ND	
o - DICHLOROBENZENE	ND		ND				ND	ND	ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND				ND	ND	ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND				ND	ND	ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Beulah, ND
Appendix J

SAMPLE SITE #	BUND 18245	BUND 18312	BUND 18398 D1	BUND 18398 R1	BUND 18399 D2	BUND 18399 R2	BUND 18406	BUND 18434
SAMPLE DATE	8/28/2000	9/3/2000	9/9/2000	9/9/2000	9/9/2000	9/9/2000	9/15/2000	9/21/2000
ANALYSIS DATE	9/6/2000	9/28/2000	9/29/2000	10/2/2000	9/29/2000	10/2/2000	9/29/2000	10/12/2000
FILE NAME	L0IE019	L0I!014	L0I!015	L0JB006	L0I!016	L0JB007	L0I!024	L0JK018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.00	0.20	0.15	0.14	0.15	0.15	0.15	0.14
PROPYLENE	0.51	0.21	0.16	0.16	0.16	0.16	0.15	0.19
DICHLORODIFLUOROMETHANE	1.51	0.60	0.56	0.57	0.57	0.56	0.55	0.53
CHLOROMETHANE	0.58	0.55	0.54	0.48	0.56	0.57	0.50	0.43
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	0.94	ND	2.21	ND	ND
TRICHLOROFLUOROMETHANE	0.57	0.26	0.25	0.26	0.24	0.25	0.24	0.23
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.54	0.10	0.06 U	ND	0.07	ND	0.07	0.12
TRICHLOROTRIFLUOROETHANE	0.08	0.08	0.07	0.07	0.06 U	0.07	0.07	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	5	3	2	2	1	2	3	2
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.41	0.12	0.09	0.09	0.09	0.10	0.09	0.11
CARBON TETRACHLORIDE	0.04 U	0.05 U	ND	ND	0.05 U	0.05 U	ND	0.08
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	2.70	0.12	0.10	0.10	0.09	0.10	0.11	0.12
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.04 U	0.07	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.23	0.02 U	0.02 U	ND	0.02 U	0.02 U	0.02 U	0.03 U
m,p - XYLENE	0.50	ND	ND	ND	ND	ND	ND	0.07
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.07	ND	ND	ND	ND	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.12	0.03 U	ND	ND	ND	ND	ND	0.02 U
1,3,5-TRIMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYLBENZENE	0.04 U	0.02 U	ND	ND	ND	ND	ND	0.03 U
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Beulah, ND
Appendix J

SAMPLE SITE #	BUND 18483	BUND 18538 D1	BUND 18538 R1	BUND 18540 D2	BUND 18540 R2	BUND 18544	BUND 18584	BUND 18629
SAMPLE DATE	9/27/2000	10/3/2000	10/3/2000	10/3/2000	10/3/2000	10/9/2000	10/15/2000	10/21/2000
ANALYSIS DATE	10/19/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000	10/28/2000	11/2/2000	Void
FILE NAME	L0JS014	L0JZ016	L0J~009	L0JZ017	L0J~010	L0J~017	L0KA016	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.24	0.22	0.21	0.28	0.27	0.22	0.36	
PROPYLENE	0.40	0.21	0.20	0.21	0.18	0.20	0.19	
DICHLORODIFLUOROMETHANE	0.54	0.54	0.54	0.56	0.51	0.57	0.54	
CHLOROMETHANE	0.54	0.44	0.43	0.47	0.40	0.49	0.42	
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROFLUOROMETHANE	0.22	0.24	0.25	0.30	0.29	0.26	0.40	
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	
METHYLENE CHLORIDE	0.13	0.11	0.08	0.03 U	0.05 U	0.10	0.11	
TRICHLOROTRIFLUOROETHANE	0.06 U	0.08	0.09	0.08	0.08	0.08	0.06 U	
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
METHYL ETHYL KETONE	4	2	2	1	2	3	4	
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
1,1,1 - TRICHLOROETHANE	ND	ND	0.02 U	ND	ND	ND	ND	
BENZENE	0.12	0.15	0.15	0.18	0.17	0.11	0.14	
CARBON TETRACHLORIDE	0.09	0.06 U	0.07 U	0.05 U	0.03 U	0.07 U	0.04 U	
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
TOLUENE	0.16	0.12	0.12	0.18	0.16	0.10	0.17	
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	
N-OCTANE	0.04 U	ND	ND	ND	ND	ND	ND	
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
ETHYLBENZENE	ND	ND	0.04	ND	0.05	0.03 U	0.06	
m,p - XYLENE	ND	ND	0.06	0.10	0.11	0.06	0.11	
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	
STYRENE	ND	ND	ND	ND	ND	ND	ND	
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
o - XYLENE	ND	ND	0.04 U	0.05	0.05	0.02 U	0.05	
1,3,5-TRIMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRIMETHYLBENZENE	ND	ND	0.04 U	ND	0.04 U	0.04 U	0.05 U	
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Beulah, ND
Appendix J

SAMPLE SITE #	BUND 18656	BUND 18713	BUND 18758	BUND 18781	BUND 18798	BUND 18823	BUND 18959	BUND 18957
SAMPLE DATE	10/27/2000	11/8/2000	11/14/2000	11/20/2000	11/26/2000	12/2/2000	12/8/2000	12/14/2000
ANALYSIS DATE	11/7/2000	11/15/2000	12/6/2000	12/6/2000	12/12/2000	12/18/2000	1/5/2001	1/5/2001
FILE NAME	L0KG013	L0KO010	L0LE020	L0LE023	L0LK017	L0LR010	L1AE001	L1AE004
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.25	0.30	0.72	0.57	0.51	0.71	0.62	0.62
PROPYLENE	0.17	0.05 U	0.20	0.21	0.23	0.20	0.27	0.18
DICHLORODIFLUOROMETHANE	0.53	0.52	0.53	0.56	0.52	0.54	0.57	0.57
CHLOROMETHANE	0.42	0.42	0.36	0.44	0.47	0.38	0.54	0.52
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	0.04 U
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.24	0.25	0.32	0.32	0.29	0.43	0.32	0.29
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.09	0.05 U	0.05 U	0.11	0.15	0.46	0.14	0.13
TRICHLOROTRIFLUOROETHANE	0.06 U	0.06 U	0.08	0.08	0.08	0.09	0.11	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	1	2	2	2	3	1	3	2
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	0.02 U	ND	0.03 U	0.06	0.07
BENZENE	0.11	0.19	0.21	0.21	0.20	0.21	0.20	0.22
CARBON TETRACHLORIDE	ND	ND	0.09	0.05 U	0.07 U	0.11	0.12	0.08
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	0.11	0.12	0.21	0.15	0.16	0.23	0.15	0.16
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	0.02 U	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	0.05 U	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	0.03 U
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.03 U	0.04 U	0.06	0.02 U	0.04 U	0.08	0.06	0.06
m,p - XYLENE	ND	0.03 U	0.09	0.06	0.08	0.16	0.11	0.05 U
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	0.03 U	0.03 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	ND	ND	0.05	0.02 U	0.05 U	0.08	0.04 U	0.05
1,3,5-TRIMETHYLBENZENE	ND	ND	0.02 U	0.02 U	0.03 U	0.02 U	0.04 U	0.04 U
1,2,4-TRIMETHYLBENZENE	0.03 U	0.05 U	0.04 U	0.03 U	0.05 U	0.07	0.08	0.07 U
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	0.03 U	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	0.04 U	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	0.05 U	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Beulah, ND
Appendix J

SAMPLE SITE #	BUND 18965		BUND 18961	
SAMPLE DATE	12/20/2000		12/26/2000	
ANALYSIS DATE	1/9/2001		1/10/2001	
FILE NAME	L1AH014		L0AJ012	
UNITS	ppbv		ppbv	
ACETYLENE	0.45		0.47	
PROPYLENE	0.07		0.15	
DICHLORODIFLUOROMETHANE	0.42		0.53	
CHLOROMETHANE	0.36		0.50	
DICHLOROTETRAFLUOROETHANE	ND		ND	
VINYL CHLORIDE	ND		ND	
1,3-BUTADIENE	ND		ND	
BROMOMETHANE	ND		ND	
CHLOROETHANE	ND		ND	
ACETONITRILE	ND		ND	
TRICHLOROFLUOROMETHANE	0.18		0.25	
ACRYLONITRILE	ND		ND	
1,1-DICHLOROETHENE	ND		ND	
METHYLENE CHLORIDE	0.07		0.06	
TRICHLOROTRIFLUOROETHANE	0.06	U	0.07	
trans - 1,2 - DICHLOROETHYLENE	ND		ND	
1,1 - DICHLOROETHANE	ND		ND	
METHYL tert-BUTYL ETHER	ND		ND	
METHYL ETHYL KETONE	1		1	
CHLOROPRENE	ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND	
BROMOCHLOROMETHANE	ND		ND	
CHLOROFORM	ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND	
1,2 - DICHLOROETHANE	ND		ND	
1,1,1 - TRICHLOROETHANE	ND		0.02	U
BENZENE	0.80		0.22	
CARBON TETRACHLORIDE	0.05	U	0.11	
tert-AMYL METHYL ETHER	ND		ND	
1,2 - DICHLOROPROPANE	ND		ND	
ETHYL ACRYLATE	ND		ND	
BROMODICHLOROMETHANE	ND		ND	
TRICHLOROETHYLENE	ND		ND	
METHYL METHACRYLATE	ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND	
METHYL ISOBUTYL KETONE	ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND	
TOLUENE	0.33		0.16	
DIBROMOCHLOROMETHANE	ND		ND	
1,2-DIBROMOETHANE	ND		ND	
N-OCTANE	ND		ND	
TETRACHLOROETHYLENE	ND		ND	
CHLOROBENZENE	ND		ND	
ETHYLBENZENE	0.03	U	0.02	U
m,p - XYLENE	0.05	U	0.04	U
BROMOFORM	ND		ND	
STYRENE	ND		ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND	
o - XYLENE	0.03	U	0.02	U
1,3,5-TRIMETHYLBENZENE	ND		ND	
1,2,4-TRIMETHYLBENZENE	0.02	U	0.02	U
m - DICHLOROBENZENE	ND		ND	
CHLOROMETHYLBENZENE	ND		ND	
p - DICHLOROBENZENE	ND		ND	
o - DICHLOROBENZENE	ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Camden, NJ
Appendix J

SAMPLE SITE #	CANJ 17099	CANJ 17088	CANJ 17162	CANJ 17164	CANJ 17166	CANJ 17206	CANJ 17218	CANJ 17257
SAMPLE DATE	11/20/1999	11/26/1999	12/2/1999	12/8/1999	12/20/1999	1/1/2000	1/13/2000	1/25/2000
ANALYSIS DATE	12/10/1999	12/21/1999	1/7/2000	1/7/2000	1/20/2000	2/2/2000	2/3/2000	2/17/2000
FILE NAME	L9JL017	L9LU005	L0AG004	L0AG005	L0AS015	L0BB013	L0BB021	L0BP018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.64	0.89	3.46	4.99	1.36	4.53	2.87	2.59
PROPYLENE	1.95	0.70	1.94	2.05	1.44	5.41	1.07	0.71
DICHLORODIFLUOROMETHANE	0.67	0.67	0.74	0.86	0.56	0.95	0.60	0.64
CHLOROMETHANE	0.67	0.98	0.80	0.87	0.63	0.85	0.60	0.63
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.30	0.06	0.19	0.24	0.16	0.17	0.08	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	7.07	0.90	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.31	0.30	0.34	0.42	0.27	0.41	0.28	0.30
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.21	0.07	0.17	0.20	0.19	0.07 U	0.13	0.06 U
TRICHLOROTRIFLUOROETHANE	0.08	0.12	0.10	0.10	0.06	0.11	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	2.41	0.62	1.12	1.55	1.18	1.24	0.67	0.46
METHYL ETHYL KETONE	0.77	0.64	1.14	1.42	0.78	1.05	0.55	0.63
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.06	0.05 U	0.05 U	0.04 U	0.09	ND	ND
BENZENE	0.80	0.37	0.76	0.91	0.69	1.56	0.55	0.53
CARBON TETRACHLORIDE	0.10	0.10	ND	0.07 U	0.05 U	0.10	0.08 U	0.09
tert-AMYL METHYL ETHER	0.13	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	0.03 U	ND	ND	0.06 U	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	2.08	0.69	1.55	2.05	1.56	2.05	1.08	0.74
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.18	0.07 U	0.16	0.20	0.10	0.23	0.04 U	ND
TETRACHLOROETHYLENE	1.31	0.07 U	0.83	0.15	0.10	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.39	0.16	0.27	0.33	0.26	0.32	0.18	0.17
m,p - XYLENE	1.12	0.34	0.73	0.90	0.73	0.86	0.49	0.40
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.15	0.09 U	0.08 U	0.14	0.07 U	0.08 U	ND	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.53	0.20	0.34	0.42	0.32	0.44	0.22	0.21
1,3,5-TRIMETHYLBENZENE	0.20	0.11	0.13	0.16	0.10	0.12	0.17	0.07 U
1,2,4-TRIMETHYLBENZENE	0.59	0.22	0.29	0.39	0.32	0.37	0.24	0.18
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	0.07 U	0.03 U	0.05 U	0.09	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	0.07 U	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	0.12	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Camden, NJ
Appendix J

SAMPLE SITE #	CANJ 17255	CANJ 17273	CANJ 17367	CANJ 17380	CANJ 17376	CANJ 17430	CANJ 17465 D1	CANJ 17465 R1
SAMPLE DATE	2/6/2000	2/18/2000	3/1/2000	3/13/2000	3/25/2000	4/6/2000	4/18/2000	4/18/2000
ANALYSIS DATE	2/22/2000	3/7/2000	3/28/2000	Void	4/4/2000	4/18/2000	5/2/2000	5/3/2000
FILE NAME	L0BV009	L0CG009	L0C!007		L0DC017	L0DR009	L0EB009	L0EC008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.13	3.36	2.16		1.81	2.11	1.75	1.69
PROPYLENE	3.53	1.13	1.18		0.91	0.93	0.58	0.56
DICHLORODIFLUOROMETHANE	0.62	0.67	0.80		0.70	0.57	0.56	0.50
CHLOROMETHANE	0.64	0.65	0.66		0.71	0.66	0.73	0.74
DICHLOROTETRAFLUOROETHANE	ND	ND	ND		ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND		ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND		ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND		13.46	ND	ND	ND
CHLOROETHANE	ND	ND	ND		ND	ND	ND	ND
ACETONITRILE	ND	ND	ND		ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.34	0.30	0.39		0.34	0.30	0.27	0.24
ACRYLONITRILE	ND	ND	ND		ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND		ND	ND	ND	ND
METHYLENE CHLORIDE	0.12	0.09 U	0.29		202.00	0.25	ND	0.04 U
TRICHLOROTRIFLUOROETHANE	0.09	0.08	0.10		0.03	0.06	0.06	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND		ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND		ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.50	0.85	0.58		0.82	0.79	0.32	0.31
METHYL ETHYL KETONE	0.49	0.63	0.68		0.65	0.67	0.86	0.81
CHLOROPRENE	ND	ND	ND		ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND		ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND		ND	ND	ND	ND
CHLOROFORM	ND	ND	ND		ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND		ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND		ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.03 U	0.03 U	ND		ND	ND	0.04 U	0.02 U
BENZENE	0.62	0.69	0.50		0.52	0.47	0.34	0.34
CARBON TETRACHLORIDE	0.08 U	0.05 U	0.03 U		0.04 U	0.05 U	0.09	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND		ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND		ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND		ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND		ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND		ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND		ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND		ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND		ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND		ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND		ND	ND	ND	ND
TOLUENE	0.92	1.41	0.92		0.88	0.96	0.67	0.67
DIBROMOCHLOROMETHANE	ND	ND	ND		ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND		ND	ND	ND	ND
N-OCTANE	0.05 U	ND	ND		0.05 U	ND	0.08 U	0.08 U
TETRACHLOROETHYLENE	ND	0.08 U	ND		ND	ND	0.05 U	0.03 U
CHLOROBENZENE	ND	ND	ND		ND	ND	ND	ND
ETHYLBENZENE	0.16	0.21	0.16		0.13	0.13	0.12	0.10 U
m,p - XYLENE	0.42	0.61	0.43		0.40	0.39	0.28	0.28
BROMOFORM	ND	ND	ND		ND	ND	ND	ND
STYRENE	ND	0.03 U	ND		ND	ND	0.02 U	0.02 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND		ND	ND	ND	ND
o - XYLENE	0.20	0.31	0.22		0.19	0.18	0.15	0.13
1,3,5-TRIMETHYLBENZENE	0.07 U	0.11	0.07 U		0.05 U	0.06 U	0.06 U	0.06 U
1,2,4-TRIMETHYLBENZENE	0.17	0.30	0.17		0.17	0.16	0.12	0.14
m - DICHLOROBENZENE	ND	ND	ND		ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND		ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND		ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND		ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND		ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND		ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

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Appendix J

SAMPLE SITE #	CANJ 17467 D2		CANJ 17467 R2		CANJ 17489		CANJ 17512		CANJ 17533		CANJ 17571		CANJ 17573		CANJ 17678	
SAMPLE DATE	4/18/2000		4/18/2000		4/30/2000		5/12/2000		5/24/2000		6/5/2000		6/5/2000		6/17/2000	
ANALYSIS DATE	5/2/2000		5/3/2000		5/11/2000		6/2/2000		6/15/2000		Void		Void		6/28/2000	
FILE NAME	L0EB010		L0EC009		L0EJ021		L0FA018		L0FN019						L0F~019	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.68		1.72		1.64		2.09		1.41						0.85	
PROPYLENE	0.53		0.51		0.86		0.97		0.96						0.85	
DICHLORODIFLUOROMETHANE	0.55		0.52		0.58		0.50		0.65						0.61	
CHLOROMETHANE	0.72		0.75		0.88		1.02		0.81						0.82	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND						ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND						ND	
1,3-BUTADIENE	ND		ND		ND		ND		ND						ND	
BROMOMETHANE	ND		ND		ND		ND		ND						ND	
CHLOROETHANE	ND		ND		ND		ND		ND						ND	
ACETONITRILE	ND		ND		ND		ND		ND						ND	
TRICHLOROFLUOROMETHANE	0.26		0.24		0.25		0.23		0.33						0.32	
ACRYLONITRILE	ND		ND		ND		ND		ND						ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND						ND	
METHYLENE CHLORIDE	0.04	U	ND		0.04	U	0.11		0.18						ND	
TRICHLOROTRIFLUOROETHANE	0.09		0.08		0.09		0.08		0.07						0.07	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND						ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND						ND	
METHYL tert-BUTYL ETHER	0.32		0.31		0.67		0.66		0.67						0.95	
METHYL ETHYL KETONE	0.62		0.54		0.93		1.36		0.77						1.36	
CHLOROPRENE	ND		ND		ND		ND		ND						ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND						ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND		ND						ND	
CHLOROFORM	ND		ND		ND		ND		ND						ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND						ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND						ND	
1,1,1 - TRICHLOROETHANE	0.03	U	0.02	U	0.02	U	0.02	U	ND						ND	
BENZENE	0.33		0.36		0.45		0.40		0.38						0.43	
CARBON TETRACHLORIDE	0.08	U	0.09		0.06	U	0.07	U	0.04	U					ND	
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND						ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND						ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND						ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND						ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND						ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND						ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND						ND	
METHYL ISOBUTYL KETONE	ND		ND		0.53		ND		ND						ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND						ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND						ND	
TOLUENE	0.68		0.66		0.68		1.02		0.96						0.84	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND						ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND						ND	
N-OCTANE	0.08	U	0.08	U	0.04	U	0.09		0.09						0.06	U
TETRACHLOROETHYLENE	0.03	U	0.05	U	ND		0.03	U	ND						ND	
CHLOROBENZENE	ND		ND		ND		ND		ND						ND	
ETHYLBENZENE	0.11		0.10	U	0.10	U	0.16		0.15						0.15	
m,p - XYLENE	0.28		0.26		0.29		0.36		0.44						0.35	
BROMOFORM	ND		ND		ND		ND		ND						ND	
STYRENE	0.02	U	ND		0.06	U	ND		0.05	U					ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND						ND	
o - XYLENE	0.15		0.13		0.15		0.18		0.19						0.17	
1,3,5-TRIMETHYLBENZENE	0.06	U	0.05	U	0.06	U	0.08	U	0.08	U					0.06	U
1,2,4-TRIMETHYLBENZENE	0.13		0.14		0.16		0.21		0.19						0.21	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND						ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND						ND	
p - DICHLOROBENZENE	ND		ND		0.02	U	ND		ND						ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND						ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND						ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND						ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Camden, NJ
Appendix J

SAMPLE SITE #	CANJ 17808 D1	CANJ 17808 R1	CANJ 17810 D2	CANJ 17810 R2	CANJ 17826	CANJ 17943	CANJ 18057	CANJ 18205 D1
SAMPLE DATE	6/29/2000	6/29/2000	6/29/2000	6/29/2000	7/11/2000	7/23/2000	8/4/2000	8/16/2000
ANALYSIS DATE	7/19/2000	7/20/2000	7/19/2000	7/20/2000	7/20/2000	7/27/2000	8/21/2000	8/28/2000
FILE NAME	L0GS007	L0GT006	L0GS008	L0GT007	L0GT014	L0G~011	L0HU012	L0H!006
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.56	1.52	1.68	1.60	1.20	1.21	1.70	1.36
PROPYLENE	0.87	0.82	0.95	0.89	0.50	0.75	0.79	1.14
DICHLORODIFLUOROMETHANE	0.60	0.58	0.65	0.59	0.66	0.66	0.66	0.60
CHLOROMETHANE	0.65	0.61	0.71	0.67	0.58	0.61	0.69	0.66
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.41	0.36	0.34	0.33	0.30	0.31	0.29	0.23
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROTRIFLUOROETHANE	0.04	ND	ND	ND	ND	ND	ND	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.79	0.74	0.83	0.81	0.52	1.28	0.85	1.10
METHYL ETHYL KETONE	0.50	0.45	0.71	0.57	1.44	0.63	0.50	0.66
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.46	0.47	0.57	0.56	0.40	0.39	0.46	0.48
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	1.06	1.02	1.06	0.97	2.01	1.14	1.21	1.52
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.19	0.18	0.18	0.17	0.34	0.18	0.18	0.16
m,p - XYLENE	0.44	0.49	0.50	0.48	0.83	0.46	0.45	0.49
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	0.31	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.21	0.22	0.23	0.21	0.45	0.19	0.18	0.17
1,3,5-TRIMETHYLBENZENE	0.07 U	0.07 U	0.04 U	0.04 U	0.18	0.03 U	ND	ND
1,2,4-TRIMETHYLBENZENE	0.20	0.19	0.21	0.18	0.55	0.18	0.19	0.21
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Camden, NJ
Appendix J

SAMPLE SITE #	CANJ 18205 R1	CANJ 18207 D2	SLCU 17497	CANJ 18238	CANJ 18384	CANJ	CANJ 18499	CANJ 18586
SAMPLE DATE	8/16/2000	8/16/2000	8/16/2000	8/28/2000	9/9/2000	9/21/2000	10/3/2000	10/15/2000
ANALYSIS DATE	9/13/2000	8/28/2000	9/12/2000	9/6/2000	9/29/2000	Not Sampled	10/27/2000	11/2/2000
FILE NAME	L0IM012	L0H!007	L0IK021	L0IE020	L0I!021		L0JZ018	L0KA019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.36	1.37	1.41	0.86	1.19		2.55	4.02
PROPYLENE	1.14	1.16	1.24	0.55	1.52		2.23	2.51
DICHLORODIFLUOROMETHANE	0.70	0.65	0.67	0.58	0.69		0.68	0.74
CHLOROMETHANE	0.67	0.72	0.75	0.84	0.79		0.64	0.58
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND		ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND		ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND		0.13	0.24
BROMOMETHANE	ND	ND	ND	ND	ND		0.14	0.34
CHLOROETHANE	ND	ND	ND	ND	ND		ND	ND
ACETONITRILE	ND	ND	ND	ND	ND		ND	ND
TRICHLOROFLUOROMETHANE	0.30	0.24	0.28	0.37	0.34		0.30	0.41
ACRYLONITRILE	ND	ND	ND	ND	ND		ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND		ND	ND
METHYLENE CHLORIDE	0.09	ND	0.09	ND	ND		0.21	0.16
TRICHLOROTRIFLUOROETHANE	ND	ND	0.08 U	0.07 U	0.04 U		0.08	0.05 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND		ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND		ND	ND
METHYL tert-BUTYL ETHER	1.08	1.07	0.84	0.49	1.27		1.62	3.17
METHYL ETHYL KETONE	0.98	0.78	0.73	0.58	0.86		0.80	1.18
CHLOROPRENE	ND	ND	ND	ND	ND		ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND		ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND		ND	ND
CHLOROFORM	ND	ND	ND	ND	ND		ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND		ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND		ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND		ND	ND
BENZENE	0.44	0.44	0.42	0.28	0.80		0.90	1.27
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND		0.10	0.05 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND		ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND		ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND		ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND		ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND		0.07	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND		ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND		ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND		ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND		ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND		ND	ND
TOLUENE	1.51	1.39	1.54	0.56	1.04		1.67	2.40
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND		ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND		ND	ND
N-OCTANE	ND	ND	ND	ND	0.07 U		0.27	0.28
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND		0.10	ND
CHLOROBENZENE	ND	ND	ND	ND	ND		ND	ND
ETHYLBENZENE	0.18	0.16	0.16	0.10	0.14		0.35	0.43
m,p - XYLENE	0.45	0.38	0.47	0.25	0.46		1.04	1.27
BROMOFORM	ND	ND	ND	ND	ND		ND	ND
STYRENE	0.04 U	ND	ND	ND	ND		0.08	0.10
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND		ND	ND
o - XYLENE	0.21	0.16	0.20	0.11	0.21		0.45	0.63
1,3,5-TRIMETHYLBENZENE	0.06 U	0.04 U	0.04 U	0.04 U	0.03 U		0.15	0.18
1,2,4-TRIMETHYLBENZENE	0.19	0.15	0.20	0.13	0.15		0.42	0.48
m - DICHLOROBENZENE	ND	ND	ND	ND	ND		ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND		ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND		0.16	0.25
o - DICHLOROBENZENE	ND	ND	ND	ND	ND		ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND		ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND		ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Camden, NJ
Appendix J

SAMPLE SITE #	CANJ 18664	CANJ	CANJ 18767	CANJ 18818	CANJ 18931	CANJ 18953 D1	CANJ 18955 D2
SAMPLE DATE	10/27/2000	11/8/2000	11/20/2000	12/2/2000	12/14/2000	12/26/2000	12/26/2000
ANALYSIS DATE	11/7/2000	Not Sampled	12/6/2000	12/19/2000	1/5/2001	Void	Void
FILE NAME	L0KG011		L0LE024	L0LR016	L1AE007		
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	4.84		6.12	1.14	3.34		
PROPYLENE	2.05		1.76	0.32	1.27		
DICHLORODIFLUOROMETHANE	0.69		0.69	0.54	0.57		
CHLOROMETHANE	0.70		0.53	0.46	0.60		
DICHLOROTETRAFLUOROETHANE	ND		ND	ND	0.03 U		
VINYL CHLORIDE	ND		ND	ND	ND		
1,3-BUTADIENE	0.34		0.17	0.02 U	0.16		
BROMOMETHANE	ND		ND	ND	ND		
CHLOROETHANE	ND		ND	ND	ND		
ACETONITRILE	ND		ND	ND	ND		
TRICHLOROFLUOROMETHANE	0.26		0.32	0.25	0.30		
ACRYLONITRILE	ND		ND	ND	ND		
1,1-DICHLOROETHENE	ND		ND	ND	ND		
METHYLENE CHLORIDE	0.28		0.06 U	0.06	0.16		
TRICHLOROTRIFLUOROETHANE	0.09		0.12	0.08	0.10		
trans - 1,2 - DICHLOROETHYLENE	ND		ND	ND	ND		
1,1 - DICHLOROETHANE	ND		ND	ND	ND		
METHYL tert-BUTYL ETHER	2.19		1.78	0.27	0.83		
METHYL ETHYL KETONE	0.83		0.84	0.42	0.72		
CHLOROPRENE	ND		ND	ND	ND		
cis-1,2-DICHLOROETHYLENE	ND		ND	ND	ND		
BROMOCHLOROMETHANE	ND		ND	ND	ND		
CHLOROFORM	ND		ND	ND	ND		
ETHYL tert-BUTYL ETHER	ND		ND	ND	ND		
1,2 - DICHLOROETHANE	ND		ND	ND	ND		
1,1,1 - TRICHLOROETHANE	ND		ND	0.04 U	0.07		
BENZENE	1.20		0.81	0.35	0.61		
CARBON TETRACHLORIDE	0.05 U		0.08 U	0.07 U	0.10		
tert-AMYL METHYL ETHER	ND		0.05 U	ND	ND		
1,2 - DICHLOROPROPANE	ND		ND	ND	ND		
ETHYL ACRYLATE	ND		ND	ND	ND		
BROMODICHLOROMETHANE	ND		ND	ND	ND		
TRICHLOROETHYLENE	0.11		ND	ND	0.08		
METHYL METHACRYLATE	ND		ND	ND	ND		
cis -1,3 - DICHLOROPROPENE	ND		ND	ND	ND		
METHYL ISOBUTYL KETONE	ND		ND	ND	ND		
trans - 1,3 - DICHLOROPROPENE	ND		ND	ND	ND		
1,1,2 - TRICHLOROETHANE	ND		ND	ND	ND		
TOLUENE	4.80		1.26	0.53	1.19		
DIBROMOCHLOROMETHANE	ND		ND	ND	ND		
1,2-DIBROMOETHANE	ND		ND	ND	ND		
N-OCTANE	1.22		0.19	0.04 U	0.13		
TETRACHLOROETHYLENE	0.28		ND	ND	0.08		
CHLOROBENZENE	ND		ND	ND	ND		
ETHYLBENZENE	0.86		0.22	0.08	0.18		
m,p - XYLENE	3.03		0.72	0.27	0.62		
BROMOFORM	ND		ND	ND	ND		
STYRENE	0.19		0.05 U	0.03 U	0.05 U		
1,1,2,2 - TETRACHLOROETHANE	ND		ND	ND	ND		
o - XYLENE	1.70		0.31	0.12	0.26		
1,3,5-TRIMETHYLBENZENE	1.47		0.10	0.03 U	0.12		
1,2,4-TRIMETHYLBENZENE	4.21		0.30	0.12	0.28		
m - DICHLOROBENZENE	ND		ND	ND	ND		
CHLOROMETHYLBENZENE	ND		ND	ND	ND		
p - DICHLOROBENZENE	0.17		0.10	ND	0.06 U		
o - DICHLOROBENZENE	ND		ND	ND	ND		
1,2,4-TRICHLOROBENZENE	ND		ND	ND	ND		
HEXACHLORO-1,3-BUTADIENE	ND		ND	ND	ND		

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Clinton, IA
Appendix J

SAMPLE SITE #	CLIA 18599		CLIA 18518		CLIA 18696		CLIA 18752		CLIA	CLIA 18919		CLIA 18968	
SAMPLE DATE	10/11/2000		10/21/2000		11/2/2000		11/14/2000		11/26/2000	12/8/2000		12/20/2000	
ANALYSIS DATE	11/1/2000		11/7/2000		11/8/2000		11/20/2000		Not Sampled	12/19/2000		1/9/2001	
FILE NAME	L0KA011		L0KF021		LOKG022		L0KT009			L0LS015		L1AH016	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv	ppbv		ppbv	
ACETYLENE	2.63		0.81		0.78		0.48			1.22		1.88	
PROPYLENE	1.21		0.39		0.67		0.21			0.34		0.53	
DICHLORODIFLUOROMETHANE	0.58		0.56		0.47		0.53			0.50		0.57	
CHLOROMETHANE	0.47		0.53		0.38		0.42			0.42		0.56	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND			ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND			ND		ND	
1,3-BUTADIENE	0.18		ND		ND		ND			ND		0.03	U
BROMOMETHANE	ND		ND		ND		ND			ND		ND	
CHLOROETHANE	ND		ND		ND		ND			ND		ND	
ACETONITRILE	ND		ND		ND		ND			ND		ND	
TRICHLOROFLUOROMETHANE	0.24		0.25		0.21		0.28			0.29		0.41	
ACRYLONITRILE	0.78		0.56		0.35		0.21			ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND			ND		ND	
METHYLENE CHLORIDE	0.09		ND		ND		ND			ND		ND	
TRICHLOROTRIFLUOROETHANE	0.06	U	0.05	U	0.05	U	0.06	U		ND		ND	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND			ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND			ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND			0.45		0.97	
METHYL ETHYL KETONE	0.93		0.43		0.17		0.52			ND		ND	
CHLOROPRENE	ND		ND		ND		ND			ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND			ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND			ND		ND	
CHLOROFORM	ND		ND		ND		ND			ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND			ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND			ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND		ND		ND			0.04	U	0.03	U
BENZENE	0.93		0.36		0.39		0.19			0.48		0.40	
CARBON TETRACHLORIDE	ND		0.04	U	ND		0.08			0.09		0.04	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND			ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND			ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND			ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND			ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND			ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND			ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND			ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND			ND		ND	
TOLUENE	1.68		0.97		0.75		0.24			0.65		0.61	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND			ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND			ND		ND	
N-OCTANE	0.08		ND		ND		ND			0.06		ND	
TETRACHLOROETHYLENE	ND		ND		ND		ND			ND		ND	
CHLOROBENZENE	ND		ND		ND		ND			ND		ND	
ETHYLBENZENE	0.33		0.14		0.11		0.05			0.12		0.10	
m,p - XYLENE	0.89		0.36		0.33		0.11			0.27		0.22	
BROMOFORM	ND		ND		ND		ND			ND		ND	
STYRENE	0.29		0.03	U	ND		0.02	U		0.05	U	ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND			ND		ND	
o - XYLENE	0.47		0.17		0.16		0.07			0.13		0.10	
1,3,5-TRIMETHYLBENZENE	0.13		0.05	U	0.03	U	0.02	U		0.05	U	0.02	U
1,2,4-TRIMETHYLBENZENE	0.42		0.15		0.17		0.06	U		0.13		0.07	U
m - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND			ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND			ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Cedar Rapids, IA
Appendix J

SAMPLE SITE #	CRIA 17689	CRIA 17845	CRIA 17859	CRIA 17999 D1	CRIA 17999 R1	CRIA 18000 D2	CRIA 18000 R2	CRIA
SAMPLE DATE	6/23/2000	7/5/2000	7/17/2000	7/29/2000	7/29/2000	7/29/2000	7/29/2000	8/10/2000
ANALYSIS DATE	7/5/2000	7/20/2000	7/20/2000	8/15/2000	8/18/2000	8/15/2000	8/18/2000	Void
FILE NAME	LOGE007	L0GT013	L0GT017	L0HO011	L0HQ016	L0HO012	L0HQ017	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.39	NR	0.40	0.59	0.78	0.58	0.76	
PROPYLENE	0.63	0.28	0.17	0.23	0.25	0.27	0.29	
DICHLORODIFLUOROMETHANE	0.85	NR	6.64	0.63	0.55	0.66	0.65	
CHLOROMETHANE	0.79	0.82	0.51	0.60	0.53	0.73	0.71	
DICHLOROTETRAFLUOROETHANE	ND	NR	ND	ND	ND	ND	ND	
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
ACETONITRILE	ND	ND	3.48	ND	ND	ND	ND	
TRICHLOROFLUOROMETHANE	0.31	0.24	0.18	0.24	0.24	0.21	0.23	
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROTRIFLUOROETHANE	0.07	ND	ND	ND	ND	ND	ND	
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
METHYL ETHYL KETONE	0.75	1.70	0.44	0.93	0.81	0.70	0.76	
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
BENZENE	0.57	0.30	0.15	0.25	0.28	0.26	0.21	
CARBON TETRACHLORIDE	0.04 U	ND	ND	ND	ND	ND	ND	
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
TOLUENE	2.08	0.54	0.27	0.53	0.50	0.44	0.46	
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	
N-OCTANE	ND	ND	ND	ND	ND	ND	ND	
TETRACHLOROETHYLENE	0.14	ND	ND	ND	ND	ND	ND	
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
ETHYLBENZENE	0.28	0.07 U	0.06 U	0.09 U	0.05 U	0.05 U	0.05 U	
m,p - XYLENE	0.74	0.21	0.13	0.06 U	0.13 U	0.12 U	0.11 U	
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	
STYRENE	0.15	ND	ND	ND	ND	ND	ND	
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
o - XYLENE	0.34	0.05	0.08	ND	ND	ND	ND	
1,3,5-TRIMETHYLBENZENE	0.10	ND	ND	ND	ND	ND	ND	
1,2,4-TRIMETHYLBENZENE	0.28	0.09 U	0.06 U	0.05 U	0.06 U	ND	ND	
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	

U = Under the Detection Limit
ND = Not Detected
NR = Not Reported

1999/2000 VOC Raw Monitoring Data - Cedar Rapids, IA
Appendix J

SAMPLE SITE #	CRIA	CRIA	CRIA 18255	CRIA 18316	CRIA 18930	CRIA 18463 D1	CRIA 18463 R1	CRIA 18465 D2
SAMPLE DATE	8/22/2000	8/28/2000	8/30/2000	9/3/2000	9/15/2000	9/27/2000	9/27/2000	9/27/2000
ANALYSIS DATE	Void	Void	9/12/2000	9/12/2000	9/29/2000	10/25/2000	10/26/2000	10/26/2000
FILE NAME			L0IK016	L0IK017	L0I!023	L0JY015	L0JZ006	L0JY016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE			0.92	0.60	0.45	1.43	1.54	1.46
PROPYLENE			0.35	0.30	0.27	0.55	0.51	0.52
DICHLORODIFLUOROMETHANE			0.75	1.38	0.64	0.76	0.72	1.09
CHLOROMETHANE			1.00	1.03	0.79	0.54	0.52	0.48
DICHLOROTETRAFLUOROETHANE			ND	ND	ND	ND	ND	ND
VINYL CHLORIDE			ND	ND	ND	ND	ND	ND
1,3-BUTADIENE			ND	ND	ND	0.06 U	0.07 U	0.03 U
BROMOMETHANE			ND	ND	ND	ND	ND	ND
CHLOROETHANE			ND	ND	ND	ND	ND	ND
ACETONITRILE			ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE			0.32	0.31	0.61	0.64	0.62	0.26
ACRYLONITRILE			ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE			ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE			0.19	ND	0.06	1.51	1.50	1.35
TRICHLOROTRIFLUOROETHANE			0.10	0.10	0.06 U	0.08	0.07	ND
trans - 1,2 - DICHLOROETHYLENE			ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE			ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER			ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE			0.55	0.54	0.28	7.37	7.92	7.18
CHLOROPRENE			ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE			ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE			ND	ND	ND	ND	ND	ND
CHLOROFORM			ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER			ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE			ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE			ND	ND	ND	0.05 U	0.05 U	0.06 U
BENZENE			0.30	0.22	0.21	0.65	0.67	0.61
CARBON TETRACHLORIDE			0.05 U	0.05 U	ND	0.09	0.07 U	0.12
tert-AMYL METHYL ETHER			ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE			ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE			ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE			ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE			ND	ND	ND	0.03 U	ND	ND
METHYL METHACRYLATE			ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE			ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE			ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE			ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE			ND	ND	ND	ND	ND	ND
TOLUENE			0.63	0.39	0.46	4.91	5.17	4.40
DIBROMOCHLOROMETHANE			ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE			ND	ND	ND	ND	ND	ND
N-OCTANE			ND	ND	ND	0.05 U	0.06	0.06 U
TETRACHLOROETHYLENE			ND	ND	ND	0.02 U	ND	0.05 U
CHLOROBENZENE			ND	ND	ND	ND	ND	ND
ETHYLBENZENE			0.07	0.06	0.10	1.36	1.37	1.23
m,p - XYLENE			0.18	0.13	0.22	3.97	3.94	3.48
BROMOFORM			ND	ND	ND	ND	ND	ND
STYRENE			ND	ND	ND	0.21	0.17	0.20
1,1,2,2 - TETRACHLOROETHANE			ND	ND	ND	ND	ND	ND
o - XYLENE			0.07	0.06	0.09	0.84	0.85	0.73
1,3,5-TRIMETHYLBENZENE			ND	ND	ND	0.07	0.05 U	0.07
1,2,4-TRIMETHYLBENZENE			0.09	0.06 U	0.09	0.18	0.17	0.14
m - DICHLOROBENZENE			ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE			ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE			ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE			ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE			ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE			ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected
NR = Not Reported

1999/2000 VOC Raw Monitoring Data - Cedar Rapids, IA
Appendix J

SAMPLE SITE #	CRIA 18465 R2	CRIA 18550	CRIA 18615	CRIA 18678	CRIA 18737	CRIA 18790	CRIA 18902	CRIA 18940
SAMPLE DATE	9/27/2000	10/9/2000	10/21/2000	11/2/2000	11/14/2000	11/26/2000	12/8/2000	12/20/2000
ANALYSIS DATE	10/26/2000	10/26/2000	11/2/2000	11/8/2000	11/20/2000	12/12/2000	12/19/2000	1/8/2001
FILE NAME	L0JZ007	L0J~022	L0KA023	L0KG017	L0KT007	L0LK016	L0LR020	L1AH012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.41	0.52	0.79	3.99	0.32	0.97	0.86	1.40
PROPYLENE	0.49	0.32	0.40	0.61	0.15	0.24	0.26	0.36
DICHLORODIFLUOROMETHANE	1.09	0.68	0.59	0.63	0.58	0.55	0.55	0.58
CHLOROMETHANE	0.45	0.48	0.59	0.54	0.54	0.50	0.47	0.57
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.04 U	ND	ND	0.06 U	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.25	0.24	0.22	0.26	0.25	0.23	0.27	0.28
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	1.33	ND	ND	ND	ND	0.05 U	0.06	0.13
TRICHLOROTRIFLUOROETHANE	0.07	0.07	0.05 U	ND	0.05 U	0.06 U	0.09	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	5.45	1.00	1.05	1.03	0.81	1.17	1.09	1.12
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	0.04 U	0.06 U	0.02 U
BENZENE	0.62	0.24	0.35	0.83	0.19	0.29	0.29	0.34
CARBON TETRACHLORIDE	0.08	0.03 U	ND	ND	0.05 U	0.07 U	0.07 U	0.12
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	1.45	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	4.45	0.26	0.56	0.35	0.14	0.34	0.42	0.40
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.05 U	ND	0.04 U	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	1.24	0.07	0.10	0.06	0.03 U	0.08	0.09	0.09
m,p - XYLENE	3.50	0.14	0.25	0.11	0.07	0.15	0.19	0.26
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.21	ND	ND	ND	ND	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.75	0.07	0.13	0.05	0.04 U	0.07	0.10	0.11
1,3,5-TRIMETHYLBENZENE	0.06 U	0.03 U	0.04 U	ND	ND	0.02 U	0.05 U	ND
1,2,4-TRIMETHYLBENZENE	0.15	0.05 U	0.13	0.02 U	0.04 U	0.06 U	0.06 U	0.09
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected
NR = Not Reported

1999/2000 VOC Raw Monitoring Data - Davenport, IA
Appendix J

SAMPLE SITE #	DAIA 18729		DAIA 18698		DAIA 18754		DAIA	DAIA 18917		DAIA 18976	
SAMPLE DATE	10/21/2000		11/2/2000		11/14/2000		11/26/2000	12/8/2000		12/20/2000	
ANALYSIS DATE	11/15/2000		11/8/2000		11/20/2000		Not Sampled	12/9/2000		1/9/2001	
FILE NAME	L0KO011		L0KG023		L0KT011			L0LS014		L1AH017	
UNITS	ppbv		ppbv		ppbv		ppbv	ppbv		ppbv	
ACETYLENE	2.26		0.91		0.47			1.50		2.69	
PROPYLENE	0.81		0.41		0.19			0.39		0.58	
DICHLORODIFLUOROMETHANE	0.64		0.54		0.54			0.56		0.68	
CHLOROMETHANE	0.64		0.55		0.45			0.43		0.55	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND			ND		ND	
VINYL CHLORIDE	ND		ND		ND			ND		ND	
1,3-BUTADIENE	ND		ND		ND			ND		0.03	U
BROMOMETHANE	0.08		ND		ND			ND		ND	
CHLOROETHANE	ND		ND		ND			ND		ND	
ACETONITRILE	ND		ND		ND			ND		ND	
TRICHLOROFLUOROMETHANE	0.28		0.23		0.22			0.32		0.39	
ACRYLONITRILE	0.93		0.40		0.47			ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND			ND		ND	
METHYLENE CHLORIDE	0.13		ND		ND			0.08		0.12	
TRICHLOROTRIFLUOROETHANE	0.05		ND		0.07	U		0.08		0.07	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND			ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND			ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND			ND		ND	
METHYL ETHYL KETONE	0.95		0.21		0.21			0.73		1.06	
CHLOROPRENE	ND		ND		ND			ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND			ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND			ND		ND	
CHLOROFORM	ND		ND		ND			ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND			ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND			ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND		ND			0.04	U	0.04	U
BENZENE	0.85		0.42		0.24			0.47		0.57	
CARBON TETRACHLORIDE	0.04	U	0.05	U	ND			0.10		0.05	U
tert-AMYL METHYL ETHER	ND		ND		ND			ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND			ND		ND	
ETHYL ACRYLATE	ND		ND		ND			ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND			ND		ND	
TRICHLOROETHYLENE	ND		ND		ND			ND		ND	
METHYL METHACRYLATE	ND		ND		ND			ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND			ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND			ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND			ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND			ND		ND	
TOLUENE	1.48		0.65		0.20			0.50		0.72	
DIBROMOCHLOROMETHANE	ND		ND		ND			ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND			ND		ND	
N-OCTANE	ND		ND		ND			ND		ND	
TETRACHLOROETHYLENE	0.09		ND		ND			ND		0.08	
CHLOROBENZENE	ND		ND		ND			ND		ND	
ETHYLBENZENE	0.26		0.10		0.05			0.10		0.12	
m,p - XYLENE	0.66		0.27		0.09			0.26		0.33	
BROMOFORM	ND		ND		ND			ND		ND	
STYRENE	0.03	U	ND		ND			0.04	U	ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND			ND		ND	
o - XYLENE	0.32		0.10		0.05	U		0.14		0.14	
1,3,5-TRIMETHYLBENZENE	0.09		0.04	U	ND			0.06	U	0.04	U
1,2,4-TRIMETHYLBENZENE	0.34		0.15		0.06	U		0.11		0.13	
m - DICHLOROBENZENE	ND		ND		ND			ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND			ND		ND	
p - DICHLOROBENZENE	ND		ND		ND			ND		ND	
o - DICHLOROBENZENE	ND		ND		ND			ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND			ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND			ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Denver, CO
Appendix J

SAMPLE SITE #	DECO 17181		DECO 14208	DECO 17210		DECO 17233	DECO 17245	DECO 18410		DECO 18432		DECO 18493	
SAMPLE DATE	1/7/2000		1/14/2000	1/20/2000		1/25/2000	1/31/2000	9/18/2000		9/25/2000		9/30/2000	
ANALYSIS DATE	2/3/2000		Void	2/4/2000		Void	Void	10/2/2000		10/19/2000		10/19/2000	
FILE NAME	L0BC012			L0BC018				L0JB014		L0JS012		L0JS013	
UNITS	ppbv		ppbv	ppbv		ppbv	ppbv	ppbv		ppbv		ppbv	
ACETYLENE	4.39			8.55				2.87		3.17		2.29	
PROPYLENE	2.02			3.79				1.53		1.79		1.78	
DICHLORODIFLUOROMETHANE	0.67			0.86				0.62		0.66		0.63	
CHLOROMETHANE	0.72			0.87				0.69		0.65		0.70	
DICHLOROTETRAFLUOROETHANE	ND			ND				ND		ND		ND	
VINYL CHLORIDE	ND			ND				ND		ND		ND	
1,3-BUTADIENE	0.13			0.38				0.15		0.21		0.15	
BROMOMETHANE	ND			ND				ND		ND		ND	
CHLOROETHANE	ND			ND				ND		ND		ND	
ACETONITRILE	11.56			35.21				ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.32			0.34				0.80		0.46		0.35	
ACRYLONITRILE	ND			ND				ND		ND		ND	
1,1-DICHLOROETHENE	ND			ND				ND		ND		ND	
METHYLENE CHLORIDE	2.83			3.32				0.52		0.28		0.18	
TRICHLOROTRIFLUOROETHANE	0.10			0.10				0.07		0.09		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND			ND				ND		ND		ND	
1,1 - DICHLOROETHANE	ND			ND				ND		ND		ND	
METHYL tert-BUTYL ETHER	ND			ND				ND		ND		ND	
METHYL ETHYL KETONE	1.10			1.00				ND		1.29		1.07	
CHLOROPRENE	ND			ND				ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND			ND				ND		ND		ND	
BROMOCHLOROMETHANE	ND			ND				ND		ND		ND	
CHLOROFORM	ND			ND				ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND			ND				ND		ND		ND	
1,2 - DICHLOROETHANE	ND			ND				ND		ND		ND	
1,1,1 - TRICHLOROETHANE	ND			0.03	U			ND		ND		ND	
BENZENE	0.79			1.85				1.04		0.98		0.95	
CARBON TETRACHLORIDE	0.03	U		0.01	U			ND		0.08		0.07	U
tert-AMYL METHYL ETHER	ND			ND				ND		ND		ND	
1,2 - DICHLOROPROPANE	ND			ND				ND		ND		ND	
ETHYL ACRYLATE	ND			ND				ND		ND		ND	
BROMODICHLOROMETHANE	ND			ND				ND		ND		ND	
TRICHLOROETHYLENE	ND			ND				ND		ND		ND	
METHYL METHACRYLATE	ND			ND				ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND			ND				ND		ND		ND	
METHYL ISOBUTYL KETONE	ND			ND				ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND			ND				ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND			ND				ND		ND		ND	
TOLUENE	2.28			5.07				2.61		2.58		2.23	
DIBROMOCHLOROMETHANE	ND			ND				ND		ND		ND	
1,2-DIBROMOETHANE	ND			ND				ND		ND		ND	
N-OCTANE	0.12			0.32				0.08		0.17		0.15	
TETRACHLOROETHYLENE	ND			0.23				ND		0.05	U	ND	
CHLOROBENZENE	ND			ND				ND		ND		ND	
ETHYLBENZENE	0.73			1.21				0.38		0.38		0.37	
m,p - XYLENE	1.41			2.95				1.20		1.13		1.08	
BROMOFORM	ND			ND				ND		ND		ND	
STYRENE	ND			0.14				0.04	U	0.18		0.10	
1,1,2,2 - TETRACHLOROETHANE	ND			ND				ND		ND		ND	
o - XYLENE	0.82			1.57				0.49		0.71		0.57	
1,3,5-TRIMETHYLBENZENE	0.18			0.40				0.22		0.45		0.40	
1,2,4-TRIMETHYLBENZENE	0.56			1.31				0.62		1.32		1.22	
m - DICHLOROBENZENE	ND			ND				ND		ND		ND	
CHLOROMETHYLBENZENE	ND			ND				ND		ND		ND	
p - DICHLOROBENZENE	ND			ND				ND		ND		ND	
o - DICHLOROBENZENE	ND			ND				ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND			ND				ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND			ND				ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Denver, CO
Appendix J

SAMPLE SITE #	DECO 18558	DECO 18555	DECO 18597	DECO 18603	DECO 18605	DECO 18626	DECO 18659	DECO 18680
SAMPLE DATE	10/3/2000	10/12/2000	10/15/2000	10/18/2000	10/21/2000	10/27/2000	10/30/2000	11/2/2000
ANALYSIS DATE	Void	11/2/2000	11/1/2000	11/2/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
FILE NAME		L0KA021	L0KA012	L0KA020	L0KF022	L0KG012	L0KG014	L0KG015
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE		3.25	4.15	5.03	4.01	5.67	6.70	4.21
PROPYLENE		1.45	1.09	1.96	1.42	1.82	1.67	1.12
DICHLORODIFLUOROMETHANE		0.57	0.57	0.61	0.06	0.57	0.55	0.44
CHLOROMETHANE		0.56	0.57	0.54	0.58	0.52	0.53	0.61
DICHLOROTETRAFLUOROETHANE		ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE		ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE		0.20	0.12	0.30	0.20	0.27	0.24	0.12
BROMOMETHANE		ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
ACETONITRILE		ND	ND	ND	ND	ND	ND	5.53
TRICHLOROFLUOROMETHANE		0.32	0.28	0.31	0.28	0.28	0.49	0.27
ACRYLONITRILE		ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE		0.12	0.15	0.50	0.16	0.21	0.20	0.11
TRICHLOROTRIFLUOROETHANE		0.06 U	0.06 U	0.06 U	0.06 U	0.07	0.05 U	0.06 U
trans - 1,2 - DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER		ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE		1.18	1.10	1.91	0.90	0.86	0.49	0.55
CHLOROPRENE		ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
CHLOROFORM		ND	0.02 U	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER		ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
BENZENE		1.07	0.83	1.65	1.12	1.42	1.32	0.84
CARBON TETRACHLORIDE		0.04 U	ND	ND	0.04 U	0.05 U	ND	ND
tert-AMYL METHYL ETHER		ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE		ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE		ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE		ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE		ND	ND	0.20	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
TOLUENE		2.25	1.72	5.41	2.40	3.52	3.26	1.99
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE		ND	ND	ND	ND	ND	ND	ND
N-OCTANE		0.16	0.13	0.31	0.17	0.28	0.27	0.18
TETRACHLOROETHYLENE		ND	ND	0.17	0.07	0.05 U	ND	ND
CHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE		0.38	0.27	0.54	0.38	0.53	0.46	0.33
m,p - XYLENE		1.13	0.79	1.76	1.11	1.66	1.51	1.06
BROMOFORM		ND	ND	ND	ND	ND	ND	ND
STYRENE		0.07	0.09	0.15	0.11	0.07	0.08	0.07
1,1,2,2 - TETRACHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
o - XYLENE		0.54	0.41	0.85	0.55	0.75	0.67	0.49
1,3,5-TRIMETHYLBENZENE		0.25	0.27	0.39	0.31	0.33	0.27	0.37
1,2,4-TRIMETHYLBENZENE		0.80	0.80	1.10	0.90	0.99	0.87	1.09
m - DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE		ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE		ND	ND	0.02 U	ND	ND	ND	ND
o - DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE		ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Denver, CO
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SAMPLE SITE #	DECO 18719	DECO 18778	DECO 18783	DECO 18807	DECO 18827	DECO 18907	DECO 18921	DECO 18938
SAMPLE DATE	11/8/2000	11/14/2000	11/20/2000	11/26/2000	12/2/2000	12/8/2000	12/14/2000	12/20/2000
ANALYSIS DATE	11/14/2000	12/6/2000	12/8/2000	12/12/2000	Void	12/19/2000	12/20/2000	1/8/2001
FILE NAME	L0KN011	L0LE021	L0LH009	L0LK019		L0LS011	L0LS016	L1AH013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.92	11.22	1.77	4.99		7.15	11.19	3.23
PROPYLENE	1.42	2.83	0.48	1.25		2.45	2.90	1.13
DICHLORODIFLUOROMETHANE	0.53	0.72	0.62	0.67		0.65	0.60	0.44
CHLOROMETHANE	0.58	0.52	0.54	0.53		0.48	0.53	0.50
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND		ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND		ND	ND	ND
1,3-BUTADIENE	0.17	0.05 U	0.05 U	0.19		0.36	0.46	0.16
BROMOMETHANE	ND	ND	ND	ND		ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
ACETONITRILE	4.85	ND	ND	ND		ND	ND	ND
TRICHLOROFLUOROMETHANE	0.28	0.35	0.36	0.59		0.39	0.29	0.26
ACRYLONITRILE	ND	ND	ND	ND		ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND		ND	ND	ND
METHYLENE CHLORIDE	0.15	0.55	0.05 U	0.20		0.60	0.39	0.09
TRICHLOROTRIFLUOROETHANE	0.07	0.09	0.14	0.07		0.08	0.08	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND		ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND		ND	ND	ND
METHYL ETHYL KETONE	1.69	1.54	0.94	1.23		1.60	1.63	0.48
CHLOROPRENE	ND	ND	ND	ND		ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND		ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND		ND	ND	ND
CHLOROFORM	ND	ND	ND	ND		ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND		ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	0.04 U	0.05 U		0.04 U	0.04 U	0.03 U
BENZENE	0.99	2.02	0.38	0.72		1.40	2.21	0.73
CARBON TETRACHLORIDE	0.04 U	0.09	ND	0.09		0.09	0.09	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND		ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND		ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND		ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND		ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND		0.20	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND		ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND		ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND		0.27	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND		ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
TOLUENE	1.96	3.68	0.56	1.32		3.02	4.30	1.53
DIBROMOCHLOROMETHANE	ND	ND	ND	ND		ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND		ND	ND	ND
N-OCTANE	0.15	0.43	0.07	0.12		0.24	0.35	0.10
TETRACHLOROETHYLENE	ND	0.19	ND	ND		0.16	0.18	0.04 U
CHLOROBENZENE	ND	ND	ND	ND		ND	ND	ND
ETHYLBENZENE	0.37	0.59	0.10	0.26		0.48	0.79	0.23
m,p - XYLENE	1.11	1.87	0.23	0.71		1.45	2.41	0.76
BROMOFORM	ND	ND	ND	ND		ND	ND	ND
STYRENE	0.14	0.07	0.06 U	0.09		0.26	0.22	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
o - XYLENE	0.54	0.84	0.11	0.34		0.66	1.03	0.34
1,3,5-TRIMETHYLBENZENE	0.37	0.42	0.05 U	0.22		0.36	0.49	0.23
1,2,4-TRIMETHYLBENZENE	1.04	1.24	0.09	0.70		1.09	1.36	0.64
m - DICHLOROBENZENE	ND	ND	ND	ND		ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND		ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	0.03 U		ND	0.04 U	ND
o - DICHLOROBENZENE	ND	ND	ND	ND		ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND		ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND		ND	ND	ND

U = Under the Detection Limit
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1999/2000 VOC Raw Monitoring Data - Denver, CO
Appendix J

SAMPLE SITE #	DECO 18974	
SAMPLE DATE	12/26/2000	
ANALYSIS DATE	1/10/2001	
FILE NAME	L1AJ010	
UNITS	ppbv	
ACETYLENE	7.79	
PROPYLENE	2.04	
DICHLORODIFLUOROMETHANE	0.63	
CHLOROMETHANE	0.64	
DICHLOROTETRAFLUOROETHANE	ND	
VINYL CHLORIDE	ND	
1,3-BUTADIENE	0.29	
BROMOMETHANE	ND	
CHLOROETHANE	ND	
ACETONITRILE	ND	
TRICHLOROFLUOROMETHANE	0.34	
ACRYLONITRILE	ND	
1,1-DICHLOROETHENE	ND	
METHYLENE CHLORIDE	0.74	
TRICHLOROTRIFLUOROETHANE	0.09	
trans - 1,2 - DICHLOROETHYLENE	ND	
1,1 - DICHLOROETHANE	ND	
METHYL tert-BUTYL ETHER	ND	
METHYL ETHYL KETONE	0.90	
CHLOROPRENE	ND	
cis-1,2-DICHLOROETHYLENE	ND	
BROMOCHLOROMETHANE	ND	
CHLOROFORM	ND	
ETHYL tert-BUTYL ETHER	ND	
1,2 - DICHLOROETHANE	ND	
1,1,1 - TRICHLOROETHANE	0.04	U
BENZENE	1.40	
CARBON TETRACHLORIDE	0.09	
tert-AMYL METHYL ETHER	ND	
1,2 - DICHLOROPROPANE	ND	
ETHYL ACRYLATE	ND	
BROMODICHLOROMETHANE	ND	
TRICHLOROETHYLENE	ND	
METHYL METHACRYLATE	ND	
cis -1,3 - DICHLOROPROPENE	ND	
METHYL ISOBUTYL KETONE	0.17	
trans - 1,3 - DICHLOROPROPENE	ND	
1,1,2 - TRICHLOROETHANE	ND	
TOLUENE	2.71	
DIBROMOCHLOROMETHANE	ND	
1,2-DIBROMOETHANE	ND	
N-OCTANE	0.21	
TETRACHLOROETHYLENE	0.09	
CHLOROBENZENE	ND	
ETHYLBENZENE	0.47	
m,p - XYLENE	1.45	
BROMOFORM	ND	
STYRENE	0.13	
1,1,2,2 - TETRACHLOROETHANE	ND	
o - XYLENE	0.66	
1,3,5-TRIMETHYLBENZENE	0.35	
1,2,4-TRIMETHYLBENZENE	0.98	
m - DICHLOROBENZENE	ND	
CHLOROMETHYLBENZENE	ND	
p - DICHLOROBENZENE	0.02	U
o - DICHLOROBENZENE	ND	
1,2,4-TRICHLOROBENZENE	ND	
HEXACHLORO-1,3-BUTADIENE	ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Des Moines, IA
Appendix J

SAMPLE SITE #	DMIA 18581		DMIA 18607		DMIA 18683		DMIA 18739		DMIA 18809	DMIA 18905		DMIA 18951	
SAMPLE DATE	10/15/2000		10/21/2000		11/3/2000		11/14/2000		11/30/2000	12/8/2000		12/20/2000	
ANALYSIS DATE	11/2/2000		11/2/2000		11/7/2000		11/20/2000		Not Sampled	12/19/2000		1/9/2001	
FILE NAME	L0KA015		L0KA025		L0KG016		L0KT008			L0LS010		L1AH018	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv	ppbv		ppbv	
ACETYLENE	1.31		1.50		1.21		1.16			1.40		4.00	
PROPYLENE	0.58		0.66		0.56		0.47			0.61		0.86	
DICHLORODIFLUOROMETHANE	0.57		0.56		0.53		0.55			0.53		0.68	
CHLOROMETHANE	0.56		0.63		0.60		0.88			0.72		0.67	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND			ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND			ND		ND	
1,3-BUTADIENE	0.04	U	0.04	U	ND		ND			ND		ND	
BROMOMETHANE	ND		ND		ND		ND			ND		ND	
CHLOROETHANE	ND		ND		ND		ND			ND		ND	
ACETONITRILE	ND		ND		ND		ND			ND		ND	
TRICHLOROFLUOROMETHANE	0.25		0.26		0.24		0.22			0.28		0.43	
ACRYLONITRILE	ND		ND		ND		ND			ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND			ND		ND	
METHYLENE CHLORIDE	0.31		0.27		0.45		0.20			0.65		1.74	
TRICHLOROTRIFLUOROETHANE	0.05	U	0.06	U	0.03	U	0.06	U		0.09		0.11	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND			ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND			ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND			ND		0.74	
METHYL ETHYL KETONE	0.50		0.69		0.32		0.64			0.61		ND	
CHLOROPRENE	ND		ND		ND		ND			ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND			ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND			ND		ND	
CHLOROFORM	ND		ND		ND		ND			ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND			ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND			ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND		ND		ND			ND		ND	
BENZENE	0.55		0.61		0.52		0.38			0.44		0.73	
CARBON TETRACHLORIDE	0.08	U	0.04	U	ND		0.04	U		0.06	U	0.08	
tert-AMYL METHYL ETHER	ND		ND		ND		ND			ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND			ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND			ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND			ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND			ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND			ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND			ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND			ND		ND	
TOLUENE	1.18		1.19		0.93		2.48			2.71		1.24	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND			ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND			ND		ND	
N-OCTANE	0.03	U	0.03	U	ND		0.10			0.05	U	0.02	U
TETRACHLOROETHYLENE	ND		ND		0.22		ND			ND		ND	
CHLOROBENZENE	ND		ND		ND		ND			ND		ND	
ETHYLBENZENE	0.19		0.21		0.17		0.17			0.14		0.16	
m,p - XYLENE	0.49		0.53		0.39		0.44			0.36		0.58	
BROMOFORM	ND		ND		ND		ND			ND		ND	
STYRENE	0.34		0.23		0.28		0.34			0.09		ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND			ND		ND	
o - XYLENE	0.24		0.26		0.13		0.20			0.21		0.22	
1,3,5-TRIMETHYLBENZENE	0.06	U	0.07	U	0.06	U	0.06	U		0.08		0.05	U
1,2,4-TRIMETHYLBENZENE	0.23		0.28		0.23		0.17			0.17		0.20	
m - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND			ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND			ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND			ND		ND	

U = Under the Detection Limit
ND = Not Detected

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SAMPLE SITE #	ELNJ 17235	ELNJ 17266	ELNJ 17337	ELNJ 17316	ELNJ 17329	ELNJ 17370	ELNJ 17403	ELNJ 17432 D1
SAMPLE DATE	1/29/2000	2/10/2000	2/22/2000	3/5/2000	3/10/2000	3/17/2000	3/29/2000	4/10/2000
ANALYSIS DATE	2/17/2000	2/22/2000	Void	3/22/2000	4/10/2000	4/3/2000	4/10/2000	4/18/2000
FILE NAME	L0BP019	L0BV010		L0CU018	L0DJ006	L0DC009	L0DJ012	L0DR011
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	5.80	7.15		1.74	1.32	4.94	1.76	1.57
PROPYLENE	2.35	4.95		3.20	0.78	1.76	1.82	0.85
DICHLORODIFLUOROMETHANE	0.77	0.87		0.68	0.81	0.66	0.66	0.61
CHLOROMETHANE	0.65	0.62		0.57	0.57	0.66	0.63	0.53
DICHLOROTETRAFLUOROETHANE	ND	ND		ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND		ND	ND	ND	ND	ND
1,3-BUTADIENE	0.31	0.27		ND	ND	0.20	ND	ND
BROMOMETHANE	ND	ND		ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
ACETONITRILE	ND	ND		ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.32	0.34		0.29	0.30	0.30	0.26	0.28
ACRYLONITRILE	ND	ND		ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND		ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.20	0.53		0.09 U	0.08 U	0.21	ND	ND
TRICHLOROTRIFLUOROETHANE	0.09	0.12		0.08	0.04	0.07	0.40	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND		ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	1.58	8.99		0.94	0.57	1.92	0.60	0.58
METHYL ETHYL KETONE	0.80	1.68		0.44	0.48	0.90	0.68	0.43
CHLOROPRENE	ND	ND		ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND		ND	ND	ND	ND	0.15
BROMOCHLOROMETHANE	ND	ND		ND	ND	ND	ND	ND
CHLOROFORM	ND	ND		ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND		ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.03 U	0.03 U		ND	ND	ND	ND	ND
BENZENE	1.07	1.40		0.49	0.40	0.93	0.46	0.40
CARBON TETRACHLORIDE	0.06 U	0.07 U		0.05 U	0.04 U	ND	ND	0.04 U
tert-AMYL METHYL ETHER	ND	ND		ND	ND	0.07	ND	ND
1,2 - DICHLOROPROPANE	ND	ND		ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND		ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND		ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	0.11		ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND		ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND		ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	0.24		ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND		ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
TOLUENE	1.79	3.24		0.89	0.65	1.94	0.80	0.60
DIBROMOCHLOROMETHANE	ND	ND		ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND		ND	ND	ND	ND	ND
N-OCTANE	0.11	0.24		0.11	ND	0.07 U	ND	ND
TETRACHLOROETHYLENE	0.07 U	0.16		ND	ND	0.10	ND	ND
CHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
ETHYLBENZENE	0.34	0.90		0.14	0.11	0.30	0.12	0.11
m,p - XYLENE	0.96	2.50		0.35	0.31	0.94	0.34	0.31
BROMOFORM	ND	ND		ND	ND	ND	ND	ND
STYRENE	0.06 U	0.08 U		ND	ND	0.06 U	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
o - XYLENE	0.45	0.96		0.20	0.15	0.44	0.15	0.14
1,3,5-TRIMETHYLBENZENE	0.14	0.27		0.05 U	0.05 U	0.19	0.05 U	0.04 U
1,2,4-TRIMETHYLBENZENE	0.40	0.83		0.15	0.15	0.54	0.16	0.12
m - DICHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND		ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND		ND	ND	0.07 U	ND	ND
o - DICHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND		ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Elizabeth, NJ
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SAMPLE SITE #	ELNJ 17432 R1	ELNJ 17434 D2	ELNJ 17434 R2	ELNJ 17474	ELNJ 17484	ELNJ 17503	ELNJ 17595 D1	ELNJ 17597 D2
SAMPLE DATE	4/10/2000	4/10/2000	4/10/2000	4/22/2000	5/4/2000	5/16/2000	6/5/2000	6/5/2000
ANALYSIS DATE	4/19/2000	4/18/2000	4/19/2000	5/3/2000	5/11/2000	6/2/2000	Void	Void
FILE NAME	L0DS009	L0DR012	L0DS010	L0EB022	L0EJ018	L0FA019		
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.65	1.56	1.66	2.00	1.98	2.57		
PROPYLENE	0.85	0.90	0.92	0.79	4.81	5.59		
DICHLORODIFLUOROMETHANE	0.62	0.58	0.63	0.61	0.63	0.80		
CHLOROMETHANE	0.57	0.52	0.60	0.73	0.71	0.68		
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND		
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND		
1,3-BUTADIENE	ND	ND	ND	ND	0.06	0.16		
BROMOMETHANE	ND	ND	ND	ND	ND	ND		
CHLOROETHANE	ND	ND	ND	ND	ND	ND		
ACETONITRILE	ND	ND	ND	ND	ND	ND		
TRICHLOROFLUOROMETHANE	0.25	0.26	0.26	0.23	0.29	0.29		
ACRYLONITRILE	ND	ND	ND	ND	ND	ND		
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND		
METHYLENE CHLORIDE	ND	ND	ND	0.06 U	0.77	0.29		
TRICHLOROTRIFLUOROETHANE	0.05	0.07	0.07	0.08	0.05	0.09		
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND		
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND		
METHYL tert-BUTYL ETHER	0.59	0.61	0.59	0.47	4.10	2.65		
METHYL ETHYL KETONE	0.39	0.42	0.43	1.64	1.55	1.36		
CHLOROPRENE	ND	ND	ND	ND	ND	ND		
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND		
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND		
CHLOROFORM	ND	ND	ND	ND	ND	ND		
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND		
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND		
1,1,1 - TRICHLOROETHANE	ND	ND	ND	0.02 U	0.05 U	0.05 U		
BENZENE	0.40	0.38	0.39	0.40	0.74	0.70		
CARBON TETRACHLORIDE	0.04 U	0.04 U	ND	0.07 U	0.06 U	0.08 U		
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND		
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND		
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND		
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND		
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND		
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND		
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND		
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND		
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND		
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND		
TOLUENE	0.59	0.63	0.54	0.71	8.82	1.62		
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND		
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND		
N-OCTANE	0.07 U	ND	ND	0.03 U	0.38	0.13		
TETRACHLOROETHYLENE	ND	ND	ND	ND	0.03 U	0.04 U		
CHLOROBENZENE	ND	ND	ND	ND	ND	ND		
ETHYLBENZENE	0.08 U	0.10 U	0.11	0.17	0.74	0.30		
m,p - XYLENE	0.28	0.29	0.28	0.44	1.54	0.81		
BROMOFORM	ND	ND	ND	ND	ND	ND		
STYRENE	ND	ND	ND	0.02 U	0.43	0.06 U		
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND		
o - XYLENE	0.11	0.13	0.14	0.21	0.64	0.39		
1,3,5-TRIMETHYLBENZENE	0.02 U	0.02 U	0.02 U	0.07 U	0.14	0.13		
1,2,4-TRIMETHYLBENZENE	0.11	0.09	0.11	0.18	0.42	0.35		
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND		
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND		
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND		
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND		
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND		
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND		

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Elizabeth, NJ
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SAMPLE SITE #	ELNJ 17740 D1	ELNJ 17740 R1	ELNJ 177742 D2	ELNJ 17742 R2	ELNJ 17829	ELNJ 17994 D1	ELNJ 17994 R1	ELNJ 17996 D2
SAMPLE DATE	6/17/2000	6/17/2000	6/17/2000	6/17/2000	7/11/2000	7/23/2000	7/23/2000	7/23/2000
ANALYSIS DATE	7/12/2000	7/13/2000	7/12/2000	7/13/2000	7/20/2000	8/2/2000	8/15/2000	8/3/2000
FILE NAME	L0GL006	L0GL014	L0GL007	L0GL015	L0GS020	L0HB015	L0HN027	L0HB016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.19	1.32	1.21	1.18	0.95	1.26	1.35	1.14
PROPYLENE	9.08	9.56	9.19	9.28	0.93	2.81	2.72	2.67
DICHLORODIFLUOROMETHANE	0.79	0.77	0.80	0.82	0.78	0.77	0.72	0.67
CHLOROMETHANE	0.59	0.62	0.67	0.63	0.63	0.48	0.48	0.54
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	8.03	16.28	3.84
TRICHLOROFLUOROMETHANE	0.36	0.39	0.38	0.40	0.25	0.28	0.36	0.26
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.22	0.25	0.14	0.14	0.07 U	0.53	0.41	0.54
TRICHLOROTRIFLUOROETHANE	ND	0.05	0.04	0.04	0.04	0.03	0.04	0.06
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	1.14	1.08	1.13	1.07	0.64	1.49	1.54	1.37
METHYL ETHYL KETONE	0.66	0.58	0.69	0.56	0.85	0.46	0.66	0.49
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.48	0.48	0.48	0.48	0.29	0.52	0.49	0.46
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	1.01	1.05	0.99	1.05	0.78	1.12	1.15	1.07
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	0.06 U	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.19	0.17	0.21	0.20	0.13	0.16	0.17	0.15
m,p - XYLENE	0.45	0.45	0.48	0.48	0.33	0.43	0.45	0.44
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	0.03 U	ND	ND	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.21	0.20	0.22	0.23	0.16	0.20	0.20	0.18
1,3,5-TRIMETHYLBENZENE	0.07 U	0.07 U	0.13	0.13	0.05 U	0.06 U	0.03 U	0.05 U
1,2,4-TRIMETHYLBENZENE	0.21	0.18	0.27	0.27	0.14	0.18	0.19	0.15
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	0.21	0.16	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	0.10 U	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Elizabeth, NJ
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SAMPLE SITE #	ELNJ 17996 R2	ELNJ	ELNJ 18194	ELNJ 18309	ELNJ 18402	ELNJ 18473	ELNJ 18530	ELNJ 18601
SAMPLE DATE	7/23/2000	8/4/2000	8/16/2000	8/28/2000	9/9/2000	9/21/2000	10/3/2000	10/15/2000
ANALYSIS DATE	8/15/2000	Not Sampled	9/5/2000	9/11/2000	9/29/2000	10/12/2000	10/27/2000	11/2/2000
FILE NAME	L0HN028		L0IE011	L0IK014	L0I!!019	L0JK022	L0JZ021	L0KA018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.09		1.55	1.87	2.80	1.22	3.41	2.47
PROPYLENE	2.63		7.17	3.00	4.41	3.44	3.39	3.07
DICHLORODIFLUOROMETHANE	0.65		0.69	0.76	0.72	0.79	0.73	0.63
CHLOROMETHANE	0.49		0.59	0.73	0.81	0.71	0.57	0.58
DICHLOROTETRAFLUOROETHANE	ND		ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND		ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND		0.06 U	0.05 U	0.10	0.04 U	0.17	0.12
BROMOMETHANE	ND		ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
ACETONITRILE	4.18		ND	ND	4.20	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.30		0.30	0.33	0.32	0.34	0.33	0.25
ACRYLONITRILE	ND		ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND		ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.51		0.15	0.44	0.39	0.58	0.26	0.31
TRICHLOROTRIFLUOROETHANE	0.04		0.07	0.07	0.08	0.07	0.08	0.07
trans - 1,2 - DICHLOROETHYLENE	ND		ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	1.31		2.58	1.96	1.64	1.13	1.86	2.01
METHYL ETHYL KETONE	0.49		2.60	1.19	0.96	0.65	0.84	0.91
CHLOROPRENE	ND		ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND		ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND		ND	ND	ND	ND	ND	ND
CHLOROFORM	ND		ND	ND	ND	ND	ND	0.02 U
ETHYL tert-BUTYL ETHER	ND		ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND		0.03 U	ND	ND	ND	ND	ND
BENZENE	0.45		0.59	0.47	0.70	0.43	0.70	0.81
CARBON TETRACHLORIDE	ND		0.07 U	ND	0.05 U	0.04 U	0.04 U	0.04 U
tert-AMYL METHYL ETHER	ND		ND	ND	0.05 U	ND	ND	ND
1,2 - DICHLOROPROPANE	ND		ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND		ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND		ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND		ND	ND	ND	ND	0.10	ND
METHYL METHACRYLATE	ND		ND	ND	ND	ND	ND	0.03 U
cis -1,3 - DICHLOROPROPENE	ND		ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND		ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND		ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
TOLUENE	1.17		1.37	1.18	1.81	4.80	1.72	1.77
DIBROMOCHLOROMETHANE	ND		ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND		ND	ND	ND	ND	ND	ND
N-OCTANE	ND		0.11	0.10	0.07	0.20	0.12	0.11
TETRACHLOROETHYLENE	ND		ND	0.12	0.09	ND	0.08	ND
CHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.16		0.21	0.19	0.28	0.33	0.27	0.29
m,p - XYLENE	0.41		0.54	0.54	0.83	0.65	0.80	0.89
BROMOFORM	ND		ND	ND	ND	ND	ND	ND
STYRENE	ND		0.05 U	0.02 U	ND	0.16	0.05 U	0.03 U
1,1,2,2 - TETRACHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
o - XYLENE	0.15		0.27	0.25	0.39	0.25	0.40	0.40
1,3,5-TRIMETHYLBENZENE	0.03 U		0.08	0.07	0.10	0.08	0.11	0.12
1,2,4-TRIMETHYLBENZENE	0.15		0.26	0.23	0.31	0.22	0.36	0.37
m - DICHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND		ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND		ND	ND	ND	ND	ND	0.06 U
o - DICHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND		ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Elizabeth, NJ
Appendix J

SAMPLE SITE #	ELNJ	ELNJ 18731		SLCU 17497		ELNJ 18936		ELNJ 18963	
SAMPLE DATE	10/27/2000	11/8/2000		12/2/2000		12/14/2000		12/26/2000	
ANALYSIS DATE	Not Sampled	11/15/2000		12/19/2000		1/5/2001		1/10/2001	
FILE NAME		L0KO015		L0LR017		L1AE008		L1AJ007	
UNITS	ppbv	ppbv		ppbv		ppbv		ppbv	
ACETYLENE		4.31		1.04		3.61		1.11	
PROPYLENE		2.15		0.45		1.26		0.61	
DICHLORODIFLUOROMETHANE		0.67		0.56		0.57		0.42	
CHLOROMETHANE		0.49		0.43		0.54		0.46	
DICHLOROTETRAFLUOROETHANE		ND		ND		0.04	U	0.01	U
VINYL CHLORIDE		ND		ND		ND		ND	
1,3-BUTADIENE		0.22		0.03	U	0.18		ND	
BROMOMETHANE		ND		ND		ND		ND	
CHLOROETHANE		ND		ND		ND		ND	
ACETONITRILE		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE		0.33		0.28		0.30		0.21	
ACRYLONITRILE		ND		ND		0.07	U	ND	
1,1-DICHLOROETHENE		ND		ND		ND		ND	
METHYLENE CHLORIDE		0.48		0.12		0.27		0.06	U
TRICHLOROTRIFLUOROETHANE		0.06	U	0.07		0.10		0.08	
trans - 1,2 - DICHLOROETHYLENE		ND		ND		ND		ND	
1,1 - DICHLOROETHANE		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER		2.75		0.36		1.00		0.30	
METHYL ETHYL KETONE		0.86		0.76		0.77		0.54	
CHLOROPRENE		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE		ND		ND		ND		ND	
BROMOCHLOROMETHANE		ND		ND		ND		ND	
CHLOROFORM		ND		ND		0.04	U	ND	
ETHYL tert-BUTYL ETHER		ND		ND		ND		ND	
1,2 - DICHLOROETHANE		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE		0.03	U	0.04	U	0.06	U	0.05	U
BENZENE		0.96		0.30		0.62		0.32	
CARBON TETRACHLORIDE		0.04	U	0.05	U	0.12		0.08	U
tert-AMYL METHYL ETHER		ND		ND		0.06	U	ND	
1,2 - DICHLOROPROPANE		ND		ND		ND		ND	
ETHYL ACRYLATE		ND		ND		ND		ND	
BROMODICHLOROMETHANE		ND		ND		ND		ND	
TRICHLOROETHYLENE		ND		ND		0.05	U	ND	
METHYL METHACRYLATE		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE		ND		ND		0.22		ND	
trans - 1,3 - DICHLOROPROPENE		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE		ND		ND		ND		ND	
TOLUENE		2.82		0.42		1.20		0.44	
DIBROMOCHLOROMETHANE		ND		ND		ND		ND	
1,2-DIBROMOETHANE		ND		ND		ND		ND	
N-OCTANE		0.26		0.05	U	0.09		0.12	
TETRACHLOROETHYLENE		0.11		ND		0.11		ND	
CHLOROBENZENE		ND		ND		ND		ND	
ETHYLBENZENE		0.38		0.08		0.23		0.07	
m,p - XYLENE		1.18		0.21		0.59		0.21	
BROMOFORM		ND		ND		ND		ND	
STYRENE		0.09		ND		0.06	U	ND	
1,1,2,2 - TETRACHLOROETHANE		ND		ND		ND		ND	
o - XYLENE		0.55		0.14		0.28		0.08	
1,3,5-TRIMETHYLBENZENE		0.14		0.04	U	0.10		0.03	U
1,2,4-TRIMETHYLBENZENE		0.44		0.08		0.26		0.08	
m - DICHLOROBENZENE		ND		ND		ND		ND	
CHLOROMETHYLBENZENE		ND		ND		ND		ND	
p - DICHLOROBENZENE		0.03	U	ND		0.04	U	ND	
o - DICHLOROBENZENE		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE		ND		ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - El Paso, TX
Appendix J

SAMPLE SITE #	EPTX 17074	EPTX 17085	EPTX 17122	EPTX 17172	EPTX 17179	EPTX 17197	EPTX 17220	EPTX 17249
SAMPLE DATE	11/14/1999	11/26/1999	12/8/1999	12/20/1999	1/1/2000	1/13/2000	1/25/2000	2/6/2000
ANALYSIS DATE	12/10/1999	12/21/1999	12/22/1999	1/20/2000	2/3/2000	2/3/2000	2/17/2000	2/22/2000
FILE NAME	L9LJ016	L9LU009	L9LU019	L0AS014	L0BB014	L0BB020	L0BP016	L0BV008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	5.59	6.28	9.31	4.86	3.18	7.81	9.69	10.49
PROPYLENE	2.99	2.29	2.60	1.71	1.11	2.92	3.35	3.04
DICHLORODIFLUOROMETHANE	1.17	0.72	0.80	0.58	0.58	0.78	0.77	0.75
CHLOROMETHANE	1.16	1.06	0.86	0.67	0.71	0.79	0.99	0.80
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.58	0.36	0.42	0.29	0.12	0.41	0.54	0.51
BROMOMETHANE	ND	ND	ND	ND	ND	ND	0.04 U	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.43	0.32	0.33	0.26	0.24	0.30	0.32	0.28
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.22	0.11	0.29	0.09 U	ND	0.13	0.26	0.15
TRICHLOROTRIFLUOROETHANE	0.11	0.11	0.11	0.08	0.08	0.08	0.09	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.33	0.33	0.40	0.15	0.25	0.27	0.91	0.52
METHYL ETHYL KETONE	1.91	0.76	0.87	1.76	0.60	0.89	1.47	1.31
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.10	0.06	0.07	0.04 U	ND	ND	0.05 U	ND
BENZENE	1.59	1.62	2.25	1.36	0.84	1.92	2.44	2.72
CARBON TETRACHLORIDE	0.14	0.09	0.03 U	0.02 U	0.05 U	0.05 U	0.06 U	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	0.07	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	4.75	3.27	5.81	3.92	1.65	5.07	6.00	5.52
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.31	0.21	0.32	0.18	0.90	0.23	0.28	0.27
TETRACHLOROETHYLENE	0.06 U	0.03 U	0.06 U	ND	ND	ND	0.03 U	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.77	0.55	0.85	0.43	0.30	0.63	0.93	0.96
m,p - XYLENE	2.14	1.59	2.55	1.30	0.82	1.93	2.66	2.50
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.30	0.13	0.16	0.08 U	ND	0.12	0.15	0.13
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	1.05	0.77	1.23	0.63	0.39	0.95	1.25	1.21
1,3,5-TRIMETHYLBENZENE	0.36	0.22	0.33	0.17	0.11	0.24	0.34	0.26
1,2,4-TRIMETHYLBENZENE	0.98	0.61	0.94	0.47	0.32	0.76	1.01	0.80
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	0.12	0.04 U	0.12	0.03 U	ND	0.07 U	0.07 U	0.16
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - El Paso, TX
Appendix J

SAMPLE SITE #	EPTX 17278		EPTX 17333		EPTX 17331		EPTX 17394		EPTX	EPTX 17448		EPTX 17491		EPTX 17501	
SAMPLE DATE	2/18/2000		3/7/2000		3/13/2000		3/25/2000		4/6/2000	4/18/2000		4/30/2000		5/12/2000	
ANALYSIS DATE	3/7/2000		3/28/2000		4/3/2000		4/10/2000		Not Sampled	5/3/2000		5/1/2000		6/2/2000	
FILE NAME	L0CG008		L0C!010		L0DC007		L0DJ008			L0EB019		L0EJ022		L0FA017	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv	ppbv		ppbv		ppbv	
ACETYLENE	5.33		1.71		7.27		5.31			7.64		2.31		4.26	
PROPYLENE	2.05		0.61		2.37		1.72			2.15		0.77		1.62	
DICHLORODIFLUOROMETHANE	0.74		0.63		0.70		0.74			0.73		0.59		9.97	
CHLOROMETHANE	0.85		0.79		0.76		0.75			0.92		0.77		0.96	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND			ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND			ND		ND		ND	
1,3-BUTADIENE	0.25		ND		0.35		0.31			0.29		ND		0.17	
BROMOMETHANE	ND		ND		ND		ND			ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND			ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND			ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.31		0.27		0.54		0.31			0.28		0.23		0.22	
ACRYLONITRILE	ND		ND		ND		ND			ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND			ND		ND		ND	
METHYLENE CHLORIDE	0.08	U	ND		ND		0.20			2.04		ND		ND	
TRICHLOROTRIFLUOROETHANE	0.08		0.06		0.07		0.70			0.08		0.06		0.07	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND			ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND			ND		ND		ND	
METHYL tert-BUTYL ETHER	0.35		ND		0.53		0.27			0.13		ND		ND	
METHYL ETHYL KETONE	1.01		1.23		1.13		1.00			10.33		0.83		1.03	
CHLOROPRENE	ND		ND		ND		ND			ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND			ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND			ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND			ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND			ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND			ND		ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND		0.04	U	ND			0.05	U	ND		0.02	U
BENZENE	1.58		0.46		1.96		1.36			1.70		0.71		1.25	
CARBON TETRACHLORIDE	0.09		0.05	U	ND		0.03	U		0.10		0.06	U	ND	
tert-AMYL METHYL ETHER	ND		ND		ND		ND			ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND			ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND			ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND			ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND			0.14		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND			ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND			ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND			ND		ND		ND	
TOLUENE	3.15		0.65		3.31		2.48			13.50		1.07		2.39	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND			ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND			ND		ND		ND	
N-OCTANE	0.12		ND		0.05	U	0.06	U		0.23		0.03	U	0.10	
TETRACHLOROETHYLENE	ND		ND		ND		ND			0.14		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND			ND		ND		ND	
ETHYLBENZENE	0.48		0.13		0.55		0.39			0.65		0.18		0.37	
m,p - XYLENE	1.52		0.34		1.67		1.11			1.66		0.50		1.12	
BROMOFORM	ND		ND		ND		ND			ND		ND		ND	
STYRENE	0.07	U	ND		0.08	U	0.06	U		0.20		ND		0.03	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND			ND		ND		ND	
o - XYLENE	0.76		0.19		0.78		0.51			0.82		0.25		0.53	
1,3,5-TRIMETHYLBENZENE	0.18		0.03	U	0.22		0.13			0.21		0.07		0.16	
1,2,4-TRIMETHYLBENZENE	0.58		0.15		0.63		0.43			0.63		0.19		0.42	
m - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND			ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		0.08	U	ND			0.12		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND			ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND			ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND			ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - El Paso, TX
Appendix J

SAMPLE SITE #	EPTX 17537 D1	EPTX 17537 R1	EPTX 17539 D2	EPTX 17539 R2	EPTX 17592	EPTX 17816	EPTX 17907	EPTX 18084 D1
SAMPLE DATE	5/24/2000	5/24/2000	5/24/2000	5/24/2000	6/11/2000	6/29/2000	7/17/2000	7/29/2000
ANALYSIS DATE	6/13/2000	6/14/2000	6/13/2000	6/14/2000	6/22/2000	7/17/2000	7/25/2000	Void
FILE NAME	L0FM014	L0FN008	L0FM015	L0FN009	L0FV013	L0GQ011	L0GU010	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.75	1.74	1.78	1.80	1.42	1.60	1.07	
PROPYLENE	0.77	0.75	0.77	0.77	0.58	0.74	5.13	
DICHLORODIFLUOROMETHANE	0.57	0.55	0.56	0.53	0.47	0.59	0.56	
CHLOROMETHANE	0.65	0.57	0.55	0.56	0.55	1.07	10.18	
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	
1,3-BUTADIENE	0.10	0.06	0.09	0.09	ND	ND	ND	
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
ACETONITRILE	ND	ND	ND	ND	ND	ND	2.72	
TRICHLOROFLUOROMETHANE	0.49	0.48	0.47	0.47	0.38	0.38	1.52	
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	1.59	
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	
METHYLENE CHLORIDE	0.21	0.25	0.25	0.25	ND	0.21	0.09	
TRICHLOROTRIFLUOROETHANE	0.09	0.08	0.08	0.06	0.03	0.05	0.08	
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
METHYL ETHYL KETONE	0.89	0.82	0.88	0.58	1.17	2.22	19.56	
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
BENZENE	0.65	0.61	0.64	0.63	0.54	0.57	1.54	
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	0.13	ND	
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	0.42	6.25	
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
TOLUENE	1.43	1.43	1.39	1.49	1.26	1.15	2.65	
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	
N-OCTANE	0.04 U	0.07 U	0.04 U	ND	ND	ND	0.19	
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
ETHYLBENZENE	0.23	0.23	0.22	0.23	0.22	0.21	0.24	
m,p - XYLENE	0.64	0.60	0.61	0.62	0.58	0.56	0.57	
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	
STYRENE	0.06 U	0.08 U	0.07 U	0.07 U	0.06 U	0.06 U	0.48	
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
o - XYLENE	0.31	0.30	0.31	0.30	0.29	0.27	0.31	
1,3,5-TRIMETHYLBENZENE	0.08	0.08	0.09	0.08	0.09	0.06 U	0.12	
1,2,4-TRIMETHYLBENZENE	0.23	0.23	0.23	0.22	0.24	0.21	0.30	
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	
p - DICHLOROBENZENE	ND	ND	ND	ND	0.07 U	ND	ND	
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	

U = Under the Detection Limit
ND = Not Detected

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SAMPLE SITE #	EPTX 18086 D2	EPTX 18145	EPTX 18210	EPTX 18331	EPTX 18420	EPTX 18471	EPTX 18525	EPTX
SAMPLE DATE	7/29/2000	8/4/2000	8/22/2000	8/29/2000	9/9/2000	9/21/2000	10/3/2000	10/15/2000
ANALYSIS DATE	Void	Void	9/5/2000	9/12/2000	9/29/2000	10/12/2000	10/27/2000	Not Sampled
FILE NAME			L0IE012	L0IK022	L0I!!020	L0JK023	L0j~013	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE			0.96	2.11	3.27	1.63	6.22	
PROPYLENE			1.64	1.24	1.42	0.82	2.00	
DICHLORODIFLUOROMETHANE			0.57	0.57	0.67	0.58	0.64	
CHLOROMETHANE			3.16	1.65	1.19	0.77	0.72	
DICHLOROTETRAFLUOROETHANE			ND	ND	ND	ND	ND	
VINYL CHLORIDE			ND	ND	ND	ND	ND	
1,3-BUTADIENE			ND	ND	0.15	0.06 U	0.30	
BROMOMETHANE			ND	ND	ND	ND	ND	
CHLOROETHANE			ND	ND	ND	ND	ND	
ACETONITRILE			ND	ND	2.19	ND	ND	
TRICHLOROFLUOROMETHANE			0.31	0.38	0.56	0.30	0.68	
ACRYLONITRILE			1.02	ND	0.42	ND	0.43	
1,1-DICHLOROETHENE			ND	ND	ND	ND	ND	
METHYLENE CHLORIDE			ND	0.06 U	1.27	0.05 U	0.26	
TRICHLOROTRIFLUOROETHANE			0.07 U	0.09	0.07	0.08	0.07	
trans - 1,2 - DICHLOROETHYLENE			ND	ND	ND	ND	ND	
1,1 - DICHLOROETHANE			ND	ND	ND	ND	ND	
METHYL tert-BUTYL ETHER			ND	ND	ND	ND	ND	
METHYL ETHYL KETONE			2.15	2.72	2.34	2.09	3.10	
CHLOROPRENE			ND	ND	ND	ND	ND	
cis-1,2-DICHLOROETHYLENE			ND	ND	ND	ND	ND	
BROMOCHLOROMETHANE			ND	ND	ND	ND	ND	
CHLOROFORM			ND	ND	ND	ND	ND	
ETHYL tert-BUTYL ETHER			ND	ND	ND	ND	ND	
1,2 - DICHLOROETHANE			ND	ND	ND	ND	ND	
1,1,1 - TRICHLOROETHANE			ND	ND	ND	ND	0.02 U	
BENZENE			0.50	0.66	1.09	1.01	2.17	
CARBON TETRACHLORIDE			0.04 U	ND	ND	0.07 U	0.03 U	
tert-AMYL METHYL ETHER			ND	ND	ND	ND	ND	
1,2 - DICHLOROPROPANE			ND	ND	ND	ND	ND	
ETHYL ACRYLATE			ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE			ND	ND	ND	ND	ND	
TRICHLOROETHYLENE			ND	0.04 U	ND	ND	0.14	
METHYL METHACRYLATE			ND	ND	ND	ND	ND	
cis -1,3 - DICHLOROPROPENE			ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE			ND	ND	ND	ND	ND	
trans - 1,3 - DICHLOROPROPENE			ND	ND	ND	ND	ND	
1,1,2 - TRICHLOROETHANE			ND	ND	ND	ND	ND	
TOLUENE			0.99	1.47	2.32	2.34	4.91	
DIBROMOCHLOROMETHANE			ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE			ND	ND	ND	ND	ND	
N-OCTANE			ND	ND	0.05 U	0.10	0.22	
TETRACHLOROETHYLENE			ND	ND	ND	ND	0.06 U	
CHLOROBENZENE			ND	ND	ND	ND	ND	
ETHYLBENZENE			0.16	0.21	0.42	0.36	0.88	
m,p - XYLENE			0.38	0.53	1.12	1.00	2.41	
BROMOFORM			ND	ND	ND	ND	ND	
STYRENE			0.03 U	0.03 U	0.04 U	ND	0.15	
1,1,2,2 - TETRACHLOROETHANE			ND	ND	ND	ND	ND	
o - XYLENE			0.18	0.23	0.51	0.46	1.11	
1,3,5-TRIMETHYLBENZENE			0.05 U	0.06 U	0.12	0.10	0.24	
1,2,4-TRIMETHYLBENZENE			0.19	0.24	0.37	0.29	0.86	
m - DICHLOROBENZENE			ND	ND	ND	ND	ND	
CHLOROMETHYLBENZENE			ND	ND	ND	ND	ND	
p - DICHLOROBENZENE			ND	ND	ND	ND	0.36	
o - DICHLOROBENZENE			ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE			ND	ND	ND	ND	ND	
HEXACHLORO-1,3-BUTADIENE			ND	ND	ND	ND	ND	

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SAMPLE SITE #	EPTX	EPTX 18735	SLCU 17497	EPTX 18773	EPTX 18825	EPTX 18926	EPTX 18981
SAMPLE DATE	10/27/2000	11/8/2000	11/14/2000	11/20/2000	12/2/2000	12/14/2000	12/26/2000
ANALYSIS DATE	Not Sampled	11/20/2000	12/6/2000	12/6/2000	12/18/2000	1/5/2001	1/10/2001
FILE NAME		L0KT005	L0LE019	L0LE022	L0LR014	L1AE005	L1AJ009
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE		3.50	4.04	7.99	0.98	12.52	1.29
PROPYLENE		0.98	1.08	1.61	0.31	3.01	0.40
DICHLORODIFLUOROMETHANE		0.69	0.62	0.76	0.49	0.64	0.53
CHLOROMETHANE		0.54	0.64	0.72	0.57	0.67	0.62
DICHLOROTETRAFLUOROETHANE		ND	ND	ND	ND	ND	ND
VINYL CHLORIDE		ND	ND	ND	ND	ND	ND
1,3-BUTADIENE		0.19	0.13	0.34	0.02 U	0.66	ND
BROMOMETHANE		ND	ND	ND	ND	ND	ND
CHLOROETHANE		ND	ND	ND	ND	ND	ND
ACETONITRILE		4.35	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE		1.66	0.40	0.36	0.30	0.38	0.29
ACRYLONITRILE		ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE		0.81	0.05 U	0.05 U	ND	0.22	0.05 U
TRICHLOROTRIFLUOROETHANE		0.05 U	0.07 U	0.09	0.08	0.12	0.13
trans - 1,2 - DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE		ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER		ND	ND	0.22	ND	1.28	ND
METHYL ETHYL KETONE		2.02	1.26	1.31	0.99	1.32	0.82
CHLOROPRENE		ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND
CHLOROFORM		ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER		ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE		ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE		0.08	0.03 U	ND	0.03 U	0.07	0.04 U
BENZENE		0.84	0.94	1.39	0.41	2.55	0.33
CARBON TETRACHLORIDE		0.04 U	0.09	0.09	0.10	0.12	0.08
tert-AMYL METHYL ETHER		ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE		ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE		ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE		ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE		0.07 U	ND	ND	ND	0.07 U	ND
METHYL METHACRYLATE		ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE		ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE		ND	ND	ND	0.38	0.49	ND
trans - 1,3 - DICHLOROPROPENE		ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE		ND	ND	ND	ND	ND	ND
TOLUENE		2.77	2.41	2.44	0.46	6.17	0.41
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE		ND	ND	ND	ND	ND	ND
N-OCTANE		0.10	0.12	0.14	ND	0.20	0.04 U
TETRACHLOROETHYLENE		0.03 U	0.14	0.03 U	ND	0.12	ND
CHLOROBENZENE		ND	ND	ND	ND	ND	ND
ETHYLBENZENE		0.38	0.30	0.43	0.07	1.03	0.09
m,p - XYLENE		0.91	0.88	1.21	0.22	2.95	0.17
BROMOFORM		ND	ND	ND	ND	ND	ND
STYRENE		0.33	0.06 U	0.09	0.03 U	0.24	ND
1,1,2,2 - TETRACHLOROETHANE		ND	ND	ND	ND	ND	ND
o - XYLENE		0.40	0.45	0.56	0.11	1.33	0.09
1,3,5-TRIMETHYLBENZENE		0.12	0.13	0.18	0.03 U	0.34	0.02 U
1,2,4-TRIMETHYLBENZENE		0.33	0.44	0.60	0.09	1.10	0.08
m - DICHLOROBENZENE		ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE		ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE		ND	0.02 U	0.16	ND	0.21	ND
o - DICHLOROBENZENE		ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE		ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE		ND	ND	ND	ND	ND	ND

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SAMPLE SITE #	FAND 17073		FAND 17080		FAND 17103		FAND 17118		FAND 17175		FAND 17176		FAND 17158		FAND 17202	
SAMPLE DATE	11/20/1999		11/26/1999		12/2/1999		12/8/1999		12/14/1999		12/20/1999		12/26/1999		1/7/2000	
ANALYSIS DATE	11/24/1999		12/21/1999		12/22/1999		12/22/1999		1/10/2000		1/19/2000		1/19/2000		2/3/2000	
FILE NAME	L9KW028		L9LU007		L9LU016		L9LU018		L0AJ006		L0AS010		L0AS012		L0BB016	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.23		0.66		1.45		1.32		0.98		0.44		0.36		1.18	
PROPYLENE	0.72		0.46		0.63		0.73		0.43		0.20		0.20		0.44	
DICHLORODIFLUOROMETHANE	0.72		0.60		0.67		0.67		0.73		0.34		0.30		0.49	
CHLOROMETHANE	0.77		0.68		0.67		0.76		0.68		0.31		0.27		0.44	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	0.02	U	ND		0.02	U	0.04	U	ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.32		0.28		0.33		0.31		0.36		0.16		0.13		0.26	
ACRYLONITRILE	0.49		0.38		0.43		0.53		0.37		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	0.07	U	0.06	U	0.09	U	0.21		0.12		ND		ND		0.04	U
TRICHLOROTRIFLUOROETHANE	0.10		0.10		0.12		0.12		0.09		0.05		0.04		0.06	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	0.75		0.84		0.84		2.41		0.54		0.32		0.42		0.43	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	12.84		10.10		6.69		60.09		3.36		0.49		7.80		0.82	
CHLOROFORM	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.06		0.05	U	0.06		0.06		0.06		0.02	U	0.02	U	ND	
BENZENE	0.36		0.30		0.51		0.54		0.32		0.14		0.16		0.33	
CARBON TETRACHLORIDE	0.08	U	0.07	U	0.09		0.07	U	0.08	U	0.03	U	0.04	U	0.03	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	0.18		0.20		0.20		1.04		0.11		ND		0.22		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	1.11		0.87		1.08		4.11		0.46		0.14		0.65		0.65	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	0.32		0.32		0.27		1.69		0.13		0.04	U	0.23		0.05	U
TETRACHLOROETHYLENE	ND		ND		ND		0.03	U	ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.12		0.09	U	0.13		0.20		0.08	U	0.04	U	0.06	U	0.11	
m,p - XYLENE	0.27		0.16		0.30		0.46		0.16		0.06	U	0.14		0.26	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.10	U	0.11		0.15		0.34		0.09	U	0.02	U	0.05	U	0.09	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.15		0.11		0.17		0.30		0.09		0.04		0.08		0.13	
1,3,5-TRIMETHYLBENZENE	0.27		0.21		0.23		0.74		0.11		0.03	U	0.09		0.06	U
1,2,4-TRIMETHYLBENZENE	1.14		0.76		0.89		2.92		0.33		0.06		0.37		0.17	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		0.03	U	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		0.11		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		0.12		ND		ND	

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SAMPLE SITE #	FAND 17228		FAND 17217		FAND 17237		FAND 17240		FAND 17261		FAND 17272		FAND 17305		FAND 17322	
SAMPLE DATE	1/19/2000		1/25/2000		1/29/2000		2/6/2000		2/12/2000		2/18/2000		3/1/2000		3/7/2000	
ANALYSIS DATE	2/4/2000		2/16/2000		2/17/2000		2/22/2000		2/22/2000		3/7/2000		3/21/2000		3/28/2000	
FILE NAME	L0BC016		L0BP013		L0BP020		L0BV011		L0BV012		L0CG005		L0CU015		L0C!011	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.50		1.18		0.86		0.94		0.72		0.89		0.65		0.90	
PROPYLENE	0.51		0.47		0.28		0.40		0.28		0.41		0.25		0.30	
DICHLORODIFLUOROMETHANE	0.73		0.65		0.66		0.62		0.59		0.64		0.58		0.60	
CHLOROMETHANE	0.64		0.71		0.60		0.60		0.63		0.59		0.58		0.67	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.35		0.30		0.39		0.29		0.27		0.29		0.37		0.28	
ACRYLONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROTRIFLUOROETHANE	0.08		0.07		0.07		0.08		0.09		0.04		0.07		0.03	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	0.22		0.71		ND		0.49		0.67		1.24		0.63		0.89	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	1.48		1.03		0.95		1.07		9.30		0.78		0.46		12.23	
CHLOROFORM	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.03	U	ND		ND		ND		0.03	U	ND		ND		ND	
BENZENE	0.50		0.39		0.30		0.34		0.35		0.30		0.22		0.32	
CARBON TETRACHLORIDE	0.08	U	0.10		0.06	U	0.08	U	0.04	U	0.04	U	0.03	U	0.05	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND		ND		ND		0.88	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	0.54		0.42		1.20		0.39		1.00		0.29		0.34		1.00	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	0.07	U	ND		ND		0.04	U	ND		ND		ND		0.15	
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.21		0.17		0.14		0.13		0.08	U	0.11		0.07	U	0.34	
m,p - XYLENE	0.33		0.27		0.22		0.24		0.16		0.20		0.11		0.61	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.03	U	ND		ND		0.03	U	ND		ND		ND		0.27	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.15		0.14		0.14		0.13		0.04		0.08		0.07		0.31	
1,3,5-TRIMETHYLBENZENE	ND		0.06	U	ND		0.08		ND		0.03	U	0.04	U	0.21	
1,2,4-TRIMETHYLBENZENE	0.14		0.21		0.16		0.23		0.05	U	0.19		0.18		0.97	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	

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SAMPLE SITE #	FAND 17344	FAND 17339	FAND 17386	FAND 17420	FAND 17440 D1	FAND 17440 R1	FAND 17441 D2	FAND 17441 R2
SAMPLE DATE	3/13/2000	3/19/2000	3/25/2000	4/6/2000	4/12/2000	4/12/2000	4/12/2000	4/12/2000
ANALYSIS DATE	4/3/2000	4/3/2000	4/3/2000	4/12/2000	4/18/2000	4/19/2000	4/18/2000	4/19/2000
FILE NAME	L0DC006	L0DC010	L0DC014	L0DL005	L0DR013	L0DS011	L0DR014	L0DS012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.67	1.03	0.87	0.46	0.78	0.90	0.80	0.87
PROPYLENE	0.28	0.33	0.36	0.19	0.26	0.28	0.19	0.19
DICHLORODIFLUOROMETHANE	0.57	0.59	0.57	0.51	0.58	0.59	0.57	0.59
CHLOROMETHANE	0.57	0.60	0.62	0.58	0.51	0.58	0.49	0.51
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.42	0.25	0.25	0.29	0.30	0.34	0.30	0.29
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROTRIFLUOROETHANE	0.07	0.06	0.07	0.07	0.06	0.07	0.06	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	0.83	0.73	ND	ND	0.84	0.76	0.36	0.39
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	1.09	1.68	0.68	0.50	0.15	0.15	0.50	0.39
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.27	0.35	0.34	0.22	0.32	0.35	0.31	0.26
CARBON TETRACHLORIDE	ND	0.07 U	0.04 U	0.04 U	0.04 U	0.04 U	ND	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	0.64	0.68	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	0.31	1.05	0.30	0.14	1.91	1.86	0.83	0.77
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	0.09 U	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.08 U	0.11	0.07 U	0.04 U	0.09 U	0.09 U	0.09 U	0.08 U
m,p - XYLENE	0.17	0.20	0.15	0.10	0.22	0.22	0.21	0.19
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	0.03 U	ND	ND	0.04 U	0.04 U	0.09 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.09	0.11	0.06	0.02 U	0.11	0.10	0.09	0.08
1,3,5-TRIMETHYLBENZENE	0.05 U	0.08	0.04 U	0.02 U	ND	0.02 U	0.02 U	ND
1,2,4-TRIMETHYLBENZENE	0.22	0.27	0.18	0.12	0.11	0.10	0.12	0.09
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

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SAMPLE SITE #	FAND 17457 D1		FAND 17457 R1		FAND 17458 D2		FAND 17458 R2		FAND 17469		FAND 17476		FAND 17486		FAND 17496	
SAMPLE DATE	4/18/2000		4/18/2000		4/18/2000		4/18/2000		4/24/2000		4/30/2000		5/6/2000		5/12/2000	
ANALYSIS DATE	5/2/2000		5/3/2000		5/2/2000		5/3/2000		5/3/2000		5/3/2000		5/11/2000		6/2/2000	
FILE NAME	L0EB011		L0EC010		L0EB012		L0EC011		L0EB021		L0EB023		L0EJ019		L0FA014	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.94		0.93		0.77		0.91		0.73		0.72		0.68		0.78	
PROPYLENE	0.35		0.32		0.23		0.22		0.26		0.28		0.29		0.48	
DICHLORODIFLUOROMETHANE	0.57		0.51		0.56		0.51		0.53		0.54		0.51		0.46	
CHLOROMETHANE	0.70		0.65		0.62		0.61		0.73		0.74		0.69		0.95	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.25		0.23		0.25		0.24		0.23		0.25		0.27		0.30	
ACRYLONITRILE	ND		ND		ND		ND		ND		0.07		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	ND		ND		ND		ND		ND		0.04	U	ND		0.08	U
TRICHLOROTRIFLUOROETHANE	0.09		0.07		0.09		0.08		0.07		0.08		0.06		0.07	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	1.21		1.21		1.13		0.84		1.20		1.71		1.31		1.47	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	3.83		3.88		4.35		4.21		6.06		10.21		11.23		11.90	
CHLOROFORM	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.05	U	0.03	U	0.02	U	0.05	U	0.02	U	0.04	U	0.02	U	ND	
BENZENE	0.27		0.26		0.27		0.24		0.22		0.20		0.24		0.22	
CARBON TETRACHLORIDE	0.06	U	0.05	U	0.07	U	0.07	U	0.08	U	0.08	U	0.07	U	ND	
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		0.12		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	0.40		0.43		0.49		0.52		0.77		1.39		1.14		1.18	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	0.41		0.39		0.39		0.41		0.33		0.81		0.72		0.56	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	0.07	U	0.07	U	0.07	U	0.07	U	0.08	U	0.14		0.13		0.14	
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.12		0.11		0.13		0.12		0.14		0.22		0.19		0.18	
m,p - XYLENE	0.24		0.21		0.23		0.25		0.25		0.42		0.41		0.35	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.10	U	0.08	U	0.10	U	0.10	U	0.11	U	0.62		0.33		0.31	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.13		0.12		0.14		0.15		0.16		0.25		0.24		0.22	
1,3,5-TRIMETHYLBENZENE	0.12		0.10		0.12		0.14		0.16		0.41		0.31		0.32	
1,2,4-TRIMETHYLBENZENE	0.41		0.39		0.48		0.45		0.65		1.76		1.24		1.40	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	

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SAMPLE SITE #	FAND 17504		FAND 17567		SLCU 17497		FAND 17535 R1		FAND 17536 D2		FAND 17536 R2		FAND 17569 D1		FAND 17569 R1	
SAMPLE DATE	5/18/2000		5/24/2000		5/30/2000		5/30/2000		5/30/2000		5/30/2000		6/5/2000		6/5/2000	
ANALYSIS DATE	6/15/2000		6/15/2000		6/13/2000		6/14/2000		6/14/2000		6/14/2000		6/22/2000		6/23/2000	
FILE NAME	L0FN017		L0FN020		L0FM016		L0FN010		L0FM017		L0FN011		L0FV016		L0FW014	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.37		0.34		0.29		0.27		0.24		0.25		0.43		0.44	
PROPYLENE	0.31		0.24		0.18		0.18		0.24		0.23		0.20		0.20	
DICHLORODIFLUOROMETHANE	0.55		0.54		0.56		0.53		0.55		0.53		0.55		0.53	
CHLOROMETHANE	0.57		0.55		0.60		0.58		0.62		0.59		0.47		0.47	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.36		0.26		0.40		0.48		0.25		0.24		0.44		0.68	
ACRYLONITRILE	0.26		0.13		ND		ND		ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	ND		ND		0.40		0.37		ND		ND		ND		ND	
TRICHLOROTRIFLUOROETHANE	0.07		0.10		0.08		0.06		0.07		0.06		0.04		0.06	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	0.58		0.44		1.73		1.51		2.03		1.51		0.39		0.38	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	2.26		2.99		11.55		10.35		10.82		10.56		3.10		2.83	
CHLOROFORM	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
BENZENE	0.20		0.19		0.16		0.16		0.15		0.15		0.22		0.23	
CARBON TETRACHLORIDE	0.04	U	ND		0.08	U	0.03	U	0.07	U	0.08	U	0.04	U	0.07	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		0.95		0.68		0.93		0.71		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	0.62		0.23		0.67		0.71		0.68		0.67		0.46		0.48	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	ND		ND		0.15		0.12		0.16		0.11		ND		ND	
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.11		0.06	U	0.18		0.18		0.18		0.18		0.12		0.11	
m,p - XYLENE	0.24		0.15		0.41		0.41		0.42		0.40		0.25		0.24	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.11		0.09	U	0.53		0.48		0.53		0.50		0.10	U	0.11	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.12		0.09		0.24		0.26		0.25		0.25		0.13		0.13	
1,3,5-TRIMETHYLBENZENE	0.09		0.08	U	0.37		0.35		0.37		0.36		0.12		0.10	
1,2,4-TRIMETHYLBENZENE	0.35		0.38		1.42		1.37		1.45		1.42		0.42		0.38	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	

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SAMPLE SITE #	FAND 17570 D2	FAND 17570 R2	FAND 17565	FAND 17603	FAND 17687 D1	FAND 17687 R1	FAND 17688 D2	FAND 17688 R2
SAMPLE DATE	6/5/2000	6/5/2000	6/11/2000	6/17/2000	6/23/2000	6/23/2000	6/23/2000	6/23/2000
ANALYSIS DATE	6/23/2000	6/23/2000	6/22/2000	6/23/2000	7/11/2000	7/12/2000	7/11/2000	7/12/2000
FILE NAME	L0FV017	L0FW015	L0FV011	L0FW011	L0GK012	L0GL008	L0GK013	L0GL009
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.41	0.43	0.34	0.48	0.30	0.29	0.29	0.29
PROPYLENE	0.31	0.30	0.29	0.35	0.32	0.31	0.20	0.21
DICHLORODIFLUOROMETHANE	0.56	0.55	0.58	0.45	0.60	0.56	0.57	0.58
CHLOROMETHANE	0.53	0.54	0.59	0.40	0.74	0.72	0.51	0.51
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	0.09	0.10	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.29	0.28	0.29	0.15	0.24	0.25	0.25	0.25
ACRYLONITRILE	ND	ND	0.28	0.12	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROTRIFLUOROETHANE	0.08	0.06	0.07	0.03	0.07	0.03	0.07	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	0.55	0.43	6.66	0.45	1.05	1.09	1.11	1.24
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	2.56	2.36	1.67	1.25	4.91	4.62	5.61	5.55
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.22	0.20	0.19	0.28	0.14	0.15	0.14	0.14
CARBON TETRACHLORIDE	ND	ND	0.07 U	ND	ND	0.05 U	ND	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	0.39	0.37	0.25	0.46	0.36	0.34	0.37	0.38
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.10	0.10	0.08 U	0.13	0.11	0.11	0.11	0.13
m,p - XYLENE	0.24	0.24	0.15	0.32	0.28	0.27	0.29	0.28
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.11	0.11	0.12	0.07 U	0.14	0.16	0.19	0.22
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.12	0.11	0.08	0.14	0.15	0.15	0.16	0.16
1,3,5-TRIMETHYLBENZENE	0.10	0.09	0.09	0.07 U	0.13	0.13	0.14	0.14
1,2,4-TRIMETHYLBENZENE	0.36	0.36	0.34	0.26	0.55	0.50	0.59	0.59
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

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SAMPLE SITE #	FAND 17851 D1	FAND 17852 D2	FAND 17802	FAND 17828	FAND 17863	FAND 17939	FAND 18011 D1	FAND 18011 R1
SAMPLE DATE	6/29/2000	6/29/2000	7/5/2000	7/11/2000	7/17/2000	7/23/2000	7/29/2000	7/29/2000
ANALYSIS DATE	Void	Void	7/18/2000	7/20/2000	7/21/2000	7/28/2000	8/15/2000	8/21/2000
FILE NAME			L0GQ022	L0GS021	L0GT020	L0G~012	L0HO013	L0HU006
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE			0.38	0.55	0.36	0.32	0.87	1.01
PROPYLENE			0.38	0.35	0.38	0.25	0.57	0.56
DICHLORODIFLUOROMETHANE			0.63	0.58	0.45	0.55	0.56	0.56
CHLOROMETHANE			0.77	0.71	0.53	0.47	0.65	0.64
DICHLOROTETRAFLUOROETHANE			ND	ND	ND	ND	ND	ND
VINYL CHLORIDE			ND	ND	ND	ND	ND	ND
1,3-BUTADIENE			ND	ND	ND	ND	ND	ND
BROMOMETHANE			ND	ND	ND	ND	ND	ND
CHLOROETHANE			ND	ND	ND	ND	ND	ND
ACETONITRILE			ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE			0.26	0.25	0.19	0.23	0.30	0.27
ACRYLONITRILE			ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE			ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE			ND	ND	ND	ND	0.10 U	0.15
TRICHLOROTRIFLUOROETHANE			0.04	0.04	ND	0.03	0.04	ND
trans - 1,2 - DICHLOROETHYLENE			ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE			ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER			ND	ND	ND	ND	5.97	5.81
METHYL ETHYL KETONE			3.66	5.71	6.24	0.46	2.73	2.70
CHLOROPRENE			ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE			ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE			19.07	24.47	20.74	3.63	9.64	ND
CHLOROFORM			ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER			ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE			ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE			ND	ND	ND	ND	ND	ND
BENZENE			0.21	0.29	0.25	0.21	1.13	9.79
CARBON TETRACHLORIDE			ND	ND	ND	ND	ND	ND
tert-AMYL METHYL ETHER			ND	ND	ND	ND	0.85	0.82
1,2 - DICHLOROPROPANE			ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE			ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE			ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE			ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE			ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE			ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE			1.31	1.80	2.30	ND	1.34	1.28
trans - 1,3 - DICHLOROPROPENE			ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE			ND	ND	ND	ND	ND	ND
TOLUENE			0.96	1.21	1.09	0.38	3.66	3.54
DIBROMOCHLOROMETHANE			ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE			ND	ND	ND	ND	ND	ND
N-OCTANE			0.08 U	0.17	0.15	ND	0.22	0.12
TETRACHLOROETHYLENE			ND	ND	ND	ND	ND	ND
CHLOROBENZENE			ND	ND	ND	ND	ND	ND
ETHYLBENZENE			0.28	0.32	0.31	0.08 U	0.68	0.66
m,p - XYLENE			0.78	0.84	0.87	0.27	1.90	1.89
BROMOFORM			ND	ND	ND	ND	ND	ND
STYRENE			0.89	0.98	0.97	0.19	0.45	0.49
1,1,2,2 - TETRACHLOROETHANE			ND	ND	ND	ND	ND	ND
o - XYLENE			0.46	0.53	0.56	0.12	0.87	0.86
1,3,5-TRIMETHYLBENZENE			0.43	0.56	0.70	0.09	0.37	0.41
1,2,4-TRIMETHYLBENZENE			1.75	2.18	2.50	0.44	1.51	1.48
m - DICHLOROBENZENE			ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE			ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE			ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE			ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE			ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE			ND	ND	ND	ND	ND	ND

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SAMPLE SITE #	FAND 18018 D2		FAND 18018 R2	FAND 18076 D1	FAND 18077 D2	FAND 18103	FAND 18148	FAND 18224		FAND 18248	
SAMPLE DATE	7/29/2000		7/29/2000	8/4/2000	8/4/2000	8/10/2000	8/16/2000	8/22/2000		8/28/2000	
ANALYSIS DATE	8/15/2000		8/18/2000	Void	Void	Void	8/23/2000	9/5/2000		9/11/2000	
FILE NAME	L0HO014		L0HQ019				L0HW012	L0IE015		L0IK005	
UNITS	ppbv		ppbv	ppbv	ppbv	ppbv	ppbv	ppbv		ppbv	
ACETYLENE	0.92		1.05				0.60	0.30		0.37	
PROPYLENE	0.66		0.64				0.32	0.24		0.45	
DICHLORODIFLUOROMETHANE	0.57		0.61				0.57	0.57		0.66	
CHLOROMETHANE	0.65		0.63				0.56	0.52		0.81	
DICHLOROTETRAFLUOROETHANE	ND		ND				ND	ND		ND	
VINYL CHLORIDE	ND		ND				ND	ND		ND	
1,3-BUTADIENE	ND		ND				ND	ND		ND	
BROMOMETHANE	ND		ND				ND	ND		ND	
CHLOROETHANE	ND		ND				ND	ND		ND	
ACETONITRILE	ND		ND				ND	ND		ND	
TRICHLOROFLUOROMETHANE	0.25		0.19				0.26	0.27		0.32	
ACRYLONITRILE	ND		ND				ND	ND		ND	
1,1-DICHLOROETHENE	ND		ND				ND	ND		ND	
METHYLENE CHLORIDE	0.11	U	0.16				ND	ND		ND	
TRICHLOROTRIFLUOROETHANE	ND		ND				ND	0.08		0.07	
trans - 1,2 - DICHLOROETHYLENE	ND		ND				ND	ND		ND	
1,1 - DICHLOROETHANE	ND		ND				ND	ND		ND	
METHYL tert-BUTYL ETHER	7.10		6.36				ND	ND		ND	
METHYL ETHYL KETONE	2.14		1.59				0.22	1.12		0.67	
CHLOROPRENE	ND		ND				ND	ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND				ND	ND		ND	
BROMOCHLOROMETHANE	7.94		7.85				0.74	7.08		1.06	
CHLOROFORM	ND		ND				ND	ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND				ND	ND		ND	
1,2 - DICHLOROETHANE	ND		ND				ND	ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND				ND	ND		ND	
BENZENE	1.28		1.32				0.32	0.16		0.22	
CARBON TETRACHLORIDE	ND		ND				ND	0.05	U	0.04	U
tert-AMYL METHYL ETHER	1.01		0.91				ND	ND		ND	
1,2 - DICHLOROPROPANE	ND		ND				ND	ND		ND	
ETHYL ACRYLATE	ND		ND				ND	ND		ND	
BROMODICHLOROMETHANE	ND		ND				ND	ND		ND	
TRICHLOROETHYLENE	ND		ND				ND	ND		ND	
METHYL METHACRYLATE	ND		ND				ND	ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND				ND	ND		ND	
METHYL ISOBUTYL KETONE	1.06		0.91				ND	ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND				ND	ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND				ND	ND		ND	
TOLUENE	3.73		3.45				0.51	0.44		0.31	
DIBROMOCHLOROMETHANE	ND		ND				ND	ND		ND	
1,2-DIBROMOETHANE	ND		ND				ND	ND		ND	
N-OCTANE	0.24		0.15				ND	ND		ND	
TETRACHLOROETHYLENE	ND		ND				ND	ND		ND	
CHLOROBENZENE	ND		ND				ND	ND		ND	
ETHYLBENZENE	0.75		0.70				0.07	0.11		0.05	
m,p - XYLENE	2.11		2.03				0.23	0.27		0.13	
BROMOFORM	ND		ND				ND	ND		ND	
STYRENE	0.38		0.36				ND	0.22		0.10	
1,1,2,2 - TETRACHLOROETHANE	ND		ND				ND	ND		ND	
o - XYLENE	0.96		0.92				0.09	0.16		0.07	
1,3,5-TRIMETHYLBENZENE	0.43		0.41				ND	0.10		0.03	U
1,2,4-TRIMETHYLBENZENE	1.55		1.49				0.18	0.39		0.18	
m - DICHLOROBENZENE	ND		ND				ND	ND		ND	
CHLOROMETHYLBENZENE	ND		ND				ND	ND		ND	
p - DICHLOROBENZENE	ND		ND				ND	ND		ND	
o - DICHLOROBENZENE	ND		ND				ND	ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND				ND	ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND				ND	ND		ND	

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SAMPLE SITE #	FAND 18322	FAND	FAND 18405	FAND 18437	FAND 18456 D1	FAND 18456 R1	FAND 18457 D2	FAND 18457 R2
SAMPLE DATE	9/3/2000	9/9/2000	9/15/2000	9/21/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000
ANALYSIS DATE	9/12/2000	Not Sampled	10/2/2000	10/12/2000	10/26/2000	10/27/2000	10/26/2000	10/27/2000
FILE NAME	L0IK023		L0JB013	L0JK021	L0JZ012	L0J~005	L0JZ013	L0J~006
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.25		0.70	0.65	0.70	0.68	0.63	0.66
PROPYLENE	0.24		0.43	0.39	0.44	0.42	0.36	0.36
DICHLORODIFLUOROMETHANE	0.61		0.56	0.58	0.53	0.55	0.53	0.53
CHLOROMETHANE	0.58		0.52	0.49	0.47	0.48	0.44	0.42
DICHLOROTETRAFLUOROETHANE	ND		ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND		ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND		ND	ND	0.03 U	0.03 U	ND	0.03 U
BROMOMETHANE	ND		ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
ACETONITRILE	ND		ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.39		0.25	0.24	0.31	0.31	0.25	0.23
ACRYLONITRILE	ND		ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND		ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND		ND	ND	0.04 U	0.07	0.03 U	0.02 U
TRICHLOROTRIFLUOROETHANE	0.07		0.07	0.09	0.08	0.07	0.07	0.07
trans - 1,2 - DICHLOROETHYLENE	ND		ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND		ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	0.18		0.39	ND	0.74	0.77	1.01	0.97
CHLOROPRENE	ND		ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND		ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	1.03		3.18	0.55	0.66	0.63	0.91	0.89
CHLOROFORM	ND		ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND		ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND		ND	ND	ND	ND	ND	0.04 U
BENZENE	0.16		0.32	0.36	0.30	0.30	0.29	0.29 U
CARBON TETRACHLORIDE	ND		ND	0.09	0.10	0.10	0.06 U	0.10
tert-AMYL METHYL ETHER	ND		ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND		ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND		ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND		ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND		ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND		ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND		ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND		ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND		ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
TOLUENE	0.20		0.56	0.57	0.43	0.42	0.43	0.41
DIBROMOCHLOROMETHANE	ND		ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND		ND	ND	ND	ND	ND	ND
N-OCTANE	ND		ND	ND	0.05 U	0.03 U	0.02 U	0.05 U
TETRACHLOROETHYLENE	ND		ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.04		0.13	0.15	0.09	0.09	0.10	0.09
m,p - XYLENE	0.10		0.33	0.37	0.25	0.25	0.26	0.25
BROMOFORM	ND		ND	ND	ND	ND	ND	ND
STYRENE	ND		0.15	0.13	0.08	0.06 U	0.07	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND		ND	ND	ND	ND	ND	ND
o - XYLENE	0.03 U		0.16	0.17	0.12	0.12	0.14	0.13
1,3,5-TRIMETHYLBENZENE	ND		0.06 U	ND	0.05 U	0.04 U	0.05 U	0.04 U
1,2,4-TRIMETHYLBENZENE	0.14		0.24	0.15	0.15	0.14	0.14	0.16
m - DICHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND		ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND		ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND		ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
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SAMPLE SITE #	FAND 18497	FAND 18543	FAND 18583	FAND 18609	FAND 18648 D1	FAND 18648 R1	FAND 18649 D2	FAND 18649 R2
SAMPLE DATE	10/3/2000	10/9/2000	10/15/2000	10/21/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000
ANALYSIS DATE	10/27/2000	10/27/2000	11/2/2000	11/2/2000	11/7/2000	11/7/2000	11/7/2000	11/7/2000
FILE NAME	L0J~014	L0J~016	L0KA014	L0KA022	L0KF016	L0KG007	L0KF017	L0KG008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.33	0.39	0.44	0.50	0.53	0.54	0.47	0.52
PROPYLENE	0.25	0.27	0.26	0.27	0.21	0.21	0.27	0.27
DICHLORODIFLUOROMETHANE	0.54	0.52	0.53	0.60	0.56	0.53	0.52	0.52
CHLOROMETHANE	0.44	0.48	0.45	0.45	0.44	0.44	0.44	0.46
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.26	0.22	0.23	0.40	0.25	0.24	0.21	0.20
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.15	0.03 U	ND	0.03 U	ND	ND	ND	ND
TRICHLOROTRIFLUOROETHANE	0.07	0.08	0.05 U	0.05 U	0.06 U	0.05 U	0.05 U	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	1.07	1.04	0.42	0.42	0.30	0.23	0.36	0.31
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	1.36	0.78	0.77	0.75	1.28	1.29	1.14	1.14
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.02 U	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.18	0.20	0.23	0.24	0.22	0.22	0.20	0.23
CARBON TETRACHLORIDE	ND	0.03 U	0.04 U	0.04 U	0.04 U	0.05 U	ND	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	0.19	0.23	0.20
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	0.18	0.27	0.26	0.30	0.32	0.35	0.30	0.32
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.06	0.07	0.07	0.07	0.08	0.07	0.07	0.07
m,p - XYLENE	0.15	0.20	0.16	0.15	0.20	0.20	0.18	0.18
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.07	0.13	0.05 U	0.03 U	0.07 U	0.06 U	0.03 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.08	0.10	0.08	0.08	0.10	0.09	0.09	0.11
1,3,5-TRIMETHYLBENZENE	0.03 U	0.03 U	0.04 U	0.02 U	0.02 U	0.02 U	0.02 U	ND
1,2,4-TRIMETHYLBENZENE	0.13	0.10	0.15	0.12	0.14	0.13	0.12	0.12
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

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SAMPLE SITE #	FAND 18682		FAND 18715		FAND 18734		FAND 18764		FAND 18796		FAND 18820		FAND 18904		FAND 18924 D1	
SAMPLE DATE	11/2/2000		11/8/2000		11/14/2000		11/20/2000		11/26/2000		12/2/2000		12/8/2000		12/14/2000	
ANALYSIS DATE	11/15/2000		11/15/2000		11/20/2000		12/6/2000		12/12/2000		12/18/2001		12/19/2000		12/18/2001	
FILE NAME	L0KO006		L0KO009		L0KT006		L0LE018		L0LK018		L0LR013		L0LS009		L0LR008	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.36		0.29		0.53		0.70		1.63		0.91		0.64		1.77	
PROPYLENE	0.19		0.19		0.23		0.41		0.49		0.43		0.23		0.49	
DICHLORODIFLUOROMETHANE	0.54		0.51		0.53		0.53		0.70		0.53		0.50		0.55	
CHLOROMETHANE	0.42		0.45		0.42		0.48		0.47		0.43		0.43		0.43	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		0.01	U
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND		0.05	U	ND		ND		0.07	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.23		0.21		0.22		0.32		0.70		0.29		0.27		0.25	
ACRYLONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	ND		ND		ND		ND		0.58		0.06	U	ND		0.06	
TRICHLOROTRIFLUOROETHANE	0.06	U	0.06	U	0.07		0.07		0.07		0.08		0.06	U	0.08	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	0.31		0.40		0.95		1.10		0.61		1.18		0.34		0.55	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	0.11	U	0.15	U	0.27		0.16		0.14		0.18		0.16		0.17	
CHLOROFORM	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND		ND		0.02	U	0.04	U	0.04	U	0.05	U	0.04	U
BENZENE	0.18		0.17		0.24		0.25		0.44		0.35		0.29		0.51	
CARBON TETRACHLORIDE	ND		ND		0.04	U	ND		0.10		0.10		0.07	U	0.11	
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND		0.18		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	0.21		0.12		0.20		0.30		0.54		0.55		0.32		0.76	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	ND		ND		ND		ND		0.04	U	ND		ND		0.06	U
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		0.03	U
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.04	U	0.04	U	0.04	U	0.06		0.12		0.10		0.08		0.16	
m,p - XYLENE	0.08		0.07		0.11		0.15		0.31		0.28		0.16		0.43	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.03	U	ND		0.05	U	0.02	U	0.09		0.04	U	0.06	U	0.12	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.03	U	0.04	U	0.05		0.05		0.15		0.15		0.06		0.17	
1,3,5-TRIMETHYLBENZENE	ND		ND		ND		0.03	U	0.02	U	0.04	U	0.03	U	0.06	U
1,2,4-TRIMETHYLBENZENE	0.05	U	0.05	U	0.05	U	0.08		0.14		0.10		0.06	U	0.15	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	

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SAMPLE SITE #	FAND 18924 R1		FAND 18925 D2		FAND 18925 R2		FAND 18942		FAND 18973	
SAMPLE DATE	12/14/2000		12/14/2000		12/14/2000		12/20/2000		12/26/2000	
ANALYSIS DATE	12/19/2000		12/18/2000		12/19/2000		1/8/2001		1/9/2001	
FILE NAME	L0LS007		L0LR009		L0LS008		L1AH011		L1AH019	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.78		1.88		1.69		0.91		0.90	
PROPYLENE	0.51		0.54		0.53		0.25		0.26	
DICHLORODIFLUOROMETHANE	0.56		0.59		0.55		0.58		0.51	
CHLOROMETHANE	0.41		0.41		0.42		0.52		0.43	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND	
1,3-BUTADIENE	0.07		0.08		0.05	U	ND		ND	
BROMOMETHANE	ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.24		0.26		0.23		ND		0.25	
ACRYLONITRILE	ND		ND		ND		0.29		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	ND		0.07		0.06		ND		ND	
TRICHLOROTRIFLUOROETHANE	0.08		0.09		0.10		ND		0.08	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		0.10		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	0.54		0.31		0.37		ND		0.73	
CHLOROPRENE	ND		ND		ND		1.04		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	0.17		0.14		0.13		ND		0.08	U
CHLOROFORM	ND		ND		ND		1.17		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.05	U	0.05	U	0.03	U	ND		ND	
BENZENE	0.50		0.57		0.54		0.07		0.29	
CARBON TETRACHLORIDE	0.10		0.10		0.09		0.29		0.10	
tert-AMYL METHYL ETHER	ND		ND		ND		0.07	U	ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		0.27		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND	
TOLUENE	0.73		0.85		0.84		ND		0.31	
DIBROMOCHLOROMETHANE	ND		ND		ND		0.30		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND	
N-OCTANE	0.07		0.09		0.06	U	ND		ND	
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND	
ETHYLBENZENE	0.16		0.18		0.17		ND		0.05	
m,p - XYLENE	0.41		0.49		0.47		0.07		0.15	
BROMOFORM	ND		ND		ND		0.15		ND	
STYRENE	0.10		0.12		0.14		ND		ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND	
o - XYLENE	0.19		0.24		0.24		ND		0.08	
1,3,5-TRIMETHYLBENZENE	0.04	U	0.07		0.08		0.09		ND	
1,2,4-TRIMETHYLBENZENE	0.16		0.19		0.17		ND		0.06	U
m - DICHLOROBENZENE	ND		ND		ND		0.10		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND	

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SAMPLE SITE #	MUIA 18595		MUIA 18620		MUIA 18694		MUIA 18748		MUIA	MUIA 18909		MUIA
SAMPLE DATE	10/11/2000		10/21/2000		11/2/2000		11/14/2000		11/26/2000	12/8/2000		12/20/2000
ANALYSIS DATE	11/1/2000		11/7/2000		11/8/2000		11/20/2000		Not Sampled	12/19/2000		Not Sampled
FILE NAME	L0KA010		L0KF020		L0KG021		L0KT010			L0LS013		
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv	ppbv		ppbv
ACETYLENE	1.65		1.37		1.65		0.54			1.50		
PROPYLENE	0.68		0.60		0.65		0.30			0.62		
DICHLORODIFLUOROMETHANE	0.57		0.64		0.53		0.52			0.52		
CHLOROMETHANE	0.79		0.97		0.73		0.85			0.72		
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND			ND		
VINYL CHLORIDE	ND		ND		ND		ND			ND		
1,3-BUTADIENE	0.05	U	ND		0.05	U	ND			0.07		
BROMOMETHANE	ND		ND		ND		ND			ND		
CHLOROETHANE	ND		ND		ND		ND			ND		
ACETONITRILE	ND		ND		ND		ND			ND		
TRICHLOROFLUOROMETHANE	0.22		0.25		0.28		0.22			0.24		
ACRYLONITRILE	ND		ND		ND		ND			ND		
1,1-DICHLOROETHENE	ND		ND		ND		ND			ND		
METHYLENE CHLORIDE	ND		0.04	U	ND		ND			0.07		
TRICHLOROTRIFLUOROETHANE	0.08		0.07		0.06	U	0.09			0.08		
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND			ND		
1,1 - DICHLOROETHANE	ND		ND		ND		ND			ND		
METHYL tert-BUTYL ETHER	ND		ND		ND		ND			ND		
METHYL ETHYL KETONE	1.47		0.66		0.50		0.67			1.00		
CHLOROPRENE	ND		ND		ND		ND			ND		
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND			ND		
BROMOCHLOROMETHANE	ND		ND		ND		ND			ND		
CHLOROFORM	ND		ND		ND		ND			ND		
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND			ND		
1,2 - DICHLOROETHANE	ND		ND		ND		ND			ND		
1,1,1 - TRICHLOROETHANE	ND		ND		ND		ND			0.05	U	
BENZENE	0.66		0.54		0.55		0.23			0.49		
CARBON TETRACHLORIDE	ND		0.05	U	ND		ND			0.08		
tert-AMYL METHYL ETHER	ND		ND		ND		ND			ND		
1,2 - DICHLOROPROPANE	ND		ND		ND		ND			ND		
ETHYL ACRYLATE	ND		ND		ND		ND			ND		
BROMODICHLOROMETHANE	ND		ND		ND		ND			ND		
TRICHLOROETHYLENE	ND		ND		ND		ND			ND		
METHYL METHACRYLATE	ND		ND		ND		ND			ND		
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		
METHYL ISOBUTYL KETONE	ND		ND		0.31		ND			ND		
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND			ND		
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND			ND		
TOLUENE	1.43		1.08		1.15		0.30			0.63		
DIBROMOCHLOROMETHANE	ND		ND		ND		ND			ND		
1,2-DIBROMOETHANE	ND		ND		ND		ND			ND		
N-OCTANE	0.08		0.04	U	ND		ND			0.06		
TETRACHLOROETHYLENE	ND		ND		ND		ND			ND		
CHLOROBENZENE	ND		ND		ND		ND			ND		
ETHYLBENZENE	0.24		0.22		0.31		0.11			0.12		
m,p - XYLENE	0.68		0.62		0.95		0.26			0.31		
BROMOFORM	ND		ND		ND		ND			ND		
STYRENE	0.10		0.39		0.10		ND			0.07		
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND			ND		
o - XYLENE	0.30		0.31		0.39		0.08			0.15		
1,3,5-TRIMETHYLBENZENE	0.10		0.29		0.10		0.04	U		0.07		
1,2,4-TRIMETHYLBENZENE	0.29		0.54		0.31		0.09			0.15		
m - DICHLOROBENZENE	ND		ND		ND		ND			ND		
CHLOROMETHYLBENZENE	ND		ND		ND		ND			ND		
p - DICHLOROBENZENE	ND		ND		ND		ND			ND		
o - DICHLOROBENZENE	ND		ND		ND		ND			ND		
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND			ND		
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND			ND		

U = Under the Detection Limit
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SAMPLE SITE #	PLOR 16481	PLOR 16506	PLOR 16685	PLOR 16723	PLOR 16824	PL0R 16880	PLOR 16956	PLOR 16984
SAMPLE DATE	8/22/1999	8/28/1999	9/9/1999	9/15/1999	9/21/1999	10/3/1999	10/15/1999	10/21/1999
ANALYSIS DATE	Void	9/14/1999	9/22/1999	9/22/1999	9/28/1999	Void	10/21/1999	10/27/1999
FILE NAME		L9IN011	L9IV013	L9IV014	L9I!008		L9JT021	L9J~008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE		1.40	1.86	2.46	3.62		1.06	1.34
PROPYLENE		0.73	0.77	0.88	1.52		1.71	2.18
DICHLORODIFLUOROMETHANE		0.53	0.58	0.74	0.75		0.73	0.67
CHLOROMETHANE		0.63	0.64	0.68	0.83		0.78	0.76
DICHLOROTETRAFLUOROETHANE		ND	ND	ND	ND		ND	ND
VINYL CHLORIDE		ND	ND	ND	ND		ND	ND
1,3-BUTADIENE		0.07	0.10	0.08	0.18		0.19	0.22
BROMOMETHANE		ND	ND	ND	ND		ND	ND
CHLOROETHANE		ND	ND	ND	ND		ND	ND
ACETONITRILE		ND	ND	ND	ND		ND	ND
TRICHLOROFLUOROMETHANE		0.66	0.30	0.39	0.36		0.33	0.40
ACRYLONITRILE		ND	ND	ND	ND		0.76	0.81
1,1-DICHLOROETHENE		ND	ND	ND	ND		ND	ND
METHYLENE CHLORIDE		0.59	0.87	8.96	0.83		1.52	1.18
TRICHLOROTRIFLUOROETHANE		0.08	0.08	0.11	0.09		0.20	0.09
trans - 1,2 - DICHLOROETHYLENE		ND	ND	ND	ND		ND	ND
1,1 - DICHLOROETHANE		ND	ND	ND	ND		ND	ND
METHYL tert-BUTYL ETHER		ND	ND	ND	ND		0.23	ND
METHYL ETHYL KETONE		1.94	0.62	0.66	1.11		1.11	2.19
CHLOROPRENE		ND	ND	ND	ND		ND	ND
cis-1,2-DICHLOROETHYLENE		ND	ND	ND	ND		ND	ND
BROMOCHLOROMETHANE		ND	ND	ND	ND		ND	ND
CHLOROFORM		ND	ND	ND	ND		ND	ND
ETHYL tert-BUTYL ETHER		ND	ND	ND	ND		ND	ND
1,2 - DICHLOROETHANE		ND	ND	ND	ND		ND	ND
1,1,1 - TRICHLOROETHANE		0.06	0.05 U	0.05 U	0.05 U		0.06	0.08
BENZENE		0.75	0.76	0.77	1.52		1.21	1.99
CARBON TETRACHLORIDE		0.07 U	0.10	0.10	0.10		0.02 U	0.11
tert-AMYL METHYL ETHER		ND	ND	ND	ND		ND	ND
1,2 - DICHLOROPROPANE		ND	ND	ND	ND		ND	ND
ETHYL ACRYLATE		ND	ND	ND	ND		ND	ND
BROMODICHLOROMETHANE		ND	ND	ND	ND		ND	ND
TRICHLOROETHYLENE		0.08	ND	0.06	0.09		0.06 U	0.04 U
METHYL METHACRYLATE		0.00	ND	ND	ND		ND	ND
cis -1,3 - DICHLOROPROPENE		0.00	ND	ND	ND		ND	ND
METHYL ISOBUTYL KETONE		0.35	ND	ND	ND		0.19	0.27
trans - 1,3 - DICHLOROPROPENE		0.00	ND	ND	ND		ND	ND
1,1,2 - TRICHLOROETHANE		0.00	ND	ND	ND		ND	ND
TOLUENE		15.48	1.73	2.96	4.79		3.21	6.17
DIBROMOCHLOROMETHANE		0.00	ND	ND	ND		ND	ND
1,2-DIBROMOETHANE		0.00	ND	ND	ND		ND	ND
N-OCTANE		0.28	0.12	0.18	0.20		0.17	0.29
TETRACHLOROETHYLENE		0.39	0.50	1.18	0.52		0.23	0.19
CHLOROBENZENE		0.00	ND	ND	ND		ND	ND
ETHYLBENZENE		0.78	0.25	0.38	0.89		0.54	0.97
m,p - XYLENE		1.36	0.78	0.94	2.77		1.72	3.04
BROMOFORM		0.00	ND	ND	ND		ND	ND
STYRENE		0.70	0.09 U	0.37	0.14		0.11 U	0.13
1,1,2,2 - TETRACHLOROETHANE		0.00	ND	ND	ND		ND	ND
o - XYLENE		0.62	0.34	0.42	1.10		0.69	1.20
1,3,5-TRIMETHYLBENZENE		0.12	0.12	0.19	0.24		0.19	0.43
1,2,4-TRIMETHYLBENZENE		0.35	0.34	0.49	0.66		0.52	1.39
m - DICHLOROBENZENE		0.00	ND	ND	ND		ND	ND
CHLOROMETHYLBENZENE		0.00	ND	ND	ND		ND	ND
p - DICHLOROBENZENE		0.00	ND	ND	ND		ND	ND
o - DICHLOROBENZENE		0.00	ND	ND	ND		ND	ND
1,2,4-TRICHLOROBENZENE		0.00	ND	ND	ND		ND	ND
HEXACHLORO-1,3-BUTADIENE		0.00	ND	ND	ND		ND	ND

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SAMPLE SITE #	PLOR 17016	PLOR 17047	PLOR17063	PLOR 17106	PLOR 17119	PLOR 17136	PLOR 17168	PLOR 17191
SAMPLE DATE	10/27/1999	11/8/1999	11/20/1999	12/3/1999	12/8/1999	12/14/1999	12/26/1999	1/7/2000
ANALYSIS DATE	11/23/1999	11/24/1999	11/24/1999	12/22/1999	12/22/1999	12/22/1999	1/20/2000	2/3/2000
FILE NAME	L9KW012	L9KW020	L9KW026	L9LU017	L9LU021	L9LU024	L0AS016	L0BB017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	4.21	4.81	1.68	0.86	1.11	0.83	0.40	6.44
PROPYLENE	1.88	2.07	0.91	1.19	1.80	0.89	0.47	2.10
DICHLORODIFLUOROMETHANE	0.75	0.83	0.73	0.71	0.74	0.72	0.46	0.54
CHLOROMETHANE	0.82	0.83	0.76	0.83	0.81	0.82	0.47	0.50
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.21	0.25	0.06	0.09	0.20	0.07	ND	0.26
BROMOMETHANE	ND	0.04	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	1.21	1.22	2.60	ND	ND	3.03	ND	ND
TRICHLOROFLUOROMETHANE	0.36	0.62	0.34	0.45	0.35	0.36	0.22	0.31
ACRYLONITRILE	0.79	ND	0.54	0.44	0.56	0.34	0.10	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	4.54	0.87	4.98	47.00	181.00	170.00	190.00	23.85
TRICHLOROTRIFLUOROETHANE	0.14	0.13	0.10	0.13	0.12	0.13	0.08	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	2.15	0.73	0.52	0.99	0.76	0.75	0.65	1.14
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.04 U	0.07	0.04 U	0.06	0.06	0.06	ND	ND
BENZENE	1.26	1.43	0.55	0.74	1.38	0.61	0.28	1.66
CARBON TETRACHLORIDE	0.07 U	0.11	0.10	0.10	0.10	0.08	0.02 U	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	0.03 U	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.43	0.43	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	3.22	3.60	0.96	1.19	5.00	2.80	0.37	5.30
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.16	0.15	0.05 U	0.11	0.90	0.75	ND	0.24
TETRACHLOROETHYLENE	0.10	0.07 U	ND	0.05 U	0.07 U	ND	ND	0.15
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.61	0.59	0.16	0.21	0.72	0.44	0.08 U	1.01
m,p - XYLENE	2.10	1.77	0.46	0.58	2.31	1.26	0.20	3.40
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.10 U	0.13	0.05 U	0.08 U	0.14	0.09 U	ND	0.11
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.73	0.79	0.22	0.29	0.94	0.50	0.10	1.32
1,3,5-TRIMETHYLBENZENE	0.19	0.27	0.10	0.10	0.26	0.14	0.04 U	0.29
1,2,4-TRIMETHYLBENZENE	0.53	0.67	0.24	0.26	0.69	0.36	0.09	0.90
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

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SAMPLE SITE #	PLOR 17212		PLOR 17229		PLOR 17251		PLOR 17299	PLOR 17318		PLOR 17340		PLOR 17397		PLOR 17436	
SAMPLE DATE	1/19/2000		1/31/2000		2/12/2000		2/24/2000	3/7/2000		3/19/2000		3/31/2000		4/12/2000	
ANALYSIS DATE	2/3/2000		2/17/2000		2/17/2000		Void	3/28/2000		4/3/2000		4/10/2000		4/18/2000	
FILE NAME	L90BB022		L0BP022		L0BP023			L0C!009		L0DC013		L0DJ010		L0DR010	
UNITS	ppbv		ppbv		ppbv		ppbv	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	4.11		5.22		4.37			3.89		1.20		2.45		3.21	
PROPYLENE	1.19		1.76		1.58			1.45		0.65		0.97		1.34	
DICHLORODIFLUOROMETHANE	0.47		0.66		0.68			0.61		0.56		0.59		0.61	
CHLOROMETHANE	0.44		0.67		0.68			0.61		0.69		0.66		0.64	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND			ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND			ND		ND		ND		ND	
1,3-BUTADIENE	0.10		0.21		0.17			0.15		ND		ND		ND	
BROMOMETHANE	ND		ND		ND			ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND			ND		ND		ND		ND	
ACETONITRILE	5.10		ND		ND			ND		2.75		ND		ND	
TRICHLOROFLUOROMETHANE	0.25		0.30		0.30			0.30		0.34		0.31		0.55	
ACRYLONITRILE	ND		ND		ND			ND		0.37		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND			ND		ND		ND		ND	
METHYLENE CHLORIDE	4.10		2.78		31.90			27.00		11.23		3.37		10.93	
TRICHLOROTRIFLUOROETHANE	0.06		0.09		0.10			0.07		0.06		0.08		0.03	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND			ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND			ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND			ND		ND		ND		ND	
METHYL ETHYL KETONE	0.72		0.69		0.65			1.04		1.37		0.88		1.17	
CHLOROPRENE	ND		ND		ND			ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND			ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND			ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND			ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND			ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND			ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.02	U	0.03	U	0.03	u		ND		ND		ND		ND	
BENZENE	0.96		1.22		1.18			1.10		0.45		0.80		1.13	
CARBON TETRACHLORIDE	0.02	U	0.03	U	0.04	U		0.07	U	0.04	U	0.04	U	0.04	U
tert-AMYL METHYL ETHER	ND		ND		ND			ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND			ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND			ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND			ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND			ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND			ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND			ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND			ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND			ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND			ND		ND		ND		ND	
TOLUENE	2.67		2.45		2.53			3.16		0.69		2.12		4.71	
DIBROMOCHLOROMETHANE	ND		ND		ND			ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND			ND		ND		ND		ND	
N-OCTANE	0.19		0.11		0.05	U		0.13		ND		0.07	U	0.17	
TETRACHLOROETHYLENE	0.09	U	0.10		ND			0.12		0.08	U	0.45		0.26	
CHLOROBENZENE	ND		ND		ND			ND		ND		ND		ND	
ETHYLBENZENE	0.51		0.44		0.42			0.42		0.14		0.40		0.73	
m,p - XYLENE	1.52		1.43		1.27			1.34		0.36		1.13		2.24	
BROMOFORM	ND		ND		ND			ND		ND		ND		ND	
STYRENE	0.08	U	ND		0.08	U		0.08	U	ND		0.03	U	0.04	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND			ND		ND		ND		0.04	U
o - XYLENE	0.62		0.62		0.59			0.61		0.15		0.50		0.92	
1,3,5-TRIMETHYLBENZENE	0.15		0.21		0.16			0.19		0.05	U	0.14		0.24	
1,2,4-TRIMETHYLBENZENE	0.43		0.61		0.49			0.61		0.12		0.48		0.77	
m - DICHLOROBENZENE	ND		ND		ND			ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND			ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND			ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND			ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND			ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND			ND		ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Portland, OR
Appendix J

SAMPLE SITE #	PLOR 17461	PLOR 17480	PLOR 17508	PLOR 17527 D1	PLOR 17527 R1	PLOR 17528 D2	PLOR 17528 R2	PLOR 17584
SAMPLE DATE	4/24/2000	5/6/2000	5/18/2000	5/30/2000	5/30/2000	5/30/2000	5/30/2000	6/11/2000
ANALYSIS DATE	5/2/2000	5/11/2000	6/2/2000	6/14/2000	6/15/2000	6/14/2000	6/15/2000	6/22/2000
FILE NAME	L0EB016	L0EJ020	L0FA020	L0FM018	L0FN012	L0FM019	L0FN013	L0FV012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.12	1.75	1.53	0.99	1.02	0.98	0.99	1.05
PROPYLENE	1.26	0.86	0.96	0.59	0.57	0.61	0.58	0.70
DICHLORODIFLUOROMETHANE	0.61	0.53	0.64	0.54	0.53	0.55	0.52	0.55
CHLOROMETHANE	0.83	0.75	0.81	0.59	0.55	0.61	0.58	0.61
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.13	ND	0.04 U	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.65	0.28	0.28	0.27	0.26	0.27	0.24	0.25
ACRYLONITRILE	0.25	0.52	0.64	0.15	0.12	0.09	ND	0.30
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.92	0.73	1.37	0.71	0.72	0.51	0.46	24.28
TRICHLOROTRIFLUOROETHANE	0.09	0.07	0.09	0.08	0.08	0.10	0.10	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	2.25	1.07	1.41	0.32	0.41	0.72	0.43	0.53
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.04 U	0.03 U	ND	ND	ND	ND	ND
BENZENE	0.94	0.59	0.74	0.48	0.45	0.47	0.46	0.58
CARBON TETRACHLORIDE	0.09	0.07 U	0.03 U	0.04 U	ND	ND	ND	0.04 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	2.34	1.01	1.90	1.06	0.99	1.03	1.03	1.32
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.12	0.05 U	0.17	0.04 U	0.04 U	0.04 U	0.04 U	0.07 U
TETRACHLOROETHYLENE	0.45	0.14	0.14	0.38	0.35	0.42	0.45	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.32	0.15	0.34	0.21	0.19	0.20	0.19	0.21
m,p - XYLENE	0.96	0.43	1.07	0.57	0.56	0.58	0.57	0.63
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.06 U	0.02 U	0.05 U	0.02 U	0.04 U	0.04 U	0.02 U	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.46	0.22	0.46	0.32	0.31	0.33	0.31	0.26
1,3,5-TRIMETHYLBENZENE	0.17	0.08	0.17	0.09	0.11	0.11	0.09	0.10
1,2,4-TRIMETHYLBENZENE	0.42	0.21	0.46	0.25	0.26	0.26	0.25	0.24
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Portland, OR
Appendix J

SAMPLE SITE #	PLOR 17683	PLOR 17757	SLCU 17497	PLOR 17980 D1	PLOR 17980 R1	PLOR 17983 D2	PLOR 17983 R2	PLOR 18094
SAMPLE DATE	6/23/2000	7/5/2000	7/17/2000	7/29/2000	7/29/2000	7/29/2000	7/29/2000	8/10/2000
ANALYSIS DATE	6/28/2000	7/12/2000	7/21/2000	8/15/2000	8/18/2000	8/16/2000	8/18/2000	8/22/2000
FILE NAME	L0F~020	L0GL013	L0GT019	L0HO015	L0HQ020	L0HO016	L0HQ021	L0HU021
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.39	1.15	1.46	0.79	0.86	0.69	0.83	1.72
PROPYLENE	0.57	0.62	0.73	0.55	0.52	0.66	0.67	0.73
DICHLORODIFLUOROMETHANE	0.69	0.61	0.47	0.62	0.60	0.55	0.56	0.56
CHLOROMETHANE	0.54	0.58	0.49	0.55	0.49	0.57	0.63	0.61
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	0.93
TRICHLOROFLUOROMETHANE	0.90	0.25	0.20	0.31	0.31	0.27	0.23	0.22
ACRYLONITRILE	0.26	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	153.00 E	129.30	5.23	11.14	11.03	1.94	2.52	2.39
TRICHLOROTRIFLUOROETHANE	0.06	0.07	ND	ND	ND	ND	ND	0.04 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	1.18	0.23	0.57	0.73	0.50	1.26	0.35	1.39
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.52	0.57	0.73	0.50	0.50	0.42	0.45	0.62
CARBON TETRACHLORIDE	0.04 U	ND	ND	ND	ND	ND	ND	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	0.59
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	2.23	1.56	1.87	1.20	1.14	1.15	1.12	2.41
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	0.20	0.96	0.39	ND	ND	ND	ND	0.40
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.17	0.22	0.34	0.16	0.16	0.15	0.16	0.24
m,p - XYLENE	0.43	0.64	1.06	0.41	0.43	0.37	0.40	0.73
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.06 U	0.03 U	ND	ND	ND	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.11	0.29	0.43	0.15	0.16	0.16	0.15	0.35
1,3,5-TRIMETHYLBENZENE	0.02 U	0.08	0.08	0.04 U	ND	ND	ND	0.11
1,2,4-TRIMETHYLBENZENE	0.07 U	0.24	0.33	0.18	0.16	0.17	0.13	0.33
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Portland, OR
Appendix J

SAMPLE SITE #	PLOR 18188 D1	PLOR 18188 R1	PLOR 18189 D2	PLOR 18189 R2	PLOR 18305
SAMPLE DATE	8/22/2000	8/22/2000	8/22/2000	8/22/2000	9/3/2000
ANALYSIS DATE	8/28/2000	9/5/2000	8/28/2000	9/5/2000	9/12/2000
FILE NAME	L0H!012	L0IE009	L0H!009	L0IE010	L0IK018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.67	1.61	1.60	1.59	0.94
PROPYLENE	0.57	0.59	0.57	0.60	0.69
DICHLORODIFLUOROMETHANE	0.54	0.56	0.55	0.58	0.61
CHLOROMETHANE	0.52	0.52	0.53	0.61	0.62
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.32	0.36	0.34	0.39	0.23
ACRYLONITRILE	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.97	1.06	2.11	2.18	1.12
TRICHLOROTRIFLUOROETHANE	ND	0.06 U	0.04 U	0.08	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	0.47	0.42	0.48	0.45	0.37
CHLOROPRENE	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	0.03 U	ND	ND	ND
BENZENE	0.68	0.70	0.68	0.67	0.56
CARBON TETRACHLORIDE	ND	0.04 U	ND	0.04 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND
TOLUENE	2.35	2.28	1.91	1.94	1.28
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND
N-OCTANE	ND	0.10	ND	0.09	ND
TETRACHLOROETHYLENE	1.00	0.99	0.91	1.08	ND
CHLOROBENZENE	ND	ND	ND	ND	ND
ETHYLBENZENE	0.27	0.31	0.26	0.30	0.17
m,p - XYLENE	0.92	0.96	0.90	0.92	0.51
BROMOFORM	ND	ND	ND	ND	ND
STYRENE	ND	0.03 U	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	0.02 U
o - XYLENE	0.35	0.40	0.34	0.40	0.23
1,3,5-TRIMETHYLBENZENE	0.04 U	0.09	0.04 U	0.09	0.06 U
1,2,4-TRIMETHYLBENZENE	0.26	0.26	0.25	0.25	0.18
m - DICHLOROBENZENE	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 17374	SFSD 17382	SFSD 17375	SFSD 17396	SFSD 17425	SFSD 17455 D1	SFSD 17455 R1	SFSD 17456 D2
SAMPLE DATE	3/19/2000	3/25/2000	3/27/2000	3/31/2000	4/6/2000	4/12/2000	4/12/2000	4/12/2000
ANALYSIS DATE	4/3/2000	4/3/2000	4/4/2000	4/10/2000	4/12/2000	5/2/2000	5/3/2000	5/2/2000
FILE NAME	L0DC012	L0DC015	L0DC020	L0DJ009	L0DL006	L0EB007	L0EC006	L0EB008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.96	0.66	1.12	0.86	0.63	1.22	1.28	1.28
PROPYLENE	0.35	0.22	0.51	0.33	0.23	0.48	0.46	0.57
DICHLORODIFLUOROMETHANE	0.74	0.61	0.57	0.65	0.46	0.56	0.52	0.59
CHLOROMETHANE	1.19	0.73	1.36	0.79	0.75	0.89	1.00	0.79
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.29	0.33	0.30	0.41	0.22	0.27	0.24	1.04
ACRYLONITRILE	0.23	ND	0.50	ND	ND	0.58	0.56	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	0.18	ND	ND	ND	ND	0.10
TRICHLOROTRIFLUOROETHANE	0.21	0.04	0.25	0.27	0.18	0.21	0.19	0.17
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	0.59	0.74	1.26	0.48	ND	0.90	0.87	0.77
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	0.28	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	0.03 U	0.02 U	0.03 U
BENZENE	0.33	0.23	0.36	0.29	0.24	0.34	0.34	0.47
CARBON TETRACHLORIDE	ND	0.04 U	0.04 U	ND	0.04 U	0.09 U	0.09 U	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	0.34	0.30	0.45	0.46	0.25	0.42	0.40	0.68
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	ND	0.03 U	ND	0.03 U
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.07 U	0.06 U	0.07 U	0.06 U	0.04 U	0.09 U	0.09 U	0.13
m,p - XYLENE	0.12	0.09	0.16	0.18	0.07 U	0.16	0.18	0.26
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	0.03 U	ND	ND	0.04 U	0.02 U	0.02 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.06	0.03 U	0.06	0.07	0.03 U	0.11	0.10	0.14
1,3,5-TRIMETHYLBENZENE	ND	ND	0.02 U	ND	ND	0.05 U	0.05 U	0.04 U
1,2,4-TRIMETHYLBENZENE	0.05 U	0.04 U	0.07	0.07	0.05 U	0.09	0.10	0.13
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 17456 R2		SFSD 17459 D1		SFSD 17459 R1		SFSD 17460 D2		SFSD 17460 R2		SFSD 17472		SFSD 17479		SFSD 17499	
SAMPLE DATE	4/12/2000		4/18/2000		4/18/2000		4/18/2000		4/18/2000		4/24/2000		4/30/2000		5/6/2000	
ANALYSIS DATE	5/3/2000		5/2/2000		5/3/2000		5/2/2000		5/3/2000		5/2/2000		5/11/2000		6/2/2000	
FILE NAME	L0EC007		L0EB013		L0EC012		L0EB014		L0EC013		L0EB015		L0EJ016		L0FA013	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.46		1.34		1.31		1.31		1.26		1.20		0.85		1.59	
PROPYLENE	0.53		0.42		0.38		0.36		0.34		0.44		0.34		0.71	
DICHLORODIFLUOROMETHANE	0.58		0.57		0.52		0.55		0.54		0.57		0.58		0.60	
CHLOROMETHANE	0.73		0.88		0.82		0.63		0.62		0.99		0.86		1.35	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	1.22		0.25		0.24		0.24		0.28		0.27		1.03		0.58	
ACRYLONITRILE	ND		0.17		ND		ND		ND		0.70		0.47		0.77	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	0.09	U	ND		ND		0.04	U	ND		0.09	U	0.08	U	0.11	
TRICHLOROTRIFLUOROETHANE	0.13		0.15		0.15		0.13		0.13		0.20		0.18		0.22	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	0.73		0.66		0.65		0.70		0.75		1.65		0.56		1.26	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.04	U	0.02	U	0.02	U	0.04	U	0.03	U	0.05	U	0.04	U	0.02	U
BENZENE	0.44		0.35		0.34		0.37		0.36		0.36		0.25		0.27	
CARBON TETRACHLORIDE	0.10		0.07	U	0.06	U	0.07	U	0.06	U	0.07	U	0.06	U	ND	
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		0.03	U	ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	0.68		1.21		1.18		2.03		1.94		3.22		0.46		0.65	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	0.03	U	0.07	U	0.07	U	0.10		0.09	U	0.13		ND		0.04	U
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND		0.03	U	ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.11		0.11		0.10		0.14		0.13		0.24		0.07	U	0.08	U
m,p - XYLENE	0.25		0.20		0.21		0.28		0.25		0.42		0.16		0.18	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.04	U	0.15		0.14		0.30		0.30		0.58		0.05	U	0.09	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.13		0.13		0.12		0.16		0.14		0.23		0.09		0.10	
1,3,5-TRIMETHYLBENZENE	0.06	U	0.05	U	0.04	U	0.05	U	0.05	U	0.05	U	0.03	U	0.03	U
1,2,4-TRIMETHYLBENZENE	0.11		0.09		0.08		0.09		0.11		0.14		0.07		0.09	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 17500		SFSD 17514		SFSD 17568	SFSD 17541 D1	SFSD 17542 D2	SFSD 17604 D1		SFSD 17604 R1		SFSD 17605 D2	
SAMPLE DATE	5/12/2000		5/18/2000		5/24/2000	5/30/2000	5/30/2000	6/5/2000		6/5/2000		6/5/2000	
ANALYSIS DATE	6/2/2000		6/15/2000		Void	Void	Void	6/22/2000		6/23/2000		6/22/2000	
FILE NAME	L0FA015		L0FN021					L0FV014		L0FW012		L0FV015	
UNITS	ppbv		ppbv		ppbv	ppbv	ppbv	ppbv		ppbv		ppbv	
ACETYLENE	0.80		0.54					0.64		0.64		0.64	
PROPYLENE	0.59		0.33					0.35		0.35		0.35	
DICHLORODIFLUOROMETHANE	NR		0.55					0.56		0.58		0.55	
CHLOROMETHANE	1.23		0.59					0.60		0.55		0.53	
DICHLOROTETRAFLUOROETHANE	ND		ND					ND		ND		ND	
VINYL CHLORIDE	ND		ND					ND		ND		ND	
1,3-BUTADIENE	ND		ND					ND		ND		ND	
BROMOMETHANE	ND		ND					ND		ND		ND	
CHLOROETHANE	ND		ND					ND		ND		ND	
ACETONITRILE	ND		ND					ND		ND		ND	
TRICHLOROFLUOROMETHANE	1.09		ND					0.27		0.33		0.28	
ACRYLONITRILE	ND		0.45					ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND					ND		ND		ND	
METHYLENE CHLORIDE	0.19		0.05	U				ND		ND		ND	
TRICHLOROTRIFLUOROETHANE	0.19		ND					0.08		0.09		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND					ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND					ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND					ND		ND		ND	
METHYL ETHYL KETONE	2.02		0.90					0.28		0.30		0.30	
CHLOROPRENE	ND		ND					ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND					ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND					ND		ND		ND	
CHLOROFORM	ND		ND					ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND					ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND					ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.02	U	ND					ND		ND		ND	
BENZENE	0.35		0.25					0.25		0.26		0.33	
CARBON TETRACHLORIDE	0.06	U	0.08	U				ND		ND		ND	
tert-AMYL METHYL ETHER	ND		ND					ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND					ND		ND		ND	
ETHYL ACRYLATE	ND		ND					ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND					ND		ND		ND	
TRICHLOROETHYLENE	ND		ND					ND		ND		ND	
METHYL METHACRYLATE	ND		ND					ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND					ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND					ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND					ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND					ND		ND		ND	
TOLUENE	0.67		0.43					0.45		0.43		0.67	
DIBROMOCHLOROMETHANE	ND		ND					ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND					ND		ND		ND	
N-OCTANE	0.03	U	0.04	U				ND		ND		ND	
TETRACHLOROETHYLENE	ND		ND					ND		ND		ND	
CHLOROBENZENE	ND		ND					ND		ND		ND	
ETHYLBENZENE	0.10		0.08	U				0.16		0.18		0.21	
m,p - XYLENE	0.26		0.16					0.43		0.41		0.51	
BROMOFORM	ND		ND					ND		ND		ND	
STYRENE	0.07	U	ND					ND		ND		ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND					ND		ND		ND	
o - XYLENE	0.12		0.09					0.20		0.18		0.21	
1,3,5-TRIMETHYLBENZENE	0.05	U	0.03	U				0.06	U	0.05	U	0.06	U
1,2,4-TRIMETHYLBENZENE	0.13		0.06					0.13		0.12		0.14	
m - DICHLOROBENZENE	ND		ND					ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND					ND		ND		ND	
p - DICHLOROBENZENE	ND		ND					ND		ND		ND	
o - DICHLOROBENZENE	ND		ND					ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND					ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND					ND		ND		ND	

U = Under the Detection Limit
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1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 17605 R2		SFSD 17602		SFSD 17682	SFSD 17849 D1	SFSD 17849 R1	SFSD 17850 D2	SFSD 17850 R2	SFSD 17806 D1	
SAMPLE DATE	6/5/2000		6/11/2000		6/17/2000	6/23/2000	6/23/2000	6/23/2000	6/23/2000	6/29/2000	
ANALYSIS DATE	6/23/2000		6/23/2000		Void	7/19/2000	7/20/2000	7/19/2000	7/20/2000	7/18/2000	
FILE NAME	L0FW013		L0FW010			L0GS013	L0GT010	L0GS014	L0GT011	L0GQ018	
UNITS	ppbv		ppbv		ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	
ACETYLENE	0.64		0.50			0.47	0.50	0.47	0.51	0.84	
PROPYLENE	0.35		0.30			0.20	0.21	0.16	0.17	0.54	
DICHLORODIFLUOROMETHANE	0.59		0.58			0.54	0.59	0.56	0.55	0.57	
CHLOROMETHANE	0.56		0.60			0.75	0.81	0.65	0.63	0.89	
DICHLOROTETRAFLUOROETHANE	ND		ND			ND	ND	ND	ND	ND	
VINYL CHLORIDE	ND		ND			ND	ND	ND	ND	ND	
1,3-BUTADIENE	ND		ND			ND	ND	ND	ND	ND	
BROMOMETHANE	ND		ND			ND	ND	ND	ND	ND	
CHLOROETHANE	ND		ND			ND	ND	ND	ND	ND	
ACETONITRILE	ND		ND			ND	ND	ND	ND	ND	
TRICHLOROFLUOROMETHANE	0.28		0.23			0.24	0.25	0.19	0.23	0.18	
ACRYLONITRILE	ND		0.18			ND	ND	ND	ND	ND	
1,1-DICHLOROETHENE	ND		ND			ND	ND	ND	ND	ND	
METHYLENE CHLORIDE	ND		ND			ND	ND	ND	ND	ND	
TRICHLOROTRIFLUOROETHANE	0.09		0.16			0.04	0.04	ND	0.04	0.10	
trans - 1,2 - DICHLOROETHYLENE	ND		ND			ND	ND	ND	ND	ND	
1,1 - DICHLOROETHANE	ND		ND			ND	ND	ND	ND	ND	
METHYL tert-BUTYL ETHER	ND		ND			ND	ND	ND	ND	ND	
METHYL ETHYL KETONE	0.39		0.35			1.23	0.65	0.44	0.50	0.73	
CHLOROPRENE	ND		ND			ND	ND	ND	ND	ND	
cis-1,2-DICHLOROETHYLENE	ND		ND			ND	ND	ND	ND	ND	
BROMOCHLOROMETHANE	ND		ND			ND	ND	ND	ND	ND	
CHLOROFORM	ND		ND			ND	ND	ND	ND	ND	
ETHYL tert-BUTYL ETHER	ND		ND			ND	ND	ND	ND	ND	
1,2 - DICHLOROETHANE	ND		ND			ND	ND	ND	ND	ND	
1,1,1 - TRICHLOROETHANE	ND		ND			ND	ND	ND	ND	ND	
BENZENE	0.32		0.23			0.21	0.25	0.24	0.26	0.37	
CARBON TETRACHLORIDE	ND		ND			ND	ND	ND	ND	ND	
tert-AMYL METHYL ETHER	ND		ND			ND	ND	ND	ND	ND	
1,2 - DICHLOROPROPANE	ND		ND			ND	ND	ND	ND	ND	
ETHYL ACRYLATE	ND		ND			ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE	ND		ND			ND	ND	ND	ND	ND	
TRICHLOROETHYLENE	ND		ND			ND	ND	ND	ND	ND	
METHYL METHACRYLATE	ND		ND			ND	ND	ND	ND	ND	
cis -1,3 - DICHLOROPROPENE	ND		ND			ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE	ND		ND			ND	ND	ND	ND	ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND			ND	ND	ND	ND	ND	
1,1,2 - TRICHLOROETHANE	ND		ND			ND	ND	ND	ND	ND	
TOLUENE	0.62		0.40			2.09	2.24	2.31	2.28	1.08	
DIBROMOCHLOROMETHANE	ND		ND			ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE	ND		ND			ND	ND	ND	ND	ND	
N-OCTANE	ND		ND			ND	ND	ND	ND	ND	
TETRACHLOROETHYLENE	ND		ND			ND	ND	ND	ND	ND	
CHLOROBENZENE	ND		ND			ND	ND	ND	ND	ND	
ETHYLBENZENE	0.19		0.08	U		0.20	0.18	0.19	0.18	0.15	
m,p - XYLENE	0.50		0.19			0.31	0.33	0.32	0.33	0.38	
BROMOFORM	ND		ND			ND	ND	ND	ND	ND	
STYRENE	ND		0.03	U		0.43	0.40	0.40	0.40	ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND			ND	ND	ND	ND	ND	
o - XYLENE	0.22		0.11			0.17	0.18	0.19	0.19	0.14	
1,3,5-TRIMETHYLBENZENE	0.05	U	0.05	U		ND	ND	ND	ND	0.03	U
1,2,4-TRIMETHYLBENZENE	0.13		0.12			0.08	0.08	0.08	0.07	0.16	
m - DICHLOROBENZENE	ND		ND			ND	ND	ND	ND	ND	
CHLOROMETHYLBENZENE	ND		ND			ND	ND	ND	ND	ND	
p - DICHLOROBENZENE	ND		ND			ND	ND	ND	ND	ND	
o - DICHLOROBENZENE	ND		ND			ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE	ND		ND			ND	ND	ND	ND	ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND			ND	ND	ND	ND	ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 17806 R1	SFSD 17807 D2	SLCU 17497	SFSD 17844	SFSD 17848	SFSD 17869	SFSD 18007	SFSD 17988 D1
SAMPLE DATE	6/29/2000	6/29/2000	6/29/2000	7/5/2000	7/11/2000	7/17/2000	7/23/2000	7/29/2000
ANALYSIS DATE	7/19/2000	7/18/2000	7/19/2000	7/20/2000	7/20/2000	7/21/2000	8/16/2000	Void
FILE NAME	L0GS011	L0GQ019	L0GS012	L0GT012	L0GT015	L0GT021	L0HO017	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.88	0.84	0.89	1.32	0.87	0.69	0.64	
PROPYLENE	0.52	0.45	0.46	0.47	0.44	0.38	0.32	
DICHLORODIFLUOROMETHANE	0.58	0.67	0.70	1.52	0.65	0.60	0.67	
CHLOROMETHANE	0.84	0.85	0.84	0.72	0.84	0.79	0.70	
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROFLUOROMETHANE	0.22	0.36	0.39	0.21	0.22	0.24	1.59	
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	0.13 U	
TRICHLOROTRIFLUOROETHANE	0.10	0.05	0.10	0.07	0.07	0.13	0.06	
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
METHYL ETHYL KETONE	1.67	0.38	1.07	0.95	0.93	0.37	0.38	
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
BENZENE	0.38	0.36	0.36	0.51	0.32	0.23	0.23	
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
TOLUENE	1.02	1.14	1.09	1.35	0.61	0.41	0.72	
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	
N-OCTANE	ND	0.09 U	ND	ND	ND	ND	ND	
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
ETHYLBENZENE	0.14	0.15	0.15	0.24	0.06 U	0.11 U	0.08 U	
m,p - XYLENE	0.37	0.40	0.41	0.47	0.18	0.22	0.19	
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	
STYRENE	ND	ND	0.04 U	0.16 U	ND	ND	ND	
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	
o - XYLENE	0.18	0.18	0.19	0.25	0.12	0.10	ND	
1,3,5-TRIMETHYLBENZENE	0.06 U	0.03 U	0.06 U	0.04 U	ND	ND	ND	
1,2,4-TRIMETHYLBENZENE	0.14	0.17	0.15	0.17	0.11	0.09	0.04 U	
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 17989 D2	SFSD 18161	SFSD 18163	SFSD 18219	SFSD 18294	SFSD 18290	SFSD 18389	SFSD 18436
SAMPLE DATE	7/29/2000	8/10/2000	8/16/2000	8/22/2000	8/28/2000	9/3/2000	9/15/2000	9/21/2000
ANALYSIS DATE	Void	8/28/2000	8/28/2000	9/5/2000	9/11/2000	9/12/2000	9/29/2000	10/12/2000
FILE NAME		L0H!010	L0H!013	L0IE013	L0IK015	L0IK019	L0I!022	L0JK020
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE		0.46	0.46	0.78	0.72	1.00	0.77	0.48
PROPYLENE		0.44	0.36	0.45	0.37	0.52	0.48	0.30
DICHLORODIFLUOROMETHANE		0.55	0.53	0.65	0.74	5.04	0.66	0.57
CHLOROMETHANE		1.26	1.06	1.00	1.07	0.77	0.68	0.67
DICHLOROTETRAFLUOROETHANE		ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE		ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE		ND	ND	ND	ND	ND	ND	ND
BROMOMETHANE		ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
ACETONITRILE		ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE		0.20	0.26	0.32	0.32	0.42	0.56	0.59
ACRYLONITRILE		ND	ND	0.45	ND	ND	ND	0.42
1,1-DICHLOROETHENE		ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE		ND	ND	ND	ND	ND	ND	0.07
TRICHLOROTRIFLUOROETHANE		0.13	0.13	0.20	0.23	0.08 U	0.14	0.15
trans - 1,2 - DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER		ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE		0.54	0.28	0.51	0.58	0.74	0.36	ND
CHLOROPRENE		ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
CHLOROFORM		ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER		ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
BENZENE		0.18	0.18	0.32	0.33	0.39	0.34	0.29
CARBON TETRACHLORIDE		ND	ND	0.04 U	ND	ND	ND	0.04 U
tert-AMYL METHYL ETHER		ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE		ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE		ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE		ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE		ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE		ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
TOLUENE		0.49	0.41	0.79	1.14	4.03	0.71	0.54
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE		ND	ND	ND	ND	ND	ND	ND
N-OCTANE		ND	ND	ND	ND	0.07 U	ND	ND
TETRACHLOROETHYLENE		ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE		0.08	ND	0.11	0.11	0.28	0.11	0.11
m,p - XYLENE		0.10	0.04 U	0.26	0.21	0.55	0.33	0.23
BROMOFORM		ND	ND	ND	ND	ND	ND	ND
STYRENE		ND	ND	0.08 U	0.16	0.79	ND	ND
1,1,2,2 - TETRACHLOROETHANE		ND	ND	ND	ND	ND	ND	ND
o - XYLENE		ND	ND	0.13	0.09	0.25	0.11	0.11
1,3,5-TRIMETHYLBENZENE		ND	ND	0.03 U	ND	0.05 U	ND	ND
1,2,4-TRIMETHYLBENZENE		0.05 U	ND	0.11	0.04 U	0.18	0.08	0.07
m - DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE		ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE		ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE		ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 18478 D1		SFSD 18478 R1		SFSD 18479 D2		SFSD 18479 R2		SFSD 18524		SFSD 18554		SFSD	SFSD 18625	
SAMPLE DATE	9/27/2000		9/27/2000		9/27/2000		9/27/2000		10/3/2000		10/9/2000		10/15/2000	10/21/2000	
ANALYSIS DATE	10/26/2000		10/27/2000		10/26/2000		10/27/2000		10/27/2000		10/28/2000		Not Sampled	11/7/2000	
FILE NAME	L0JZ014		L0J~007		L0JZ015		L0J~008		L0J~015		L0J~021			L0KF023	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	ppbv	
ACETYLENE	0.49		0.52		0.49		0.54		0.68		0.42			0.66	
PROPYLENE	0.32		0.33		0.28		0.31		0.39		0.24			0.31	
DICHLORODIFLUOROMETHANE	0.56		0.55		0.54		0.56		0.53		0.50			0.55	
CHLOROMETHANE	0.53		0.55		0.48		0.56		0.63		0.51			0.64	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND			ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND			ND	
1,3-BUTADIENE	ND		ND		0.02	U	ND		ND		ND			ND	
BROMOMETHANE	ND		ND		ND		ND		ND		ND			ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND			ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND			ND	
TRICHLOROFLUOROMETHANE	0.25		0.23		0.23		0.27		0.23		0.25			0.41	
ACRYLONITRILE	0.22		0.18	U	0.18	U	0.25		0.58		0.41			0.27	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND			ND	
METHYLENE CHLORIDE	0.02	U	0.02	U	ND		0.03	U	0.06	U	0.03	U		0.04	U
TRICHLOROTRIFLUOROETHANE	0.14		0.12		0.13		0.13		0.16		0.14			0.14	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND			ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND			ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND			ND	
METHYL ETHYL KETONE	0.67		0.76		0.43		0.44		0.66		0.63			0.60	
CHLOROPRENE	ND		ND		ND		ND		ND		ND			ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND			ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND			ND	
CHLOROFORM	ND		ND		ND		ND		ND		ND			ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND			ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND			ND	
1,1,1 - TRICHLOROETHANE	ND		ND		ND		0.02	U	ND		0.02	U		ND	
BENZENE	0.25		0.24		0.25		0.26		0.31		0.21			0.28	
CARBON TETRACHLORIDE	0.03	U	0.03	U	0.07	U	0.07	U	0.07	U	0.06	U		0.04	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND			ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND			ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND			ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND			ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND			ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND			ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND			ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND		ND			ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND			ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND			ND	
TOLUENE	0.47		0.45		0.44		0.46		0.42		0.23			0.39	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND			ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND			ND	
N-OCTANE	0.07		0.06		0.09		0.07		0.03	U	0.02	U		ND	
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND		ND			ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND			ND	
ETHYLBENZENE	0.08		0.08		0.10		0.10		0.10		0.07			0.07	
m,p - XYLENE	0.20		0.20		0.23		0.23		0.25		0.13			0.16	
BROMOFORM	ND		ND		ND		ND		ND		ND			ND	
STYRENE	ND		0.02	U	0.02	U	0.04	U	0.04	U	0.02	U		ND	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND			ND	
o - XYLENE	0.09		0.09		0.09		0.10		0.11		0.07			0.09	
1,3,5-TRIMETHYLBENZENE	ND		0.04	U	ND		0.05	U	0.03	U	0.02	U		ND	
1,2,4-TRIMETHYLBENZENE	0.09		0.08		0.10		0.11		0.11		0.04	U		0.05	U
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND			ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND			ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND			ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND			ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND			ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND			ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 18661 D1	SFSD 18661 R1	SFSD 18662 D2	SFSD 18662 R2	SFSD 18700	SFSD 18727	SFSD 18747	SFSD 18775
SAMPLE DATE	10/27/2000	10/27/2000	10/27/2000	10/27/2000	11/2/2000	11/8/2000	11/14/2000	11/20/2000
ANALYSIS DATE	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/14/2000	11/15/2000	11/20/2000	12/8/2000
FILE NAME	L0KF018	L0KG009	L0KF019	L0KG010	L0KN009	L0KO012	L0KT012	L0LH010
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.59	0.58	0.64	0.62	0.64	0.68	1.24	7.24
PROPYLENE	0.29	0.28	0.28	0.26	0.28	0.22	0.35	3.09
DICHLORODIFLUOROMETHANE	0.69	0.63	0.78	0.76	0.56	0.54	0.49	0.85
CHLOROMETHANE	0.61	0.68	0.50	0.47	0.75	0.47	0.50	0.41
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	0.54
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.02	0.24	0.26	0.26	0.35	0.24	0.20	1.62
ACRYLONITRILE	0.35	0.37	0.37	0.39	0.92	0.35	0.42	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	0.05 U	0.04 U	ND	0.25
TRICHLOROTRIFLUOROETHANE	0.15	0.14	0.14	0.15	0.18	0.14	0.14	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	0.25	0.18	0.27	0.19	0.32	0.52	0.58	1.40
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	0.09
BENZENE	0.28	0.27	0.28	0.30	0.24	0.24	0.35	1.40
CARBON TETRACHLORIDE	ND	ND	ND	ND	0.04 U	ND	ND	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	1.20	1.25	1.37	1.38	0.40	0.30	0.52	2.44
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.08	ND	ND	0.05 U	ND	ND	ND	0.11
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.11	0.10	0.13	0.13	0.07	0.05	0.07	0.60
m,p - XYLENE	0.23	0.21	0.29	0.28	0.13	0.09	0.17	1.74
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.22	0.18	0.22	0.24	0.05 U	ND	ND	0.17
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.11	0.10	0.13	0.14	0.05	0.06	0.09	0.82
1,3,5-TRIMETHYLBENZENE	0.02 U	0.02 U	0.02 U	ND	ND	ND	ND	0.28
1,2,4-TRIMETHYLBENZENE	0.09	0.07 U	0.12	0.11	0.04 U	ND	0.04 U	0.80
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Sioux Falls, SD
Appendix J

SAMPLE SITE #	SFSD 18806		SFSD 18829		SFSD 18930		SFSD 18933		SFSD 18971		SFSD 18988	
SAMPLE DATE	11/26/2000		12/2/2000		12/8/2000		12/14/2000		12/20/2000		12/26/2000	
ANALYSIS DATE	12/12/2000		12/18/2000		1/5/2001		1/5/2001		1/9/2001		1/10/2001	
FILE NAME	L0LK021		L0LR012		L1AE002		L1AE003		L1AH015		L1AJ011	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.95		0.68		1.19		2.70		1.35		1.81	
PROPYLENE	0.48		0.27		0.39		0.59		0.32		0.42	
DICHLORODIFLUOROMETHANE	0.60		0.49		0.57		0.60		0.57		0.56	
CHLOROMETHANE	0.54		0.53		0.51		0.58		0.56		0.57	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		0.03	U	ND		0.01	U
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	0.04	U	ND		0.07	U	0.11		0.05	U	0.06	U
BROMOMETHANE	ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.45		0.24		0.32		0.36		0.27		0.24	
ACRYLONITRILE	0.50		0.72		0.73		0.34		ND		0.37	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND	
METHYLENE CHLORIDE	0.09		0.07		0.09		0.10		0.02	U	ND	
TRICHLOROTRIFLUOROETHANE	0.14		0.20		0.19		0.14		0.12		0.14	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	0.82		0.84		0.69		1.29		0.87		0.54	
CHLOROPRENE	ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		0.04	U	ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		0.01	U	ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.04	U	0.04	U	0.06	U	0.08		0.04	U	0.02	U
BENZENE	0.42		0.28		0.40		0.59		0.33		0.44	
CARBON TETRACHLORIDE	0.09		0.10		0.14		0.12		ND		0.09	
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		0.02	U	ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND	
TOLUENE	0.76		0.52		0.81		1.06		0.52		0.65	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND	
N-OCTANE	0.08		0.04	U	0.13		0.08		ND		0.06	U
TETRACHLOROETHYLENE	ND		ND		0.03	U	0.05	U	ND		ND	
CHLOROBENZENE	ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.13		0.08		0.14		0.23		0.05		0.11	
m,p - XYLENE	0.31		0.15		0.31		0.52		0.13		0.29	
BROMOFORM	ND		ND		ND		ND		ND		ND	
STYRENE	0.05	U	0.06	U	0.12		0.17		ND		0.02	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND	
o - XYLENE	0.15		0.08		0.15		0.24		0.06		0.14	
1,3,5-TRIMETHYLBENZENE	0.04	U	0.03	U	0.08		0.09		ND		0.04	U
1,2,4-TRIMETHYLBENZENE	0.10		0.04	U	0.11		0.18		0.02	U	0.07	U
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		0.02	U	0.03	U	ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		0.04	U	0.07		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		0.04	U	ND		ND		ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
Appendix J

SAMPLE SITE #	SLCU 17093	SLCU 17083	SLCU 17101	SLCU 17114	SLCU 17134	SLCU 17148	SLCU 17160	SLCU 17195
SAMPLE DATE	11/12/1999	11/20/1999	11/26/1999	12/2/1999	12/9/1999	12/14/1999	12/20/1999	1/7/2000
ANALYSIS DATE	12/10/1999	12/10/2000	12/21/1999	12/22/1999	Void	12/22/1999	1/19/2000	2/4/2000
FILE NAME	L9LJ014	L9LJ023	L9LU006	L9LU013		L9LU023	L0AS011	L0BC013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	4.82	6.92	2.53	3.92		6.92	4.47	9.92
PROPYLENE	2.42	2.42	1.05	1.23		1.76	1.99	2.41
DICHLORODIFLUOROMETHANE	0.80	0.73	0.69	0.68		0.69	0.76	0.87
CHLOROMETHANE	0.69	0.69	0.95	0.88		0.85	0.82	0.88
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND		ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND		ND	ND	ND
1,3-BUTADIENE	0.49	0.44	0.13	0.14		0.21	0.29	0.27
BROMOMETHANE	ND	ND	ND	ND		ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
ACETONITRILE	2.34	ND	ND	ND		ND	ND	ND
TRICHLOROFLUOROMETHANE	0.38	0.30	0.33	0.39		0.32	0.34	0.44
ACRYLONITRILE	ND	ND	0.74	0.77		0.87	0.84	0.88
1,1-DICHLOROETHENE	ND	ND	ND	ND		ND	ND	ND
METHYLENE CHLORIDE	0.48	0.21	0.07 U	0.22		0.12	0.17	0.08 U
TRICHLOROTRIFLUOROETHANE	0.07	0.08	0.11	0.11		0.12	0.09	0.12
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND		ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
METHYL tert-BUTYL ETHER	0.18	ND	ND	ND		ND	ND	ND
METHYL ETHYL KETONE	1.90	2.45	2.84	2.81		2.47	2.54	3.33
CHLOROPRENE	ND	ND	ND	ND		ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND		ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND		ND	ND	ND
CHLOROFORM	ND	ND	ND	ND		ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND		ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.06	0.06	0.06		0.06	0.04 U	0.04 U
BENZENE	2.11	1.66	0.80	0.92		1.29	1.48	1.78
CARBON TETRACHLORIDE	0.10	0.10	0.06	0.10		0.09	0.05 U	0.04 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND		ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND		ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND		ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND		ND	ND	ND
TRICHLOROETHYLENE	0.02 U	ND	ND	ND		ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND		ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND		ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	0.13	ND		ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND		ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
TOLUENE	4.82	3.49	1.48	1.83		2.33	2.89	3.44
DIBROMOCHLOROMETHANE	ND	ND	ND	ND		ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND		ND	ND	ND
N-OCTANE	0.24	0.20	0.12	0.13		0.12	0.17	0.16
TETRACHLOROETHYLENE	0.11	0.04 U	0.19	ND		0.04 U	0.06 U	0.04 U
CHLOROBENZENE	ND	ND	ND	ND		ND	ND	ND
ETHYLBENZENE	0.69	0.46	0.23	0.25		0.31	0.36	0.48
m,p - XYLENE	2.47	1.68	0.63	0.79		1.02	1.29	1.54
BROMOFORM	ND	ND	ND	ND		ND	ND	ND
STYRENE	0.20	0.16	0.10 U	0.14		0.09 U	0.09 U	0.17
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND		ND	ND	ND
o - XYLENE	1.07	0.75	0.31	0.36		0.45	0.56	0.19
1,3,5-TRIMETHYLBENZENE	0.33	0.24	0.13	0.13		0.14	0.18	0.02
1,2,4-TRIMETHYLBENZENE	0.87	0.64	0.27	0.29		0.35	0.48	0.49
m - DICHLOROBENZENE	ND	ND	ND	ND		ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND		ND	ND	ND
p - DICHLOROBENZENE	0.04 U	0.01 U	ND	ND		ND	ND	ND
o - DICHLOROBENZENE	0.02 U	ND	ND	ND		ND	ND	ND
1,2,4-TRICHLOROBENZENE	0.02 U	ND	ND	ND		ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	0.03 U	ND	ND	ND		ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
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SAMPLE SITE #	SLCU 17200	SLCU 17226	SLCU 17222	SLCU 17238	SLCU 17241	SLCU 17262	SLCU 17276	SLCU 17303
SAMPLE DATE	1/13/2000	1/19/2000	1/25/2000	1/31/2000	2/6/2000	2/12/2000	2/18/2000	2/24/2000
ANALYSIS DATE	2/4/2000	2/16/2000	2/16/2000	2/17/2000	2/22/2000	2/22/2000	3/7/2000	3/7/2000
FILE NAME	L0BC014	L0BP012	L0BP014	L0BP021	L0BV013	L0BV014	L0CG006	L0CG010
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	7.67	8.74	6.42	8.82	13.14	2.55	7.61	1.77
PROPYLENE	1.67	2.82	1.96	2.15	3.29	0.79	2.01	0.48
DICHLORODIFLUOROMETHANE	0.65	0.71	0.67	0.69	0.75	0.64	0.76	0.63
CHLOROMETHANE	0.66	0.78	0.78	0.69	0.66	0.67	0.66	0.66
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.16	0.42	0.25	0.25	0.46	0.06	0.25	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.27	0.34	0.31	0.45	0.50	0.29	0.33	0.31
ACRYLONITRILE	ND	0.94	0.80	0.72	0.90	0.64	0.38	0.23
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.07 U	0.23	0.13	0.15	0.22	0.57	0.11	0.38
TRICHLOROTRIFLUOROETHANE	0.09	0.07	0.07	0.07	0.06	0.10	0.04	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	2.32	3.12	2.72	2.52	2.37	2.04	2.28	1.84
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.03 U	ND	ND	ND	0.03 U	ND	ND	ND
BENZENE	1.24	2.14	1.39	1.52	2.78	0.67	1.56	0.43
CARBON TETRACHLORIDE	ND	ND	ND	0.04 U	0.05 U	0.04 U	0.09 U	0.04 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	2.31	4.34	2.51	3.31	5.75	0.94	2.61	0.54
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.10	0.17	0.12	0.16	0.20	ND	ND	ND
TETRACHLOROETHYLENE	ND	0.07 U	ND	ND	0.10 U	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.32	0.60	0.34	0.42	0.70	0.14	0.35	0.09 U
m,p - XYLENE	1.13	2.25	1.24	1.58	2.54	0.44	1.27	0.26
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.09 U	0.30	0.18	0.15	0.14	0.02 U	0.03 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.49	0.96	0.54	0.70	1.10	0.19	0.56	0.13
1,3,5-TRIMETHYLBENZENE	0.13	0.25	0.15	0.17	0.25	0.07 U	0.15	0.02 U
1,2,4-TRIMETHYLBENZENE	0.34	0.78	0.41	0.49	0.77	0.15	0.44	0.09
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
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1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
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SAMPLE SITE #	SLCU 17306	SLCU 17323	SLCU 17327	SLCU 17372	SLCU 17383	SLCU 17401	SLCU 17421 D1	SLCU 17421 R1
SAMPLE DATE	3/1/2000	3/7/2000	3/13/2000	3/19/2000	3/25/2000	3/31/2000	4/6/2000	4/6/2000
ANALYSIS DATE	3/21/2000	3/28/2000	4/3/2000	4/3/2000	4/4/2000	4/10/2000	4/18/2000	4/19/2000
FILE NAME	L0CU016	L0C!008	L0DC005	L0DC011	L0DC016	L0DJ011	L0DR005	L0DS005
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.55	6.66	5.50	1.39	9.35	1.94	2.16	2.33
PROPYLENE	0.46	1.38	1.39	0.42	2.42	0.70	0.70	0.71
DICHLORODIFLUOROMETHANE	0.59	0.62	0.64	0.60	0.71	0.58	0.58	0.62
CHLOROMETHANE	0.60	0.68	0.62	0.60	0.59	0.62	0.57	0.59
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	0.17	0.20	ND	0.40	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.27	0.41	0.59	0.27	0.29	0.30	0.29	0.27
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.18	2.29	ND	0.25	ND	0.09 U	0.10 U
TRICHLOROTRIFLUOROETHANE	0.09	0.07	0.08	0.08	0.07	0.07	0.06	0.04
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	1.66	2.46	1.80	1.63	1.95	1.44	1.05	1.17
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	0.63	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	0.44	1.15	1.53	0.47	2.45	0.50	0.68	0.69
CARBON TETRACHLORIDE	0.04 U	ND	0.03 U	0.03 U	0.07 U	ND	0.07 U	ND
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	0.65	2.37	2.95	0.41	5.14	0.92	1.47	1.47
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	0.06 U	0.07 U	ND	0.15	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	0.11	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.10 U	0.30	0.36	0.07 U	0.61	0.16	0.17	0.17
m,p - XYLENE	0.32	1.08	1.33	0.19	2.33	0.43	0.64	0.64
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.06 U	0.09 U	0.12	ND	0.11 U	ND	0.12	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.15	0.49	0.57	0.09	0.95	0.19	0.29	0.29
1,3,5-TRIMETHYLBENZENE	0.05 U	0.12	0.14	0.02 U	0.23	0.04 U	ND	0.07 U
1,2,4-TRIMETHYLBENZENE	0.11	0.35	0.35	0.06 U	0.62	0.10	0.22	0.22
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
Appendix J

SAMPLE SITE #	SLCU 17423 D2	SLCU 17423 R2	SLCU 17442 D1	SLCU 17442 R1	SLCU 17444 D2	SLCU 17444 R2	SLCU 17453	SLCU 17470
SAMPLE DATE	4/6/2000	4/6/2000	4/12/2000	4/12/2000	4/12/2000	4/12/2000	4/18/2000	4/24/2000
ANALYSIS DATE	4/18/2000	4/19/2000	4/18/2000	4/19/2000	4/18/2000	4/19/2000	5/2/2000	5/2/2000
FILE NAME	L0DR006	L0DS006	L0DR015	L0DS013	L0DR016	L0DS014	L0EB018	L0EB017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.24	2.35	2.53	2.47	2.72	2.87	3.48	2.65
PROPYLENE	0.78	0.79	0.86	0.83	0.96	0.99	1.15	0.75
DICHLORODIFLUOROMETHANE	0.61	0.58	0.65	0.72	0.57	0.64	0.56	0.55
CHLOROMETHANE	0.55	0.62	0.58	0.64	0.52	0.60	0.68	0.69
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	0.14	0.05 U
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.29	0.26	0.49	0.88	0.26	0.25	0.25	0.25
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	0.47	0.42
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	0.20	0.13	0.20	0.12	0.06 U	0.05 U
TRICHLOROTRIFLUOROETHANE	0.08	0.04	0.03	0.04	0.04	ND	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	1.38	1.37	1.26	1.67	1.09	1.19	1.88	1.89
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	0.04 U	ND
BENZENE	0.75	0.76	0.95	0.82	1.02	1.00	0.95	0.69
CARBON TETRACHLORIDE	0.04 U	ND	0.04 U	ND	0.04 U	0.04 U	0.07 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	1.50	1.40	1.97	1.73	2.09	2.04	2.01	1.26
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND	ND	ND	0.09 U	0.03 U
TETRACHLOROETHYLENE	ND	ND	0.04 U	ND	ND	0.05 U	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.19	0.16	0.21	0.20	0.24	0.24	0.25	0.17
m,p - XYLENE	0.65	0.60	0.80	0.71	0.87	0.84	0.80	0.50
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.09 U	0.08 U	ND	ND	ND	ND	0.07 U	0.02 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.28	0.25	0.36	0.29	0.35	0.36	0.35	0.23
1,3,5-TRIMETHYLBENZENE	ND	0.07 U	0.10	0.07 U	0.10	0.07 U	0.11	0.09
1,2,4-TRIMETHYLBENZENE	0.22	0.20	0.25	0.21	0.27	0.24	0.30	0.17
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
Appendix J

SAMPLE SITE #	SLCU 17487	SLCU 17493	SLCU 17497	SLCU 17505	SLCU 17559 D1	SLCU 17560 D2	SLCU 17548 D1	SLCU 17548 R1
SAMPLE DATE	4/30/2000	5/6/2000	5/12/2000	5/18/2000	5/24/2000	5/24/2000	5/30/2000	5/30/2000
ANALYSIS DATE	5/11/2000	6/2/2000	6/2/2000	6/2/2000	Void	Void	6/14/2000	6/15/2000
FILE NAME	L0EJ017	L0FA012	L0FA016	L0FA020			L0FM020	L0FN014
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.50	2.84	3.09	1.73			1.48	1.44
PROPYLENE	1.04	1.06	0.97	0.73			0.70	0.69
DICHLORODIFLUOROMETHANE	0.57	0.48	0.45	0.56			0.60	0.58
CHLOROMETHANE	0.68	0.94	0.79	0.58			0.54	0.53
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND			ND	ND
VINYL CHLORIDE	ND	ND	ND	ND			ND	ND
1,3-BUTADIENE	ND	0.09	0.10	0.10			0.05 U	0.04 U
BROMOMETHANE	ND	ND	ND	ND			ND	ND
CHLOROETHANE	ND	ND	ND	ND			ND	ND
ACETONITRILE	ND	ND	ND	ND			ND	ND
TRICHLOROFLUOROMETHANE	0.39	0.32	0.23	0.25			0.27	0.27
ACRYLONITRILE	0.50	ND	0.69	0.50			0.10	0.10
1,1-DICHLOROETHENE	ND	ND	ND	ND			ND	ND
METHYLENE CHLORIDE	0.13	0.12	0.09 U	0.41			0.06 U	0.11
TRICHLOROTRIFLUOROETHANE	0.06	0.07	0.06	0.07			0.06	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	0.33	ND	ND			ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND			ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND			ND	ND
METHYL ETHYL KETONE	2.47	1.82	2.15	0.96			0.75	0.74
CHLOROPRENE	ND	ND	ND	ND			ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND			ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND			ND	ND
CHLOROFORM	ND	ND	ND	ND			ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND			ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND			ND	ND
1,1,1 - TRICHLOROETHANE	0.03 U	0.02 U	0.02 U	ND			ND	ND
BENZENE	0.99	0.85	0.66	0.77			0.67	0.65
CARBON TETRACHLORIDE	0.06 U	0.05 U	0.06 U	0.04 U			0.07 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND			ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND			ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND			ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND			ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND			ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND			ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND			ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND			ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND			ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND			ND	ND
TOLUENE	2.07	3.01	1.37	1.96			1.72	1.72
DIBROMOCHLOROMETHANE	ND	ND	ND	ND			ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND			ND	ND
N-OCTANE	0.05 U	0.20	0.08 U	0.08 U			0.10	0.11
TETRACHLOROETHYLENE	ND	ND	ND	ND			ND	ND
CHLOROBENZENE	ND	ND	ND	ND			ND	ND
ETHYLBENZENE	0.25	0.57	0.17	0.23			0.22	0.22
m,p - XYLENE	0.80	2.45	0.51	0.72			0.72	0.71
BROMOFORM	ND	ND	ND	ND			ND	ND
STYRENE	0.02 U	0.09 U	0.09 U	0.17			0.05 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND			ND	ND
o - XYLENE	0.38	1.22	0.24	0.31			0.32	0.31
1,3,5-TRIMETHYLBENZENE	0.10	0.51	0.09	0.09			0.10	0.09
1,2,4-TRIMETHYLBENZENE	0.26	1.45	0.19	0.24			0.24	0.24
m - DICHLOROBENZENE	ND	ND	ND	ND			ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND			ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND			ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND			ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND			ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND			ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
Appendix J

SAMPLE SITE #	SLCU 17550 D2	SLCU 17550 R2	SLCU 17557	SLCU 17599	SLCU 17613 D1	SLCU 17613 R1	SLCU 17615 D2	SLCU 17615 R2
SAMPLE DATE	5/30/2000	5/30/2000	6/5/2000	6/11/2000	6/18/2000	6/18/2000	6/18/2000	6/18/2000
ANALYSIS DATE	6/14/2000	6/15/2000	Void	6/23/2000	6/23/2000	6/27/2000	6/23/2000	7/27/2000
FILE NAME	L0FM021	L0FN015		L0FV022	L0FV020	L0F~007	L0FV021	L0F~008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.40	1.41		2.16	NR	1.05	1.07	1.05
PROPYLENE	0.67	0.65		0.99	0.41	0.45	0.43	0.45
DICHLORODIFLUOROMETHANE	0.60	0.56		0.72	NR	0.52	0.55	0.52
CHLOROMETHANE	0.58	0.53		0.63	ND	0.48	0.52	0.48
DICHLOROTETRAFLUOROETHANE	ND	ND		ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND		ND	ND	ND	ND	ND
1,3-BUTADIENE	0.04 U	0.04 U		0.13	ND	ND	ND	ND
BROMOMETHANE	ND	ND		ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
ACETONITRILE	ND	ND		ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.25	0.23		0.44	0.25	0.24	0.25	0.24
ACRYLONITRILE	ND	ND		0.46	ND	0.09	0.05 U	0.09
1,1-DICHLOROETHENE	ND	ND		ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.10 U	0.05 U		0.18	ND	ND	ND	ND
TRICHLOROTRIFLUOROETHANE	0.06	0.08		0.06	0.06	0.03	0.06	0.03
trans - 1,2 - DICHLOROETHYLENE	ND	ND		ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND		ND	ND	ND	ND	ND
METHYL ETHYL KETONE	1.37	0.64		1.06	0.96	0.51	0.50	0.51
CHLOROPRENE	ND	ND		ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND		ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND		ND	ND	ND	ND	ND
CHLOROFORM	ND	ND		ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND		ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
BENZENE	0.69	0.68		1.14	0.57	0.58	0.56	0.58
CARBON TETRACHLORIDE	0.07 U	0.07 U		0.08 U	0.04 U	ND	ND	ND
tert-AMYL METHYL ETHER	ND	ND		ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND		ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND		ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND		ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND		ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND		ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND		ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND		ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND		ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
TOLUENE	1.65	1.72		3.39	1.27	1.26	1.26	1.26
DIBROMOCHLOROMETHANE	ND	ND		ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND		ND	ND	ND	ND	ND
N-OCTANE	0.05 U	0.05 U		0.13	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND		ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
ETHYLBENZENE	0.22	0.22		0.34	0.16	0.15	0.17	0.15
m,p - XYLENE	0.71	0.72		1.14	0.48	0.48	0.52	0.48
BROMOFORM	ND	ND		ND	ND	ND	ND	ND
STYRENE	0.05 U	0.05 U		0.11 U	ND	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND		ND	ND	ND	ND	ND
o - XYLENE	0.33	0.34		0.46	0.22	0.22	0.23	0.22
1,3,5-TRIMETHYLBENZENE	0.09	0.10		0.13	0.06 U	0.06 U	0.06 U	0.06 U
1,2,4-TRIMETHYLBENZENE	0.24	0.25		0.35	0.18	0.17	0.17	0.17
m - DICHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND		ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND		ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND		ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
Appendix J

SAMPLE SITE #	SLCU 17692 D1	SLCU 17693 D2	SLCU 17698	SLCU 17755	SLCU 17837	SLCU 17972 D1	SLCU 17974 D2	SLCU 17990 D1
SAMPLE DATE	6/23/2000	6/23/2000	6/29/2000	7/5/2000	7/11/2000	7/23/2000	7/23/2000	7/29/2000
ANALYSIS DATE	7/11/2000	Void	Void	7/12/2000	7/20/2000	8/23/2000	Void	8/3/2000
FILE NAME	L0GK014			L0GL012	L0GT016	L0HW007		L0HB019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.00			0.74	1.86	1.75		2.78
PROPYLENE	0.43			0.38	0.68	0.67		1.02
DICHLORODIFLUOROMETHANE	0.55			0.58	0.61	0.60		0.70
CHLOROMETHANE	0.55			0.52	0.58	0.57		0.58
DICHLOROTETRAFLUOROETHANE	ND			ND	ND	ND		ND
VINYL CHLORIDE	ND			ND	ND	ND		ND
1,3-BUTADIENE	ND			ND	ND	ND		0.07
BROMOMETHANE	ND			ND	ND	ND		ND
CHLOROETHANE	ND			ND	ND	ND		ND
ACETONITRILE	ND			ND	ND	ND		ND
TRICHLOROFLUOROMETHANE	0.24			0.24	0.36	0.28		0.25
ACRYLONITRILE	ND			0.28	0.34	ND		ND
1,1-DICHLOROETHENE	ND			ND	ND	ND		ND
METHYLENE CHLORIDE	ND			ND	ND	0.08 U		0.07 U
TRICHLOROTRIFLUOROETHANE	0.07			0.06	0.07	0.04		0.03
trans - 1,2 - DICHLOROETHYLENE	ND			ND	ND	ND		ND
1,1 - DICHLOROETHANE	ND			ND	ND	ND		ND
METHYL tert-BUTYL ETHER	ND			ND	ND	ND		ND
METHYL ETHYL KETONE	0.66			1.13	1.43	0.92		0.82
CHLOROPRENE	ND			ND	ND	ND		ND
cis-1,2-DICHLOROETHYLENE	ND			ND	ND	ND		ND
BROMOCHLOROMETHANE	ND			ND	ND	ND		ND
CHLOROFORM	ND			ND	ND	ND		ND
ETHYL tert-BUTYL ETHER	ND			ND	ND	ND		ND
1,2 - DICHLOROETHANE	ND			ND	ND	ND		ND
1,1,1 - TRICHLOROETHANE	ND			ND	ND	ND		ND
BENZENE	0.51			0.46	0.98	0.89		1.78
CARBON TETRACHLORIDE	ND			ND	ND	ND		ND
tert-AMYL METHYL ETHER	ND			ND	ND	ND		ND
1,2 - DICHLOROPROPANE	ND			ND	ND	ND		ND
ETHYL ACRYLATE	ND			ND	ND	ND		ND
BROMODICHLOROMETHANE	ND			ND	ND	ND		ND
TRICHLOROETHYLENE	ND			ND	ND	ND		ND
METHYL METHACRYLATE	ND			ND	ND	ND		ND
cis -1,3 - DICHLOROPROPENE	ND			ND	ND	ND		ND
METHYL ISOBUTYL KETONE	ND			ND	ND	ND		ND
trans - 1,3 - DICHLOROPROPENE	ND			ND	ND	ND		ND
1,1,2 - TRICHLOROETHANE	ND			ND	ND	ND		ND
TOLUENE	3.86			0.82	2.05	2.38		4.12
DIBROMOCHLOROMETHANE	ND			ND	ND	ND		ND
1,2-DIBROMOETHANE	ND			ND	ND	ND		ND
N-OCTANE	ND			ND	ND	ND		0.08 U
TETRACHLOROETHYLENE	ND			ND	ND	ND		ND
CHLOROBENZENE	ND			ND	ND	ND		ND
ETHYLBENZENE	0.15			0.11	0.23	0.26		0.41
m,p - XYLENE	0.39			0.33	0.81	0.82		1.50
BROMOFORM	ND			ND	ND	ND		ND
STYRENE	0.03 U			ND	0.03 U	0.05 U		0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND			ND	ND	ND		ND
o - XYLENE	0.17			0.13	0.34	0.35		0.61
1,3,5-TRIMETHYLBENZENE	0.05 U			0.02 U	0.06 U	0.09		0.14
1,2,4-TRIMETHYLBENZENE	0.14			0.11	0.21	0.30		0.42
m - DICHLOROBENZENE	ND			ND	ND	ND		ND
CHLOROMETHYLBENZENE	ND			ND	ND	ND		ND
p - DICHLOROBENZENE	ND			ND	ND	ND		ND
o - DICHLOROBENZENE	ND			ND	ND	ND		ND
1,2,4-TRICHLOROBENZENE	ND			ND	ND	ND		0.07 U
HEXACHLORO-1,3-BUTADIENE	ND			ND	ND	ND		ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
Appendix J

SAMPLE SITE #	SLCU 17990 R1	SLCU 17992 D2	SLCU 17992 R2	SLCU 18088	SLCU 18098	SLCU 18154	SLCU 18221	SLCU 18323
SAMPLE DATE	7/29/2000	7/29/2000	7/29/2000	8/4/2000	8/10/2000	8/16/2000	8/22/2000	8/28/2000
ANALYSIS DATE	8/15/2000	8/3/2000	8/15/2000	8/21/2000	8/21/2000	8/23/2000	9/5/2000	9/11/2000
FILE NAME	L0HN021	L0HB020	L0HN022	L0HU013	L0HU017	L0HW011	L0IE014	L0IK013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.25	2.76	3.07	2.33	1.20	1.25	1.68	1.46
PROPYLENE	1.08	1.04	1.13	0.79	0.45	0.43	0.65	0.65
DICHLORODIFLUOROMETHANE	0.70	0.71	0.70	0.68	0.56	0.54	0.63	0.67
CHLOROMETHANE	0.55	0.61	0.61	0.66	0.62	0.59	0.57	0.71
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.08	0.15	0.08	ND	ND	ND	0.08	0.05 U
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.28	0.25	0.27	0.47	0.20	0.26	0.28	0.32
ACRYLONITRILE	ND	ND	ND	ND	ND	ND	0.40	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.07 U	0.08 U	1.45	0.08	ND	0.12	ND
TRICHLOROTRIFLUOROETHANE	0.06	0.04	0.03	0.04	ND	ND	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	1.23	0.84	1.40	1.71	0.95	1.28	1.02	0.87
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
BENZENE	1.73	1.77	1.68	1.01	0.63	0.60	0.84	0.69
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	0.04 U	0.05 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	0.05 U	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	4.58	4.22	4.29	2.48	1.77	1.28	1.82	1.52
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.16	0.10	0.09 U	ND	ND	ND	0.05 U	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.41	0.41	0.40	0.28	0.18	0.13	0.22	0.17
m,p - XYLENE	1.43	1.52	1.41	0.89	0.54	0.39	0.75	0.49
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	0.12	ND	ND	0.06 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.59	0.62	0.59	0.34	0.19	0.15	0.33	0.21
1,3,5-TRIMETHYLBENZENE	0.13	0.11	0.13	0.08	ND	ND	0.10	0.04 U
1,2,4-TRIMETHYLBENZENE	0.41	0.38	0.39	0.25	0.14	0.10	0.25	0.15
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	0.09 U	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
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SAMPLE SITE #	SLCU 18338	SLCU 18394	SLCU 18387	SLCU 18429	SLCU 18458 D1	SLCU 18460 D2	SLCU 18495	SLCU 18552
SAMPLE DATE	9/3/2000	9/12/2000	9/15/2000	9/21/2000	9/27/2000	9/27/2000	10/3/2000	10/9/2000
ANALYSIS DATE	Void	Void	10/2/2000	10/12/2000	10/19/2000	Void	10/27/2000	10/28/2000
FILE NAME			L0JB012	L0JK019	L0JS015		L0JZ019	L0J~020
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE			2.42	3.40	4.83		3.22	2.14
PROPYLENE			1.08	1.73	1.51		1.26	0.69
DICHLORODIFLUOROMETHANE			0.62	0.62	0.63		0.56	0.63
CHLOROMETHANE			0.62	0.60	0.56		0.65	0.48
DICHLOROTETRAFLUOROETHANE			ND	ND	ND		ND	ND
VINYL CHLORIDE			ND	ND	ND		ND	ND
1,3-BUTADIENE			0.14	0.23	0.27		0.18	0.11
BROMOMETHANE			ND	ND	ND		ND	ND
CHLOROETHANE			ND	ND	ND		ND	ND
ACETONITRILE			ND	ND	ND		ND	ND
TRICHLOROFLUOROMETHANE			0.25	0.31	0.33		0.24	0.82
ACRYLONITRILE			0.34	0.53	ND		0.49	0.37
1,1-DICHLOROETHENE			ND	ND	ND		ND	ND
METHYLENE CHLORIDE			0.27	0.43	1.27		0.14	0.16
TRICHLOROTRIFLUOROETHANE			0.08	0.06 U	0.16		0.07 U	0.07 U
trans - 1,2 - DICHLOROETHYLENE			ND	ND	ND		ND	ND
1,1 - DICHLOROETHANE			ND	ND	ND		ND	ND
METHYL tert-BUTYL ETHER			ND	ND	ND		ND	ND
METHYL ETHYL KETONE			1.55	1.06	1.55		1.39	1.51
CHLOROPRENE			ND	ND	ND		ND	ND
cis-1,2-DICHLOROETHYLENE			ND	ND	ND		ND	ND
BROMOCHLOROMETHANE			ND	ND	ND		ND	ND
CHLOROFORM			ND	ND	ND		ND	0.02 U
ETHYL tert-BUTYL ETHER			ND	ND	ND		ND	ND
1,2 - DICHLOROETHANE			ND	ND	ND		ND	ND
1,1,1 - TRICHLOROETHANE			ND	ND	ND		ND	ND
BENZENE			1.12	1.68	1.57		1.22	0.78
CARBON TETRACHLORIDE			ND	0.05 U	0.08		0.07 U	0.07 U
tert-AMYL METHYL ETHER			ND	ND	ND		ND	ND
1,2 - DICHLOROPROPANE			ND	ND	ND		ND	ND
ETHYL ACRYLATE			ND	ND	ND		ND	ND
BROMODICHLOROMETHANE			ND	ND	ND		ND	ND
TRICHLOROETHYLENE			ND	ND	ND		0.06 U	ND
METHYL METHACRYLATE			ND	ND	ND		ND	ND
cis -1,3 - DICHLOROPROPENE			ND	ND	ND		ND	ND
METHYL ISOBUTYL KETONE			ND	ND	ND		ND	ND
trans - 1,3 - DICHLOROPROPENE			ND	ND	ND		ND	ND
1,1,2 - TRICHLOROETHANE			ND	ND	ND		ND	ND
TOLUENE			2.73	4.22	3.75		2.86	1.32
DIBROMOCHLOROMETHANE			ND	ND	ND		ND	ND
1,2-DIBROMOETHANE			ND	ND	ND		ND	ND
N-OCTANE			0.06 U	0.13	0.13		0.10	0.06
TETRACHLOROETHYLENE			ND	0.05 U	0.12		ND	ND
CHLOROBENZENE			ND	ND	ND		ND	ND
ETHYLBENZENE			0.31	0.52	0.51		0.35	0.23
m,p - XYLENE			1.07	1.76	1.74		1.29	0.73
BROMOFORM			ND	ND	ND		ND	ND
STYRENE			ND	0.25	0.18		0.10	0.06 U
1,1,2,2 - TETRACHLOROETHANE			ND	ND	ND		ND	ND
o - XYLENE			0.45	0.73	0.74		0.56	0.30
1,3,5-TRIMETHYLBENZENE			0.10	0.16	0.20		0.17	0.08
1,2,4-TRIMETHYLBENZENE			0.32	0.47	0.60		0.47	0.22
m - DICHLOROBENZENE			ND	ND	ND		ND	ND
CHLOROMETHYLBENZENE			ND	ND	ND		ND	ND
p - DICHLOROBENZENE			ND	ND	ND		ND	ND
o - DICHLOROBENZENE			ND	ND	ND		ND	ND
1,2,4-TRICHLOROBENZENE			ND	ND	ND		ND	ND
HEXACHLORO-1,3-BUTADIENE			ND	ND	ND		ND	ND

U = Under the Detection Limit
ND = Not Detected

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SAMPLE SITE #	SLCU 18590		SLCU 18622		SLCU 18671 D1		SLCU 18671 R1		SLCU 18673 D2		SLCU 18673 R2		SLCU 18710		SLCU 18725	
SAMPLE DATE	10/15/2000		10/21/2000		10/27/2000		10/27/2000		10/27/2000		10/27/2000		11/2/2000		11/8/2000	
ANALYSIS DATE	11/2/2000		11/2/2000		11/6/2000		11/7/2000		11/6/2000		11/7/2000		11/14/2000		11/15/2000	
FILE NAME	L0KA013		L0KA024		L0KF014		L0KG005		L0KF015		L0KG006		L0KN010		L0KO013	
UNITS	ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv		ppbv	
ACETYLENE	3.50		0.65		2.69		2.79		2.73		2.81		6.00		3.34	
PROPYLENE	1.03		0.45		0.85		0.87		0.86		0.84		1.36		0.77	
DICHLORODIFLUOROMETHANE	0.63		0.53		0.54		0.57		0.54		0.56		0.59		0.56	
CHLOROMETHANE	0.54		0.56		0.58		0.53		0.51		0.51		0.51		0.54	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND		ND		ND		ND		ND	
1,3-BUTADIENE	0.20		ND		0.15		0.13		0.12		0.13		0.23		0.07	
BROMOMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.30		0.26		0.40		0.39		0.23		0.25		0.25		0.25	
ACRYLONITRILE	ND		0.49		ND		ND		ND		ND		0.45		0.38	
1,1-DICHLOROETHENE	ND		ND		ND		ND		ND		ND		ND		0.05	U
METHYLENE CHLORIDE	0.17		0.03	U	0.14		0.11		0.10		0.07		0.04	U	0.06	
TRICHLOROTRIFLUOROETHANE	0.06	U	0.06	U	0.06	U	0.07		0.05	U	0.08		0.06	U	0.06	U
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ETHYL KETONE	1.39		0.90		0.62		0.51		0.57		0.45		1.37		1.24	
CHLOROPRENE	ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROFORM	0.02	U	ND		ND		ND		ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
BENZENE	1.07		0.33		0.83		0.82		0.82		0.85		1.21		0.74	
CARBON TETRACHLORIDE	0.04	U	0.07	U	ND		0.04	U	0.04	U	0.05	U	0.04	U	0.04	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND		ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND		ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND		ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
TOLUENE	2.36		0.47		1.81		1.88		1.84		1.95		2.49		1.26	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
N-OCTANE	0.10		ND		0.05	U	ND		0.04	U	ND		0.09		0.07	
TETRACHLOROETHYLENE	ND		ND		ND		ND		ND		ND		ND		0.04	U
CHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
ETHYLBENZENE	0.30		0.08		0.23		0.25		0.23		0.24		0.32		0.18	
m,p - XYLENE	1.00		0.23		0.78		0.75		0.78		0.78		1.11		0.57	
BROMOFORM	ND		ND		ND		ND		ND		ND		ND		ND	
STYRENE	0.06	U	0.04	U	0.06	U	0.04	U	0.06	U	0.03	U	0.08		0.09	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND		ND		ND		ND		ND	
o - XYLENE	0.44		0.11		0.36		0.34		0.35		0.34		0.48		0.24	
1,3,5-TRIMETHYLBENZENE	0.11		0.02	U	0.08		0.07		0.06	U	0.06	U	0.14		0.06	U
1,2,4-TRIMETHYLBENZENE	0.32		0.09		0.27		0.24		0.24		0.27		0.38		0.19	
m - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND		ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND		ND		ND		ND		ND	

U = Under the Detection Limit
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SAMPLE SITE #	SLCU 18770	SLCU 18792 D1	SLCU 18792 R1	SLCU 18794 D2	SLCU 18794 R2	SLCU 18804	SLCU 18814	SLCU 18911
SAMPLE DATE	11/16/2000	11/21/2000	11/21/2000	11/21/2000	11/21/2000	11/26/2000	12/2/2000	12/8/2000
ANALYSIS DATE	12/6/2000	12/5/2000	12/8/2000	12/5/2000	12/8/2000	12/12/2000	12/18/2000	12/19/2000
FILE NAME	L0LE017	L0LE015	L0LH007	L0LE016	L0LH008	L0LK020	L0LR011	L0LS012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	5.94	20.35	16.92	20.08	17.14	7.00	16.30	16.37
PROPYLENE	1.26	3.95	3.51	3.83	3.49	1.65	4.30	3.63
DICHLORODIFLUOROMETHANE	0.65	0.78	0.73	0.75	0.76	0.54	0.70	0.65
CHLOROMETHANE	0.59	0.57	0.48	0.55	0.48	0.52	0.44	0.50
DICHLOROTETRAFLUOROETHANE	ND	ND	0.01 U	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.27	0.70	0.49	0.59	0.60	0.29	0.22	0.65
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.30	0.35	0.29	0.30	0.32	0.29	0.31	0.27
ACRYLONITRILE	0.99	ND	0.69	ND	ND	0.43	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	0.06	0.39	0.38	0.39	0.38	0.13	0.31	0.38
TRICHLOROTRIFLUOROETHANE	0.11	0.05 U	0.10	0.09	0.08	0.09	0.09	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	2.10	2.04	2.86	2.00	1.95	1.78	2.44	2.42
CHLOROPRENE	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.03 U	0.05 U	0.02 U	0.06 U	0.06 U	0.06 U	0.05 U
BENZENE	1.04	3.43	3.26	3.52	3.08	1.64	3.64	3.36
CARBON TETRACHLORIDE	ND	0.08	0.08	0.06 U	0.09	0.10	0.10	0.08
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	0.05 U	0.04 U	0.03 U	0.05 U	ND	0.06 U	0.04 U
METHYL METHACRYLATE	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	0.34	ND	0.36	ND	ND	0.33
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	1.99	7.68	7.53	7.38	7.25	3.27	7.72	7.75
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	ND
N-OCTANE	0.04 U	0.31	0.31	0.29	0.32	0.14	0.37	0.34
TETRACHLOROETHYLENE	0.02 U	0.26	0.21	0.22	0.23	0.08	0.19	0.15
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.23	0.93	0.94	0.90	0.93	0.40	1.02	1.05
m,p - XYLENE	0.84	3.17	3.26	3.10	3.26	1.33	3.79	3.87
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	0.08	0.33	0.40	0.43	0.38	0.09	0.08	0.33
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	ND
o - XYLENE	0.40	1.34	1.34	1.38	1.41	0.54	1.56	1.64
1,3,5-TRIMETHYLBENZENE	0.11	0.33	0.29	0.35	0.33	0.14	0.41	0.37
1,2,4-TRIMETHYLBENZENE	0.32	0.97	0.87	0.97	0.89	0.37	1.09	1.10
m - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	0.02 U	ND	0.04 U	ND	ND	0.04 U
o - DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND	ND	ND	ND

U = Under the Detection Limit
ND = Not Detected

1999/2000 VOC Raw Monitoring Data - Salt Lake City, UT
Appendix J

SAMPLE SITE #	SLCU 19009	
SAMPLE DATE	12/14/2000	
ANALYSIS DATE	1/9/2001	
FILE NAME	L1AH020	
UNITS	ppbv	
ACETYLENE	2.98	
PROPYLENE	0.76	
DICHLORODIFLUOROMETHANE	0.57	
CHLOROMETHANE	0.58	
DICHLOROTETRAFLUOROETHANE	ND	
VINYL CHLORIDE	ND	
1,3-BUTADIENE	0.15	
BROMOMETHANE	ND	
CHLOROETHANE	ND	
ACETONITRILE	ND	
TRICHLOROFLUOROMETHANE	0.26	
ACRYLONITRILE	ND	
1,1-DICHLOROETHENE	ND	
METHYLENE CHLORIDE	0.10	
TRICHLOROTRIFLUOROETHANE	0.08	
trans - 1,2 - DICHLOROETHYLENE	ND	
1,1 - DICHLOROETHANE	ND	
METHYL tert-BUTYL ETHER	ND	
METHYL ETHYL KETONE	1.42	
CHLOROPRENE	ND	
cis-1,2-DICHLOROETHYLENE	ND	
BROMOCHLOROMETHANE	ND	
CHLOROFORM	ND	
ETHYL tert-BUTYL ETHER	ND	
1,2 - DICHLOROETHANE	ND	
1,1,1 - TRICHLOROETHANE	ND	
BENZENE	0.68	
CARBON TETRACHLORIDE	0.09	
tert-AMYL METHYL ETHER	ND	
1,2 - DICHLOROPROPANE	ND	
ETHYL ACRYLATE	ND	
BROMODICHLOROMETHANE	ND	
TRICHLOROETHYLENE	ND	
METHYL METHACRYLATE	ND	
cis -1,3 - DICHLOROPROPENE	ND	
METHYL ISOBUTYL KETONE	ND	
trans - 1,3 - DICHLOROPROPENE	ND	
1,1,2 - TRICHLOROETHANE	ND	
TOLUENE	1.34	
DIBROMOCHLOROMETHANE	ND	
1,2-DIBROMOETHANE	ND	
N-OCTANE	0.06	U
TETRACHLOROETHYLENE	ND	
CHLOROBENZENE	ND	
ETHYLBENZENE	0.18	
m,p - XYLENE	0.67	
BROMOFORM	ND	
STYRENE	0.13	
1,1,2,2 - TETRACHLOROETHANE	ND	
o - XYLENE	0.28	
1,3,5-TRIMETHYLBENZENE	0.06	U
1,2,4-TRIMETHYLBENZENE	0.19	
m - DICHLOROBENZENE	ND	
CHLOROMETHYLBENZENE	ND	
p - DICHLOROBENZENE	ND	
o - DICHLOROBENZENE	ND	
1,2,4-TRICHLOROBENZENE	ND	
HEXACHLORO-1,3-BUTADIENE	ND	

U = Under the Detection Limit
ND = Not Detected

1999/2000 SNMOC Raw Monitoring Data - Beulah, ND

Appendix K

Sample No.:	BUND 17387	BUND 17764	BUND 17933 D1	BUND 17934 D2	BUND 18009	BUND 18136	BUND 18159	BUND 18202
Sampling Date:	3/25/2000	7/5/2000	7/23/2000	7/23/2000	7/29/2000	8/10/2000	8/16/2000	8/22/2000
Analysis Date:	4/4/2000	7/19/2000	VOID	VOID	8/21/2000	8/21/2000	8/28/2000	8/28/2000
Ethylene	1.38	1.07			0.91	0.94	1.10	1.11
Acetylene	1.92	0.86			0.55	0.65	0.54	0.56
Ethane	7.78	2.88			2.51	3.19	2.68	3.92
Propylene	0.88	1.03			1.07	1.08	0.92	0.83
Propane	7.92	2.96			2.63	3.65	3.03	3.87
Propyne	ND	ND			ND	ND	ND	ND
Isobutane	3.83	0.71			0.82	0.68	7.22	0.98
Isobutene/1-Butene	0.72	0.86			0.90	0.87	0.74	1.08
1,3-Butadiene	ND	ND			ND	ND	ND	ND
n-Butane	4.30	1.20			0.98	1.42	2.20	1.82
trans-2-Butene	0.29	0.38			0.34	0.32	0.22	0.23
cis-2-Butene	0.43	0.52			0.43	0.47	0.32	0.32
3-Methyl-1-butene	ND	ND			ND	ND	ND	ND
Isopentane	9.87	1.86			2.01	1.53	6.14	1.87
1-Pentene	0.33	ND			0.40	0.41	0.33	0.30
2-Methyl-1-butene	0.21	ND			ND	ND	0.12	ND
n-Pentane	9.34	1.00			1.17	0.86	4.02	1.51
Isoprene	0.39	0.64			1.17	0.75	0.34	0.47
trans-2-Pentene	0.39	0.38			0.35	0.34	0.31	0.26
cis-2-Pentene	0.40	0.54			0.45	0.44	0.37	0.33
2-Methyl-2-butene	0.20	ND			ND	ND	0.12	ND
2,2-Dimethylbutane	0.65	0.83			0.69	0.70	0.56	0.51
Cyclopentene	0.17	0.23			0.39	0.22	0.17	0.14
4-Methyl-1-pentene	ND	ND			ND	ND	ND	ND
Cyclopentane	1.76	0.53			0.46	0.45	0.45	0.37
2,3-Dimethylbutane	0.56	0.82			0.71	0.75	0.59	0.54
2-Methylpentane	2.11	0.59			1.28	0.80	0.82	0.51
3-Methylpentane	0.53	0.68			0.59	0.63	0.88	0.53
2-Methyl-1-pentene	ND	ND			ND	ND	ND	ND
1-Hexene	ND	ND			ND	ND	0.62	0.57
2-Ethyl-1-butene	ND	ND			ND	ND	ND	ND
n-Hexane	1.12	0.64			0.54	0.57	1.64	0.67
trans-2-Hexene	ND	ND			ND	ND	ND	ND
cis-2-Hexene	ND	ND			ND	ND	ND	ND
Methylcyclopentane	0.63	0.47			0.46	0.53	0.75	0.43
2,4-Dimethylpentane	0.49	0.70			0.58	0.62	0.49	0.41
Benzene	1.47	0.99			0.79	0.75	1.03	1.04
Cyclohexane	257.19	3.75			6.11	0.63	5.78	21.65
2-Methylhexane	0.32	0.43			0.20	0.19	0.32	0.28
2,3-Dimethylpentane	0.57	0.75			0.47	0.51	0.65	0.59
3-Methylhexane	1.25	1.19			1.50	1.31	1.06	0.90
1-Heptene	0.10	ND			ND	ND	0.14	ND
2,2,4-Trimethylpentane	0.77	0.75			0.74	0.78	0.80	0.70
n-Heptane	0.58	0.51			0.53	0.48	0.49	0.55
Methylcyclohexane	0.79	0.64			0.66	1.56	0.74	0.54
2,2,3-Trimethylpentane	ND	ND			ND	ND	ND	ND
2,3,4-Trimethylpentane	0.36	0.43			0.40	0.54	0.32	0.31
Toluene	3.66	1.44			1.42	1.23	9.03	2.13
2-Methylheptane	0.35	0.46			0.36	0.44	0.26	0.24
3-Methylheptane	0.37	0.43			0.40	0.37	0.29	0.27
1-Octene	ND	0.12			0.19	ND	ND	ND
n-Octane	0.52	0.57			0.50	0.57	0.33	0.40
Ethylbenzene	0.42	0.52			0.50	0.55	0.57	0.44
m-Xylene/p-Xylene	0.88	0.92			0.73	0.80	1.42	0.82
Styrene	0.26	0.40			0.30	0.42	0.29	0.28
o-Xylene	0.48	0.55			0.41	0.56	0.79	0.41
1-Nonene	ND	ND			ND	ND	ND	ND
n-Nonane	0.42	0.48			0.40	0.40	1.11	0.33
Isopropylbenzene	0.35	0.75			0.57	0.65	0.32	0.33
a-Pinene	0.43	0.33			0.42	1.62	1.20	1.15
n-Propylbenzene	0.33	0.48			0.47	0.43	0.33	0.27
m-Ethyltoluene	0.45	0.83			0.64	1.19	0.42	0.56
p-Ethyltoluene	0.43	0.66			0.51	0.45	0.38	0.38
1,3,5-Trimethylbenzene	0.38	0.43			0.37	0.49	0.28	0.25
o-Ethyltoluene	0.39	0.48			0.39	0.35	0.33	0.23
b-Pinene	0.20	ND			ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.65	0.84			0.71	0.74	0.53	0.60
1-Decene	ND	ND			ND	ND	ND	ND
n-Decane	0.60	0.44			0.39	0.48	0.46	0.44
1,2,3-Trimethylbenzene	0.29	0.62			0.27	0.21	0.23	0.32
m-Diethylbenzene	0.35	0.53			0.98	0.77	0.55	0.33
p-Diethylbenzene	0.24	0.32			0.15	0.23	0.19	0.18
1-Undecene	ND	ND			ND	ND	ND	ND
n-Undecane	0.48	0.47			0.39	0.47	0.47	0.41
1-Dodecene	0.10	0.24			0.35	0.47	0.35	0.12
n-Dodecane	0.16	0.14			0.21	0.15	0.34	0.30
1-Tridecene	ND	ND			ND	ND	ND	ND
n-Tridecane	0.12	0.23			0.32	0.21	0.33	0.13
TNMOC (speciated)	335.27	45.50			46.10	43.84	69.78	61.99
TNMOC (w/ unknowns)	1674.88	74.62			87.03	90.76	108.35	98.81

Reported in ppbC

NR = Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Beulah, ND

Appendix K

Sample No.:	BUND 18245	BUND 18312	BUND 18398 D1	BUND 18398 R1	BUND 18399 D2	BUND 18399 R2	BUND 18406	BUND 18434
Sampling Date:	8/28/2000	9/3/2000	9/9/2000	9/9/2000	9/9/2000	9/9/2000	9/15/2000	9/21/2000
Analysis Date:	9/6/2000	9/28/2000	9/29/2000	10/2/2000	9/29/2000	10/2/2000	9/29/2000	10/12/2000
Ethylene	2.90	1.03	0.78	0.70	0.87	0.83	0.84	0.95
Acetylene	2.04	0.43	0.31	0.28	0.34	0.32	0.34	0.24
Ethane	10.11	2.30	3.39	3.37	3.46	3.41	2.44	2.56
Propylene	1.67	0.77	0.64	0.64	0.65	0.67	0.68	0.76
Propane	25.42	2.55	3.88	3.91	3.84	3.88	2.17	2.88
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	8.02	0.42	0.89	0.86	0.90	0.89	0.53	0.59
Isobutene/1-Butene	2.01	0.66	0.67	0.64	1.01	1.02	0.71	0.65
1,3-Butadiene	0.20	ND	ND	ND	ND	ND	ND	ND
n-Butane	10.39	0.87	1.96	1.91	1.97	1.91	0.89	1.22
trans-2-Butene	0.35	0.22	0.25	0.24	0.24	0.24	0.23	0.24
cis-2-Butene	0.52	0.30	0.35	0.35	0.33	0.33	0.35	0.30
3-Methyl-1-butene	0.13	ND	ND	ND	ND	ND	ND	ND
Isopentane	33.70	1.21	1.24	1.24	1.41	1.37	0.95	0.89
1-Pentene	0.50	0.36	0.34	0.32	0.30	0.29	0.30	0.34
2-Methyl-1-butene	0.47	0.10	ND	ND	0.10	0.10	ND	ND
n-Pentane	247.61	0.93	1.06	1.05	1.12	1.10	0.65	0.73
Isoprene	1.63	0.35	0.33	0.30	0.35	0.36	0.28	0.25
trans-2-Pentene	0.66	0.28	0.23	0.22	0.23	0.21	0.23	0.21
cis-2-Pentene	0.52	0.34	0.31	0.31	0.32	0.32	0.33	0.31
2-Methyl-2-butene	0.65	ND	ND	ND	0.13	0.11	ND	ND
2,2-Dimethylbutane	0.85	0.47	0.46	0.44	0.49	0.47	0.43	0.41
Cyclopentene	0.48	0.38	0.17	0.16	0.19	0.23	0.09	0.17
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	1.52	0.32	0.38	0.34	0.36	0.36	0.30	0.31
2,3-Dimethylbutane	0.94	0.50	0.49	0.50	0.50	0.47	0.50	0.47
2-Methylpentane	3.16	0.79	0.40	0.44	0.41	0.46	0.26	1.27
3-Methylpentane	1.92	0.42	0.43	0.42	0.42	0.42	0.36	0.38
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.71	0.66	0.57	0.60	0.56	0.56	0.61	0.59
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	2.96	0.46	0.54	0.52	0.55	0.54	0.40	0.46
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	1.52	0.35	0.39	0.36	0.39	0.36	0.33	0.31
2,4-Dimethylpentane	0.68	0.39	0.45	0.47	0.39	0.43	0.38	0.36
Benzene	2.46	0.68	0.58	0.58	0.57	0.57	0.57	0.59
Cyclohexane	237.49	1.23	0.58	0.58	0.90	0.89	1.52	0.57
2-Methylhexane	2.10	0.12	0.17	0.18	0.21	0.21	0.19	0.16
2,3-Dimethylpentane	1.42	0.40	0.52	0.55	0.59	0.57	0.55	0.53
3-Methylhexane	6.14	1.09	0.83	0.83	1.01	1.06	0.89	1.32
1-Heptene	0.57	0.17	0.16	0.14	ND	ND	ND	0.15
2,2,4-Trimethylpentane	3.49	0.49	0.38	0.38	0.59	0.53	0.50	0.45
n-Heptane	4.19	0.33	0.39	0.42	0.39	0.40	0.38	0.33
Methylcyclohexane	2.50	0.42	0.46	0.42	0.45	0.43	0.40	0.43
2,2,3-Trimethylpentane	0.44	ND	ND	ND	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.90	0.24	0.24	0.26	0.25	0.24	0.27	0.25
Toluene	17.72	1.06	0.80	0.81	0.82	0.87	0.91	0.96
2-Methylheptane	0.50	0.28	0.26	0.29	0.30	0.31	0.22	0.28
3-Methylheptane	0.56	0.27	0.27	0.26	0.30	0.29	0.29	0.30
1-Octene	0.18	0.20	0.13	0.13	ND	ND	ND	0.12
n-Octane	0.89	0.35	0.38	0.42	0.42	0.44	0.39	0.41
Ethylbenzene	1.63	0.33	0.29	0.23	0.28	0.28	0.31	0.34
m-Xylene/p-Xylene	4.31	0.72	0.50	0.56	0.60	0.60	0.50	0.75
Styrene	0.73	0.20	0.20	0.19	0.18	0.20	0.21	0.21
o-Xylene	0.90	0.33	0.29	0.29	0.27	0.26	0.25	0.34
1-Nonene	ND	0.14	ND	ND	ND	ND	ND	0.13
n-Nonane	0.34	0.25	0.23	0.26	0.27	0.27	0.26	0.29
Isopropylbenzene	0.25	0.44	0.37	0.31	0.35	0.32	0.29	0.33
a-Pinene	3.63	1.43	0.55	0.50	0.28	0.20	0.91	0.78
n-Propylbenzene	0.26	0.25	0.20	0.23	0.26	0.24	0.24	0.28
m-Ethyltoluene	0.72	0.48	0.30	0.31	0.44	0.47	0.28	0.50
p-Ethyltoluene	0.42	0.40	0.29	0.31	0.30	0.32	0.35	0.40
1,3,5-Trimethylbenzene	0.28	0.23	0.21	0.25	0.21	0.28	0.23	0.23
o-Ethyltoluene	0.28	0.28	0.25	0.19	0.26	0.22	0.24	0.22
b-Pinene	0.30	0.17	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.53	0.56	0.40	0.43	0.39	0.41	0.36	0.47
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.33	0.31	0.28	0.29	0.33	0.34	0.27	0.34
1,2,3-Trimethylbenzene	0.23	0.19	0.17	0.18	0.20	0.18	0.17	0.18
m-Diethylbenzene	0.31	0.52	0.22	0.28	0.31	0.35	0.30	0.28
p-Diethylbenzene	0.15	0.13	0.17	0.17	0.13	0.13	0.15	0.19
1-Undecene	ND	ND	ND	ND	ND	ND	ND	0.10
n-Undecane	0.30	0.40	0.24	0.27	0.25	0.27	0.22	0.26
1-Dodecene	0.15	0.22	ND	ND	ND	0.25	ND	0.10
n-Dodecane	0.22	0.63	0.20	0.22	0.19	0.24	0.21	0.20
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	0.24	2.32	ND	ND	ND	ND	ND	ND
TNMOC (speciated)	662.25	36.07	32.43	32.31	34.10	34.29	28.39	31.63
TNMOC (w/ unknowns)	697.96	74.19	51.47	53.29	56.29	58.48	53.35	62.64

Reported in ppbC

NR = Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Beulah, ND
Appendix K

Sample No.:	BUND 18483	BUND 18538 D1	BUND 18538 R1	BUND 18540 D2	BUND 18540 R2	BUND 18544	BUND 18584	BUND 18629
Sampling Date:	9/27/2000	10/3/2000	10/3/2000	10/3/2000	10/3/2000	10/9/2000	10/15/2000	10/21/2000
Analysis Date:	10/19/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000	10/28/2000	11/2/2000	VOID
Ethylene	1.39	0.78	0.88	0.99	1.03	0.81	1.17	
Acetylene	0.51	0.45	0.47	0.62	0.61	0.46	0.85	
Ethane	3.03	2.97	2.98	3.18	3.18	4.41	4.42	
Propylene	1.14	0.64	0.68	0.64	0.66	0.59	0.80	
Propane	3.60	2.54	2.60	2.66	2.77	4.03	4.70	
Propyne	ND	ND	ND	ND	ND	ND	ND	
Isobutane	0.74	0.76	0.74	0.88	0.91	0.88	1.21	
Isobutene/1-Butene	0.87	0.55	0.59	0.67	0.69	0.68	0.78	
1,3-Butadiene	ND	ND	ND	ND	ND	ND	0.33	
n-Butane	1.56	1.47	1.45	2.05	2.06	1.83	2.44	
trans-2-Butene	0.19	0.22	0.23	0.25	0.24	0.21	0.26	
cis-2-Butene	0.32	0.34	0.34	0.35	0.36	0.33	0.37	
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	
Isopentane	6.90	5.53	6.92	4.34	4.77	6.51	7.58	
1-Pentene	0.33	0.31	0.30	0.33	0.40	0.30	0.38	
2-Methyl-1-butene	0.13	ND	ND	ND	ND	ND	ND	
n-Pentane	0.99	0.98	1.00	1.18	1.23	0.88	1.30	
Isoprene	0.30	0.23	0.25	0.29	0.30	0.23	0.36	
trans-2-Pentene	0.23	0.24	0.25	0.27	0.26	0.26	0.30	
cis-2-Pentene	0.27	0.35	0.34	0.31	0.31	0.37	0.32	
2-Methyl-2-butene	0.10	0.09	0.11	ND	0.14	0.10	0.14	
2,2-Dimethylbutane	0.42	0.43	0.39	0.43	0.48	0.40	0.50	
Cyclopentene	0.30	0.39	0.48	0.46	0.23	0.30	0.32	
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	
Cyclopentane	0.32	0.29	0.27	0.33	0.28	0.21	0.30	
2,3-Dimethylbutane	0.46	0.46	0.51	0.49	0.50	0.44	0.64	
2-Methylpentane	0.42	0.36	0.34	0.51	0.52	0.24	0.49	
3-Methylpentane	0.56	0.49	0.52	0.60	0.61	0.46	0.68	
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	
1-Hexene	0.59	0.53	0.57	0.67	0.64	0.59	0.60	
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	
n-Hexane	0.49	0.58	0.58	0.64	0.71	0.47	0.82	
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	
cis-2-Hexene	1.27	0.50	0.56	0.47	0.55	0.94	2.34	
Methylcyclopentane	0.33	0.41	0.40	0.43	0.36	0.29	0.40	
2,4-Dimethylpentane	0.38	0.40	0.42	0.42	0.42	0.40	0.43	
Benzene	0.91	1.09	1.17	1.02	1.05	0.72	1.06	
Cyclohexane	0.41	3.25	3.23	11.53	11.58	0.87	2.92	
2-Methylhexane	0.17	0.18	0.19	0.23	0.20	0.19	0.22	
2,3-Dimethylpentane	0.45	0.45	0.46	0.47	0.47	0.44	0.48	
3-Methylhexane	0.26	0.23	0.27	0.25	0.27	0.22	0.29	
1-Heptene	0.17	0.15	0.14	0.19	0.19	0.30	0.13	
2,2,4-Trimethylpentane	0.43	0.34	0.36	0.47	0.47	0.39	0.60	
n-Heptane	0.38	0.30	0.34	0.36	0.36	0.32	0.40	
Methylcyclohexane	0.30	0.34	0.33	0.34	0.35	0.28	0.37	
2,2,3-Trimethylpentane	ND	ND	ND	ND	ND	ND	ND	
2,3,4-Trimethylpentane	0.37	0.26	0.24	0.24	0.23	0.21	0.27	
Toluene	1.08	0.90	0.93	1.21	1.32	0.81	1.50	
2-Methylheptane	0.26	0.35	0.36	0.30	0.36	0.30	0.39	
3-Methylheptane	0.27	0.25	0.28	0.23	0.25	0.27	0.30	
1-Octene	0.15	ND	0.10	0.13	0.14	0.11	ND	
n-Octane	0.42	0.32	0.32	0.30	0.35	0.35	0.44	
Ethylbenzene	0.22	0.27	0.32	0.34	0.41	0.26	0.50	
m-Xylene/p-Xylene	0.75	0.56	0.68	0.78	0.76	0.53	1.09	
Styrene	1.21	0.25	0.29	0.45	0.54	0.69	0.77	
o-Xylene	0.38	0.24	0.33	0.34	0.37	0.29	0.52	
1-Nonene	0.31	ND	0.10	0.14	0.14	0.13	ND	
n-Nonane	0.30	0.23	0.28	0.24	0.29	0.26	0.34	
Isopropylbenzene	0.31	0.26	0.34	0.28	0.35	0.33	0.36	
a-Pinene	0.87	0.28	0.31	0.50	0.57	0.63	3.44	
n-Propylbenzene	0.33	0.21	0.27	0.22	0.30	0.26	0.32	
m-Ethyltoluene	0.44	0.23	0.29	0.30	0.34	0.26	0.57	
p-Ethyltoluene	0.34	0.26	0.33	0.29	0.32	0.32	0.40	
1,3,5-Trimethylbenzene	0.21	0.19	0.22	0.19	0.23	0.18	0.29	
o-Ethyltoluene	0.26	0.18	0.25	0.20	0.26	0.23	0.31	
b-Pinene	1.30	ND	ND	0.19	0.20	0.26	0.89	
1,2,4-Trimethylbenzene	0.58	0.32	0.40	0.40	0.50	0.37	0.74	
1-Decene	ND	ND	ND	ND	ND	ND	ND	
n-Decane	0.41	0.28	0.35	0.31	0.29	0.31	0.37	
1,2,3-Trimethylbenzene	0.22	0.21	0.21	0.21	0.19	0.17	0.21	
m-Diethylbenzene	0.64	0.28	0.31	0.24	0.32	0.26	0.32	
p-Diethylbenzene	0.24	0.12	0.11	0.10	0.13	0.11	0.13	
1-Undecene	ND	ND	ND	ND	ND	ND	ND	
n-Undecane	0.37	0.28	0.30	0.23	0.25	0.34	0.35	
1-Dodecene	0.49	ND	ND	ND	ND	ND	ND	
n-Dodecane	0.32	0.20	0.21	0.15	0.18	0.40	0.34	
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	
n-Tridecane	ND	ND	ND	ND	ND	0.22	0.16	
TNMOC (speciated)	44.63	36.53	39.75	47.81	49.69	40.17	57.01	
TNMOC (w/ unknowns)	74.03	47.47	53.04	61.40	67.53	58.66	73.76	

Reported in ppbC

NR = Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Beulah, ND

Appendix K

Sample No.:	BUND 18656	BUND 18713	BUND 18758	BUND 18781	BUND 18798	BUND 18823	BUND 18959	BUND 18957
Sampling Date:	10/27/2000	11/8/2000	11/14/2000	11/20/2000	11/26/2000	12/2/2000	12/8/2000	12/14/2000
Analysis Date:	11/7/2000	11/15/2000	12/6/2000	12/6/2000	12/12/2000	12/18/2000	1/5/2001	1/5/2001
Ethylene	0.85	1.01	1.40	1.26	1.57	1.79	1.48	1.23
Acetylene	0.52	0.66	1.13	0.94	1.01	1.60	1.30	1.19
Ethane	2.79	4.37	12.49	7.14	9.73	5.34	6.83	10.97
Propylene	0.67	0.69	0.76	0.76	0.98	0.89	1.07	0.75
Propane	2.40	4.20	13.29	7.76	12.73	5.48	7.58	13.25
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	0.63	1.16	3.20	1.89	2.69	1.30	1.68	2.77
Isobutene/1-Butene	0.72	0.76	0.79	0.77	0.98	0.81	0.79	0.61
1,3-Butadiene	ND	ND	ND	ND	ND	ND	0.13	ND
n-Butane	1.11	2.27	6.81	4.09	7.15	3.60	4.09	6.61
trans-2-Butene	0.25	0.29	0.43	0.24	0.27	0.28	0.15	0.17
cis-2-Butene	0.37	0.45	0.39	0.36	0.35	0.40	0.19	0.26
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	3.35	4.41	15.06	8.08	9.53	5.20	NR	7.35
1-Pentene	0.41	0.38	0.31	0.40	0.40	0.37	0.30	0.24
2-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Pentane	0.67	1.16	3.99	1.84	3.40	1.36	1.76	2.78
Isoprene	0.28	0.40	0.31	0.31	0.26	0.34	0.14	0.19
trans-2-Pentene	0.29	0.30	0.31	0.27	0.27	0.31	0.16	0.17
cis-2-Pentene	0.38	0.38	0.31	0.29	0.31	0.36	0.15	0.22
2-Methyl-2-butene	0.10	ND	0.11	ND	ND	0.14	ND	ND
2,2-Dimethylbutane	0.44	0.57	0.61	0.53	0.54	0.63	0.43	0.38
Cyclopentene	0.14	0.34	0.18	0.19	0.58	0.43	0.31	0.31
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.30	0.31	0.43	0.40	0.46	0.38	0.22	0.45
2,3-Dimethylbutane	0.45	0.64	0.52	0.56	0.46	0.65	0.34	0.45
2-Methylpentane	0.33	0.53	0.98	0.55	0.77	0.79	0.71	0.59
3-Methylpentane	0.48	0.65	0.85	0.68	0.78	0.80	0.59	0.58
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.62	0.74	0.61	0.65	0.61	0.61	0.33	0.42
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	0.37	0.67	1.33	1.02	1.71	0.92	0.81	1.25
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	0.71	0.82	0.95	0.89	1.11	0.81	1.12	0.38
Methylcyclopentane	0.35	0.51	0.60	0.56	0.71	0.48	0.50	0.61
2,4-Dimethylpentane	0.40	0.54	0.48	0.41	0.43	0.48	0.25	0.28
Benzene	0.86	1.14	1.45	1.21	1.17	1.41	1.35	1.36
Cyclohexane	0.73	0.41	0.79	0.66	0.45	0.38	0.50	0.58
2-Methylhexane	0.19	0.28	0.26	0.28	0.20	0.23	0.22	0.23
2,3-Dimethylpentane	0.43	0.66	0.55	0.50	0.50	0.51	0.31	0.39
3-Methylhexane	0.18	0.34	0.38	0.30	0.29	0.27	0.17	0.22
1-Heptene	0.23	0.28	0.14	0.22	0.28	ND	0.30	0.17
2,2,4-Trimethylpentane	0.36	0.50	0.54	0.41	0.41	0.67	0.29	0.33
n-Heptane	0.33	0.45	0.58	0.48	0.69	0.43	0.40	0.46
Methylcyclohexane	0.30	0.45	0.51	0.45	0.49	0.43	0.31	0.39
2,2,3-Trimethylpentane	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.27	0.34	0.30	0.28	0.26	0.36	0.20	0.17
Toluene	0.81	1.07	1.67	0.87	0.89	1.59	1.23	1.06
2-Methylheptane	0.32	0.34	0.40	0.44	0.24	0.29	0.17	0.17
3-Methylheptane	0.27	0.39	0.31	0.30	0.27	0.30	0.15	0.21
1-Octene	0.17	ND	ND	0.11	0.12	ND	0.12	ND
n-Octane	0.35	0.47	0.43	0.42	0.42	0.37	0.49	0.38
Ethylbenzene	0.25	0.43	0.36	0.31	0.27	0.47	0.41	0.37
m-Xylene/p-Xylene	0.50	0.35	0.66	0.47	0.16	1.05	0.87	0.55
Styrene	0.70	0.33	0.25	0.43	0.43	0.42	1.16	0.41
o-Xylene	0.27	0.42	0.39	0.28	0.30	0.45	0.45	0.35
1-Nonene	0.14	ND	ND	ND	0.16	0.13	0.36	ND
n-Nonane	0.29	0.40	0.28	0.31	0.21	0.28	0.17	0.18
Isopropylbenzene	0.29	0.46	0.30	0.29	0.25	0.31	0.20	0.21
a-Pinene	0.78	0.66	0.27	0.63	0.25	0.64	1.04	0.39
n-Propylbenzene	0.23	0.34	0.23	0.21	0.14	0.24	0.23	0.22
m-Ethyltoluene	0.40	0.37	0.31	0.19	0.34	0.36	0.26	0.14
p-Ethyltoluene	0.29	0.46	0.31	0.21	0.18	0.31	0.40	0.22
1,3,5-Trimethylbenzene	0.20	0.36	0.24	0.22	0.14	0.23	0.43	0.32
o-Ethyltoluene	0.27	0.31	0.26	0.22	0.22	0.25	0.22	0.22
b-Pinene	0.39	ND	ND	0.12	0.17	0.15	0.91	ND
1,2,4-Trimethylbenzene	0.54	0.62	0.42	0.44	0.40	0.48	0.77	0.50
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.43	0.42	3.82	0.32	0.25	0.45	0.43	0.31
1,2,3-Trimethylbenzene	0.21	0.21	0.16	0.16	0.16	0.17	0.43	0.25
m-Diethylbenzene	0.24	0.39	0.20	0.24	0.18	0.23	0.70	0.43
p-Diethylbenzene	0.14	0.22	0.16	0.14	0.13	0.13	0.31	0.21
1-Undecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Undecane	0.28	0.35	5.64	0.43	0.23	1.17	0.43	0.33
1-Dodecene	ND	ND	ND	ND	0.11	ND	0.25	ND
n-Dodecane	0.19	0.25	0.89	0.35	0.23	4.41	0.58	0.46
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	0.22	ND	0.13	2.95	0.14	ND
TNMOC (speciated)	33.17	43.61	92.28	55.72	71.45	59.07	50.70	66.64
TNMOC (w/ unknowns)	47.92	54.06	108.42	74.22	90.72	75.82	179.95	85.69

Reported in ppbC

NR = Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Beulah, ND
Appendix K

Sample No.:	BUND 18965	BUND 18961
Sampling Date:	12/20/2000	12/26/2000
Analysis Date:	1/9/2001	1/10/2001
Ethylene	1.19	1.14
Acetylene	1.28	1.31
Ethane	6.87	11.50
Propylene	0.48	0.61
Propane	6.52	20.13
Propyne	ND	ND
Isobutane	1.70	3.13
Isobutene/1-Butene	0.46	0.58
1,3-Butadiene	ND	ND
n-Butane	3.47	7.70
trans-2-Butene	0.15	0.19
cis-2-Butene	0.14	0.25
3-Methyl-1-butene	ND	ND
Isopentane	4.30	5.13
1-Pentene	0.22	0.18
2-Methyl-1-butene	ND	ND
n-Pentane	1.61	3.59
Isoprene	0.11	0.16
trans-2-Pentene	0.14	0.16
cis-2-Pentene	0.17	0.22
2-Methyl-2-butene	ND	ND
2,2-Dimethylbutane	0.29	0.45
Cyclopentene	ND	0.15
4-Methyl-1-pentene	ND	ND
Cyclopentane	0.29	0.41
2,3-Dimethylbutane	0.30	0.42
2-Methylpentane	0.52	0.78
3-Methylpentane	0.55	0.71
2-Methyl-1-pentene	ND	ND
1-Hexene	0.36	0.31
2-Ethyl-1-butene	ND	ND
n-Hexane	1.31	1.70
trans-2-Hexene	ND	ND
cis-2-Hexene	0.37	0.51
Methylcyclopentane	0.55	0.62
2,4-Dimethylpentane	0.21	0.27
Benzene	5.55	1.31
Cyclohexane	0.21	0.33
2-Methylhexane	0.17	0.18
2,3-Dimethylpentane	0.28	0.37
3-Methylhexane	0.19	0.26
1-Heptene	0.17	0.17
2,2,4-Trimethylpentane	0.26	0.35
n-Heptane	0.41	0.73
Methylcyclohexane	0.30	0.42
2,2,3-Trimethylpentane	ND	ND
2,3,4-Trimethylpentane	0.12	0.19
Toluene	2.49	1.16
2-Methylheptane	0.12	0.16
3-Methylheptane	0.12	0.20
1-Octene	0.16	ND
n-Octane	0.29	0.40
Ethylbenzene	0.31	0.28
m-Xylene/p-Xylene	0.58	0.36
Styrene	0.14	0.18
o-Xylene	0.23	0.23
1-Nonene	ND	ND
n-Nonane	0.15	0.22
Isopropylbenzene	0.13	0.19
a-Pinene	0.26	0.35
n-Propylbenzene	0.14	0.15
m-Ethyltoluene	0.16	0.27
p-Ethyltoluene	0.14	0.17
1,3,5-Trimethylbenzene	0.11	0.11
o-Ethyltoluene	0.13	0.14
b-Pinene	ND	ND
1,2,4-Trimethylbenzene	0.22	0.26
1-Decene	ND	ND
n-Decane	0.13	0.21
1,2,3-Trimethylbenzene	0.14	0.12
m-Diethylbenzene	0.14	0.17
p-Diethylbenzene	ND	ND
1-Undecene	ND	ND
n-Undecane	0.24	0.36
1-Dodecene	ND	ND
n-Dodecane	0.21	0.26
1-Tridecene	ND	ND
n-Tridecane	ND	ND
TNMOC (speciated)	47.90	72.49
TNMOC (w/ unknowns)	62.16	83.49

Reported in ppbC

NR = Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Clinton, IA
Appendix K

Sample No.:	CLIA 18599	CLIA 18618	CLIA 18696	CLIA 18752	CLIA 18919	CLIA 18968
Sampling Date:	10/11/2000	10/21/2000	11/2/2000	11/14/2000	12/8/2000	12/20/2000
Analysis Date:	11/1/2000	11/7/2000	11/8/2000	11/20/2000	12/19/2000	1/9/2001
Filename:	L0KA011	L0KF021	L0KG022	L0KT009	L0LS015	L0AH016
Ethylene	15.64	3.63	7.25	1.62	3.90	15.67
Acetylene	5.99	1.87	1.96	1.07	2.86	3.92
Ethane	11.45	10.06	5.90	4.11	7.18	8.48
Propylene	4.41	1.48	2.74	0.86	1.54	1.82
Propane	19.58	12.74	6.56	3.79	8.78	11.26
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	11.12	2.58	4.30	0.91	2.26	2.71
Isobutene/1-Butene	2.63	1.27	1.65	0.92	1.38	1.28
1,3-Butadiene	0.82	0.16	0.27	ND	0.23	0.19
n-Butane	28.38	8.58	10.74	2.36	6.76	7.80
trans-2-Butene	0.96	0.33	0.47	0.27	0.34	0.22
cis-2-Butene	1.16	0.49	0.60	0.41	0.46	0.30
3-Methyl-1-butene	2.14	ND	ND	ND	ND	ND
Isopentane	36.63	13.55	9.69	4.09	4.99	8.61
1-Pentene	1.34	0.50	0.60	0.33	0.33	0.31
2-Methyl-1-butene	1.79	0.36	0.47	ND	0.21	0.26
n-Pentane	12.27	4.44	4.34	1.45	2.98	2.88
Isoprene	0.78	0.50	0.45	0.32	0.44	0.26
trans-2-Pentene	2.04	0.59	0.72	0.31	0.44	0.30
cis-2-Pentene	1.25	0.49	0.55	0.31	0.38	0.25
2-Methyl-2-butene	2.59	0.49	0.68	0.11	0.35	0.32
2,2-Dimethylbutane	1.69	0.81	0.79	0.49	0.75	0.55
Cyclopentene	0.89	0.47	0.31	0.32	0.43	ND
4-Methyl-1-pentene	0.13	ND	ND	ND	ND	ND
Cyclopentane	1.17	0.55	0.59	0.29	0.49	0.39
2,3-Dimethylbutane	2.20	1.08	0.96	0.53	0.75	0.66
2-Methylpentane	6.10	1.99	2.10	0.44	1.22	1.47
3-Methylpentane	4.53	1.73	1.69	0.65	1.27	1.11
2-Methyl-1-pentene	0.26	ND	ND	ND	ND	ND
1-Hexene	1.09	0.76	0.85	0.62	0.64	0.46
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.82	1.93	2.11	0.84	1.47	1.42
trans-2-Hexene	ND	ND	ND	ND	ND	ND
cis-2-Hexene	0.26	ND	ND	ND	ND	ND
Methylcyclopentane	2.69	1.13	1.15	0.42	0.88	0.75
2,4-Dimethylpentane	1.44	0.84	0.83	0.46	0.61	0.47
Benzene	6.11	2.44	2.69	1.37	2.89	2.29
Cyclohexane	34.82	0.46	0.88	0.57	0.48	0.33
2-Methylhexane	1.60	0.72	0.74	0.25	0.60	0.36
2,3-Dimethylpentane	1.77	1.01	0.96	0.55	0.79	0.53
3-Methylhexane	1.96	0.86	0.91	0.28	0.57	0.51
1-Heptene	ND	0.22	0.24	0.16	ND	ND
2,2,4-Trimethylpentane	4.43	1.67	1.44	0.55	1.23	1.03
n-Heptane	1.64	0.97	0.81	0.47	0.78	0.56
Methylcyclohexane	1.17	0.65	0.58	0.36	0.67	0.49
2,2,3-Trimethylpentane	0.62	0.29	0.23	ND	0.16	0.13
2,3,4-Trimethylpentane	1.26	0.62	0.59	0.28	0.49	0.35
Toluene	12.93	6.94	4.76	1.79	4.37	4.03
2-Methylheptane	0.92	0.57	0.46	0.36	0.41	0.18
3-Methylheptane	0.70	0.44	0.40	0.30	0.35	0.28
1-Octene	0.27	0.11	0.17	ND	ND	ND
n-Octane	1.03	0.75	0.52	0.45	0.55	0.32
Ethylbenzene	2.85	1.92	0.85	0.51	0.80	0.72
m-Xylene/p-Xylene	7.57	2.99	2.57	1.17	2.24	1.89
Styrene	2.70	1.15	0.70	1.08	1.12	0.26
o-Xylene	2.99	1.32	1.06	0.58	0.95	0.77
1-Nonene	0.33	0.37	0.20	0.20	0.12	ND
n-Nonane	1.29	0.78	0.47	0.46	0.46	0.23
Isopropylbenzene	0.48	0.42	0.27	0.37	0.31	0.17
a-Pinene	0.41	1.14	0.12	ND	1.13	0.23
n-Propylbenzene	0.78	0.44	0.38	0.31	0.28	0.23
m-Ethyltoluene	2.30	1.07	0.76	0.44	0.67	0.47
p-Ethyltoluene	1.25	0.67	0.49	0.45	0.48	0.29
1,3,5-Trimethylbenzene	1.38	0.68	0.55	0.33	0.44	0.29
o-Ethyltoluene	1.12	0.65	0.44	0.37	0.34	0.26
b-Pinene	ND	ND	0.27	0.48	0.85	ND
1,2,4-Trimethylbenzene	3.44	1.60	1.40	0.72	1.09	0.71
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.37	1.97	0.50	0.41	0.46	0.29
1,2,3-Trimethylbenzene	0.80	0.54	0.37	0.27	0.32	0.22
m-Diethylbenzene	0.60	0.64	0.31	0.33	0.31	0.19
p-Diethylbenzene	0.36	0.27	0.20	0.17	0.16	0.12
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.89	5.13	0.43	0.48	0.43	0.34
1-Dodecene	0.23	ND	0.12	ND	ND	ND
n-Dodecane	0.52	4.04	0.32	0.33	0.41	0.28
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.18	1.16	0.14	0.16	0.32	ND
TNMOC (speciated)	295.31	123.05	100.59	45.63	82.32	93.42
TNMOC (w/ unknowns)	330.31	143.78	115.77	62.06	99.89	107.84

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Cedar Rapids, IA
Appendix K

Sample No.:	CRIA 17689	CRIA 17845	CRIA 17859	CRIA 17999 D1	CRIA 17999 R1	CRIA 18001 D2	CRIA 18001 R2	CRIA 18234
Sampling Date:	6/23/2000	7/5/2000	7/17/2000	7/29/2000	7/29/2000	7/29/2000	7/29/2000	8/10/2000
Analysis Date:	7/5/2000	7/20/2000	7/20/2000	8/15/2000	8/16/2000	8/15/2000	8/16/2000	VOID
Filename:	L0GE007	L0GT013	L0GT017	L0HO011	L0HQ016	L0HO012	L0HQ017	
Ethylene	4.43	2.72	1.13	1.96	1.84	2.01	1.87	
Acetylene	3.18	1.30	0.82	1.19	1.54	1.16	1.50	
Ethane	6.09	4.69	2.26	4.48	4.42	4.49	4.43	
Propylene	2.03	1.21	0.69	1.08	1.20	1.22	1.32	
Propane	9.66	5.86	3.18	4.39	4.45	4.94	5.01	
Propyne	ND	ND	ND	ND	ND	ND	ND	
Isobutane	1.92	1.48	0.58	1.16	1.23	1.09	1.19	
Isobutene/1-Butene	1.49	0.98	0.71	1.12	1.21	1.25	1.25	
1,3-Butadiene	0.34	ND	ND	0.21	0.23	0.22	ND	
n-Butane	7.81	3.27	1.42	2.59	2.66	2.64	2.60	
trans-2-Butene	0.47	0.44	0.30	0.51	0.60	0.53	0.53	
cis-2-Butene	0.62	0.59	0.37	0.77	0.77	0.74	0.81	
3-Methyl-1-butene	0.17	ND	ND	ND	ND	ND	ND	
Isopentane	25.81	5.66	2.77	4.45	4.47	4.47	4.43	
1-Pentene	0.68	0.51	0.33	0.58	0.63	0.63	0.62	
2-Methyl-1-butene	0.65	0.21	0.12	0.21	0.19	0.27	0.22	
n-Pentane	15.73	2.44	1.65	1.97	2.00	1.98	2.02	
Isoprene	1.77	1.37	1.74	1.11	1.13	1.12	1.14	
trans-2-Pentene	1.01	0.58	0.39	0.66	0.68	0.63	0.75	
cis-2-Pentene	0.72	0.60	0.41	0.69	0.75	0.73	0.72	
2-Methyl-2-butene	0.81	0.22	0.10	ND	ND	ND	0.23	
2,2-Dimethylbutane	1.38	1.26	0.70	1.45	1.49	1.48	1.45	
Cyclopentene	0.44	0.28	0.35	0.28	0.28	0.22	0.22	
4-Methyl-1-pentene	0.18	ND	ND	0.21	0.17	0.24	0.23	
Cyclopentane	1.06	0.62	0.41	0.78	0.81	0.79	0.84	
2,3-Dimethylbutane	1.78	1.07	0.83	1.89	1.97	1.83	1.85	
2-Methylpentane	5.96	2.23	1.36	3.91	4.02	3.71	4.11	
3-Methylpentane	3.15	1.25	0.87	2.17	2.23	2.19	2.21	
2-Methyl-1-pentene	0.21	ND	ND	ND	ND	ND	ND	
1-Hexene	0.24	ND	ND	1.16	ND	1.24	ND	
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	
n-Hexane	3.37	1.15	0.80	1.67	1.70	1.75	1.74	
trans-2-Hexene	0.12	ND	ND	ND	ND	ND	ND	
cis-2-Hexene	0.12	ND	ND	ND	ND	ND	ND	
Methylcyclopentane	2.02	1.04	0.53	1.07	1.15	1.03	1.02	
2,4-Dimethylpentane	1.14	0.75	0.56	0.96	1.11	0.98	1.06	
Benzene	3.25	1.69	0.87	1.63	1.72	1.66	1.66	
Cyclohexane	1.27	0.73	1.75	1.99	2.03	2.43	2.43	
2-Methylhexane	1.08	0.58	0.42	0.45	0.50	0.51	0.55	
2,3-Dimethylpentane	1.16	0.52	0.72	1.03	1.09	1.02	1.11	
3-Methylhexane	2.29	2.44	1.02	1.69	1.79	1.75	1.85	
1-Heptene	0.31	ND	ND	ND	ND	ND	ND	
2,2,4-Trimethylpentane	2.57	1.27	0.80	1.44	1.41	1.66	1.69	
n-Heptane	1.44	0.85	0.55	1.36	1.47	1.34	1.44	
Methylcyclohexane	1.57	1.06	0.57	0.93	1.00	0.84	0.93	
2,2,3-Trimethylpentane	0.33	ND	ND	ND	ND	ND	ND	
2,3,4-Trimethylpentane	1.14	0.72	0.39	0.81	0.68	0.79	0.85	
Toluene	12.45	3.50	1.90	3.79	3.79	3.57	3.73	
2-Methylheptane	0.63	0.56	0.36	0.58	0.67	0.58	0.61	
3-Methylheptane	0.72	0.55	0.36	0.60	0.62	0.69	0.64	
1-Octene	0.19	0.15	ND	ND	ND	ND	ND	
n-Octane	0.74	0.85	0.49	0.71	0.75	0.80	0.83	
Ethylbenzene	1.85	0.95	0.66	0.98	1.11	1.02	1.18	
m-Xylene/p-Xylene	5.05	1.72	1.23	2.02	2.14	1.97	2.22	
Styrene	1.01	0.33	0.44	1.14	1.21	1.14	1.18	
o-Xylene	1.94	0.82	0.71	0.91	0.97	0.88	0.99	
1-Nonene	0.24	ND	ND	ND	ND	ND	ND	
n-Nonane	0.88	0.63	0.38	0.59	0.66	0.60	0.58	
Isopropylbenzene	0.48	0.54	0.50	0.66	0.76	0.65	0.76	
a-Pinene	0.99	0.44	11.27	0.22	0.22	0.31	0.39	
n-Propylbenzene	0.73	0.51	0.46	0.59	0.74	0.58	0.78	
m-Ethyltoluene	1.62	0.85	0.84	1.15	1.28	1.30	1.47	
p-Ethyltoluene	1.07	0.87	0.51	0.82	0.83	0.88	0.98	
1,3,5-Trimethylbenzene	0.95	0.47	0.31	0.64	0.69	0.51	0.64	
o-Ethyltoluene	1.05	0.69	0.56	0.67	0.81	0.58	0.79	
b-Pinene	0.80	ND	0.79	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	2.25	0.96	0.72	1.16	1.22	1.26	1.32	
1-Decene	ND	ND	ND	ND	ND	ND	ND	
n-Decane	1.31	0.73	0.56	0.83	0.77	0.77	0.71	
1,2,3-Trimethylbenzene	0.61	0.42	0.39	0.40	0.39	0.32	0.40	
m-Diethylbenzene	0.69	0.76	0.51	0.56	0.98	0.98	0.92	
p-Diethylbenzene	0.35	0.37	0.26	0.34	0.29	0.32	0.34	
1-Undecene	0.84	ND	ND	ND	ND	ND	ND	
n-Undecane	1.21	0.83	0.49	0.87	0.88	0.83	0.66	
1-Dodecene	0.86	0.84	0.35	0.42	0.43	0.73	0.78	
n-Dodecane	0.47	0.48	0.19	0.62	0.30	0.90	0.52	
1-Tridecene	ND	0.30	ND	ND	ND	ND	ND	
n-Tridecane	0.31	0.41	0.32	ND	ND	ND	0.21	
TNMOC (speciated)	165.26	74.14	57.99	77.25	79.11	79.74	81.46	
TNMOC (w/ unknowns)	233.58	103.22	95.30	97.27	98.48	103.03	110.74	

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1999/2000 SNMOC Raw Monitoring Data - Cedar Rapids, IA
Appendix K

Sample No.:	CRIA 18198	CRIA 18320	CRIA 18255	CRIA 18316	CRIA 18390	CRIA 18463D1	CRIA 18463R1	CRIA 18465D2
Sampling Date:	8/22/2000	8/28/2000	8/30/2000	9/3/2000	9/15/2000	9/27/2000	9/27/2000	9/27/2000
Analysis Date:	VOID	VOID	9/12/2000	9/12/2000	9/29/2000	10/25/2000	10/26/2000	10/25/2000
Filename:			L0IK016	L0IK017	L0I!023	L0JY015	L0JZ006	L0JY016
Ethylene			5.66	2.30	1.76	4.40	4.46	4.23
Acetylene			1.66	1.09	0.92	3.11	3.26	2.99
Ethane			5.38	4.57	2.88	5.90	5.76	5.45
Propylene			1.07	1.00	0.97	1.34	1.65	1.58
Propane			5.36	5.53	4.46	16.73	16.58	15.31
Propyne			ND	ND	ND	ND	ND	ND
Isobutane			1.77	2.87	0.83	8.96	8.91	7.92
Isobutene/1-Butene			0.82	0.84	0.88	1.42	1.41	1.35
1,3-Butadiene			ND	ND	0.09	0.21	0.33	0.28
n-Butane			2.28	2.64	1.88	16.61	16.51	15.15
trans-2-Butene			0.25	0.24	0.27	0.41	0.41	0.34
cis-2-Butene			0.35	0.34	0.41	0.45	0.47	0.44
3-Methyl-1-butene			ND	ND	ND	ND	ND	ND
Isopentane			5.61	4.87	3.47	8.45	7.83	6.85
1-Pentene			0.30	0.34	0.38	0.33	0.48	0.37
2-Methyl-1-butene			0.16	0.10	0.21	0.34	0.36	0.32
n-Pentane			8.40	3.58	1.58	6.77	6.74	6.22
Isoprene			0.75	1.54	0.69	0.77	0.79	1.75
trans-2-Pentene			0.34	0.33	0.39	0.76	0.71	0.65
cis-2-Pentene			0.36	0.35	0.39	0.44	0.44	0.50
2-Methyl-2-butene			0.15	ND	0.20	0.44	0.50	0.42
2,2-Dimethylbutane			0.71	0.69	0.68	0.95	1.08	0.99
Cyclopentene			0.19	0.42	0.13	ND	0.70	ND
4-Methyl-1-pentene			ND	ND	ND	ND	ND	ND
Cyclopentane			0.98	0.52	0.43	0.98	0.94	0.89
2,3-Dimethylbutane			0.71	0.78	0.83	1.53	1.44	1.39
2-Methylpentane			1.25	1.63	1.52	4.47	4.39	4.09
3-Methylpentane			1.04	1.03	1.09	3.57	3.55	3.04
2-Methyl-1-pentene			ND	ND	ND	ND	ND	ND
1-Hexene			0.52	0.55	0.65	0.62	0.60	0.62
2-Ethyl-1-butene			ND	ND	ND	ND	ND	ND
n-Hexane			1.49	1.14	1.03	5.65	5.68	4.85
trans-2-Hexene			ND	ND	ND	ND	ND	ND
cis-2-Hexene			ND	ND	ND	ND	0.56	ND
Methylcyclopentane			0.77	0.64	0.70	3.81	3.80	3.43
2,4-Dimethylpentane			0.56	0.51	0.64	1.07	1.05	0.99
Benzene			1.64	1.33	1.17	3.98	4.01	3.69
Cyclohexane			36.14	1.60	0.91	109.01	108.89	86.21
2-Methylhexane			0.36	0.30	0.49	1.16	1.17	0.86
2,3-Dimethylpentane			0.69	0.62	0.76	1.40	1.38	1.24
3-Methylhexane			1.08	1.15	1.39	1.41	1.40	1.07
1-Heptene			ND	ND	0.12	ND	ND	ND
2,2,4-Trimethylpentane			1.07	1.07	1.02	26.49	26.55	24.55
n-Heptane			0.57	0.49	0.89	1.35	1.37	1.12
Methylcyclohexane			0.51	0.47	0.62	1.16	1.24	1.24
2,2,3-Trimethylpentane			0.11	ND	0.10	1.51	1.52	1.17
2,3,4-Trimethylpentane			0.40	0.38	0.45	1.81	1.78	1.69
Toluene			3.53	2.44	3.37	33.54	33.81	31.63
2-Methylheptane			0.31	0.29	0.36	0.51	0.47	0.49
3-Methylheptane			0.30	0.32	0.41	0.43	0.40	0.38
1-Octene			0.13	0.17	0.20	0.13	0.13	0.13
n-Octane			0.41	0.41	0.47	0.80	0.78	0.66
Ethylbenzene			0.60	0.60	0.75	8.35	8.12	7.94
m-Xylene/p-Xylene			1.20	1.07	1.82	25.51	24.66	24.02
Styrene			0.30	0.21	0.29	1.79	1.83	1.97
o-Xylene			0.52	0.49	0.75	4.54	4.36	4.23
1-Nonene			ND	ND	0.10	0.38	0.42	0.45
n-Nonane			0.33	0.28	0.35	0.82	0.79	0.79
Isopropylbenzene			0.37	0.39	0.33	0.36	0.38	0.39
a-Pinene			0.28	0.68	0.56	0.43	0.56	0.46
n-Propylbenzene			0.29	0.26	0.33	0.43	0.40	0.43
m-Ethyltoluene			0.51	0.60	0.59	0.92	0.88	0.88
p-Ethyltoluene			0.46	0.41	0.46	0.65	0.64	0.57
1,3,5-Trimethylbenzene			0.28	0.23	0.40	0.70	0.54	0.54
o-Ethyltoluene			0.30	0.46	0.41	0.59	0.56	0.53
b-Pinene			ND	ND	0.17	ND	ND	ND
1,2,4-Trimethylbenzene			0.58	0.61	0.91	1.27	1.29	1.22
1-Decene			ND	ND	ND	ND	ND	ND
n-Decane			0.51	0.41	0.42	1.47	1.45	1.26
1,2,3-Trimethylbenzene			0.17	0.17	0.26	0.37	0.51	0.34
m-Diethylbenzene			0.36	0.34	0.34	0.40	0.34	0.43
p-Diethylbenzene			0.23	0.15	0.18	0.19	0.17	0.17
1-Undecene			ND	ND	ND	ND	ND	ND
n-Undecane			0.51	0.45	0.39	1.06	1.18	0.97
1-Dodecene			0.27	0.48	0.12	0.08	0.26	0.13
n-Dodecane			0.31	0.32	0.26	0.66	0.72	0.52
1-Tridecene			ND	ND	ND	ND	ND	ND
n-Tridecane			ND	ND	ND	ND	ND	ND
TNMOC (speciated)			104.53	60.07	53.26	336.15	336.30	296.76
TNMOC (w/ unknowns)			132.60	85.74	71.89	369.63	365.35	330.79

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1999/2000 SNMOC Raw Monitoring Data - Cedar Rapids, IA
Appendix K

Sample No.:	CRIA 18465R2	CRIA 18550	CRIA 18615	CRIA 18678	CRIA 18737	CRIA 18790	CRIA 18902	CRIA 18940
Sampling Date:	9/27/2000	10/9/2000	10/21/2000	11/2/2000	11/14/2000	11/26/2000	12/8/2000	12/20/2000
Analysis Date:	10/26/2000	10/28/2000	11/2/2000	11/8/2000	11/20/2000	12/12/2000	12/19/2000	1/8/2001
Filename:	L0JZ007	L0J~022	L0KA023	L0KG017	L0KT007	L0LK016	L0LR020	L0AH012
Ethylene	4.24	2.16	3.29	12.26	1.14	2.82	2.68	3.62
Acetylene	3.00	1.07	1.84	8.18	0.80	2.15	2.03	2.79
Ethane	5.43	3.90	10.41	6.37	3.74	8.34	6.31	7.15
Propylene	1.58	1.00	1.55	2.15	0.64	1.08	1.13	1.37
Propane	15.15	5.31	14.93	4.78	4.08	12.74	8.08	10.07
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	7.92	0.73	2.69	1.04	0.84	2.29	1.96	1.74
Isobutene/1-Butene	1.39	0.84	5.82	1.16	0.92	1.13	1.31	1.17
1,3-Butadiene	0.26	0.15	ND	0.52	ND	ND	0.15	0.18
n-Butane	15.13	2.29	8.45	2.89	2.40	7.04	6.12	6.67
trans-2-Butene	0.33	0.25	0.35	0.26	0.28	0.26	0.32	0.20
cis-2-Butene	0.42	0.38	0.40	0.40	0.40	0.37	0.43	0.28
3-Methyl-1-butene	ND	ND	0.11	ND	ND	ND	ND	ND
Isopentane	6.03	5.71	17.39	8.15	5.05	13.96	9.91	13.93
1-Pentene	0.41	0.32	0.38	0.32	0.31	0.34	0.36	0.23
2-Methyl-1-butene	0.28	0.14	0.25	ND	ND	0.13	0.15	0.16
n-Pentane	6.20	1.27	3.49	1.86	1.02	2.52	2.19	5.92
Isoprene	1.78	0.52	ND	0.33	0.28	0.34	0.30	0.22
trans-2-Pentene	0.70	0.32	0.50	0.63	0.29	0.30	0.36	0.28
cis-2-Pentene	0.39	0.32	0.36	0.35	0.38	0.30	0.34	0.17
2-Methyl-2-butene	0.43	0.13	0.11	ND	ND	0.14	0.22	0.17
2,2-Dimethylbutane	0.99	0.50	0.93	0.53	0.47	0.68	0.64	0.52
Cyclopentene	0.61	0.39	4.32	0.50	0.30	0.52	0.49	0.46
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.84	0.35	0.51	0.37	0.27	0.45	0.41	0.42
2,3-Dimethylbutane	1.37	0.61	0.83	0.61	0.56	0.75	0.74	0.52
2-Methylpentane	3.92	0.69	1.98	0.52	0.35	1.05	1.31	1.40
3-Methylpentane	3.09	0.75	1.26	0.67	0.58	1.07	1.00	1.08
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.56	0.58	0.75	0.65	0.60	0.67	0.75	0.29
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	4.76	0.77	1.10	0.64	0.67	1.47	1.23	1.19
trans-2-Hexene	0.12	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	0.28	0.18	0.18	0.14	0.30	ND	0.25	0.16
Methylcyclopentane	3.44	0.48	0.83	0.44	0.38	0.68	0.70	0.81
2,4-Dimethylpentane	0.99	0.46	0.59	0.45	0.43	0.55	0.55	0.36
Benzene	3.63	1.46	2.23	4.69	1.50	2.04	1.79	1.87
Cyclohexane	85.91	0.37	0.62	0.29	0.60	0.58	0.38	0.29
2-Methylhexane	0.88	0.26	0.61	0.26	0.26	0.31	0.30	0.43
2,3-Dimethylpentane	1.28	0.51	0.72	0.52	0.51	0.62	0.61	0.47
3-Methylhexane	1.09	0.36	0.65	0.31	0.38	0.43	0.41	0.38
1-Heptene	ND	0.14	0.20	0.19	ND	0.21	0.20	0.15
2,2,4-Trimethylpentane	24.46	0.69	1.03	0.55	0.45	0.72	0.71	0.79
n-Heptane	1.15	0.43	0.78	0.46	0.34	0.59	0.50	0.58
Methylcyclohexane	1.18	0.40	0.57	0.61	0.36	0.45	0.45	0.61
2,2,3-Trimethylpentane	1.40	ND	0.15	ND	ND	0.08	ND	ND
2,3,4-Trimethylpentane	1.70	0.34	0.45	0.30	0.27	0.35	0.36	0.31
Toluene	30.62	1.94	4.99	2.35	1.16	2.55	2.80	2.72
2-Methylheptane	0.48	0.42	0.44	0.38	0.36	0.36	0.35	0.25
3-Methylheptane	0.40	0.27	0.38	0.27	0.29	0.33	0.35	0.22
1-Octene	0.11	ND	ND	0.15	ND	0.17	0.14	ND
n-Octane	0.61	0.37	0.72	0.41	0.36	0.49	0.45	0.30
Ethylbenzene	7.56	0.50	0.90	0.50	0.39	0.50	0.56	0.68
m-Xylene/p-Xylene	22.98	1.16	2.36	1.08	0.80	2.14	1.44	1.68
Styrene	1.97	0.57	1.40	1.02	0.70	0.42	0.45	0.81
o-Xylene	4.08	0.54	0.98	0.49	0.41	0.52	0.65	0.70
1-Nonene	0.31	ND	0.33	0.14	ND	0.32	0.23	ND
n-Nonane	0.76	0.33	0.52	0.32	0.34	0.31	0.60	0.28
Isopropylbenzene	0.38	0.36	0.38	0.29	0.37	0.27	0.50	0.15
a-Pinene	0.46	0.51	ND	0.16	0.13	0.19	0.25	ND
n-Propylbenzene	0.41	0.32	0.36	0.26	0.31	0.25	0.25	0.19
m-Ethyltoluene	0.84	0.42	0.76	0.25	0.32	0.25	0.39	0.44
p-Ethyltoluene	0.60	0.39	0.61	0.28	0.38	0.26	0.39	0.28
1,3,5-Trimethylbenzene	0.51	0.26	0.57	0.28	0.27	0.26	0.43	0.26
o-Ethyltoluene	0.50	0.27	0.39	0.28	0.28	0.26	0.41	0.26
b-Pinene	ND	ND	ND	0.50	0.28	0.14	0.12	0.38
1,2,4-Trimethylbenzene	1.16	0.64	1.19	0.53	0.55	0.54	0.68	0.62
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.30	0.34	0.66	0.45	0.83	0.32	1.17	0.42
1,2,3-Trimethylbenzene	0.36	0.24	0.34	0.20	0.24	0.17	0.23	0.14
m-Diethylbenzene	0.45	0.26	0.78	0.29	0.34	0.23	0.23	0.21
p-Diethylbenzene	0.18	0.17	0.21	0.15	0.15	ND	0.15	0.11
1-Undecene	ND	ND	NR	ND	ND	ND	ND	ND
n-Undecane	0.82	0.45	0.51	0.36	2.06	0.28	0.56	0.50
1-Dodecene	0.13	0.10	0.54	ND	ND	0.13	ND	ND
n-Dodecane	0.52	0.54	0.38	0.35	1.38	0.18	0.26	0.48
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	0.14	0.24	0.19	0.27	ND	ND	ND
TNMOC (speciated)	293.17	49.00	114.54	77.22	45.08	82.33	72.14	81.45
TNMOC (w/ unknowns)	321.98	62.98	150.42	178.24	61.78	98.15	93.43	108.35

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Davenport, IA
Appendix K

Sample No.:	DAIA 18593	DAIA 18729	DAIA 18698	DAIA 18754	DAIA 18917	DAIA 18976
Sampling Date:	10/11/2000	10/21/2000	11/2/2000	11/14/2000	12/8/2000	12/20/2000
Analysis Date:	VOID	11/15/2000	11/8/2000	11/20/2000	12/19/2000	1/9/2001
Filename:	VOID	L0KO011	L0KG023	L0KT011	L0LS014	L0AH017
Ethylene		7.33	2.78	1.53	4.07	5.41
Acetylene		4.54	1.93	1.19	3.35	5.37
Ethane		17.55	6.46	4.10	7.72	10.02
Propylene		2.88	1.54	0.81	1.62	2.03
Propane		15.09	5.01	3.81	7.98	11.47
Propyne		ND	ND	ND	ND	ND
Isobutane		4.92	1.85	0.95	2.46	2.82
Isobutene/1-Butene		2.36	1.75	1.13	1.61	1.83
1,3-Butadiene		0.46	0.23	0.11	0.23	0.32
n-Butane		18.36	7.16	2.66	8.02	8.93
trans-2-Butene		0.48	0.43	0.30	0.39	0.34
cis-2-Butene		0.63	0.54	0.41	0.50	0.39
3-Methyl-1-butene		ND	ND	ND	ND	0.11
Isopentane		27.31	7.01	3.34	7.37	8.22
1-Pentene		0.86	0.40	0.28	0.45	0.31
2-Methyl-1-butene		1.09	0.60	0.31	0.43	0.47
n-Pentane		10.10	3.19	1.55	3.21	3.19
Isoprene		0.57	0.38	0.37	0.35	0.30
trans-2-Pentene		1.00	0.59	0.30	0.46	0.42
cis-2-Pentene		0.67	0.46	0.33	0.41	0.29
2-Methyl-2-butene		1.01	0.69	0.27	0.55	0.60
2,2-Dimethylbutane		1.34	0.72	0.58	0.72	0.56
Cyclopentene		0.70	0.33	0.24	0.44	ND
4-Methyl-1-pentene		ND	ND	ND	ND	ND
Cyclopentane		0.88	0.52	0.30	0.52	0.45
2,3-Dimethylbutane		1.97	0.84	0.57	0.94	0.74
2-Methylpentane		4.90	1.66	0.54	1.61	1.91
3-Methylpentane		3.19	1.37	0.67	1.43	1.41
2-Methyl-1-pentene		0.13	ND	ND	ND	ND
1-Hexene		0.74	0.68	0.54	0.70	0.33
2-Ethyl-1-butene		ND	ND	ND	ND	ND
n-Hexane		3.31	1.50	0.68	1.66	1.84
trans-2-Hexene		ND	ND	ND	ND	ND
cis-2-Hexene		0.15	ND	ND	ND	ND
Methylcyclopentane		2.02	0.94	0.45	0.93	1.01
2,4-Dimethylpentane		1.22	0.67	0.45	0.66	0.50
Benzene		5.82	3.21	2.11	3.82	3.46
Cyclohexane		0.62	0.76	0.51	0.45	0.40
2-Methylhexane		1.25	0.59	0.26	0.49	0.49
2,3-Dimethylpentane		1.59	0.83	0.54	0.79	0.63
3-Methylhexane		1.49	0.71	0.37	0.96	0.66
1-Heptene		ND	ND	ND	ND	ND
2,2,4-Trimethylpentane		3.23	1.48	0.63	1.35	1.51
n-Heptane		1.38	0.72	0.40	0.66	0.66
Methylcyclohexane		0.96	0.52	0.37	0.53	0.43
2,2,3-Trimethylpentane		0.54	0.22	ND	0.20	0.27
2,3,4-Trimethylpentane		1.13	0.51	0.34	0.54	0.46
Toluene		11.54	4.20	1.75	3.60	4.67
2-Methylheptane		0.76	0.43	0.34	0.41	0.30
3-Methylheptane		0.63	0.40	0.29	0.38	0.32
1-Octene		0.20	ND	ND	ND	ND
n-Octane		0.93	0.54	0.42	0.46	0.40
Ethylbenzene		1.99	0.82	0.51	0.69	0.90
m-Xylene/p-Xylene		5.55	2.23	1.03	1.93	2.40
Styrene		1.37	0.80	0.49	0.88	0.29
o-Xylene		2.32	0.92	0.52	0.88	0.98
1-Nonene		1.30	0.43	ND	0.14	0.12
n-Nonane		0.91	0.40	0.33	0.32	0.26
Isopropylbenzene		0.43	0.35	0.38	0.30	0.17
a-Pinene		0.94	ND	0.16	ND	ND
n-Propylbenzene		1.21	0.66	0.59	0.49	0.42
m-Ethyltoluene		2.90	1.29	1.04	1.23	1.14
p-Ethyltoluene		1.48	0.88	0.57	0.55	0.59
1,3,5-Trimethylbenzene		0.69	0.55	0.37	0.29	0.28
o-Ethyltoluene		1.12	0.65	0.57	0.55	0.41
b-Pinene		2.64	1.64	1.27	1.28	0.27
1,2,4-Trimethylbenzene		2.85	1.57	0.60	1.18	1.03
1-Decene		ND	ND	ND	ND	ND
n-Decane		1.77	1.02	0.80	1.12	0.75
1,2,3-Trimethylbenzene		1.66	1.02	0.90	0.82	0.60
m-Diethylbenzene		5.08	3.04	1.52	2.23	0.72
p-Diethylbenzene		3.07	1.04	1.85	1.01	0.36
1-Undecene		1.40	0.67	0.65	0.45	0.28
n-Undecane		7.00	2.43	2.65	2.41	2.79
1-Dodecene		0.85	0.14	ND	ND	ND
n-Dodecane		4.12	0.42	0.47	0.39	1.61
1-Tridecene		ND	ND	ND	ND	ND
n-Tridecane		0.74	0.17	0.12	0.14	0.11
TNMOC (speciated)		223.19	90.42	54.48	94.64	102.69
TNMOC (w/ unknowns)		312.11	152.10	106.11	149.01	134.17

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Des Moines, IA
Appendix K

Sample No.:	DMIA 18581	DMIA 18607	DMIA 18683	DMIA 18739	DMIA 18809	DMIA 18905	DMIA 18944	DMIA 18951
Sampling Date:	10/15/2000	10/21/2000	11/3/2000	########	11/30/2000	12/8/2000	12/14/2000	12/26/2000
Analysis Date:	11/2/2000	11/2/2000	11/7/2000	########	VOID	12/19/2000		1/9/2001
Filename:	L0KA015	L0KA025	L0KG016	L0KT008		L0LS010	VOID	L0AH018
Ethylene	4.18	4.67	3.62	3.24		4.74		8.04
Acetylene	3.07	3.39	2.46	2.66		3.85		8.09
Ethane	7.34	9.36	5.73	6.85		7.85		13.93
Propylene	2.19	2.48	2.00	1.85		2.46		2.95
Propane	10.57	12.38	5.80	7.29		10.72		16.36
Propyne	ND	ND	ND	ND		ND		ND
Isobutane	4.36	3.36	2.68	2.68		3.13		4.09
Isobutene/1-Butene	1.53	1.65	1.58	1.38		1.59		1.78
1,3-Butadiene	0.30	0.37	0.29	0.23		0.30		0.41
n-Butane	10.27	13.31	11.71	6.45		10.40		14.08
trans-2-Butene	0.40	0.47	0.52	0.46		0.60		0.48
cis-2-Butene	0.53	0.59	0.63	0.48		0.55		0.49
3-Methyl-1-butene	ND	0.14	0.14	ND		ND		0.11
Isopentane	22.46	24.61	12.55	10.65	@	19.55		15.41
1-Pentene	0.44	0.61	0.50	0.40		0.41		0.34
2-Methyl-1-butene	0.46	0.50	0.47	0.23		0.34		0.47
n-Pentane	13.37	5.60	3.69	4.32		5.93		4.26
Isoprene	0.58	0.45	0.39	0.40		0.42		0.40
trans-2-Pentene	0.70	0.79	0.67	0.42		0.59		0.60
cis-2-Pentene	0.50	0.53	0.52	0.39		0.48		0.41
2-Methyl-2-butene	0.64	0.69	0.66	0.38		0.58		0.75
2,2-Dimethylbutane	1.23	1.20	0.88	0.73		0.96		0.93
Cyclopentene	0.48	0.64	0.43	0.30		0.35		ND
4-Methyl-1-pentene	ND	ND	ND	ND		ND		ND
Cyclopentane	0.81	0.71	0.56	0.48		0.80		0.55
2,3-Dimethylbutane	1.24	1.25	0.98	0.80		2.30		1.09
2-Methylpentane	2.71	3.25	2.15	1.45		14.61		2.90
3-Methylpentane	2.34	2.64	1.78	1.27		21.66		2.29
2-Methyl-1-pentene	ND	ND	ND	ND		ND		ND
1-Hexene	0.76	0.80	0.71	0.69		0.72		0.41
2-Ethyl-1-butene	ND	ND	ND	ND		ND		ND
n-Hexane	3.44	3.38	1.92	1.02		56.17		2.47
trans-2-Hexene	ND	ND	ND	ND		ND		ND
cis-2-Hexene	ND	ND	ND	0.12		0.18		ND
Methylcyclopentane	1.61	1.68	1.06	0.82		22.20		1.48
2,4-Dimethylpentane	0.80	0.89	0.75	0.61		1.82		0.74
Benzene	3.46	4.05	3.16	2.63		3.08		4.05
Cyclohexane	38.96	0.52	0.85	1.78		1.29		0.47
2-Methylhexane	4.30	1.19	0.80	0.59		1.09		0.82
2,3-Dimethylpentane	2.09	1.15	0.90	0.79		1.07		0.89
3-Methylhexane	5.84	1.51	0.96	0.77		1.36		1.05
1-Heptene	0.43	0.22	0.25	ND		ND		ND
2,2,4-Trimethylpentane	1.62	1.81	1.21	1.63		1.54		2.21
n-Heptane	2.19	1.32	0.98	0.87		0.95		0.95
Methylcyclohexane	1.46	0.91	0.72	0.66		0.79		0.75
2,2,3-Trimethylpentane	0.64	0.44	0.20	0.27		0.19		0.44
2,3,4-Trimethylpentane	2.19	0.75	0.59	1.48		0.62		0.76
Toluene	11.39	9.13	5.57	20.91		17.05		7.80
2-Methylheptane	0.72	0.75	0.50	0.56		0.50		0.41
3-Methylheptane	0.57	0.61	0.45	0.68		0.49		0.43
1-Octene	0.88	ND	0.17	0.31		0.11		ND
n-Octane	0.77	0.77	0.61	1.17		0.62		0.49
Ethylbenzene	2.15	1.31	2.50	1.26		0.89		1.83
m-Xylene/p-Xylene	7.03	7.08	4.50	6.07		2.49		4.76
Styrene	3.57	2.78	2.26	3.05		0.99		0.71
o-Xylene	2.76	2.88	2.14	2.04		1.84		1.87
1-Nonene	ND	ND	ND	ND		ND		ND
n-Nonane	0.62	0.65	0.48	0.48		0.43		0.31
Isopropylbenzene	0.45	0.47	0.34	0.44		0.39		0.17
a-Pinene	1.12	2.40	1.55	3.97		2.61		0.50
n-Propylbenzene	0.65	0.59	0.40	0.54		0.42		0.36
m-Ethyltoluene	1.85	1.62	1.14	1.69		1.15		1.15
p-Ethyltoluene	0.87	0.90	0.68	0.75		0.65		0.57
1,3,5-Trimethylbenzene	0.80	0.94	0.70	0.70		0.64		0.59
o-Ethyltoluene	0.63	0.60	1.82	0.56		0.46		0.42
b-Pinene	ND	ND	0.68	ND		0.20		ND
1,2,4-Trimethylbenzene	2.39	2.47	1.64	1.78		1.34		1.54
1-Decene	ND	ND	ND	ND		ND		ND
n-Decane	0.98	0.73	0.86	2.40		1.74		0.30
1,2,3-Trimethylbenzene	0.28	0.38	0.28	0.22		0.22		0.29
m-Diethylbenzene	0.83	1.00	0.68	0.42		0.42		0.30
p-Diethylbenzene	1.14	1.08	0.80	0.43		0.67		0.50
1-Undecene	0.28	0.28	0.20	ND		0.12		ND
n-Undecane	1.61	1.90	1.31	3.09		3.80		0.54
1-Dodecene	0.15	0.58	ND	ND		ND		ND
n-Dodecane	0.50	1.37	0.45	0.70		1.32		0.42
1-Tridecene	ND	ND	ND	ND		ND		ND
n-Tridecane	0.25	0.55	0.11	0.15		0.19		ND
TNMOC (speciated)	207.68	160.03	111.28	124.88		249.95		144.94
TNMOC (w/ unknowns)	274.49	226.48	190.80	248.66		316.59		184.66

Reported in ppbC

@ - Isopentane for the 11/14/00 sample is an estimate, may include Acetone.

1999/2000 SNMOC Raw Monitoring Data - Denver, CO
Appendix K

Sample No.:	DECO 18410	DECO 18432	DECO 18493	DECO 18558	DECO 18555	DECO 18597	DECO 18603	DECO 18605
Sampling Date:	9/18/2000	9/25/2000	9/30/2000	10/3/2000	10/12/2000	10/15/2000	10/18/2000	10/21/2000
Analysis Date:	10/2/2000	10/19/2000	10/19/2000	VOID	11/2/2000	11/1/2000	11/2/2000	11/7/2000
Ethylene	9.09	9.34	7.27		10.44	9.10	15.94	11.28
Acetylene	5.66	6.37	4.58		7.38	9.13	11.11	8.89
Ethane	14.29	12.48	10.85		24.61	23.43	19.93	27.22
Propylene	4.97	5.04	4.89		5.43	4.00	7.26	5.23
Propane	13.20	11.29	8.56		33.41	20.13	17.05	17.11
Propyne	ND	ND	ND		ND	ND	ND	ND
Isobutane	5.30	4.09	3.49		8.94	7.04	11.80	8.42
Isobutene/1-Butene	2.82	3.01	3.23		3.09	2.28	5.14	3.40
1,3-Butadiene	0.63	0.75	0.59		0.82	0.61	1.31	0.86
n-Butane	11.79	9.02	8.68		30.30	15.83	26.93	17.11
trans-2-Butene	0.98	0.96	0.89		0.98	0.78	1.85	1.12
cis-2-Butene	1.08	0.90	0.97		1.05	0.84	1.80	1.15
3-Methyl-1-butene	0.28	0.29	ND		0.13	ND	ND	ND
Isopentane	21.08	26.87	24.38		31.25	26.17	46.62	25.16
1-Pentene	0.94	0.77	0.86		0.95	0.68	1.31	0.99
2-Methyl-1-butene	0.92	0.74	0.83		0.83	0.55	1.61	0.92
n-Pentane	13.96	11.26	11.16		18.85	11.58	23.76	14.63
Isoprene	1.19	0.91	1.04		0.77	0.65	1.26	0.85
trans-2-Pentene	1.32	1.08	1.27		1.25	0.89	2.24	1.28
cis-2-Pentene	0.92	0.81	0.88		0.86	0.67	1.34	0.88
2-Methyl-2-butene	1.23	1.08	1.27		1.21	0.73	2.42	1.37
2,2-Dimethylbutane	1.51	1.43	1.31		1.55	1.26	2.07	1.48
Cyclopentene	0.31	0.75	1.85		1.02	0.54	1.00	0.67
4-Methyl-1-pentene	ND	ND	ND		ND	ND	ND	ND
Cyclopentane	1.23	0.93	1.05		1.47	1.09	1.90	1.31
2,3-Dimethylbutane	2.25	1.98	1.92		2.40	1.82	3.38	2.27
2-Methylpentane	7.95	5.75	5.72		8.07	5.55	11.92	7.38
3-Methylpentane	4.76	3.91	4.00		5.39	3.88	7.92	5.15
2-Methyl-1-pentene	ND	0.23	ND		0.19	ND	0.35	ND
1-Hexene	0.98	0.93	1.14		1.01	0.98	1.09	1.16
2-Ethyl-1-butene	ND	ND	ND		ND	ND	ND	ND
n-Hexane	6.16	6.16	5.99		8.67	6.14	11.98	8.26
trans-2-Hexene	0.30	0.10	0.12		ND	ND	ND	ND
cis-2-Hexene	0.18	0.28	0.24		0.39	0.16	0.39	0.25
Methylcyclopentane	3.17	2.72	2.66		3.67	2.73	5.25	3.42
2,4-Dimethylpentane	1.54	1.26	1.19		1.42	1.13	1.98	1.53
Benzene	6.11	6.10	6.21		6.82	5.33	10.36	6.88
Cyclohexane	4.49	31.06	4.03		6.79	2.38	3.89	2.14
2-Methylhexane	2.27	2.10	1.89		2.51	1.78	3.66	2.64
2,3-Dimethylpentane	1.88	1.69	1.64		2.19	1.62	2.82	2.12
3-Methylhexane	4.18	2.34	2.17		2.90	2.09	4.29	2.99
1-Heptene	0.70	0.90	0.95		ND	0.67	1.28	0.80
2,2,4-Trimethylpentane	2.76	2.48	2.32		29.57	2.11	3.95	2.59
n-Heptane	2.98	2.96	2.47		3.51	2.57	5.14	3.55
Methylcyclohexane	3.29	3.14	2.97		3.74	3.35	4.91	4.04
2,2,3-Trimethylpentane	0.50	1.00	0.86		2.33	0.66	1.46	1.19
2,3,4-Trimethylpentane	1.00	0.89	0.84		2.12	0.79	1.41	1.00
Toluene	15.60	17.55	14.60		17.30	12.92	40.00	17.50
2-Methylheptane	1.00	1.29	1.21		1.30	1.16	1.98	1.10
3-Methylheptane	1.20	0.93	0.84		1.06	0.99	1.59	1.12
1-Octene	0.26	0.37	0.20		0.26	0.16	0.20	0.23
n-Octane	1.44	1.81	1.31		1.68	1.45	3.08	2.00
Ethylbenzene	2.40	2.98	2.33		2.85	1.97	4.62	3.54
m-Xylene/p-Xylene	7.27	7.83	8.27		9.50	6.55	14.97	9.14
Styrene	0.56	3.32	2.22		1.07	1.42	1.89	1.93
o-Xylene	2.84	4.74	3.23		3.67	2.75	5.72	3.69
1-Nonene	0.24	ND	0.72		0.45	0.41	0.56	0.52
n-Nonane	0.99	13.72	2.08		1.36	1.37	1.91	1.59
Isopropylbenzene	0.48	0.54	0.66		0.57	0.61	0.72	0.63
a-Pinene	2.40	2.21	2.59		1.88	2.15	2.83	2.55
n-Propylbenzene	0.94	2.81	1.42		1.22	1.12	1.61	1.23
m-Ethyltoluene	2.63	5.98	4.60		3.48	3.25	5.26	3.98
p-Ethyltoluene	1.38	4.73	2.29		1.91	1.74	2.74	2.20
1,3,5-Trimethylbenzene	1.76	3.70	3.36		2.47	2.56	3.65	2.97
o-Ethyltoluene	1.54	6.06	2.65		2.15	2.23	3.01	2.51
b-Pinene	0.38	ND	ND		0.22	0.46	ND	0.68
1,2,4-Trimethylbenzene	4.52	12.00	8.47		6.16	6.34	9.08	7.20
1-Decene	ND	ND	ND		ND	ND	ND	ND
n-Decane	1.49	25.09	3.51		2.32	2.44	3.15	2.74
1,2,3-Trimethylbenzene	1.27	2.72	2.55		1.81	1.92	2.29	1.66
m-Diethylbenzene	0.61	2.54	0.90		0.59	0.59	0.73	0.72
p-Diethylbenzene	0.34	1.57	0.47		0.44	0.51	0.62	0.47
1-Undecene	0.17	ND	0.47		ND	0.18	ND	0.23
n-Undecane	1.52	14.52	2.78		2.14	2.46	2.70	2.54
1-Dodecene	0.13	0.29	0.53		ND	0.17	0.34	0.11
n-Dodecane	0.56	2.76	0.98		0.84	0.79	0.73	0.76
1-Tridecene	ND	ND	ND		ND	ND	ND	ND
n-Tridecane	0.15	ND	0.47		0.18	0.15	0.19	0.21
TNMOC (speciated)	228.17	330.19	224.93		349.09	244.46	409.18	286.39
TNMOC (w/ unknowns)	282.72	453.94	298.52		396.01	292.80	481.51	335.83

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Denver, CO
Appendix K

Sample No.:	DECO 18626	DECO 18659	DECO 18680	DECO 18719	DECO 18778	DECO 18783	DECO 18807	DECO 18827
Sampling Date:	10/27/2000	10/30/2000	11/2/2000	11/8/2000	11/14/2000	11/20/2000	11/26/2000	12/2/2000
Analysis Date:	11/7/2000	11/7/2000	11/7/2000	11/14/2000	12/6/2000	12/8/2000	12/12/2000	VOID
Ethylene	14.83	15.47	9.19	10.91	22.69	3.99	11.35	
Acetylene	12.24	14.29	8.60	8.53	19.53	3.64	11.05	
Ethane	41.66	29.94	13.36	15.79	73.22	7.48	25.77	
Propylene	6.54	6.05	3.95	5.29	9.53	1.74	4.81	
Propane	36.89	17.98	10.16	13.23	60.89	7.88	13.90	
Propyne	ND	ND	ND	ND	ND	ND	ND	
Isobutane	13.86	8.03	4.12	6.08	18.77	2.28	5.70	
Isobutene/1-Butene	3.76	3.56	2.42	2.90	6.87	1.57	2.94	
1,3-Butadiene	1.07	1.06	0.65	0.86	0.16	0.17	0.64	
n-Butane	31.03	18.34	8.39	12.86	38.77	8.09	12.36	
trans-2-Butene	1.37	1.30	0.75	0.97	1.48	0.51	0.86	
cis-2-Butene	1.39	1.31	0.81	0.97	1.44	0.54	0.88	
3-Methyl-1-butene	1.08	0.65	ND	0.64	0.40	ND	ND	
Isopentane	39.04	35.47	23.36	23.91	45.40	13.70	20.40	
1-Pentene	1.09	1.12	0.69	0.71	1.01	0.48	0.77	
2-Methyl-1-butene	1.15	1.13	0.54	0.68	1.18	0.38	0.66	
n-Pentane	23.82	16.94	11.81	13.40	26.51	2.80	8.93	
Isoprene	0.99	1.29	0.98	0.75	ND	0.36	0.66	
trans-2-Pentene	1.52	1.57	0.86	1.01	1.63	0.49	0.95	
cis-2-Pentene	1.01	1.00	0.67	0.71	1.01	0.39	0.66	
2-Methyl-2-butene	1.72	1.69	0.83	1.10	0.67	0.42	1.00	
2,2-Dimethylbutane	1.74	1.47	1.09	1.26	2.23	0.71	1.17	
Cyclopentene	0.92	0.74	0.65	0.83	1.67	0.61	0.93	
4-Methyl-1-pentene	ND	ND	ND	ND	0.15	ND	ND	
Cyclopentane	1.80	1.44	0.86	1.11	2.00	0.46	0.87	
2,3-Dimethylbutane	2.74	2.19	1.58	1.84	2.59	0.83	1.40	
2-Methylpentane	10.25	8.32	4.11	5.69	11.35	1.66	3.87	
3-Methylpentane	6.89	5.72	3.16	4.25	8.01	1.38	3.30	
2-Methyl-1-pentene	0.28	0.31	0.17	ND	0.25	ND	ND	
1-Hexene	0.96	1.09	0.89	0.86	1.13	0.70	0.90	
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	
n-Hexane	10.99	8.78	5.04	6.75	13.23	1.43	4.54	
trans-2-Hexene	ND	ND	ND	ND	0.11	ND	ND	
cis-2-Hexene	0.25	0.23	0.17	0.62	0.40	0.20	0.37	
Methylcyclopentane	4.67	3.90	2.19	2.86	5.77	0.84	2.12	
2,4-Dimethylpentane	1.73	1.59	0.98	1.24	1.89	0.70	1.00	
Benzene	8.95	8.51	5.45	6.31	11.05	2.36	4.66	
Cyclohexane	3.67	2.02	11.90	10.93	4.62	0.68	1.25	
2-Methylhexane	3.31	2.86	1.62	2.04	4.16	0.47	1.35	
2,3-Dimethylpentane	2.32	2.17	1.52	1.85	2.79	0.81	1.37	
3-Methylhexane	3.83	3.36	1.99	2.46	4.69	0.66	1.64	
1-Heptene	0.90	1.00	0.62	0.82	1.53	0.18	0.63	
2,2,4-Trimethylpentane	2.97	2.58	1.81	2.02	2.96	1.30	1.95	
n-Heptane	4.64	3.77	2.37	3.14	6.30	0.59	1.79	
Methylcyclohexane	4.85	3.56	3.52	4.10	5.58	0.58	2.65	
2,2,3-Trimethylpentane	0.80	0.68	0.62	1.04	1.44	0.18	0.52	
2,3,4-Trimethylpentane	1.05	1.02	0.70	0.81	1.15	0.54	0.74	
Toluene	20.99	18.56	11.98	15.39	22.61	3.73	7.84	
2-Methylheptane	1.68	1.41	1.10	1.31	2.06	0.39	0.82	
3-Methylheptane	1.33	1.16	0.80	0.99	1.64	0.39	0.69	
1-Octene	0.24	0.26	0.41	0.22	0.27	0.11	ND	
n-Octane	2.24	1.78	1.36	1.67	3.44	0.44	1.05	
Ethylbenzene	3.37	2.94	2.12	2.94	3.59	0.64	1.40	
m-Xylene/p-Xylene	11.12	9.70	7.07	9.28	11.77	1.99	5.34	
Styrene	1.87	0.95	1.39	2.07	1.50	0.29	1.75	
o-Xylene	4.23	3.67	2.94	4.00	4.92	0.75	2.00	
1-Nonene	0.46	0.46	0.40	0.51	0.55	0.19	0.39	
n-Nonane	1.72	1.31	1.26	1.62	2.62	0.31	0.84	
Isopropylbenzene	0.55	0.50	0.57	0.72	0.59	0.29	0.41	
a-Pinene	1.78	1.28	1.67	1.80	0.41	0.18	1.77	
n-Propylbenzene	1.16	1.03	1.17	1.46	1.25	0.35	0.72	
m-Ethyltoluene	3.66	3.20	3.57	4.51	4.42	0.62	2.31	
p-Ethyltoluene	1.97	1.68	1.90	2.45	2.20	0.43	1.18	
1,3,5-Trimethylbenzene	2.76	2.24	2.85	3.51	3.32	0.20	1.81	
o-Ethyltoluene	2.27	1.86	2.47	2.89	2.63	0.29	1.46	
b-Pinene	1.28	0.18	0.39	0.38	0.44	0.17	1.20	
1,2,4-Trimethylbenzene	6.59	5.48	7.13	8.62	7.75	0.54	4.27	
1-Decene	ND	ND	ND	ND	ND	ND	ND	
n-Decane	2.90	2.07	2.44	3.50	2.70	0.40	1.47	
1,2,3-Trimethylbenzene	1.88	1.41	1.69	2.27	1.68	0.31	1.07	
m-Diethylbenzene	0.76	0.49	0.52	0.73	0.80	0.40	0.60	
p-Diethylbenzene	0.52	0.41	0.41	0.45	0.48	0.24	0.23	
1-Undecene	0.20	0.13	0.26	0.22	ND	0.13	ND	
n-Undecane	2.64	1.61	3.41	5.02	2.62	0.66	1.52	
1-Dodecene	0.20	ND	0.12	ND	0.58	ND	0.35	
n-Dodecane	0.86	0.51	1.12	1.86	1.05	0.21	0.60	
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	
n-Tridecane	0.15	ND	0.16	0.18	0.61	ND	0.17	
TNMOC (speciated)	397.95	311.75	217.78	264.71	516.71	89.40	206.53	
TNMOC (w/ unknowns)	445.05	352.77	253.74	308.45	902.75	104.21	260.30	

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Denver, CO
Appendix K

Sample No.:	DECO 18907	DECO 18921	DECO 18938	DECO 18974
Sampling Date:	12/8/2000	12/14/2000	12/20/2000	12/26/2000
Analysis Date:	12/19/2000	12/20/2000	1/8/2001	1/10/2001
Ethylene	21.03	31.44	10.22	19.52
Acetylene	16.73	25.63	8.23	17.17
Ethane	53.49	79.49	18.11	32.97
Propylene	9.63	11.36	4.69	7.33
Propane	46.08	59.01	12.56	23.59
Propyne	ND	ND	ND	ND
Isobutane	19.13	23.97	5.49	11.92
Isobutene/1-Butene	4.88	7.87	2.57	3.88
1,3-Butadiene	1.49	2.20	0.65	1.25
n-Butane	38.99	48.05	11.21	23.87
trans-2-Butene	1.71	2.14	0.61	1.26
cis-2-Butene	1.63	2.02	0.65	1.12
3-Methyl-1-butene	ND	ND	0.18	0.30
Isopentane	48.88	57.51	21.09	37.44
1-Pentene	1.20	1.52	0.46	0.92
2-Methyl-1-butene	1.32	1.92	0.46	0.96
n-Pentane	26.76	34.21	8.90	17.39
Isoprene	1.06	1.59	0.51	0.90
trans-2-Pentene	1.80	2.56	0.73	1.42
cis-2-Pentene	1.11	1.52	0.49	0.82
2-Methyl-2-butene	2.11	3.26	0.84	1.56
2,2-Dimethylbutane	1.94	2.40	1.07	1.57
Cyclopentene	0.97	1.37	0.49	1.76
4-Methyl-1-pentene	ND	0.16	ND	ND
Cyclopentane	1.95	2.50	0.83	1.41
2,3-Dimethylbutane	2.77	3.79	1.20	2.22
2-Methylpentane	10.52	15.42	4.24	8.54
3-Methylpentane	7.46	10.38	3.06	5.88
2-Methyl-1-pentene	0.31	0.52	0.13	0.27
1-Hexene	1.06	1.26	0.43	0.77
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	11.86	15.12	4.93	8.87
trans-2-Hexene	ND	ND	ND	ND
cis-2-Hexene	0.41	0.43	ND	ND
Methylcyclopentane	5.36	7.49	2.22	4.16
2,4-Dimethylpentane	1.89	2.80	0.84	1.47
Benzene	9.04	14.02	5.26	8.85
Cyclohexane	2.94	3.96	1.03	1.97
2-Methylhexane	4.22	5.44	1.92	3.59
2,3-Dimethylpentane	2.64	3.73	1.30	2.16
3-Methylhexane	4.18	6.36	1.82	3.45
1-Heptene	0.98	1.74	0.67	0.83
2,2,4-Trimethylpentane	3.22	4.75	1.62	2.99
n-Heptane	4.73	7.36	2.23	4.03
Methylcyclohexane	5.12	6.58	2.66	4.12
2,2,3-Trimethylpentane	1.30	1.48	0.67	0.85
2,3,4-Trimethylpentane	1.28	1.91	0.66	1.09
Toluene	19.85	28.18	10.43	17.66
2-Methylheptane	1.37	2.64	0.65	1.16
3-Methylheptane	1.48	2.69	0.69	1.25
1-Octene	0.23	0.37	ND	0.22
n-Octane	2.27	3.35	1.09	1.77
Ethylbenzene	3.15	5.01	1.86	3.03
m-Xylene/p-Xylene	10.26	16.68	6.14	10.85
Styrene	2.07	1.72	1.13	1.94
o-Xylene	4.32	6.65	2.49	4.19
1-Nonene	0.55	0.64	0.19	0.46
n-Nonane	1.64	2.81	1.09	1.75
Isopropylbenzene	0.55	0.64	0.33	0.46
a-Pinene	1.48	1.49	1.01	1.50
n-Propylbenzene	1.32	1.68	0.87	1.26
m-Ethyltoluene	4.48	5.86	3.05	4.15
p-Ethyltoluene	2.23	3.08	1.41	2.14
1,3,5-Trimethylbenzene	3.08	4.12	2.15	3.12
o-Ethyltoluene	2.59	3.32	1.79	2.50
b-Pinene	0.16	0.25	0.33	0.58
1,2,4-Trimethylbenzene	7.40	9.77	5.27	7.27
1-Decene	ND	ND	ND	ND
n-Decane	5.56	4.59	1.90	3.16
1,2,3-Trimethylbenzene	1.80	2.64	1.13	1.61
m-Diethylbenzene	0.51	0.73	0.40	0.56
p-Diethylbenzene	0.51	0.61	0.29	0.47
1-Undecene	0.23	0.23	ND	0.17
n-Undecane	9.90	5.52	2.19	2.91
1-Dodecene	ND	0.25	ND	0.16
n-Dodecane	4.27	2.72	1.05	0.93
1-Tridecene	ND	ND	ND	ND
n-Tridecane	4.71	0.53	0.22	0.21
TNMOC (speciated)	483.12	636.98	197.04	353.89
TNMOC (w/ unknowns)	548.95	798.10	233.36	417.85

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 17073	FAND 17080	FAND 17103	FAND 17118	FAND 17175	FAND 17176	FAND 17158	FAND 17202
Sampling Date:	11/20/1999	11/26/1999	12/2/1999	12/8/1999	12/14/1999	12/20/1999	12/26/1999	1/7/2000
Analysis Date:	11/24/1999	12/21/1999	12/22/1999	12/22/1999	1/10/2000	1/19/2000	1/19/2000	2/3/2000
Ethylene	2.62	1.44	2.73	2.62	1.73	1.78	2.26	3.27
Acetylene	2.26	1.15	2.17	2.13	1.67	1.66	1.47	3.22
Ethane	5.94	6.57	7.92	6.92	6.68	4.54	6.94	8.95
Propylene	1.74	1.18	1.45	1.62	1.18	1.05	1.19	1.71
Propane	11.02	9.77	11.52	9.88	8.87	5.95	8.22	12.48
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	1.87	1.90	2.91	2.34	1.99	1.54	2.38	5.46
Isobutene/1-Butene	1.34	1.16	1.17	3.29	1.16	1.26	1.67	1.53
1,3-Butadiene	0.15	ND	0.17	ND	ND	ND	ND	0.19
n-Butane	5.07	3.89	6.57	6.16	4.38	3.56	5.06	9.05
trans-2-Butene	0.37	0.28	0.30	0.38	0.36	0.61	0.36	0.52
cis-2-Butene	0.57	0.48	0.46	0.50	0.53	0.54	0.60	0.78
3-Methyl-1-butene	ND	ND	0.10	0.09	ND	ND	ND	ND
Isopentane	8.06	5.53	8.11	17.91	4.80	2.43	9.59	16.93
1-Pentene	0.49	0.42	0.34	3.46	0.45	0.36	2.45	0.49
2-Methyl-1-butene	ND	0.49	0.18	1.15	0.25	0.23	ND	0.58
n-Pentane	8.95	6.16	6.39	28.56	4.06	2.07	9.88	11.07
Isoprene	0.48	0.42	0.34	1.10	0.42	0.40	2.73	0.46
trans-2-Pentene	0.43	0.28	0.37	0.44	0.41	0.41	0.42	0.56
cis-2-Pentene	0.47	0.40	0.39	0.44	0.41	0.47	0.38	0.55
2-Methyl-2-butene	0.20	0.15	0.26	1.28	0.22	0.24	0.40	0.27
2,2-Dimethylbutane	0.78	0.61	0.73	0.75	0.60	0.73	0.64	1.20
Cyclopentene	0.07	0.27	0.21	0.28	0.20	ND	ND	ND
4-Methyl-1-pentene	ND	0.23	ND	ND	ND	ND	ND	ND
Cyclopentane	0.54	0.49	0.59	0.72	0.55	0.47	0.49	0.69
2,3-Dimethylbutane	0.81	0.71	0.92	0.86	0.71	0.85	0.83	1.64
2-Methylpentane	2.45	1.76	2.90	2.45	2.12	1.04	2.22	4.99
3-Methylpentane	1.32	0.97	1.28	4.77	1.02	0.86	1.35	2.11
2-Methyl-1-pentene	0.08	0.10	0.10	0.10	ND	0.06	ND	0.13
1-Hexene	0.14	0.16	0.10	0.22	ND	0.15	ND	0.13
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.67	1.51	1.78	3.88	1.22	0.81	2.15	1.93
trans-2-Hexene	ND	0.28	ND	0.44	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	0.77	ND	ND	ND	ND
Methylcyclopentane	1.02	1.27	0.99	2.16	0.79	0.68	1.11	1.16
2,4-Dimethylpentane	0.71	0.52	0.59	0.68	0.63	0.71	0.57	0.78
Benzene	2.53	1.51	2.54	4.91	2.08	1.67	2.48	2.36
Cyclohexane	2.21	3.89	2.07	6.90	4.29	0.64	8.02	75.60
2-Methylhexane	1.37	1.05	1.18	1.65	0.59	0.45	0.72	1.08
2,3-Dimethylpentane	1.06	0.89	0.96	1.08	0.75	0.84	0.87	1.02
3-Methylhexane	2.30	0.76	0.99	9.26	0.73	0.54	5.70	1.44
1-Heptene	0.17	0.20	0.23	0.56	0.19	ND	0.27	0.13
2,2,4-Trimethylpentane	0.78	0.58	0.89	0.93	0.64	0.68	0.66	1.17
n-Heptane	1.03	0.88	1.01	3.51	0.84	0.69	1.55	1.16
Methylcyclohexane	1.48	0.62	1.40	1.55	1.25	0.81	1.23	1.52
2,2,3-Trimethylpentane	ND	ND	ND	0.50	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.49	0.29	0.46	0.90	0.42	0.53	0.67	0.59
Toluene	7.37	4.85	5.66	19.93	3.06	2.26	8.91	6.49
2-Methylheptane	0.53	0.51	0.44	1.05	0.34	0.41	0.61	0.57
3-Methylheptane	0.65	0.52	0.45	1.21	0.52	0.44	0.68	0.66
1-Octene	0.11	ND	ND	0.37	ND	ND	ND	ND
n-Octane	1.13	2.98	2.32	14.46	1.71	0.95	5.39	1.33
Ethylbenzene	1.44	1.14	1.07	4.01	0.90	0.75	2.11	1.27
m-Xylene/p-Xylene	2.74	1.72	2.35	5.15	1.70	1.23	2.92	2.93
Styrene	1.38	1.07	1.22	7.58	1.70	0.38	2.02	1.90
o-Xylene	1.30	0.87	1.10	3.19	0.87	0.75	1.74	1.30
1-Nonene	1.00	0.93	0.56	4.37	0.47	ND	ND	0.37
n-Nonane	2.56	2.34	2.30	11.23	1.82	0.94	5.43	1.99
Isopropylbenzene	0.64	0.83	0.69	0.74	0.57	0.59	0.62	0.55
a-Pinene	ND	11.10	14.69	1.08	6.89	ND	35.90	3.46
n-Propylbenzene	1.19	1.01	0.98	2.07	0.78	0.45	0.99	0.58
m-Ethyltoluene	4.40	3.27	2.78	9.11	1.90	1.10	2.75	1.74
p-Ethyltoluene	1.74	1.39	1.40	3.24	0.85	0.55	1.08	1.03
1,3,5-Trimethylbenzene	2.21	1.78	1.92	5.03	0.89	0.71	1.90	1.03
o-Ethyltoluene	2.11	1.52	1.54	4.29	0.97	0.54	1.28	1.08
b-Pinene	2.00	0.63	2.42	7.61	0.78	ND	3.58	0.37
1,2,4-Trimethylbenzene	9.13	5.66	5.97	18.09	2.76	1.35	6.06	1.98
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	2.01	1.76	2.06	5.93	1.20	0.47	2.24	2.08
1,2,3-Trimethylbenzene	1.80	2.61	3.19	9.45	1.98	0.64	2.40	1.12
m-Diethylbenzene	2.81	1.90	2.73	3.85	2.75	0.62	1.35	1.55
p-Diethylbenzene	2.83	1.24	2.81	5.11	1.64	0.29	1.87	1.28
1-Undecene	3.15	1.72	2.00	1.20	1.81	ND	0.43	ND
n-Undecane	5.84	3.54	2.58	7.31	1.59	0.48	2.43	2.08
1-Dodecene	ND	ND	2.12	ND	ND	ND	ND	ND
n-Dodecane	4.18	2.86	4.32	8.77	2.16	0.23	3.78	0.87
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	9.22	4.62	10.58	13.92	6.29	0.17	7.49	2.19
TNMOC (speciated)	150.48	125.60	158.05	319.46	108.09	58.61	193.51	220.69
TNMOC (w/ unknowns)	334.35	284.68	328.17	953.57	259.60	104.50	463.46	735.98

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 17228	FAND 17217	FAND 17237	FAND 17240	FAND 17261	FAND 17272	FAND 17305	FAND 17322
Sampling Date:	1/19/2000	1/25/2000	1/29/2000	2/6/2000	2/12/2000	2/18/2000	3/1/2000	3/7/2000
Analysis Date:	2/4/2000	2/16/2000	2/17/2000	2/22/2000	2/22/2000	3/7/2000	3/21/2000	3/28/2000
Ethylene	2.80	2.47	1.26	2.25	1.59	1.43	0.96	1.90
Acetylene	2.58	2.34	1.61	2.06	2.20	1.74	1.37	2.16
Ethane	8.70	5.10	6.06	7.00	6.01	9.50	4.36	6.96
Propylene	1.40	1.44	0.86	1.31	0.92	1.22	0.87	1.03
Propane	11.92	7.46	8.03	10.85	5.41	11.68	5.96	6.91
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	2.77	1.62	1.60	2.20	1.78	2.18	1.86	1.79
Isobutene/1-Butene	1.27	1.89	0.85	1.11	1.75	1.15	0.94	1.29
1,3-Butadiene	0.12	0.15	ND	0.10	ND	ND	ND	ND
n-Butane	6.38	4.78	3.90	6.14	3.02	5.11	3.00	3.01
trans-2-Butene	0.48	0.15	0.13	0.29	0.36	0.29	0.32	0.26
cis-2-Butene	0.55	0.46	0.35	0.46	0.50	0.40	0.42	0.48
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	5.18	3.75	3.34	4.62	18.93	3.48	3.16	36.62
1-Pentene	0.40	0.35	0.32	0.33	3.60	0.45	0.36	ND
2-Methyl-1-butene	0.17	0.21	0.11	0.18	1.55	0.19	ND	ND
n-Pentane	3.73	2.90	2.98	3.46	12.76	2.62	2.57	14.30
Isoprene	0.51	0.34	0.30	0.46	7.18	0.43	0.39	3.37
trans-2-Pentene	0.42	0.39	0.28	0.38	0.42	0.31	0.33	0.35
cis-2-Pentene	0.52	0.45	0.36	0.44	0.40	0.40	0.39	0.37
2-Methyl-2-butene	0.28	0.32	0.13	0.18	0.16	0.20	ND	ND
2,2-Dimethylbutane	0.80	0.65	0.57	0.76	0.78	0.59	0.65	0.77
Cyclopentene	ND	ND	ND	0.21	ND	0.50	ND	0.30
4-Methyl-1-pentene	ND	ND	ND	ND	ND	0.13	ND	ND
Cyclopentane	0.50	0.45	0.41	0.50	0.57	0.40	0.44	0.53
2,3-Dimethylbutane	0.98	0.72	0.61	0.82	0.93	0.71	0.69	0.71
2-Methylpentane	1.50	1.87	1.64	2.24	1.66	1.85	2.02	1.96
3-Methylpentane	1.25	1.11	0.82	1.19	1.20	0.80	0.83	0.97
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	ND	ND	ND	ND	ND	0.21	ND	ND
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.55	1.11	1.11	1.09	1.41	0.93	1.52	1.41
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	1.03	0.78	0.59	0.92	0.90	0.78	0.91	0.83
2,4-Dimethylpentane	0.79	0.66	0.62	0.73	0.83	0.55	0.62	0.55
Benzene	2.49	2.29	1.66	2.08	2.31	1.91	1.51	1.44
Cyclohexane	1.09	1.38	2.18	3.00	126.92	0.87	58.64	17.74
2-Methylhexane	0.64	1.09	1.40	0.96	0.91	0.58	ND	0.62
2,3-Dimethylpentane	0.92	1.03	1.05	0.97	1.52	0.74	0.46	0.70
3-Methylhexane	1.35	0.70	1.34	0.75	0.76	1.95	ND	ND
1-Heptene	ND	0.57	0.12	0.17	0.21	0.18	ND	0.23
2,2,4-Trimethylpentane	1.29	0.90	0.77	0.96	0.92	0.71	0.47	0.75
n-Heptane	1.01	0.79	1.18	0.85	0.91	0.69	0.50	1.95
Methylcyclohexane	0.89	0.98	0.97	1.00	0.72	0.82	0.93	3.92
2,2,3-Trimethylpentane	ND	ND	ND	ND	ND	0.15	ND	ND
2,3,4-Trimethylpentane	0.54	0.48	0.34	0.51	0.43	0.45	0.27	1.28
Toluene	3.50	3.18	8.46	3.08	6.80	2.09	2.50	6.33
2-Methylheptane	0.46	0.53	0.39	0.39	0.34	0.47	0.51	0.49
3-Methylheptane	0.58	0.44	0.43	0.45	0.41	0.36	0.44	0.54
1-Octene	ND	ND	ND	0.14	ND	0.23	ND	0.22
n-Octane	1.17	0.90	0.99	0.85	0.70	0.69	0.60	1.91
Ethylbenzene	1.57	1.30	1.18	1.28	0.70	0.91	0.61	3.00
m-Xylene/p-Xylene	2.30	2.30	2.00	2.25	1.55	1.48	1.04	4.85
Styrene	0.47	0.94	0.38	1.67	0.31	0.35	0.43	1.68
o-Xylene	1.16	1.03	0.87	1.04	0.46	0.76	0.66	2.48
1-Nonene	0.29	0.16	0.25	0.27	ND	0.20	0.14	1.37
n-Nonane	1.21	1.26	1.14	1.37	0.42	1.13	1.18	4.56
Isopropylbenzene	0.55	0.49	0.60	0.47	0.35	0.46	0.42	0.50
a-Pinene	2.14	ND	3.62	6.72	2.89	1.70	5.56	54.52
n-Propylbenzene	0.51	0.48	0.55	0.76	0.36	0.68	0.51	1.09
m-Ethyltoluene	1.49	2.06	1.36	2.10	0.41	2.47	1.27	3.07
p-Ethyltoluene	0.71	0.59	0.61	0.78	0.36	0.66	0.79	1.11
1,3,5-Trimethylbenzene	0.52	0.59	0.49	0.53	0.32	0.41	0.40	1.91
o-Ethyltoluene	0.55	0.67	0.57	0.78	0.35	0.48	0.65	1.28
b-Pinene	ND	ND	1.23	0.60	0.36	0.35	ND	14.54
1,2,4-Trimethylbenzene	1.20	1.75	1.44	2.12	0.54	1.46	1.63	7.56
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.61	0.73	0.81	1.19	0.31	0.81	1.59	2.69
1,2,3-Trimethylbenzene	0.44	0.85	0.92	1.47	0.30	0.88	0.74	2.98
m-Diethylbenzene	0.66	1.16	1.37	1.57	0.33	1.17	0.93	2.02
p-Diethylbenzene	0.51	0.47	0.98	1.10	0.24	0.64	1.00	3.21
1-Undecene	ND	0.23	0.63	0.69	ND	0.39	0.55	0.81
n-Undecane	0.63	1.18	2.35	2.55	0.30	1.41	3.39	3.07
1-Dodecene	ND	ND	0.10	ND	ND	0.11	ND	1.92
n-Dodecane	0.20	1.44	1.06	1.62	ND	1.27	1.72	7.69
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	0.13	4.72	2.34	4.34	0.81	2.46	3.82	24.07
TNMOC (speciated)	92.34	83.59	87.02	105.65	232.31	85.75	130.81	278.93
TNMOC (w/ unknowns)	146.21	229.38	246.68	170.70	273.59	141.57	202.93	529.97

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 17344	FAND 17339	FAND 17386	FAND 17420	FAND 17440 D1	FAND 17440 R1	FAND 17441 D2	FAND 17441 R2
Sampling Date:	3/13/2000	3/19/2000	3/25/2000	4/6/2000	4/12/2000	4/12/2000	4/12/2000	4/12/2000
Analysis Date:	4/3/2000	4/3/2000	4/3/2000	4/12/2000	4/18/2000	4/19/2000	4/18/2000	4/19/2000
Ethylene	1.04	1.96	1.62	0.85	1.59	1.61	1.66	1.54
Acetylene	1.50	2.31	1.87	1.12	2.00	1.99	2.03	2.04
Ethane	7.61	7.27	6.14	4.11	6.19	6.20	6.11	6.09
Propylene	0.99	1.13	1.22	0.69	1.01	1.02	0.80	0.82
Propane	8.55	11.30	7.10	3.85	7.12	7.08	5.72	5.60
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	1.74	8.22	1.80	0.54	1.82	1.84	1.78	1.74
Isobutene/1-Butene	1.24	1.24	1.29	1.50	0.98	0.83	1.26	1.19
1,3-Butadiene	ND	0.12	0.10	ND	ND	ND	ND	ND
n-Butane	4.11	9.22	5.11	0.99	4.78	4.75	4.63	4.61
trans-2-Butene	0.28	0.36	0.36	0.24	0.44	0.39	0.37	0.39
cis-2-Butene	0.41	0.46	0.50	0.29	0.51	0.52	0.49	0.52
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	3.54	22.97	4.44	1.50	4.31	4.30	4.96	4.88
1-Pentene	0.74	0.29	0.22	0.23	0.32	0.42	0.34	0.34
2-Methyl-1-butene	0.16	0.26	0.32	ND	0.24	0.19	0.25	0.25
n-Pentane	1.90	12.76	1.78	0.58	1.96	1.90	1.97	1.95
Isoprene	0.32	0.38	0.30	0.28	0.39	0.36	0.37	0.38
trans-2-Pentene	0.30	0.39	0.42	0.27	0.42	0.43	0.40	0.39
cis-2-Pentene	0.37	0.41	0.41	0.30	0.41	0.41	0.42	0.40
2-Methyl-2-butene	0.14	0.27	0.27	0.17	0.19	0.22	0.22	0.19
2,2-Dimethylbutane	0.58	0.67	0.65	0.43	0.62	0.63	0.64	0.64
Cyclopentene	0.30	0.27	0.19	0.19	0.18	0.19	0.12	0.16
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.32	0.58	0.43	0.30	0.47	0.46	0.44	0.42
2,3-Dimethylbutane	0.67	0.75	0.74	0.50	0.73	0.73	0.74	0.74
2-Methylpentane	1.28	1.81	1.71	0.64	1.73	1.71	1.62	1.69
3-Methylpentane	0.70	0.97	0.89	0.47	0.87	0.88	0.86	0.86
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.27	ND	ND	ND	ND	ND	ND	ND
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	0.73	1.21	1.03	0.44	0.98	1.12	1.11	1.05
trans-2-Hexene	ND	ND	ND	ND	ND	ND	0.11	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	0.54	0.73	0.62	0.35	0.64	0.63	0.66	0.62
2,4-Dimethylpentane	0.50	0.57	0.56	0.43	0.61	0.54	0.62	0.57
Benzene	1.65	1.84	1.83	1.21	1.87	1.88	1.64	1.74
Cyclohexane	1.74	88.60	0.79	0.65	3.80	3.91	3.68	3.74
2-Methylhexane	0.12	0.36	0.32	0.18	0.36	0.34	0.38	0.33
2,3-Dimethylpentane	0.49	0.65	0.73	0.52	0.76	0.71	0.78	0.74
3-Methylhexane	1.95	2.56	1.57	1.03	1.29	1.36	1.46	1.44
1-Heptene	0.44	ND	ND	ND	0.10	ND	0.11	ND
2,2,4-Trimethylpentane	0.53	1.00	0.80	0.35	0.77	0.82	0.81	0.76
n-Heptane	0.61	0.96	0.67	0.38	0.62	0.62	0.68	0.64
Methylcyclohexane	0.85	1.28	0.88	0.63	3.01	3.01	0.87	0.89
2,2,3-Trimethylpentane	ND	ND	ND	ND	ND	ND	0.10	ND
2,3,4-Trimethylpentane	0.32	0.53	0.46	0.27	0.37	0.41	0.37	0.44
Toluene	2.32	7.14	2.45	1.05	13.09	13.30	5.96	5.64
2-Methylheptane	0.43	0.40	0.41	0.34	0.40	0.39	0.37	0.36
3-Methylheptane	0.38	0.46	0.42	0.32	0.36	0.38	0.40	0.38
1-Octene	0.46	ND	ND	ND	ND	ND	ND	ND
n-Octane	0.65	0.77	0.52	0.43	0.55	0.59	0.55	0.54
Ethylbenzene	0.74	0.91	0.68	0.57	0.77	0.82	0.79	0.76
m-Xylene/p-Xylene	1.44	1.63	1.39	0.91	1.97	2.08	1.91	1.85
Styrene	0.38	0.45	0.32	0.37	0.73	0.76	0.79	0.69
o-Xylene	0.38	0.94	0.67	0.47	0.82	0.83	0.79	0.77
1-Nonene	0.35	ND	ND	0.18	ND	ND	ND	ND
n-Nonane	0.93	2.20	0.71	0.74	0.62	0.62	0.69	0.65
Isopropylbenzene	0.35	0.39	0.28	0.30	0.34	0.48	0.31	0.42
a-Pinene	4.88	10.42	5.57	0.24	2.42	2.39	3.39	3.33
n-Propylbenzene	0.72	0.55	0.59	0.36	0.37	0.43	0.44	0.44
m-Ethyltoluene	2.54	3.58	1.36	1.67	0.88	0.94	1.15	1.06
p-Ethyltoluene	0.68	0.81	0.59	0.60	0.58	0.57	0.58	0.50
1,3,5-Trimethylbenzene	0.39	0.76	0.37	0.33	0.33	0.34	0.33	0.37
o-Ethyltoluene	0.71	1.30	0.56	0.58	0.37	0.36	0.51	0.35
b-Pinene	0.87	1.36	ND	1.23	0.48	0.64	0.61	0.92
1,2,4-Trimethylbenzene	1.88	2.71	1.63	1.17	1.12	1.12	1.21	1.17
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.91	2.76	0.73	0.89	0.59	0.66	0.70	0.67
1,2,3-Trimethylbenzene	1.17	1.32	1.11	2.92	0.48	0.46	0.70	0.68
m-Diethylbenzene	1.48	1.58	1.55	1.30	0.85	0.55	0.95	0.59
p-Diethylbenzene	0.87	1.01	0.92	0.92	0.64	0.60	0.62	0.65
1-Undecene	0.64	0.65	0.61	ND	0.28	0.27	0.30	0.31
n-Undecane	1.70	2.99	2.74	2.47	1.60	1.55	1.69	1.86
1-Dodecene	0.15	ND	0.11	0.26	ND	ND	ND	ND
n-Dodecane	1.69	2.48	2.14	1.84	1.23	1.14	1.39	1.46
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	2.91	5.26	5.98	7.09	3.14	2.90	3.34	3.61
TNMOC (speciated)	82.58	241.49	84.52	56.03	89.45	89.61	82.02	80.81
TNMOC (w/ unknowns)	144.60	322.30	148.90	113.64	129.62	128.78	116.80	117.75

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 17457 D1	FAND 17457 R1	FAND 17458 D2	FAND 17458 R2	FAND 17469	FAND 17476	FAND 17486	FAND 17496
Sampling Date:	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/24/2000	4/30/2000	5/6/2000	5/12/2000
Analysis Date:	5/2/2000	5/3/2000	5/2/2000	5/3/2000	5/3/2000	5/3/2000	5/11/2000	6/2/2000
Ethylene	1.14	1.19	1.02	1.02	0.74	0.83	1.01	0.92
Acetylene	1.46	1.52	1.45	1.48	1.24	1.15	1.13	1.31
Ethane	5.11	5.06	5.02	5.08	4.52	5.56	5.15	4.26
Propylene	0.93	0.90	0.66	0.61	0.67	0.78	0.84	1.04
Propane	4.97	5.04	3.39	3.45	3.62	3.57	3.83	4.71
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	0.89	0.91	0.88	0.89	0.59	0.85	1.17	0.73
Isobutene/1-Butene	1.04	1.02	0.93	0.99	0.98	1.31	1.36	1.54
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND
n-Butane	2.14	2.12	2.07	2.11	1.28	1.79	1.91	1.59
trans-2-Butene	ND	0.16	0.31	0.11	0.22	0.18	0.24	0.31
cis-2-Butene	0.38	0.39	0.39	0.40	0.39	0.38	0.43	0.41
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	8.77	8.71	8.21	8.21	2.35	54.19	18.39	9.61
1-Pentene	0.26	0.96	0.30	0.31	0.28	0.47	0.29	0.69
2-Methyl-1-butene	ND	0.11	0.12	0.13	ND	ND	ND	ND
n-Pentane	2.91	2.93	2.77	2.73	1.97	11.28	6.40	4.17
Isoprene	0.36	0.37	0.36	0.36	2.11	1.03	1.80	1.86
trans-2-Pentene	0.31	0.32	0.26	0.26	0.29	0.26	0.34	0.31
cis-2-Pentene	0.36	0.35	0.35	0.37	0.35	0.35	0.35	0.35
2-Methyl-2-butene	0.09	0.11	0.10	0.11	0.09	ND	0.12	ND
2,2-Dimethylbutane	0.57	0.60	0.61	0.60	0.60	0.67	0.66	0.66
Cyclopentene	0.29	0.30	0.24	0.25	0.40	0.35	0.30	0.51
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.40	0.41	0.29	0.31	0.30	0.46	0.31	0.39
2,3-Dimethylbutane	0.63	0.61	0.64	0.61	0.57	0.65	0.65	0.62
2-Methylpentane	1.22	1.30	1.16	1.05	1.14	1.75	1.37	1.37
3-Methylpentane	0.64	0.65	0.66	0.63	0.61	0.63	0.77	0.70
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	ND	0.11	ND	ND	ND	ND	0.11	0.29
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	0.74	0.81	0.69	0.84	0.66	0.94	1.16	1.03
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	0.50	0.55	0.49	0.54	0.47	0.62	0.70	0.68
2,4-Dimethylpentane	0.48	0.49	0.51	0.52	0.49	0.54	0.49	0.56
Benzene	1.17	1.21	1.29	1.15	0.87	0.76	0.88	0.88
Cyclohexane	2.18	2.22	1.41	1.44	8.51	3.33	10.73	5.43
2-Methylhexane	0.31	0.28	0.25	0.25	0.48	0.87	0.59	0.57
2,3-Dimethylpentane	0.49	0.48	0.49	0.62	0.46	0.67	0.54	0.85
3-Methylhexane	3.26	3.39	3.43	3.47	4.30	5.65	7.95	9.88
1-Heptene	0.14	0.15	0.12	0.13	0.12	0.18	0.23	0.56
2,2,4-Trimethylpentane	0.62	0.57	0.63	0.53	0.50	0.63	0.69	0.64
n-Heptane	1.01	1.01	1.21	1.17	1.13	1.69	1.60	1.55
Methylcyclohexane	1.74	1.82	2.00	2.08	2.71	4.64	ND	ND
2,2,3-Trimethylpentane	ND	ND	0.10	ND	0.11	0.15	0.12	0.15
2,3,4-Trimethylpentane	0.49	0.32	0.28	0.43	0.60	0.68	0.99	0.96
Toluene	2.49	2.52	2.36	2.43	1.79	4.34	4.48	2.84
2-Methylheptane	0.42	0.42	0.39	0.40	0.46	0.49	0.60	0.44
3-Methylheptane	0.38	0.37	0.40	0.42	0.40	0.46	0.50	0.45
1-Octene	0.11	0.12	0.11	0.10	ND	0.19	0.15	0.71
n-Octane	0.76	0.78	0.78	0.78	0.87	1.29	1.32	1.15
Ethylbenzene	0.96	0.91	1.02	0.97	1.07	1.66	1.74	1.32
m-Xylene/p-Xylene	1.66	1.66	1.73	1.75	1.71	3.00	3.22	2.35
Styrene	0.51	0.47	0.61	0.49	0.53	3.56	2.12	1.34
o-Xylene	0.91	0.89	0.93	0.95	1.08	1.74	1.75	1.41
1-Nonene	0.37	0.35	0.29	0.41	0.54	0.62	0.54	0.78
n-Nonane	1.52	1.50	1.63	1.63	1.92	2.89	3.07	2.68
Isopropylbenzene	0.58	0.36	0.46	0.38	0.39	0.51	0.47	0.50
a-Pinene	24.56	24.40	30.17	30.14	39.54	117.15	117.75	107.55
n-Propylbenzene	0.58	0.59	0.61	0.58	0.63	1.37	1.22	1.10
m-Ethyltoluene	5.76	5.67	5.05	5.12	2.34	4.62	4.49	4.05
p-Ethyltoluene	0.64	0.70	0.74	0.75	1.05	1.20	1.59	1.71
1,3,5-Trimethylbenzene	0.86	0.88	0.90	0.93	1.27	2.99	2.48	2.34
o-Ethyltoluene	0.66	0.67	0.69	0.69	0.79	1.92	1.61	1.46
b-Pinene	0.81	0.96	2.68	2.36	8.36	19.46	20.99	14.95
1,2,4-Trimethylbenzene	3.12	3.34	3.59	3.59	4.43	12.20	9.93	9.26
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.38	1.31	1.34	1.33	2.04	2.90	3.83	3.88
1,2,3-Trimethylbenzene	1.12	1.01	1.23	1.26	1.88	6.18	7.36	4.32
m-Diethylbenzene	0.81	0.80	1.10	0.84	1.57	3.03	3.35	2.26
p-Diethylbenzene	1.45	1.37	1.32	1.40	1.80	5.85	4.80	5.12
1-Undecene	0.34	0.36	0.68	0.68	0.51	1.05	1.21	1.55
n-Undecane	2.42	2.25	2.55	2.40	2.49	5.63	5.48	6.12
1-Dodecene	0.10	ND	ND	ND	ND	ND	ND	ND
n-Dodecane	2.54	2.59	3.68	3.36	4.60	13.29	12.38	14.17
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	5.51	5.37	10.25	9.02	10.45	25.50	32.15	35.78
TNMOC (speciated)	111.35	112.09	122.41	120.37	141.20	354.92	326.20	293.67
TNMOC (w/ unknowns)	191.26	195.52	208.35	200.43	268.93	591.68	422.03	401.06

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 17504	FAND 17567	FAND 17535 D1	FAND 17535 R1	FAND 17536 D2	FAND 17536 R2	FAND 17569 D1	FAND 17569 R1
Sampling Date:	5/18/2000	5/24/2000	5/30/2000	5/30/2000	5/30/2000	5/30/2000	6/5/2000	6/5/2000
Analysis Date:	6/15/2000	6/15/2000	6/13/2000	6/14/2000	6/14/2000	6/14/2000	6/22/2000	6/23/2000
Ethylene	1.26	0.84	0.71	0.88	0.74	0.76	1.34	1.38
Acetylene	1.00	0.91	0.73	0.72	0.74	0.72	1.06	1.08
Ethane	3.58	3.87	3.28	3.28	3.29	3.31	3.38	3.46
Propylene	1.05	0.94	0.68	0.67	0.83	0.80	0.77	0.77
Propane	3.26	4.06	2.07	2.15	2.83	2.85	2.69	2.96
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	2.35	0.66	0.48	0.53	0.44	0.41	0.96	1.03
Isobutene/1-Butene	1.60	0.99	1.27	1.31	1.48	1.44	0.98	0.97
1,3-Butadiene	0.10	ND	ND	ND	ND	ND	0.07	0.10
n-Butane	1.05	1.46	1.44	1.05	2.02	0.93	2.25	2.34
trans-2-Butene	0.25	ND	0.32	0.19	0.25	0.24	0.27	0.35
cis-2-Butene	0.41	0.38	0.50	0.50	0.42	0.54	0.50	0.51
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	14.57	7.45	21.88	21.02	21.30	20.94	8.03	7.78
1-Pentene	0.59	0.80	2.59	2.26	2.49	2.05	0.77	0.72
2-Methyl-1-butene	0.16	0.15	ND	ND	ND	ND	0.19	0.20
n-Pentane	5.95	2.01	6.25	5.88	6.44	6.31	2.31	2.27
Isoprene	0.45	0.48	2.30	2.34	2.19	2.19	0.62	0.88
trans-2-Pentene	0.31	0.28	0.31	0.30	0.29	0.30	0.42	0.45
cis-2-Pentene	0.43	0.36	0.35	0.37	0.36	0.35	0.47	0.44
2-Methyl-2-butene	0.11	0.12	0.98	0.86	1.01	1.00	0.17	0.15
2,2-Dimethylbutane	0.63	0.62	0.69	0.65	0.66	0.66	0.76	0.83
Cyclopentene	0.19	0.14	0.43	0.41	0.56	0.53	0.22	0.22
4-Methyl-1-pentene	0.08	0.13	0.15	0.13	0.21	0.12	0.09	0.11
Cyclopentane	0.43	0.37	0.44	0.44	0.45	0.45	0.43	0.46
2,3-Dimethylbutane	0.66	0.60	0.59	0.60	0.57	0.58	0.81	0.78
2-Methylpentane	0.83	0.59	1.60	1.50	0.63	1.93	1.10	1.06
3-Methylpentane	0.79	0.72	0.60	0.63	0.64	0.58	0.87	0.88
2-Methyl-1-pentene	0.11	ND	ND	ND	ND	ND	0.10	0.10
1-Hexene	0.12	0.14	ND	0.12	ND	ND	0.10	0.10
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.17	0.65	1.07	1.54	1.00	0.91	1.04	0.98
trans-2-Hexene	1.58	0.54	0.91	1.10	1.01	1.07	ND	0.12
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	0.57	0.47	0.66	0.62	0.73	0.59	0.61	0.67
2,4-Dimethylpentane	0.55	0.55	0.48	0.50	0.51	0.49	0.59	0.62
Benzene	1.21	1.05	0.86	0.87	0.79	0.80	1.28	1.31
Cyclohexane	3.12	0.62	15.33	14.40	16.76	16.62	0.57	0.61
2-Methylhexane	0.38	0.27	0.84	0.53	1.22	0.27	0.41	0.46
2,3-Dimethylpentane	0.66	0.74	0.58	0.84	0.73	0.45	0.85	0.82
3-Methylhexane	3.06	2.60	10.71	8.61	10.91	9.04	2.87	2.74
1-Heptene	0.15	0.20	0.31	0.31	0.28	0.29	0.17	0.14
2,2,4-Trimethylpentane	0.73	0.50	0.70	0.75	0.73	0.67	0.75	0.86
n-Heptane	0.80	0.85	2.66	2.25	2.65	2.28	0.96	0.95
Methylcyclohexane	1.21	1.30	4.24	3.32	4.25	3.55	1.40	1.34
2,2,3-Trimethylpentane	ND	0.06	0.12	ND	0.16	0.13	ND	0.12
2,3,4-Trimethylpentane	0.27	0.21	0.77	0.72	0.76	0.72	0.25	0.42
Toluene	3.73	1.54	4.56	4.56	4.53	4.33	3.04	3.31
2-Methylheptane	0.41	0.41	0.47	0.44	0.53	0.44	0.42	0.40
3-Methylheptane	0.35	0.33	0.45	0.46	0.49	0.43	0.39	0.40
1-Octene	0.15	0.28	0.42	0.34	0.39	0.31	0.10	0.11
n-Octane	0.57	0.58	1.33	1.25	1.33	1.32	0.69	0.65
Ethylbenzene	0.89	0.72	1.61	1.48	1.58	1.45	0.94	0.94
m-Xylene/p-Xylene	1.74	1.10	3.14	2.83	3.04	2.76	1.99	2.02
Styrene	0.69	0.85	3.99	3.03	3.94	3.68	1.03	0.99
o-Xylene	1.00	0.64	1.79	1.62	1.84	1.70	0.96	0.98
1-Nonene	ND	0.20	0.19	0.34	0.57	0.34	0.53	0.09
n-Nonane	1.27	1.02	3.50	3.17	3.60	3.49	1.10	1.08
Isopropylbenzene	0.29	0.47	0.70	0.76	0.73	0.66	0.45	0.47
a-Pinene	25.23	28.51	205.40	190.86	208.15	205.80	14.80	14.21
n-Propylbenzene	0.59	0.69	1.56	2.67	1.52	1.35	0.68	0.69
m-Ethyltoluene	1.21	1.86	7.23	6.25	7.39	6.80	4.31	3.93
p-Ethyltoluene	0.59	0.94	1.72	1.52	1.75	1.70	0.83	0.94
1,3,5-Trimethylbenzene	0.77	0.82	3.21	2.90	3.01	3.28	1.09	1.03
o-Ethyltoluene	0.94	0.80	2.49	2.22	2.50	2.39	1.04	1.08
b-Pinene	2.21	2.50	32.91	29.51	26.08	20.94	1.32	1.41
1,2,4-Trimethylbenzene	2.70	3.13	12.43	11.06	12.44	11.62	3.52	3.36
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.27	1.26	4.72	4.19	4.79	4.58	1.50	1.24
1,2,3-Trimethylbenzene	1.33	1.89	5.92	5.23	5.74	5.24	2.11	1.89
m-Diethylbenzene	2.63	3.01	2.92	2.59	3.06	2.77	2.48	2.33
p-Diethylbenzene	2.11	1.88	4.67	4.55	4.53	4.68	1.88	1.48
1-Undecene	0.72	0.55	1.74	1.51	1.58	1.32	2.28	1.63
n-Undecane	4.15	4.17	9.49	5.33	6.38	5.83	3.06	2.80
1-Dodecene	1.92	1.94	7.18	4.90	6.52	4.70	2.83	2.80
n-Dodecane	5.63	5.19	14.85	12.94	13.86	12.82	6.03	5.90
1-Tridecene	ND	ND	ND	ND	ND	ND	0.23	0.90
n-Tridecane	16.98	10.37	29.93	22.07	24.36	18.17	14.01	14.87
TNMOC (speciated)	139.81	117.27	461.39	415.64	449.54	422.75	119.08	118.40
TNMOC (w/ unknowns)	238.92	199.91	578.97	525.97	566.74	539.07	218.22	214.49

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 17570 D2	FAND 17540 R2	FAND 17565	FAND 17603	FAND 17687 D1	FAND 17687 R1	FAND 17688 D2	FAND 17688 R2
Sampling Date:	6/5/2000	6/5/2000	6/11/2000	6/17/2000	6/23/2000	6/23/2000	6/23/2000	6/23/2000
Analysis Date:	6/23/2000	6/23/2000	6/22/2000	6/23/2000	7/11/2000	7/12/2000	7/11/2000	7/12/2000
Ethylene	1.44	1.43	0.93	1.80	1.22	1.20	1.09	1.14
Acetylene	1.03	1.04	0.79	1.20	0.69	0.72	0.69	0.72
Ethane	3.34	3.33	3.23	3.03	3.06	3.07	2.88	2.89
Propylene	1.16	1.20	1.01	1.29	1.16	1.18	0.78	0.77
Propane	4.46	4.52	4.02	5.28	4.28	4.36	2.31	2.32
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	0.80	0.84	0.62	1.25	0.61	0.66	0.57	0.55
Isobutene/1-Butene	1.06	1.05	1.02	1.16	1.70	1.77	1.05	1.06
1,3-Butadiene	0.09	0.10	ND	0.13	ND	ND	ND	ND
n-Butane	2.17	2.22	1.26	3.64	1.35	1.41	1.32	1.34
trans-2-Butene	0.10	0.09	0.25	0.42	0.09	0.15	ND	0.20
cis-2-Butene	0.66	0.66	0.43	0.56	0.50	0.49	0.39	0.41
3-Methyl-1-butene	ND	ND	ND	0.11	ND	ND	ND	ND
Isopentane	6.33	6.35	4.68	6.73	6.80	6.77	7.51	7.52
1-Pentene	0.58	0.68	0.36	0.28	1.04	1.07	1.20	1.18
2-Methyl-1-butene	0.21	0.21	0.18	0.37	0.11	0.10	0.14	0.14
n-Pentane	1.93	1.93	1.71	2.83	2.11	2.05	2.36	2.47
Isoprene	0.44	0.42	0.65	0.43	0.78	0.77	0.87	0.87
trans-2-Pentene	0.44	0.44	0.40	0.58	0.38	0.42	0.37	0.35
cis-2-Pentene	0.45	0.45	0.41	0.53	0.39	0.40	0.34	0.37
2-Methyl-2-butene	0.17	0.17	0.14	0.36	0.13	0.12	0.13	0.12
2,2-Dimethylbutane	0.69	0.69	0.70	0.80	0.71	0.68	0.63	0.68
Cyclopentene	0.28	0.28	0.32	0.17	0.33	0.34	0.45	0.37
4-Methyl-1-pentene	0.20	0.14	ND	0.11	ND	ND	ND	ND
Cyclopentane	0.48	0.44	0.38	0.54	0.41	0.34	0.35	0.34
2,3-Dimethylbutane	0.77	0.79	0.64	1.00	0.63	0.64	0.60	0.62
2-Methylpentane	1.35	1.36	2.75	1.91	1.32	1.39	2.02	2.17
3-Methylpentane	0.83	0.84	0.64	1.24	0.74	0.70	0.65	0.67
2-Methyl-1-pentene	0.11	0.09	ND	0.12	ND	ND	ND	ND
1-Hexene	0.22	0.17	ND	0.15	0.10	ND	0.11	0.15
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	0.88	0.80	0.65	1.17	0.75	0.74	0.73	0.74
trans-2-Hexene	0.20	0.19	0.15	0.14	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	0.61	0.58	0.71	0.81	0.50	0.47	0.63	0.70
2,4-Dimethylpentane	0.64	0.62	0.52	0.74	0.54	0.52	0.55	0.49
Benzene	1.18	1.20	1.00	1.64	0.86	0.84	0.80	0.78
Cyclohexane	0.56	0.57	0.69	2.63	0.65	0.63	0.71	0.88
2-Methylhexane	0.32	0.30	0.52	0.48	0.45	0.52	0.66	0.92
2,3-Dimethylpentane	0.82	0.85	0.66	0.97	0.81	0.80	0.62	0.60
3-Methylhexane	2.41	2.44	2.65	1.72	3.06	3.39	3.53	4.12
1-Heptene	0.24	0.19	0.12	0.21	0.12	0.14	0.20	0.16
2,2,4-Trimethylpentane	0.82	0.90	0.61	1.18	0.71	0.65	0.70	0.62
n-Heptane	0.86	0.80	0.70	0.76	0.91	0.91	0.93	1.01
Methylcyclohexane	1.16	1.20	1.06	1.10	1.54	1.64	1.60	1.86
2,2,3-Trimethylpentane	ND	0.11	ND	0.14	ND	ND	ND	0.10
2,3,4-Trimethylpentane	0.21	0.43	0.21	0.57	0.41	0.37	0.31	0.31
Toluene	2.65	2.66	1.86	3.35	2.33	2.44	2.38	2.52
2-Methylheptane	0.40	0.47	0.43	0.51	0.43	0.38	0.38	0.39
3-Methylheptane	0.46	0.44	0.36	0.50	0.39	0.36	0.35	0.35
1-Octene	0.21	0.25	0.13	0.14	0.11	0.13	0.22	0.22
n-Octane	0.60	0.62	0.56	0.62	0.60	0.69	0.60	0.64
Ethylbenzene	0.85	0.89	0.74	1.06	0.94	1.02	0.94	1.02
m-Xylene/p-Xylene	1.75	1.82	1.47	2.64	2.08	2.25	2.13	2.31
Styrene	0.88	0.88	1.02	0.82	1.14	1.38	1.50	1.38
o-Xylene	0.86	0.88	0.75	1.15	1.03	1.12	1.08	1.19
1-Nonene	0.31	0.19	1.07	0.11	ND	ND	ND	ND
n-Nonane	1.00	1.00	0.91	0.74	1.13	1.20	1.20	1.30
Isopropylbenzene	0.45	0.38	0.48	0.52	0.36	0.41	0.50	0.39
a-Pinene	25.25	25.33	17.91	6.90	26.90	27.90	38.25	40.13
n-Propylbenzene	0.68	0.92	0.95	0.66	0.71	0.73	0.77	0.79
m-Ethyltoluene	2.61	2.21	5.11	2.08	3.81	3.84	4.54	4.71
p-Ethyltoluene	1.17	0.95	1.00	1.10	0.97	0.85	1.16	1.38
1,3,5-Trimethylbenzene	0.98	1.00	0.99	0.71	1.27	1.31	1.29	1.37
o-Ethyltoluene	0.91	0.90	0.93	0.83	1.17	1.16	1.19	1.26
b-Pinene	1.72	0.95	2.27	1.10	ND	ND	3.03	3.28
1,2,4-Trimethylbenzene	3.07	3.11	3.08	2.29	4.14	4.32	4.63	4.88
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.40	1.35	1.43	1.19	1.60	1.69	1.48	1.53
1,2,3-Trimethylbenzene	1.80	1.77	2.05	1.28	2.79	3.01	3.29	3.53
m-Diethylbenzene	2.30	2.28	3.92	2.94	2.53	2.87	2.57	2.91
p-Diethylbenzene	1.39	1.27	1.52	1.50	1.92	2.07	2.77	2.36
1-Undecene	1.26	1.23	0.61	2.47	ND	ND	0.66	0.66
n-Undecane	2.42	3.14	4.15	2.74	3.07	3.16	3.46	3.56
1-Dodecene	2.70	2.63	3.14	1.81	3.41	0.73	0.58	0.80
n-Dodecane	5.71	5.77	6.32	3.33	0.86	8.00	8.83	9.14
1-Tridecene	ND	0.90	ND	ND	ND	ND	ND	ND
n-Tridecane	17.12	17.51	18.14	9.15	19.67	24.34	22.72	25.77
TNMOC (speciated)	125.57	126.79	121.05	106.50	127.26	139.76	153.25	162.51
TNMOC (w/ unknowns)	228.23	227.68	268.05	189.31	221.27	235.76	242.09	251.49

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 17851 D1	FAND 17852 D2	FAND 17802	FAND 17828	FAND 17863	FAND 17939	FAND 18011 D1	FAND 18011 R1
Sampling Date:	6/29/2000	6/29/2000	7/5/2000	7/11/2000	7/17/2000	7/23/2000	7/29/2000	7/29/2000
Analysis Date:	VOID	VOID	7/18/2000	7/20/2000	7/21/2000	7/28/2000	8/15/2000	8/21/2000
Ethylene			1.30	1.49	1.25	1.06	3.24	3.11
Acetylene			0.78	1.20	0.69	0.74	1.92	2.15
Ethane			3.75	3.46	2.25	2.11	5.73	5.64
Propylene			1.19	1.27	1.16	0.92	2.07	2.12
Propane			4.99	5.14	4.23	4.08	6.77	6.71
Propyne			ND	ND	ND	ND	ND	ND
Isobutane			3.02	0.74	0.98	2.10	5.43	5.45
Isobutene/1-Butene			1.92	2.03	1.95	1.45	3.22	3.15
1,3-Butadiene			ND	ND	ND	0.16	0.16	0.18
n-Butane			2.48	NR	NR	1.63	18.56	18.42
trans-2-Butene			0.23	0.24	0.31	0.12	1.39	1.44
cis-2-Butene			0.59	0.48	0.49	0.44	1.68	1.71
3-Methyl-1-butene			ND	ND	ND	ND	0.63	0.63
Isopentane			40.52	32.50	23.76	8.74	58.41	57.67
1-Pentene			4.29	5.95	4.33	0.95	1.99	1.90
2-Methyl-1-butene			0.18	0.14	0.22	0.11	2.60	2.57
n-Pentane			8.60	8.57	6.69	2.47	26.47	26.07
Isoprene			0.76	2.04	1.44	0.73	1.72	1.69
trans-2-Pentene			0.40	0.77	0.79	0.43	5.64	5.64
cis-2-Pentene			0.42	0.40	0.43	0.38	2.81	2.80
2-Methyl-2-butene			0.16	2.10	1.74	0.36	5.63	5.62
2,2-Dimethylbutane			1.01	0.90	0.94	0.71	2.91	2.91
Cyclopentene			0.51	0.91	0.56	0.17	0.47	0.42
4-Methyl-1-pentene			ND	0.25	0.39	ND	0.34	0.39
Cyclopentane			0.53	0.46	0.47	0.43	3.20	3.22
2,3-Dimethylbutane			0.73	0.68	0.83	0.70	4.04	4.06
2-Methylpentane			2.89	3.76	3.44	1.26	16.58	16.39
3-Methylpentane			1.14	1.06	1.24	0.81	10.44	10.37
2-Methyl-1-pentene			ND	ND	ND	ND	0.82	1.02
1-Hexene			0.14	0.18	0.19	ND	1.23	0.79
2-Ethyl-1-butene			ND	ND	ND	ND	ND	ND
n-Hexane			2.22	2.23	2.03	0.83	13.72	13.51
trans-2-Hexene			ND	ND	ND	ND	1.22	1.21
cis-2-Hexene			ND	ND	ND	ND	0.70	0.74
Methylcyclopentane			1.33	1.40	1.39	0.57	6.74	6.65
2,4-Dimethylpentane			0.58	0.57	0.63	0.61	2.26	2.26
Benzene			1.21	1.44	1.25	1.20	7.71	7.61
Cyclohexane			25.30	3.77	1.76	5.84	28.95	28.68
2-Methylhexane			1.43	1.05	1.50	0.42	3.80	3.72
2,3-Dimethylpentane			0.99	0.51	0.82	0.79	1.80	1.88
3-Methylhexane			9.90	18.40	ND	2.42	3.85	5.41
1-Heptene			0.30	0.42	0.47	0.17	1.07	0.88
2,2,4-Trimethylpentane			0.93	1.03	1.08	0.76	6.98	6.71
n-Heptane			2.71	2.24	2.08	0.80	5.91	5.86
Methylcyclohexane			5.56	ND	ND	1.53	6.45	6.45
2,2,3-Trimethylpentane			0.26	0.34	0.27	ND	0.83	0.85
2,3,4-Trimethylpentane			1.97	2.96	3.74	0.41	3.30	2.73
Toluene			5.61	7.43	6.84	2.49	25.37	25.00
2-Methylheptane			0.57	0.49	0.60	0.36	1.39	1.39
3-Methylheptane			0.55	0.64	0.54	0.41	1.77	1.80
1-Octene			0.23	0.32	0.30	ND	0.54	0.46
n-Octane			1.11	1.43	1.42	0.56	2.52	2.56
Ethylbenzene			2.07	2.59	2.62	0.81	5.02	5.02
m-Xylene/p-Xylene			4.98	6.00	6.30	1.95	14.35	14.24
Styrene			5.08	6.53	6.44	1.37	3.43	3.47
o-Xylene			2.61	3.32	3.57	0.72	5.63	5.60
1-Nonene			0.12	0.57	0.33	ND	0.31	0.30
n-Nonane			2.89	3.96	5.59	0.94	2.59	2.60
Isopropylbenzene			0.72	0.70	0.96	0.30	0.90	1.28
a-Pinene			190.94	311.98	379.46	1.49	99.49	98.08
n-Propylbenzene			1.40	2.04	2.09	0.65	1.96	2.04
m-Ethyltoluene			7.59	10.34	12.41	7.96	7.49	7.98
p-Ethyltoluene			1.54	2.89	4.11	0.93	3.11	3.33
1,3,5-Trimethylbenzene			3.48	4.74	4.25	1.28	3.55	3.92
o-Ethyltoluene			2.38	3.30	4.45	0.78	2.91	2.89
b-Pinene			28.25	47.42	58.75	ND	12.92	12.86
1,2,4-Trimethylbenzene			12.49	16.71	19.25	3.32	12.05	11.84
1-Decene			ND	ND	ND	ND	ND	ND
n-Decane			3.94	5.65	9.92	1.22	3.13	3.10
1,2,3-Trimethylbenzene			7.82	10.25	9.98	15.30	4.57	5.74
m-Diethylbenzene			4.83	5.53	6.12	3.74	2.20	2.48
p-Diethylbenzene			5.39	6.33	6.12	1.29	3.01	3.14
1-Undecene			1.19	2.06	2.48	ND	0.68	ND
n-Undecane			7.63	10.02	11.27	4.93	4.59	4.55
1-Dodecene			0.78	0.87	ND	0.62	0.21	0.32
n-Dodecane			18.46	22.25	20.76	7.88	9.26	8.90
1-Tridecene			ND	ND	ND	ND	ND	ND
n-Tridecane			33.59	46.60	40.18	28.64	19.11	20.46
TNMOC (speciated)			495.40	656.01	704.83	139.35	545.41	544.65
TNMOC (w/ unknowns)			639.23	797.93	871.10	250.06	646.01	654.07

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 18018 D2	FAND 18018 R2	FAND 18076 D1	FAND 18076 R1	FAND 18077 D2	FAND 18077 R2	FAND 18103	FAND 18148
Sampling Date:	7/29/2000	7/29/2000	8/4/2000	8/4/2000	8/4/2000	8/4/2000	8/10/2000	8/16/2000
Analysis Date:	8/15/2000	8/18/2000	8/21/2000	8/23/2000	8/21/2000	8/28/2000	8/21/2000	8/23/2000
Ethylene	3.50	3.39	1.27	1.27	1.09	1.41	2.33	2.12
Acetylene	2.08	2.27	1.02	0.95	0.93	0.86	1.47	1.22
Ethane	6.19	6.11	4.64	4.58	3.67	4.06	2.99	2.63
Propylene	2.37	2.43	0.81	0.80	1.00	1.23	1.71	1.22
Propane	8.27	8.29	3.34	3.21	5.13	5.68	6.20	5.25
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	4.91	4.93	1.32	1.31	0.96	1.15	1.87	0.97
Isobutene/1-Butene	3.26	3.20	1.00	2.22	1.03	1.26	1.44	1.15
1,3-Butadiene	0.15	0.19	ND	0.18	0.12	ND	0.42	0.17
n-Butane	21.53	21.47	2.06	ND	1.91	2.13	6.36	2.81
trans-2-Butene	1.59	1.78	0.13	0.23	ND	0.36	0.44	0.35
cis-2-Butene	1.80	1.82	0.41	0.45	0.63	0.53	0.78	0.47
3-Methyl-1-butene	0.69	0.69	ND	ND	ND	ND	0.17	ND
Isopentane	58.63	58.06	5.88	5.95	4.46	4.77	13.00	5.70
1-Pentene	2.18	2.35	0.40	0.35	0.37	0.48	0.70	0.38
2-Methyl-1-butene	3.04	3.03	0.23	0.48	0.19	0.22	0.66	0.34
n-Pentane	28.29	27.95	2.43	2.35	2.26	1.71	6.13	2.64
Isoprene	1.77	1.78	0.52	0.56	0.46	0.57	0.88	0.72
trans-2-Pentene	6.54	6.55	0.42	0.47	0.43	0.47	1.05	0.57
cis-2-Pentene	3.22	3.24	0.40	0.40	0.39	0.51	0.65	0.44
2-Methyl-2-butene	6.74	6.45	0.20	0.19	0.19	0.23	0.73	0.29
2,2-Dimethylbutane	3.29	3.24	0.75	0.79	0.72	0.78	1.16	0.69
Cyclopentene	0.37	0.32	0.27	0.31	0.21	0.26	0.37	0.24
4-Methyl-1-pentene	0.42	0.30	0.10	ND	0.10	ND	0.11	ND
Cyclopentane	3.52	3.51	0.44	0.46	0.42	0.53	0.63	0.47
2,3-Dimethylbutane	4.49	4.53	0.65	0.68	0.66	0.79	1.25	0.84
2-Methylpentane	18.75	18.21	2.25	2.79	1.80	1.38	4.34	1.55
3-Methylpentane	11.99	11.87	0.82	0.88	0.87	0.94	2.02	1.16
2-Methyl-1-pentene	1.13	1.20	ND	ND	ND	ND	0.15	ND
1-Hexene	1.31	0.94	ND	0.69	ND	0.79	0.26	0.53
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	15.62	15.40	1.14	1.44	0.97	1.05	2.00	1.13
trans-2-Hexene	1.42	1.42	ND	ND	ND	ND	0.11	ND
cis-2-Hexene	0.83	0.82	ND	ND	ND	ND	0.10	ND
Methylcyclopentane	7.67	7.58	0.83	0.91	0.76	0.57	1.58	0.77
2,4-Dimethylpentane	2.57	2.75	0.52	0.53	0.55	0.64	0.81	0.62
Benzene	8.75	8.67	1.14	1.17	2.75	3.11	2.81	1.95
Cyclohexane	5.37	5.35	6.02	5.92	3.57	3.59	0.88	0.63
2-Methylhexane	4.31	4.28	0.73	0.44	0.79	0.35	0.82	0.45
2,3-Dimethylpentane	1.99	2.11	0.70	0.42	0.64	0.68	0.71	0.82
3-Methylhexane	5.92	5.92	2.07	2.46	2.12	1.63	3.07	1.21
1-Heptene	1.26	0.95	ND	0.41	0.12	0.17	0.26	ND
2,2,4-Trimethylpentane	7.88	7.79	0.87	0.80	0.75	0.89	1.47	1.22
n-Heptane	6.43	6.30	0.67	0.69	0.60	0.62	1.15	0.65
Methylcyclohexane	6.00	5.79	1.16	1.04	1.08	0.90	1.81	0.86
2,2,3-Trimethylpentane	1.56	0.93	ND	ND	ND	ND	0.14	0.13
2,3,4-Trimethylpentane	3.73	2.94	0.41	0.40	0.34	0.43	0.60	0.46
Toluene	26.09	24.56	5.91	6.48	4.00	4.14	5.47	3.63
2-Methylheptane	1.51	1.47	0.40	0.36	0.45	0.37	0.46	0.34
3-Methylheptane	1.88	1.86	0.32	0.36	0.33	0.40	0.41	0.37
1-Octene	0.54	0.54	ND	0.44	0.17	0.18	0.30	ND
n-Octane	2.69	2.67	0.41	0.44	0.46	0.57	0.76	0.53
Ethylbenzene	5.36	5.19	0.79	0.78	1.07	0.80	1.60	0.78
m-Xylene/p-Xylene	15.76	15.50	1.59	1.54	1.62	1.51	3.99	2.24
Styrene	2.80	2.84	0.99	1.08	0.97	0.92	2.21	0.80
o-Xylene	6.10	6.00	0.73	0.69	0.80	0.75	1.55	0.88
1-Nonene	0.37	0.40	ND	0.32	ND	ND	ND	ND
n-Nonane	2.53	2.53	0.54	0.53	0.56	0.58	0.93	0.57
Isopropylbenzene	0.88	0.93	0.26	0.25	0.43	0.35	0.38	0.19
a-Pinene	83.58	82.10	12.54	12.51	12.85	12.36	24.55	12.77
n-Propylbenzene	2.06	2.08	0.54	0.59	0.68	0.65	1.02	0.55
m-Ethyltoluene	7.25	7.75	1.86	1.60	1.67	2.18	3.15	1.98
p-Ethyltoluene	2.81	3.31	0.87	0.75	0.88	0.88	1.43	0.80
1,3,5-Trimethylbenzene	3.86	3.81	0.58	0.57	0.61	0.69	1.20	0.52
o-Ethyltoluene	2.91	3.17	0.57	0.72	0.61	0.77	1.03	0.67
b-Pinene	11.88	11.03	1.22	1.28	1.68	1.58	3.13	1.42
1,2,4-Trimethylbenzene	12.44	12.26	1.93	2.42	2.17	2.10	3.57	1.71
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	2.72	2.66	0.92	1.00	1.05	1.13	1.79	0.95
1,2,3-Trimethylbenzene	4.78	4.84	1.42	1.32	1.53	1.83	2.24	1.16
m-Diethylbenzene	2.48	2.45	3.84	3.54	4.54	3.56	4.45	2.33
p-Diethylbenzene	2.66	2.46	1.30	1.31	0.88	1.18	2.11	0.95
1-Undecene	0.54	ND	0.66	0.61	ND	0.77	ND	0.97
n-Undecane	3.61	3.63	2.82	3.43	3.68	3.57	4.63	3.78
1-Dodecene	0.25	0.32	0.74	0.75	1.01	0.60	0.62	0.19
n-Dodecane	6.65	6.26	5.43	5.96	7.45	7.63	7.52	4.00
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	11.02	10.17	17.95	19.45	31.85	35.26	20.77	13.89
TNMOC (speciated)	521.33	511.88	115.15	120.23	129.04	135.01	179.82	104.79
TNMOC (w/ unknowns)	617.68	603.18	219.78	210.58	253.23	224.97	309.91	185.43

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 18224	FAND 18248	FAND 18322	FAND 18405	FAND 18437	FAND 18456 D1	FAND 18456 R1	FAND 18457 D2
Sampling Date:	8/22/2000	8/28/2000	9/3/2000	9/15/2000	9/21/2000	9/27/2000	9/27/2000	9/27/2000
Analysis Date:	9/5/2000	9/11/2000	9/12/2000	10/2/2000	10/12/2000	10/26/2000	10/27/2000	10/26/2000
Ethylene	1.36	1.52	1.00	2.62	2.56	2.87	2.83	2.73
Acetylene	0.62	0.70	0.47	1.37	1.25	1.50	1.51	1.41
Ethane	2.39	3.64	2.35	2.61	3.68	2.76	2.74	2.47
Propylene	0.89	1.43	0.81	1.55	1.40	1.35	1.40	1.18
Propane	2.64	5.20	3.80	5.46	7.49	3.90	4.01	1.99
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	0.58	0.79	0.49	1.15	1.63	0.89	0.87	1.03
Isobutene/1-Butene	1.02	1.35	0.79	1.36	1.24	1.14	1.14	1.11
1,3-Butadiene	ND	ND	ND	0.22	0.20	0.20	0.21	0.19
n-Butane	1.35	1.73	0.97	3.06	5.29	2.40	2.45	2.05
trans-2-Butene	0.20	0.31	0.24	0.35	0.42	0.25	0.28	0.28
cis-2-Butene	0.32	0.47	0.34	0.45	0.58	0.37	0.41	0.36
3-Methyl-1-butene	ND	ND	ND	ND	0.11	ND	ND	ND
Isopentane	7.81	3.66	2.32	8.61	6.70	9.02	9.65	9.77
1-Pentene	0.39	0.64	0.30	0.37	0.44	0.33	0.39	0.36
2-Methyl-1-butene	0.11	0.19	0.13	0.31	0.42	0.24	0.23	0.22
n-Pentane	2.65	1.40	0.80	2.55	2.68	1.78	1.84	2.14
Isoprene	1.72	0.54	0.61	0.52	0.32	0.42	0.45	0.39
trans-2-Pentene	0.29	0.37	0.25	0.51	0.58	0.41	0.42	0.38
cis-2-Pentene	0.32	0.44	0.32	0.42	0.47	0.44	0.41	0.39
2-Methyl-2-butene	0.11	0.15	0.10	0.32	0.50	0.29	0.30	0.21
2,2-Dimethylbutane	0.69	1.02	0.44	0.78	0.74	0.61	0.61	0.58
Cyclopentene	0.30	ND	ND	0.14	0.25	0.43	0.48	0.61
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.36	0.45	0.31	0.45	0.47	0.31	0.39	0.40
2,3-Dimethylbutane	0.55	0.67	0.50	0.81	0.90	0.73	0.74	0.71
2-Methylpentane	1.05	0.82	0.44	1.53	1.84	1.05	1.08	0.97
3-Methylpentane	0.64	0.79	0.49	1.16	1.34	0.95	0.94	0.89
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.63	0.98	0.51	0.73	0.67	0.63	0.49	0.71
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	0.74	0.80	0.47	1.15	1.28	0.97	1.00	1.12
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	0.50	0.53	0.36	0.79	0.88	0.57	0.58	0.66
2,4-Dimethylpentane	0.47	0.58	0.41	0.69	0.67	0.56	0.58	0.56
Benzene	1.03	1.30	0.99	1.92	2.02	2.09	2.12	2.17
Cyclohexane	4.32	3.95	0.47	1.03	0.59	0.72	0.73	1.10
2-Methylhexane	0.26	0.23	0.21	0.49	0.53	0.38	0.37	0.33
2,3-Dimethylpentane	0.60	0.64	0.49	0.85	0.90	0.69	0.69	0.70
3-Methylhexane	2.96	2.74	0.68	2.14	1.68	0.44	0.43	0.41
1-Heptene	0.19	0.27	ND	ND	ND	0.21	0.18	0.27
2,2,4-Trimethylpentane	0.78	1.09	0.60	1.35	1.47	0.99	1.05	1.05
n-Heptane	0.84	0.59	0.35	0.75	0.73	0.54	0.52	0.50
Methylcyclohexane	1.81	0.78	0.51	1.35	0.97	0.49	0.47	0.49
2,2,3-Trimethylpentane	ND	ND	ND	0.13	0.17	0.20	0.11	0.18
2,3,4-Trimethylpentane	0.31	0.42	0.30	0.49	0.48	0.40	0.42	0.39
Toluene	2.80	1.97	1.15	3.80	3.98	3.03	3.17	2.94
2-Methylheptane	0.28	0.37	0.21	0.40	0.39	0.41	0.53	0.56
3-Methylheptane	0.32	0.36	0.25	0.42	0.43	0.34	0.30	0.32
1-Octene	0.21	0.36	ND	0.19	ND	ND	ND	0.15
n-Octane	0.61	0.60	0.31	0.59	0.62	0.49	0.53	0.47
Ethylbenzene	0.89	0.66	0.35	0.94	1.09	0.66	0.78	0.68
m-Xylene/p-Xylene	2.28	1.05	0.69	2.59	2.99	1.73	1.87	1.70
Styrene	1.48	0.70	0.46	1.04	1.06	1.05	1.13	1.05
o-Xylene	0.98	0.51	0.37	1.08	1.19	0.72	0.81	0.75
1-Nonene	ND	0.29	ND	ND	ND	0.25	0.21	0.27
n-Nonane	0.92	0.52	0.33	0.70	0.54	0.39	0.45	0.38
Isopropylbenzene	0.44	0.29	0.18	0.23	0.24	0.27	0.31	0.29
a-Pinene	52.72	11.67	9.36	23.10	4.45	3.98	3.95	4.03
n-Propylbenzene	0.51	0.37	0.45	0.52	0.56	0.37	0.31	0.33
m-Ethyltoluene	2.16	1.23	1.02	1.54	1.36	1.22	1.27	1.21
p-Ethyltoluene	1.18	0.92	0.66	0.82	0.92	0.49	0.50	0.54
1,3,5-Trimethylbenzene	0.72	0.39	0.28	0.60	0.56	0.33	0.35	0.31
o-Ethyltoluene	0.83	0.55	0.49	0.71	0.71	0.48	0.45	0.45
b-Pinene	8.28	1.85	1.19	2.29	0.66	0.82	0.83	0.66
1,2,4-Trimethylbenzene	3.02	1.34	1.00	1.88	1.36	1.07	1.09	1.13
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.17	0.78	0.57	1.00	0.90	0.61	0.65	0.65
1,2,3-Trimethylbenzene	1.78	1.19	0.91	1.11	0.84	0.71	0.66	0.54
m-Diethylbenzene	1.23	2.96	2.19	1.94	2.26	1.09	1.16	0.90
p-Diethylbenzene	1.10	1.15	0.62	0.75	1.28	0.44	0.43	0.43
1-Undecene	ND	0.77	0.67	0.79	0.77	0.25	0.37	0.28
n-Undecane	2.12	2.22	2.93	2.49	3.38	1.37	1.29	1.33
1-Dodecene	0.51	0.79	0.27	0.20	0.12	ND	ND	0.13
n-Dodecane	5.16	3.69	3.07	2.71	1.59	1.20	1.33	1.29
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	12.40	14.73	8.55	5.61	4.14	2.44	2.91	2.54
TNMOC (speciated)	149.86	97.43	63.14	112.55	94.89	70.68	73.10	69.74
TNMOC (w/ unknowns)	220.19	158.62	124.38	179.19	153.37	103.53	108.05	105.31

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 18457 R2	FAND 18497	FAND 18543	FAND 18583	FAND 18609	FAND 18648 D1	FAND 18648 R1	FAND 18649 D2
Sampling Date:	9/27/2000	10/3/2000	10/9/2000	10/15/2000	10/21/2000	10/27/2000	10/27/2000	10/27/2000
Analysis Date:	10/27/2000	10/27/2000	10/27/2000	11/2/2000	11/2/2000	11/7/2000	11/7/2000	11/7/2000
Ethylene	2.75	1.39	1.41	1.60	1.88	1.67	1.63	1.60
Acetylene	1.42	0.74	0.85	0.92	1.24	1.14	1.14	1.08
Ethane	2.50	3.77	4.17	3.61	4.47	3.73	3.65	3.62
Propylene	1.17	0.89	0.93	1.01	1.07	0.86	0.84	1.10
Propane	2.06	4.49	5.72	4.61	5.85	3.21	3.13	4.59
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	1.01	1.15	1.27	0.85	1.30	1.16	1.12	1.13
Isobutene/1-Butene	1.09	0.96	0.97	1.28	1.24	1.00	0.96	1.12
1,3-Butadiene	0.14	ND	0.11	0.11	ND	0.12	ND	0.12
n-Butane	2.09	2.09	3.71	2.12	3.59	3.58	3.52	3.36
trans-2-Butene	0.29	0.28	0.33	0.25	0.25	0.31	0.33	0.33
cis-2-Butene	0.40	0.32	0.42	0.41	0.40	0.42	0.42	0.45
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	10.42	10.46	10.10	10.16	9.80	7.13	6.51	10.66
1-Pentene	0.41	0.26	0.25	0.30	0.32	0.30	0.24	0.37
2-Methyl-1-butene	0.19	0.14	0.19	0.15	0.20	0.17	0.15	0.18
n-Pentane	2.08	1.65	1.82	1.55	1.88	1.78	1.79	1.75
Isoprene	0.41	0.25	0.30	0.31	0.45	0.89	0.86	0.95
trans-2-Pentene	0.42	0.33	0.35	0.40	0.37	0.38	0.36	0.39
cis-2-Pentene	0.42	0.39	0.36	0.39	0.36	0.34	0.34	0.37
2-Methyl-2-butene	0.26	0.16	0.23	0.18	0.20	0.24	0.24	0.24
2,2-Dimethylbutane	0.62	0.51	0.50	0.63	0.64	0.66	0.67	0.62
Cyclopentene	0.68	0.49	0.32	0.27	0.48	0.20	0.32	0.34
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.39	0.36	0.39	0.39	0.43	0.42	0.41	0.44
2,3-Dimethylbutane	0.72	0.57	0.64	0.60	0.68	0.68	0.67	0.66
2-Methylpentane	0.96	0.66	0.70	0.58	0.82	0.84	0.85	0.74
3-Methylpentane	0.92	0.60	0.78	0.65	0.82	0.85	0.79	0.79
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.64	0.51	0.48	0.58	0.64	0.57	0.57	0.52
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	0.72	0.68	0.94	0.66	0.93	0.88	0.88	0.82
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	0.11	ND	ND	ND	ND	ND
Methylcyclopentane	0.59	0.44	0.51	0.45	0.53	0.57	0.56	0.51
2,4-Dimethylpentane	0.58	0.41	0.45	0.47	0.44	0.49	0.50	0.51
Benzene	2.28	1.79	1.63	1.84	2.08	1.68	1.68	1.74
Cyclohexane	1.12	13.55	1.86	0.42	0.43	0.37	0.62	0.39
2-Methylhexane	0.36	0.24	0.27	0.29	0.32	0.35	0.37	0.33
2,3-Dimethylpentane	0.74	0.50	0.55	0.60	0.59	0.61	0.61	0.63
3-Methylhexane	0.39	0.32	0.36	0.31	0.38	0.38	0.39	0.36
1-Heptene	0.19	0.21	0.10	0.11	0.11	ND	ND	ND
2,2,4-Trimethylpentane	1.05	0.53	0.52	0.67	0.75	0.87	0.79	0.81
n-Heptane	0.52	0.44	0.44	0.43	0.52	0.52	0.52	0.56
Methylcyclohexane	0.46	0.35	0.38	0.43	0.44	0.52	0.50	0.49
2,2,3-Trimethylpentane	0.12	ND	ND	0.13	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.38	0.24	0.31	0.31	0.32	0.33	0.33	0.31
Toluene	2.96	1.43	2.12	1.95	2.49	2.61	2.56	2.40
2-Methylheptane	0.45	0.32	0.29	0.39	0.45	0.35	0.44	0.50
3-Methylheptane	0.33	0.28	0.30	0.31	0.33	0.35	0.33	0.31
1-Octene	0.20	0.11	ND	ND	ND	ND	ND	ND
n-Octane	0.44	0.44	0.42	0.48	0.47	0.57	0.54	0.53
Ethylbenzene	0.67	0.49	0.62	0.56	0.48	0.54	1.13	0.76
m-Xylene/p-Xylene	1.72	1.07	1.59	1.36	1.50	1.70	1.61	1.59
Styrene	1.06	1.09	1.49	1.28	1.06	1.23	1.04	1.22
o-Xylene	0.75	0.59	0.65	0.66	0.68	0.82	0.80	0.75
1-Nonene	0.24	0.17	ND	ND	0.15	ND	0.22	0.29
n-Nonane	0.37	0.43	0.40	0.44	0.42	0.48	0.47	0.45
Isopropylbenzene	0.30	0.32	0.32	0.35	0.37	0.35	0.35	0.34
a-Pinene	3.88	10.89	4.85	7.11	8.70	14.31	13.74	14.68
n-Propylbenzene	0.34	0.37	0.33	0.37	0.41	0.33	0.36	0.35
m-Ethyltoluene	1.19	0.96	0.87	1.86	0.98	1.43	1.40	1.13
p-Ethyltoluene	0.54	0.52	0.49	0.57	0.57	0.48	0.51	0.53
1,3,5-Trimethylbenzene	0.35	0.30	0.27	0.32	0.30	0.41	0.37	0.45
o-Ethyltoluene	0.47	0.47	0.41	0.47	0.49	0.52	0.43	0.54
b-Pinene	0.64	1.43	1.02	2.21	2.00	1.34	1.21	1.54
1,2,4-Trimethylbenzene	1.20	1.01	0.93	1.08	1.05	1.27	1.13	1.16
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.60	0.74	0.78	0.89	0.76	0.90	0.90	1.92
1,2,3-Trimethylbenzene	0.69	0.75	0.73	0.98	0.90	0.80	0.63	0.65
m-Diethylbenzene	1.01	1.40	1.42	2.01	1.54	0.92	1.03	1.26
p-Diethylbenzene	0.39	0.64	0.53	0.72	0.71	0.60	0.51	0.56
1-Undecene	0.42	0.66	0.60	1.00	0.79	0.35	0.28	0.38
n-Undecane	1.29	1.78	1.51	2.86	2.30	3.63	3.11	4.71
1-Dodecene	0.13	ND	ND	0.11	ND	ND	ND	ND
n-Dodecane	1.40	1.71	0.98	2.68	2.10	6.91	6.66	3.76
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	3.01	3.33	2.28	4.68	3.80	4.30	4.50	3.58
TNMOC (speciated)	70.95	86.80	71.89	78.65	83.01	87.71	85.46	91.29
TNMOC (w/ unknowns)	108.79	133.02	109.50	132.52	127.36	124.33	118.42	128.09

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 18649 R2	FAND 18682	FAND 18715	FAND 18734	FAND 18764	FAND 18796	FAND 18820	FAND 18904
Sampling Date:	10/27/2000	11/2/2000	11/8/2000	11/14/2000	11/20/2000	11/26/2000	12/2/2000	12/8/2000
Analysis Date:	11/7/2000	11/15/2000	11/15/2000	11/20/2000	12/5/2000	12/12/2000	12/18/2000	12/19/2000
Ethylene	1.60	1.05	0.88	1.39	2.09	4.08	2.93	2.09
Acetylene	1.10	0.68	0.54	1.23	1.35	3.44	2.25	1.73
Ethane	3.59	4.91	3.25	10.51	5.12	10.50	5.08	5.09
Propylene	1.04	0.77	0.84	0.90	1.43	1.80	1.84	1.01
Propane	4.52	5.91	4.24	12.50	6.42	12.64	8.37	6.89
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	1.09	1.29	0.77	2.40	1.69	3.47	2.82	1.75
Isobutene/1-Butene	1.07	0.81	1.18	0.97	1.47	1.68	1.69	1.02
1,3-Butadiene	0.11	ND	ND	ND	0.13	0.25	0.19	0.11
n-Butane	3.29	3.03	1.64	5.75	4.89	10.36	6.68	4.34
trans-2-Butene	0.37	0.34	0.27	0.24	0.46	0.46	0.46	0.31
cis-2-Butene	0.44	0.47	0.46	0.40	0.53	0.54	0.58	0.41
3-Methyl-1-butene	ND	ND	ND	ND	ND	0.09	ND	ND
Isopentane	10.87	4.97	6.48	9.58	12.76	8.45	15.87	5.91
1-Pentene	0.28	0.35	0.41	0.37	0.60	0.39	0.43	0.28
2-Methyl-1-butene	0.17	ND	ND	0.14	0.25	0.31	0.30	0.13
n-Pentane	1.78	1.56	1.03	2.49	2.00	3.55	3.29	1.84
Isoprene	0.95	0.44	0.46	0.29	0.33	0.36	0.45	2.61
trans-2-Pentene	0.33	0.34	0.34	0.31	0.37	0.46	0.51	0.31
cis-2-Pentene	0.46	0.46	0.44	0.31	0.44	0.40	0.41	0.31
2-Methyl-2-butene	0.24	ND	ND	0.17	0.29	0.28	0.37	0.17
2,2-Dimethylbutane	0.66	0.64	0.58	0.55	0.56	0.86	0.69	0.53
Cyclopentene	0.34	0.55	0.36	0.54	0.61	0.39	0.60	0.59
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.36	0.44	0.44	0.34	0.44	0.56	0.45	0.35
2,3-Dimethylbutane	0.62	0.68	0.59	0.68	0.62	1.11	0.88	0.61
2-Methylpentane	0.76	0.55	0.36	1.04	0.91	2.36	1.24	1.02
3-Methylpentane	0.78	0.73	0.62	0.87	0.89	1.75	1.27	0.83
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.61	0.71	0.73	0.68	0.90	0.64	0.72	0.57
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	0.85	0.86	0.56	1.40	1.01	1.66	1.28	0.95
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	0.18	ND	ND
Methylcyclopentane	0.54	0.52	0.42	0.59	0.57	0.95	0.87	0.59
2,4-Dimethylpentane	0.48	0.57	0.56	0.45	0.50	0.60	0.71	0.46
Benzene	1.76	1.73	1.53	2.01	2.18	2.66	2.71	2.03
Cyclohexane	0.35	0.45	0.34	0.43	0.54	0.52	2.03	0.45
2-Methylhexane	0.33	0.28	0.23	0.26	0.27	0.55	0.44	0.34
2,3-Dimethylpentane	0.60	0.67	0.61	0.57	0.62	0.76	0.95	0.59
3-Methylhexane	0.36	0.32	0.33	0.39	0.42	0.67	0.70	0.37
1-Heptene	0.11	ND	0.19	0.23	0.54	ND	ND	ND
2,2,4-Trimethylpentane	0.69	0.70	0.45	0.59	0.75	1.40	1.85	0.73
n-Heptane	0.54	0.50	0.45	0.53	0.45	0.67	0.63	0.52
Methylcyclohexane	0.47	0.47	0.49	0.48	0.48	0.71	0.57	0.48
2,2,3-Trimethylpentane	ND	ND	ND	ND	0.17	0.12	0.27	ND
2,3,4-Trimethylpentane	0.29	0.32	0.34	0.32	0.39	0.58	0.78	0.35
Toluene	2.40	1.64	1.09	1.72	2.17	3.28	4.03	2.19
2-Methylheptane	0.43	0.43	0.47	0.42	0.46	0.32	0.38	0.25
3-Methylheptane	0.33	0.38	0.39	0.32	0.34	0.35	0.39	0.34
1-Octene	ND	ND	0.16	0.14	0.34	ND	ND	ND
n-Octane	0.54	0.50	0.49	0.46	0.44	0.50	0.49	0.48
Ethylbenzene	0.94	0.51	0.51	0.52	0.49	0.72	0.76	0.55
m-Xylene/p-Xylene	1.52	1.06	0.82	0.65	1.39	1.98	2.07	1.27
Styrene	1.13	1.01	0.48	0.64	0.30	0.58	0.61	0.54
o-Xylene	0.70	0.52	0.47	0.52	0.61	0.82	0.93	0.58
1-Nonene	0.14	ND	0.17	ND	0.54	0.27	0.17	ND
n-Nonane	0.45	0.44	0.38	0.36	0.28	0.39	0.35	0.40
Isopropylbenzene	0.36	0.43	0.49	0.35	0.21	0.26	0.27	0.27
a-Pinene	13.84	2.30	1.74	1.99	0.41	1.19	1.53	1.46
n-Propylbenzene	0.35	0.47	0.62	0.37	0.29	0.34	0.33	0.20
m-Ethyltoluene	0.99	0.72	0.79	0.62	0.70	0.85	0.82	0.64
p-Ethyltoluene	0.52	0.59	0.64	0.50	0.51	0.46	0.55	0.34
1,3,5-Trimethylbenzene	0.54	0.31	0.33	0.35	0.24	0.35	0.36	0.21
o-Ethyltoluene	0.43	0.44	0.48	0.42	0.33	0.43	0.52	0.32
b-Pinene	1.39	1.12	ND	0.31	ND	0.51	0.44	0.67
1,2,4-Trimethylbenzene	1.08	0.71	0.79	0.71	0.54	0.85	0.91	0.63
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.67	0.99	0.74	1.19	0.72	0.88	0.87	0.61
1,2,3-Trimethylbenzene	0.74	0.73	0.67	0.57	0.39	0.53	0.50	0.43
m-Diethylbenzene	1.17	1.68	0.92	0.99	0.40	0.64	0.73	0.98
p-Diethylbenzene	0.52	0.97	0.66	0.59	0.21	0.34	0.41	0.39
1-Undecene	0.29	0.46	0.45	0.42	0.31	0.29	0.36	0.43
n-Undecane	4.24	2.04	1.93	9.66	0.74	2.29	1.88	1.37
1-Dodecene	ND	ND	ND	ND	ND	0.12	ND	ND
n-Dodecane	3.58	1.29	0.75	18.63	0.36	1.49	0.75	0.72
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	3.85	3.15	0.75	5.72	0.37	0.94	0.42	1.16
TNMOC (speciated)	88.94	63.91	51.55	112.02	70.51	105.12	95.96	66.08
TNMOC (w/ unknowns)	122.93	93.66	74.72	142.69	108.02	138.71	126.18	92.35

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Fargo, ND
Appendix K

Sample No.:	FAND 18924 D1	FAND 18924 R1	FAND 18925 D2	FAND 18925 R2	FAND 18942	FAND 18973
Sampling Date:	12/14/2000	12/14/2000	12/14/2000	12/14/2000	12/20/2000	12/26/2000
Analysis Date:	12/18/2000	12/19/2000	12/18/2000	12/19/2000	1/8/2001	1/9/2001
Ethylene	5.61	5.59	5.52	5.52	1.78	2.35
Acetylene	4.59	4.43	4.48	4.55	1.76	1.97
Ethane	8.63	8.76	8.63	8.64	5.87	8.26
Propylene	2.07	2.11	2.24	2.21	0.81	1.10
Propane	17.09	16.96	17.84	17.67	7.98	10.18
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.71	3.65	3.71	3.64	1.52	2.75
Isobutene/1-Butene	1.67	1.59	1.61	1.64	1.03	0.95
1,3-Butadiene	0.36	0.36	0.36	0.34	ND	0.16
n-Butane	11.78	11.69	11.79	11.76	3.77	6.39
trans-2-Butene	0.56	0.55	0.59	0.59	0.20	0.19
cis-2-Butene	0.74	0.69	0.69	0.69	0.19	0.28
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND
Isopentane	9.06	8.84	8.80	8.31	10.29	7.47
1-Pentene	0.43	0.40	0.41	0.39	0.18	0.21
2-Methyl-1-butene	0.33	0.31	0.32	0.34	0.11	0.18
n-Pentane	4.22	4.09	4.21	4.10	1.83	2.50
Isoprene	0.41	0.43	0.43	0.47	0.30	0.16
trans-2-Pentene	0.58	0.58	0.57	0.56	0.17	0.18
cis-2-Pentene	0.46	0.45	0.44	0.46	0.18	0.14
2-Methyl-2-butene	0.45	0.45	0.45	0.43	0.17	0.18
2,2-Dimethylbutane	0.87	0.87	0.89	0.87	0.34	0.38
Cyclopentene	0.51	0.36	0.61	0.48	0.23	ND
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND
Cyclopentane	0.61	0.60	0.60	0.60	0.20	0.37
2,3-Dimethylbutane	1.01	1.01	0.95	0.98	0.37	0.43
2-Methylpentane	2.33	2.34	1.99	1.96	0.65	0.92
3-Methylpentane	1.80	1.79	1.79	1.80	0.63	0.84
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND
1-Hexene	0.72	0.69	0.71	0.69	0.34	0.33
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.04	2.02	2.04	2.03	0.79	1.50
trans-2-Hexene	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND
Methylcyclopentane	1.24	1.20	1.22	1.24	0.52	0.71
2,4-Dimethylpentane	0.74	0.74	0.76	0.77	0.28	0.29
Benzene	3.25	3.11	3.41	3.38	1.86	2.58
Cyclohexane	0.60	0.61	0.58	0.57	0.28	0.28
2-Methylhexane	0.94	0.79	0.84	0.83	0.26	0.19
2,3-Dimethylpentane	0.99	0.99	0.99	1.01	0.32	0.45
3-Methylhexane	0.97	0.95	0.96	0.94	0.46	0.32
1-Heptene	ND	ND	ND	ND	0.19	0.14
2,2,4-Trimethylpentane	1.74	1.76	1.74	1.77	0.58	0.64
n-Heptane	0.88	0.88	0.93	0.90	0.40	0.50
Methylcyclohexane	0.78	0.77	0.78	0.75	0.33	0.51
2,2,3-Trimethylpentane	0.23	0.34	0.24	0.20	0.14	0.15
2,3,4-Trimethylpentane	0.71	0.70	0.72	0.71	0.29	0.26
Toluene	5.06	4.93	5.57	5.52	1.79	2.08
2-Methylheptane	0.40	0.39	0.41	0.43	0.17	0.20
3-Methylheptane	0.48	0.45	0.48	0.47	0.20	0.20
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.66	0.62	0.67	0.64	0.27	0.36
Ethylbenzene	1.07	1.03	1.14	1.18	0.44	0.44
m-Xylene/p-Xylene	2.86	3.17	3.18	3.19	1.04	1.11
Styrene	0.93	0.93	1.08	0.92	0.47	0.42
o-Xylene	1.25	1.21	1.31	1.31	0.53	0.54
1-Nonene	ND	ND	0.19	ND	ND	ND
n-Nonane	0.53	0.51	0.52	0.55	0.28	0.24
Isopropylbenzene	0.29	0.31	0.30	0.30	0.15	0.15
a-Pinene	1.52	1.46	1.33	1.35	6.11	1.15
n-Propylbenzene	0.33	0.34	0.37	0.40	0.17	0.21
m-Ethyltoluene	0.92	0.98	1.00	0.93	1.04	0.82
p-Ethyltoluene	0.57	0.54	0.55	0.60	0.25	0.32
1,3,5-Trimethylbenzene	0.50	0.46	0.57	0.59	0.14	0.19
o-Ethyltoluene	0.52	0.46	0.45	0.53	0.27	0.24
b-Pinene	0.19	0.14	0.63	0.53	0.28	0.31
1,2,4-Trimethylbenzene	1.15	1.14	1.21	1.25	0.72	0.54
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.81	0.56	0.84	0.85	0.49	0.43
1,2,3-Trimethylbenzene	0.31	0.39	0.45	0.45	0.44	0.47
m-Diethylbenzene	0.33	0.38	0.63	0.58	0.49	0.65
p-Diethylbenzene	0.25	0.25	0.27	0.34	0.25	0.34
1-Undecene	0.12	0.14	0.18	0.17	0.20	0.30
n-Undecane	0.91	0.90	1.43	1.22	1.45	1.02
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	0.74	0.51	0.80	0.75	1.27	0.49
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.55	0.37	0.93	0.96	0.80	0.56
TNMOC (speciated)	118.91	117.00	122.31	120.76	67.27	71.08
TNMOC (w/ unknowns)	140.21	134.79	147.00	143.49	92.28	98.34

Reported in ppbC

NR - Not reported due to a large interfering non-target peak.

1999/2000 SNMOC Raw Monitoring Data - Muscatine, IA

Appendix K

Sample No.:	MUIA 18595	MUIA 18620	MUIA 18694	MUIA 18748	MUIA 18909
Sampling Date:	10/11/2000	10/21/2000	11/2/2000	11/14/2000	12/8/2000
Analysis Date:	11/1/2000	11/7/2000	11/8/2000	11/20/2000	12/19/2000
Filename:	L0KA010	L0KF020	L0KG021	L0KT010	L0LS013
Ethylene	5.26	4.21	4.81	1.60	5.36
Acetylene	3.98	2.98	3.54	1.30	3.91
Ethane	10.17	15.10	7.38	4.19	8.52
Propylene	2.56	2.32	2.48	1.22	2.52
Propane	11.88	19.11	10.56	5.58	12.25
Propyne	ND	ND	ND	ND	ND
Isobutane	3.96	3.99	2.55	0.83	4.47
Isobutene/1-Butene	1.99	1.66	1.77	1.10	2.02
1,3-Butadiene	0.42	0.28	0.39	ND	0.33
n-Butane	15.63	16.61	10.31	2.46	19.36
trans-2-Butene	0.72	0.51	0.55	0.31	0.76
cis-2-Butene	0.85	0.62	0.67	0.42	0.82
3-Methyl-1-butene	ND	ND	0.14	ND	ND
Isopentane	32.90	26.77	14.09	11.49	24.85
1-Pentene	0.88	0.72	0.61	0.57	0.50
2-Methyl-1-butene	1.16	0.72	0.58	0.13	0.50
n-Pentane	7.74	6.12	4.04	1.16	4.28
Isoprene	0.57	0.44	0.51	0.35	0.39
trans-2-Pentene	1.59	0.88	0.89	0.33	0.71
cis-2-Pentene	0.97	0.64	0.63	0.36	0.55
2-Methyl-2-butene	1.78	0.77	0.90	0.18	0.74
2,2-Dimethylbutane	1.39	1.13	0.95	0.56	1.05
Cyclopentene	1.00	0.59	0.44	0.22	0.81
4-Methyl-1-pentene	ND	ND	ND	ND	ND
Cyclopentane	0.98	0.80	0.65	0.37	0.60
2,3-Dimethylbutane	2.14	1.54	1.27	0.51	1.09
2-Methylpentane	5.12	3.31	2.62	0.65	1.89
3-Methylpentane	3.72	2.58	2.17	0.76	1.73
2-Methyl-1-pentene	0.30	ND	ND	ND	ND
1-Hexene	0.81	0.90	0.90	0.92	0.77
2-Ethyl-1-butene	ND	ND	ND	ND	ND
n-Hexane	3.68	2.54	2.38	0.88	1.92
trans-2-Hexene	ND	ND	ND	ND	ND
cis-2-Hexene	0.25	ND	ND	ND	ND
Methylcyclopentane	2.31	1.62	1.36	0.45	1.05
2,4-Dimethylpentane	1.36	1.05	0.94	0.51	0.73
Benzene	4.64	3.68	3.77	1.67	3.20
Cyclohexane	1.31	0.57	15.82	0.50	0.46
2-Methylhexane	1.33	1.00	0.92	0.31	0.50
2,3-Dimethylpentane	1.58	1.31	1.18	0.66	0.85
3-Methylhexane	1.54	1.17	1.06	0.36	0.62
1-Heptene	0.44	ND	0.36	0.51	ND
2,2,4-Trimethylpentane	2.76	2.77	1.84	0.70	1.45
n-Heptane	1.35	1.18	0.96	0.46	0.76
Methylcyclohexane	0.96	0.81	0.76	0.43	0.71
2,2,3-Trimethylpentane	0.57	0.56	0.31	ND	0.30
2,3,4-Trimethylpentane	0.96	0.95	0.75	0.41	0.52
Toluene	11.05	8.15	7.09	2.63	4.46
2-Methylheptane	0.87	0.67	0.64	0.35	0.43
3-Methylheptane	0.67	0.56	0.54	0.32	0.42
1-Octene	ND	0.19	0.14	0.39	0.12
n-Octane	0.94	0.81	0.65	0.44	0.50
Ethylbenzene	2.61	2.43	1.93	0.96	0.82
m-Xylene/p-Xylene	6.09	5.04	6.29	2.58	2.10
Styrene	1.95	3.61	1.54	0.52	1.19
o-Xylene	2.22	2.11	2.06	0.83	1.02
1-Nonene	0.30	0.65	0.32	0.43	0.24
n-Nonane	0.59	0.68	0.47	0.35	0.32
Isopropylbenzene	0.43	0.59	0.31	0.43	0.35
a-Pinene	0.25	0.32	0.34	ND	ND
n-Propylbenzene	0.65	1.46	0.50	0.43	0.38
m-Ethyltoluene	1.65	4.25	1.24	0.74	0.82
p-Ethyltoluene	0.94	2.12	0.73	0.53	0.55
1,3,5-Trimethylbenzene	0.99	2.29	0.81	0.48	0.52
o-Ethyltoluene	0.82	1.93	0.70	0.46	0.48
b-Pinene	ND	ND	0.81	ND	0.32
1,2,4-Trimethylbenzene	2.59	4.23	2.01	1.20	1.23
1-Decene	ND	ND	ND	ND	ND
n-Decane	0.86	1.73	0.86	0.44	0.50
1,2,3-Trimethylbenzene	0.58	1.51	0.52	0.36	0.34
m-Diethylbenzene	0.64	0.61	0.45	0.31	0.36
p-Diethylbenzene	0.30	0.40	0.27	0.22	0.19
1-Undecene	ND	ND	ND	0.65	ND
n-Undecane	0.48	2.88	0.74	0.57	0.76
1-Dodecene	0.19	0.16	ND	0.11	ND
n-Dodecane	0.34	2.04	0.39	0.54	0.66
1-Tridecene	ND	ND	ND	ND	ND
n-Tridecane	0.55	0.43	0.14	0.16	0.43
TNMOC (speciated)	185.02	186.35	141.26	62.78	133.33
TNMOC (w/ unknowns)	247.09	215.25	166.74	86.40	164.95

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 17314	SFSD 17374	SFSD 17382	SFSD 17375	SFSD 17396	SFSD 17425	SFSD 17455 D1	SFSD 17455 R1
Sampling Date:	3/1/2000	3/19/2000	3/25/2000	3/27/2000	3/31/2000	4/6/2000	4/14/2000	4/14/2000
Analysis Date:	VOID	4/3/2000	4/3/2000	4/4/2000	4/10/2000	4/12/2000	5/2/2000	5/3/2000
Ethylene		1.58	1.01	2.10	2.19	1.21	1.94	1.97
Acetylene		2.12	1.43	2.47	1.95	1.56	2.09	2.03
Ethane		5.90	5.50	8.46	9.20	4.76	9.40	9.42
Propylene		1.20	0.83	1.70	1.18	0.88	1.28	1.30
Propane		10.42	21.33	13.41	6.75	5.33	9.98	10.03
Propyne		ND	ND	ND	ND	ND	ND	ND
Isobutane		1.42	2.01	1.79	1.93	0.80	1.74	1.79
Isobutene/1-Butene		1.48	1.11	1.70	1.63	1.95	1.39	1.35
1,3-Butadiene		ND	ND	ND	ND	ND	0.10	0.13
n-Butane		3.24	15.60	4.71	4.12	1.87	3.96	3.98
trans-2-Butene		0.32	0.25	0.34	0.34	0.30	0.35	0.31
cis-2-Butene		0.44	0.40	0.49	0.44	0.39	0.49	0.51
3-Methyl-1-butene		ND	ND	ND	ND	ND	ND	ND
Isopentane		3.01	3.58	4.68	4.71	2.12	3.41	3.40
1-Pentene		0.40	0.44	0.45	0.48	0.29	0.36	0.34
2-Methyl-1-butene		0.41	ND	0.48	0.37	0.25	0.31	0.37
n-Pentane		1.79	1.17	2.23	3.22	1.04	2.46	2.48
Isoprene		0.33	0.32	0.33	0.31	0.29	0.34	0.35
trans-2-Pentene		0.34	0.36	0.35	0.40	0.29	0.40	0.35
cis-2-Pentene		0.41	0.39	0.40	0.39	0.35	0.43	0.46
2-Methyl-2-butene		0.31	0.11	0.39	0.32	0.18	0.31	0.32
2,2-Dimethylbutane		0.65	0.56	0.72	0.75	0.53	0.72	0.75
Cyclopentene		0.22	0.18	0.36	0.26	0.32	0.26	0.24
4-Methyl-1-pentene		ND	ND	ND	ND	ND	ND	ND
Cyclopentane		0.43	0.36	0.47	0.47	0.36	0.48	0.44
2,3-Dimethylbutane		0.72	0.65	0.79	0.75	0.59	0.81	0.80
2-Methylpentane		1.79	1.84	1.85	1.40	1.13	1.88	2.03
3-Methylpentane		0.82	0.68	0.91	0.99	0.63	0.99	0.98
2-Methyl-1-pentene		ND	ND	ND	ND	ND	0.11	ND
1-Hexene		ND	ND	ND	0.21	ND	0.12	ND
2-Ethyl-1-butene		ND	ND	ND	ND	ND	ND	ND
n-Hexane		0.56	0.91	0.68	0.96	0.61	1.06	1.05
trans-2-Hexene		ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene		ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane		0.55	0.50	0.58	0.69	0.45	0.80	0.68
2,4-Dimethylpentane		0.56	0.54	0.56	0.60	0.51	0.61	0.62
Benzene		1.83	1.31	2.22	1.77	1.28	1.86	1.86
Cyclohexane		1.99	3.34	0.97	8.16	0.48	1.40	1.42
2-Methylhexane		0.22	0.28	0.23	0.32	0.28	0.26	0.27
2,3-Dimethylpentane		0.66	0.68	0.70	0.80	0.67	0.62	0.61
3-Methylhexane		1.38	0.74	1.60	1.21	0.81	2.13	2.19
1-Heptene		ND	ND	0.12	0.19	ND	0.11	0.13
2,2,4-Trimethylpentane		0.83	0.67	0.90	1.06	0.65	0.89	0.94
n-Heptane		0.50	0.46	0.57	0.59	0.45	0.66	0.63
Methylcyclohexane		0.57	0.64	0.68	0.58	0.54	0.68	0.70
2,2,3-Trimethylpentane		ND	ND	ND	ND	ND	0.12	0.12
2,3,4-Trimethylpentane		0.33	0.35	0.36	0.42	0.35	0.41	0.46
Toluene		2.66	2.23	3.44	3.51	2.00	2.82	2.76
2-Methylheptane		0.37	0.35	0.46	0.42	0.38	0.47	0.47
3-Methylheptane		0.36	0.34	0.33	0.40	0.34	0.38	0.39
1-Octene		0.14	ND	0.16	0.19	ND	0.12	0.12
n-Octane		0.44	0.49	0.47	0.51	0.44	0.55	0.53
Ethylbenzene		0.59	0.47	0.67	0.64	0.44	0.59	0.61
m-Xylene/p-Xylene		1.44	0.93	1.56	1.56	1.06	1.38	1.38
Styrene		0.37	0.23	0.44	0.34	0.35	0.39	0.30
o-Xylene		0.59	0.59	0.71	0.71	0.43	0.65	0.65
1-Nonene		ND	ND	ND	ND	ND	0.12	0.10
n-Nonane		0.38	1.40	0.40	0.66	0.35	0.40	0.40
Isopropylbenzene		0.38	0.45	0.33	0.33	0.28	0.30	0.35
a-Pinene		ND	0.13	ND	ND	ND	ND	ND
n-Propylbenzene		0.67	0.38	0.72	0.54	0.60	0.59	0.61
m-Ethyltoluene		1.00	0.45	1.11	1.07	1.01	1.12	0.84
p-Ethyltoluene		0.61	0.49	0.62	0.66	0.51	0.73	0.68
1,3,5-Trimethylbenzene		0.19	0.59	0.22	0.58	0.30	0.29	0.29
o-Ethyltoluene		0.41	0.58	0.43	0.56	0.48	0.43	0.38
b-Pinene		0.56	ND	ND	0.56	0.94	1.43	1.46
1,2,4-Trimethylbenzene		0.72	0.80	0.87	0.67	0.78	0.79	0.83
1-Decene		ND	ND	ND	ND	ND	ND	ND
n-Decane		0.76	1.97	0.79	1.77	0.61	0.70	0.62
1,2,3-Trimethylbenzene		0.48	0.29	0.46	0.37	0.40	0.63	0.54
m-Diethylbenzene		0.77	0.27	0.91	0.71	0.62	1.27	1.13
p-Diethylbenzene		1.23	0.30	1.32	0.83	1.10	0.77	0.86
1-Undecene		0.44	ND	0.53	0.23	0.42	0.68	0.35
n-Undecane		2.65	1.12	2.12	2.48	1.90	2.61	2.41
1-Dodecene		ND	ND	ND	ND	ND	0.15	ND
n-Dodecane		0.14	0.13	0.15	0.10	0.15	0.12	0.21
1-Tridecene		ND	ND	ND	ND	ND	ND	ND
n-Tridecane		ND	ND	ND	ND	ND	0.22	0.71
TNMOC (speciated)		68.09	85.50	80.93	82.51	50.39	78.36	77.74
TNMOC (w/ unknowns)		150.89	145.32	180.26	140.08	111.52	146.43	147.69

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1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 17456 D2	SFSD 17456 R2	SFSD 17459 D1	SFSD 17459 R1	SFSD 17460 D2	SFSD 17460 R2	SFSD 17472	SFSD 17479
Sampling Date:	4/14/2000	4/14/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/24/2000	4/30/2000
Analysis Date:	5/2/2000	5/3/2000	5/2/2000	5/3/2000	5/2/2000	5/3/2000	5/2/2000	5/11/2000
Ethylene	4.678	4.356	1.914	1.946	1.986	1.95	1.846	1.294
Acetylene	2.416	2.366	2.206	2.222	2.2	2.074	1.958	1.36
Ethane	8.478	8.27	6.462	6.384	6.416	6.398	5.238	4.54
Propylene	1.612	1.532	1.138	1.146	0.974	0.922	1.202	0.962
Propane	7.468	8.098	6.992	7.034	6.096	6.046	7.824	4.72
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	8.184	5.664	1.462	1.486	1.554	1.57	2.656	0.954
Isobutene/1-Butene	1.508	1.516	1.254	1.326	1.232	1.268	1.572	1.218
1,3-Butadiene	0.116	0.1	ND	ND	0.114	ND	0.104	ND
n-Butane	4.516	5.184	4.326	4.326	4.816	4.804	4.236	1.982
trans-2-Butene	0.454	0.432	0.334	0.35	0.312	0.31	0.218	0.29
cis-2-Butene	0.586	0.514	0.47	0.5	0.488	0.456	0.49	0.426
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	3.996	3.766	15.044	14.942	26.94	26.126	59.776	3.862
1-Pentene	0.402	0.404	0.46	0.35	0.364	0.426	0.4	0.34
2-Methyl-1-butene	0.336	0.334	0.28	0.268	0.254	0.22	ND	0.28
n-Pentane	2.032	1.784	3.994	3.812	6.72	6.136	13.636	0.962
Isoprene	0.532	0.518	0.48	0.464	0.45	0.456	0.384	0.914
trans-2-Pentene	0.43	0.414	0.41	0.372	0.37	0.342	0.428	0.352
cis-2-Pentene	0.418	0.398	0.424	0.416	0.394	0.388	0.378	0.418
2-Methyl-2-butene	0.384	0.34	0.286	0.262	0.26	0.25	0.304	0.234
2,2-Dimethylbutane	0.744	0.702	0.714	0.738	0.708	0.686	0.864	0.644
Cyclopentene	0.264	0.268	0.354	0.346	0.662	0.712	0.456	0.356
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	0.1	ND
Cyclopentane	0.448	0.468	0.45	0.494	0.536	0.522	0.908	0.308
2,3-Dimethylbutane	0.822	0.782	0.782	0.792	0.77	0.764	0.786	0.68
2-Methylpentane	1.85	1.614	1.512	1.562	1.624	1.87	2.73	1.562
3-Methylpentane	1.046	0.99	0.938	0.956	0.932	0.966	1.134	0.748
2-Methyl-1-pentene	ND	0.1	ND	ND	ND	ND	ND	ND
1-Hexene	0.124	0.118	0.212	0.136	0.114	0.118	0.14	ND
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.53	1.244	0.686	0.646	1.204	1.172	1.378	0.912
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	0.65	0.698	0.612	0.59	0.616	0.612	0.844	0.5
2,4-Dimethylpentane	0.662	0.61	0.614	0.594	0.616	0.602	0.612	0.576
Benzene	2.45	2.39	1.89	1.89	1.848	1.948	1.968	1.258
Cyclohexane	2.73	2.862	1.074	1.08	1.42	1.41	8.882	0.686
2-Methylhexane	0.432	0.442	0.448	0.444	0.486	0.456	0.534	0.27
2,3-Dimethylpentane	0.732	0.82	0.914	0.88	0.902	0.828	0.67	0.698
3-Methylhexane	1.652	1.696	1.866	1.96	2.214	2.416	2.74	1.28
1-Heptene	0.106	0.164	0.116	0.108	0.122	0.122	ND	ND
2,2,4-Trimethylpentane	1.212	1.152	0.988	1.006	1.224	1.172	1.732	0.796
n-Heptane	0.68	0.71	0.684	0.684	0.792	0.796	0.99	0.452
Methylcyclohexane	0.792	0.848	0.62	0.63	0.658	0.696	1.034	0.652
2,2,3-Trimethylpentane	0.096	ND	0.092	ND	ND	0.124	0.194	ND
2,3,4-Trimethylpentane	0.476	0.456	0.382	0.396	0.38	0.404	0.556	0.384
Toluene	4.588	4.454	7.486	7.396	12.298	12.43	20.096	3.33
2-Methylheptane	0.416	0.462	0.452	0.382	0.476	0.426	0.622	0.436
3-Methylheptane	0.434	0.39	0.426	0.4	0.5	0.482	0.52	0.36
1-Octene	0.146	0.15	0.136	0.164	0.216	0.18	0.218	ND
n-Octane	0.554	0.57	0.7	0.69	0.998	0.998	1.462	0.506
Ethylbenzene	0.876	0.84	0.78	0.794	1.016	1.012	1.884	0.628
m-Xylene/p-Xylene	1.986	1.91	1.734	1.746	1.992	1.96	3.084	1.318
Styrene	0.318	0.322	1.028	0.974	1.824	1.59	3.414	0.282
o-Xylene	0.864	0.834	0.73	0.708	0.938	0.906	1.426	0.672
1-Nonene	0.106	0.13	0.128	0.114	0.148	0.152	0.154	0.1
n-Nonane	0.388	0.516	0.562	0.576	0.736	0.724	1.024	0.39
Isopropylbenzene	0.498	0.324	0.43	0.372	0.418	0.388	0.51	0.29
a-Pinene	0.274	0.338	1.048	1.018	2.114	2.152	4.262	ND
n-Propylbenzene	0.564	0.44	0.466	0.544	0.672	0.632	0.972	0.498
m-Ethyltoluene	0.91	0.9	1.05	0.986	0.924	1.082	1.584	1.146
p-Ethyltoluene	0.642	0.65	0.55	0.56	0.626	0.612	0.542	0.648
1,3,5-Trimethylbenzene	0.318	0.332	0.274	0.328	0.298	0.316	0.37	0.236
o-Ethyltoluene	0.374	0.454	0.36	0.398	0.418	0.378	0.596	0.446
b-Pinene	0.752	0.704	0.368	0.464	0.546	1.14	1.214	0.846
1,2,4-Trimethylbenzene	0.976	0.94	0.758	0.796	0.784	0.828	0.936	0.694
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.532	0.6	0.9	0.736	0.804	0.826	1.874	0.686
1,2,3-Trimethylbenzene	0.564	0.39	3.852	3.78	0.406	0.376	0.724	0.392
m-Diethylbenzene	0.912	0.638	0.606	0.382	0.428	0.408	0.486	0.392
p-Diethylbenzene	0.502	0.468	1.1	0.552	0.38	0.42	0.716	0.754
1-Undecene	0.264	0.234	0.282	0.272	0.272	0.28	0.404	0.394
n-Undecane	1.772	2.008	2.374	2.214	2.454	2.2	3.614	2.236
1-Dodecene	0.13	0.108	ND	ND	0.136	0.108	0.174	0.156
n-Dodecane	0.152	0.144	0.118	0.366	0.642	0.642	1.012	0.272
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	0.276	0.23	0.31	0.128	0.294	0.186	0.31
TNMOC (speciated)	88.86	85.65	92.81	91.56	113.36	112.48	185.98	56.29
TNMOC (w/ unknowns)	128.11	122.00	142.46	142.99	164.17	167.14	339.72	120.30

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1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 17499	SFSD 17500	SFSD 17514	SFSD 17568	SFSD 17541 D1	SFSD 17542 D2	SFSD 17604 D1	SFSD 17604 R1
Sampling Date:	5/6/2000	5/12/2000	5/18/2000	5/24/2000	5/30/2000	5/30/2000	6/5/2000	6/5/2000
Analysis Date:	6/2/2000	6/2/2000	6/22/2000	VOID	VOID	VOID	6/22/2000	6/23/2000
Ethylene	1.87	2.012	1.653				1.893	1.946
Acetylene	2.612	1.822	1.483				1.617	1.627
Ethane	4.916	8.824	4.163				3.666	3.691
Propylene	1.548	1.224	1.232				1.333	1.308
Propane	7.922	9.458	3.94				4.796	4.851
Propyne	ND	ND	ND				ND	ND
Isobutane	1.93	2.284	0.949				0.896	0.979
Isobutene/1-Butene	1.578	1.274	9.17				1.308	1.414
1,3-Butadiene	0.166	0.128	ND				0.161	0.128
n-Butane	3.58	4.486	1.891				2.614	2.943
trans-2-Butene	0.338	0.336	0.501				0.555	0.54
cis-2-Butene	0.486	0.478	0.669				0.65	0.645
3-Methyl-1-butene	ND	ND	ND				ND	ND
Isopentane	8.922	7.244	3.346				3.812	4.005
1-Pentene	0.526	0.574	0.531				0.542	0.557
2-Methyl-1-butene	0.378	0.376	0.343				0.284	0.279
n-Pentane	3.446	2.41	1.853				1.439	1.589
Isoprene	0.818	2.49	0.363				0.726	0.665
trans-2-Pentene	0.418	0.498	0.566				0.567	0.625
cis-2-Pentene	0.434	0.5	0.641				0.648	0.691
2-Methyl-2-butene	0.32	0.268	0.859				0.271	0.334
2,2-Dimethylbutane	0.886	0.938	7.441				0.964	0.952
Cyclopentene	0.48	0.544	0.283				0.121	0.166
4-Methyl-1-pentene	ND	ND	ND				0.141	0.173
Cyclopentane	0.554	0.51	0.584				0.63	0.623
2,3-Dimethylbutane	0.9	0.952	1.049				1.132	1.105
2-Methylpentane	2.718	3.45	1.473				1.283	1.371
3-Methylpentane	1.066	1.238	1.082				1.137	1.263
2-Methyl-1-pentene	ND	ND	ND				ND	0.133
1-Hexene	0.322	0.16	ND				ND	0.128
2-Ethyl-1-butene	ND	ND	ND				ND	ND
n-Hexane	1.178	1.28	0.992				ND	1.1
trans-2-Hexene	ND	ND	ND				ND	0.136
cis-2-Hexene	ND	ND	ND				ND	ND
Methylcyclopentane	0.562	0.954	0.679				0.756	0.809
2,4-Dimethylpentane	0.67	0.766	0.859				0.967	0.851
Benzene	1.588	1.89	1.525				1.454	1.514
Cyclohexane	1.692	6.39	1.102				0.874	0.788
2-Methylhexane	0.478	0.668	0.591				0.497	0.5
2,3-Dimethylpentane	0.876	0.872	0.962				1.273	1.165
3-Methylhexane	2.344	1.77	1.58				1.281	1.527
1-Heptene	0.164	0.104	0.148				0.153	0.118
2,2,4-Trimethylpentane	1.374	1.36	1.157				1.145	1.203
n-Heptane	0.622	0.714	0.879				0.638	0.683
Methylcyclohexane	0.736	0.884	1.092				0.781	0.773
2,2,3-Trimethylpentane	ND	0.164	0.303				ND	0.173
2,3,4-Trimethylpentane	0.482	0.644	0.601				0.65	0.628
Toluene	4.246	4.594	3.684				2.95	3.264
2-Methylheptane	0.484	0.498	0.716				0.588	0.593
3-Methylheptane	0.418	0.42	0.498				0.567	0.555
1-Octene	0.292	0.13	ND				ND	0.128
n-Octane	0.594	0.546	1.012				0.638	0.713
Ethylbenzene	0.688	0.882	0.769				1.333	1.391
m-Xylene/p-Xylene	1.552	1.98	1.593				3.432	3.606
Styrene	0.504	0.39	0.393				0.362	0.419
o-Xylene	0.622	0.754	0.779				1.278	1.363
1-Nonene	0.254	ND	0.386				ND	ND
n-Nonane	0.44	0.476	0.834				0.52	0.562
Isopropylbenzene	0.384	0.428	0.641				0.691	0.449
a-Pinene	0.83	1.854	0.521				0.163	0.244
n-Propylbenzene	0.758	0.572	0.992				0.62	0.655
m-Ethyltoluene	1.076	1.212	0.857				0.919	1.002
p-Ethyltoluene	0.544	0.644	1.095				0.884	0.937
1,3,5-Trimethylbenzene	0.222	0.292	0.654				0.598	0.557
o-Ethyltoluene	0.474	0.572	0.626				0.603	0.663
b-Pinene	1.17	1.682	0.318				0.688	0.68
1,2,4-Trimethylbenzene	0.782	1.596	0.909				1.215	1.155
1-Decene	ND	ND	ND				ND	ND
n-Decane	0.648	0.706	0.621				0.585	0.505
1,2,3-Trimethylbenzene	0.67	ND	0.406				0.613	0.485
m-Diethylbenzene	0.52	1.88	2.793				1.461	1.321
p-Diethylbenzene	0.64	0.888	0.584				0.567	0.515
1-Undecene	0.454	ND	1.205				0.432	0.748
n-Undecane	2.124	3.078	1.876				1.215	1.092
1-Dodecene	0.112	0.222	0.378				0.186	0.191
n-Dodecane	0.17	0.384	0.323				0.108	ND
1-Tridecene	0.476	0.484	ND				ND	ND
n-Tridecane	0.116	0.486	0.18				ND	0.138
TNMOC (speciated)	84.16	100.59	84.18				66.87	70.63
TNMOC (w/ unknowns)	138.09	154.22	119.49				88.37	90.55

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1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 17605 D2	SFSD 17605 R2	SFSD 17602	SFSD 17682	SFSD 17849 D1	SFSD 17849 R1	SFSD 17850 D2	SFSD 17807 R2
Sampling Date:	6/5/2000	6/5/2000	6/11/2000	6/17/2000	6/23/2000	6/23/2000	6/23/2000	6/23/2000
Analysis Date:	6/22/2000	6/23/2000	6/23/2000	VOID	7/19/2000	7/20/2000	7/19/2000	7/20/2000
Ethylene	1.908	1.906	1.449		1.154	1.164	1.072	1.107
Acetylene	1.652	1.645	1.255		1.03	1.05	1.037	1.129
Ethane	3.711	3.731	3.726		6.221	6.275	6.054	6.087
Propylene	1.301	1.363	1.082		0.839	0.888	0.695	0.702
Propane	4.216	4.336	4.914		8.831	8.863	7.933	8.022
Propyne	ND	ND	ND		ND	ND	ND	ND
Isobutane	1.198	1.137	1.067		1.365	1.39	1.303	1.38
Isobutene/1-Butene	1.371	1.286	2.699		1.099	1.03	0.878	0.968
1,3-Butadiene	0.161	0.136	0.153		ND	ND	ND	ND
n-Butane	4.341	4.306	2.428		3.804	3.784	3.7	3.858
trans-2-Butene	0.482	0.502	0.495		0.333	0.38	0.35	0.372
cis-2-Butene	0.728	0.718	0.691		0.551	0.551	0.491	0.566
3-Methyl-1-butene	0.158	ND	ND		ND	ND	ND	ND
Isopentane	5.946	4.334	4.05		30.764	30.684	31.543	31.664
1-Pentene	0.753	0.65	0.623		2.273	2.201	2.248	2.233
2-Methyl-1-butene	0.394	0.424	0.336		ND	ND	ND	ND
n-Pentane	2.571	2.569	1.758		6.469	6.779	6.712	6.757
Isoprene	0.683	0.713	1.215		2.732	2.754	2.638	2.685
trans-2-Pentene	0.751	0.766	0.663		0.429	0.474	0.424	0.452
cis-2-Pentene	0.748	0.806	0.673		0.546	0.563	0.496	0.551
2-Methyl-2-butene	0.53	0.522	0.429		0.174	0.149	ND	0.146
2,2-Dimethylbutane	1.348	1.414	0.997		1.176	1.06	1.047	1.159
Cyclopentene	0.128	0.123	0.505		0.342	0.404	0.362	0.385
4-Methyl-1-pentene	0.196	0.131	ND		ND	ND	ND	ND
Cyclopentane	0.743	0.741	0.593		0.64	0.667	0.623	0.66
2,3-Dimethylbutane	1.306	1.338	1.1		0.898	0.891	0.861	0.903
2-Methylpentane	2.205	2.162	1.316		2.33	1.474	1.412	1.568
3-Methylpentane	1.758	1.73	1.26		0.883	0.933	0.896	0.965
2-Methyl-1-pentene	0.188	0.178	0.136		ND	ND	ND	ND
1-Hexene	0.186	0.198	0.186		ND	ND	ND	ND
2-Ethyl-1-butene	ND	ND	ND		ND	ND	ND	ND
n-Hexane	ND	1.592	0.819		0.883	0.868	0.918	0.968
trans-2-Hexene	ND	0.166	ND		ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND		ND	ND	ND	ND
Methylcyclopentane	1.087	1.077	0.781		0.648	0.548	0.613	0.625
2,4-Dimethylpentane	1.075	1.029	0.932		0.707	0.722	0.715	0.747
Benzene	2.104	2.031	1.451		1.136	1.117	1.404	1.392
Cyclohexane	0.881	0.876	0.721		2.313	2.35	2.084	2.084
2-Methylhexane	0.685	0.678	0.49		0.372	0.29	0.362	0.345
2,3-Dimethylpentane	1.333	1.336	1.145		0.749	0.787	0.893	0.859
3-Methylhexane	2.107	2.421	1.677		3.923	3.05	2.278	2.457
1-Heptene	0.168	0.256	0.153		ND	ND	ND	ND
2,2,4-Trimethylpentane	1.82	1.856	1.137		1.275	1.28	1.206	1.285
n-Heptane	0.866	0.889	0.628		0.712	0.836	0.747	0.789
Methylcyclohexane	0.881	0.854	0.708		0.846	0.792	0.794	0.794
2,2,3-Trimethylpentane	0.239	0.216	ND		0.124	0.156	ND	ND
2,3,4-Trimethylpentane	0.806	0.771	0.562		0.481	0.499	0.543	0.593
Toluene	4.713	4.894	2.84		14.898	14.528	14.464	15.092
2-Methylheptane	0.65	0.66	0.562		0.61	0.608	0.596	0.586
3-Methylheptane	0.683	0.653	0.532		0.583	0.613	0.558	0.571
1-Octene	0.231	0.221	0.166		0.159	0.151	0.139	0.156
n-Octane	0.803	0.849	0.625		1.218	1.154	1.159	1.238
Ethylbenzene	1.529	1.753	0.844		2.33	2.176	2.035	2.104
m-Xylene/p-Xylene	4.005	4.402	1.717		2.844	2.645	2.625	2.752
Styrene	0.399	0.5	0.507		3.226	3.231	3.062	3.171
o-Xylene	1.519	1.715	0.788		1.372	1.261	1.231	1.293
1-Nonene	0.206	0.218	ND		ND	ND	ND	ND
n-Nonane	0.6	0.688	0.635		1.04	1.002	1.017	1.045
Isopropylbenzene	0.459	0.532	0.62		0.782	0.734	0.836	0.861
a-Pinene	0.419	0.532	0.6		3.576	3.471	3.466	3.484
n-Propylbenzene	0.743	0.881	0.788		0.913	0.846	0.799	0.816
m-Ethyltoluene	1.042	1.178	0.997		1.146	1.236	0.975	1.109
p-Ethyltoluene	1.029	1.173	1.147		0.739	0.72	0.62	0.692
1,3,5-Trimethylbenzene	0.693	0.743	0.703		0.501	0.491	0.466	0.459
o-Ethyltoluene	0.648	0.763	0.916		0.69	0.66	0.615	0.722
b-Pinene	1.263	1.459	1.444		2.898	2.471	2.521	2.896
1,2,4-Trimethylbenzene	1.235	1.557	1.175		1.045	0.99	0.98	1.015
1-Decene	ND	ND	ND		ND	ND	ND	ND
n-Decane	0.663	0.708	0.819		0.648	0.605	0.658	0.876
1,2,3-Trimethylbenzene	0.615	0.67	0.974		0.382	0.404	0.241	0.387
m-Diethylbenzene	1.391	1.67	2.147		0.926	0.866	0.633	0.722
p-Diethylbenzene	0.562	0.703	1.002		0.399	0.422	0.335	0.328
1-Undecene	0.173	1.933	2.059		ND	ND	ND	ND
n-Undecane	1.838	1.858	3.232		0.98	0.739	0.665	0.677
1-Dodecene	0.171	0.171	0.284		0.926	0.784	0.62	0.653
n-Dodecane	0.123	0.131	0.188		0.437	0.432	0.442	0.452
1-Tridecene	ND	ND	ND		ND	ND	ND	ND
n-Tridecane	ND	ND	0.126		0.203	0.201	0.201	0.208
TNMOC (speciated)	84.12	89.13	75.44		134.52	131.14	127.29	131.62
TNMOC (w/ unknowns)	160.07	186.48	121.73		177.95	179.40	164.29	175.45

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 17806 D1	SFSD 17806 R1	SFSD 17807 D2	SFSD 17807 R2	SFSD 17844	SFSD 17848	SFSD 17869	SFSD 18007
Sampling Date:	6/29/2000	6/29/2000	6/29/2000	6/29/2000	7/5/2000	7/11/2000	7/17/2000	7/23/2000
Analysis Date:	7/18/2000	7/19/2000	7/18/2000	7/19/2000	7/20/2000	7/20/2000	7/21/2000	8/16/2000
Ethylene	2.476	2.521	2.437	2.457	2.821	1.978	1.943	1.914
Acetylene	1.851	1.923	1.911	1.955	2.866	1.784	1.531	1.384
Ethane	4.179	4.176	4.226	4.295	4.019	3.646	3.156	3.204
Propylene	1.769	1.782	1.645	1.596	1.791	1.578	1.238	1.203
Propane	9.236	9.33	8.556	8.583	6.701	7.313	4.975	6.093
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	1.876	1.923	1.983	2.027	2.843	1.261	0.968	1.702
Isobutene/1-Butene	1.7	1.799	1.466	1.543	1.985	1.825	1.447	1.29
1,3-Butadiene	0.156	0.136	0.146	0.144	ND	ND	ND	0.124
n-Butane	5.067	5.206	5.184	5.218	3.948	2.664	1.993	2.084
trans-2-Butene	0.551	0.298	0.524	0.573	0.701	0.672	0.471	0.407
cis-2-Butene	0.797	0.797	0.749	0.779	0.933	0.94	0.67	0.547
3-Methyl-1-butene	ND	0.132	0.127	0.136	ND	ND	ND	ND
Isopentane	10.625	10.417	11.258	11.275	19.806	6.743	4.566	6.628
1-Pentene	0.757	0.804	0.707	0.725	0.993	0.694	0.509	0.549
2-Methyl-1-butene	0.538	0.476	0.486	0.462	0.642	0.287	0.35	0.337
n-Pentane	3.913	4.179	4.528	4.193	10.299	2.272	1.672	2.332
Isoprene	1.099	1.127	1.238	1.347	1.578	1.459	0.797	2.504
trans-2-Pentene	0.739	0.774	0.73	0.873	1.075	0.881	0.603	0.495
cis-2-Pentene	0.754	0.774	0.742	0.769	1.063	0.91	0.648	0.533
2-Methyl-2-butene	0.419	0.427	0.399	0.399	0.81	0.381	0.315	0.302
2,2-Dimethylbutane	1.31	1.412	1.243	1.308	1.653	1.272	0.876	0.87
Cyclopentene	ND	0.437	0.206	0.258	0.403	0.478	0.194	0.315
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	0.156
Cyclopentane	0.769	0.809	0.752	0.797	1.455	0.899	0.61	0.657
2,3-Dimethylbutane	1.516	1.553	1.526	1.529	1.787	1.504	1.087	0.859
2-Methylpentane	3.129	4.643	3.154	4.027	3.306	2.937	2.265	1.658
3-Methylpentane	2	2.072	1.978	2.042	2.496	1.653	1.186	1.238
2-Methyl-1-pentene	ND	0.166	ND	0.149	0.201	ND	ND	ND
1-Hexene	0.27	0.28	0.203	0.184	0.243	ND	ND	0.918
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.501	1.496	1.633	1.675	2.272	1.25	0.918	2.402
trans-2-Hexene	ND	ND	0.141	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	1.243	1.328	1.278	1.194	1.858	0.75	0.747	0.921
2,4-Dimethylpentane	1.146	1.275	1.256	1.129	1.41	1.157	0.841	0.662
Benzene	1.97	2.159	2.102	2.238	3.026	1.817	1.367	1.572
Cyclohexane	2.566	2.605	3.352	3.387	43.485	3.5	0.782	14.713
2-Methylhexane	0.707	0.801	0.779	0.648	0.854	0.739	0.491	0.482
2,3-Dimethylpentane	1.427	1.814	1.377	1.362	1.437	1.668	1.047	0.783
3-Methylhexane	2.72	3.712	2.146	2.841	3.343	2.287	1.395	1.373
1-Heptene	0.275	0.268	0.233	0.248	ND	0.194	ND	0.178
2,2,4-Trimethylpentane	2.112	2.166	1.801	1.799	2.448	1.399	1.228	1.265
n-Heptane	0.97	1.064	0.998	1.042	1.291	0.866	0.67	0.751
Methylcyclohexane	1.218	1.27	0.99	1.196	1.381	1.101	0.71	0.746
2,2,3-Trimethylpentane	0.166	0.221	0.176	0.253	0.254	ND	ND	0.151
2,3,4-Trimethylpentane	0.749	0.759	0.759	0.839	1.004	0.75	0.586	0.56
Toluene	7.079	7.367	7.035	7.938	9.743	4.269	2.993	4.86
2-Methylheptane	0.687	0.722	0.578	0.67	0.869	0.716	0.521	0.407
3-Methylheptane	0.65	0.655	0.667	0.744	0.978	0.776	0.561	0.398
1-Octene	0.216	0.278	0.194	0.186	0.243	0.201	0.139	0.234
n-Octane	0.896	0.973	0.819	0.965	1.146	0.873	0.715	0.547
Ethylbenzene	1.151	1.298	1.119	1.315	1.944	1.131	0.926	0.695
m-Xylene/p-Xylene	2.794	3.159	2.742	3.402	4.082	2.235	2.062	1.389
Styrene	0.439	0.521	0.504	0.64	1.664	0.675	0.677	0.45
o-Xylene	1.213	1.342	1.179	1.422	1.787	1.101	0.99	0.697
1-Nonene	0.246	0.228	0.144	0.176	ND	ND	ND	ND
n-Nonane	0.732	0.834	0.725	0.871	0.899	0.754	0.551	0.428
Isopropylbenzene	0.638	0.469	0.583	0.529	0.657	0.821	0.399	0.261
a-Pinene	0.521	0.469	0.633	0.702	1.493	0.623	0.794	1.575
n-Propylbenzene	0.633	0.658	0.677	0.923	1.041	0.884	0.868	0.487
m-Ethyltoluene	1.127	1.213	1.223	1.198	2.09	1.493	1.231	0.851
p-Ethyltoluene	0.973	1.092	0.985	1.025	1.563	1.567	1.082	0.665
1,3,5-Trimethylbenzene	0.772	0.841	0.72	0.7	1.063	0.888	0.64	0.485
o-Ethyltoluene	0.757	0.789	0.767	0.844	0.91	0.873	0.643	0.676
b-Pinene	ND	0.176	ND	ND	ND	ND	ND	0.417
1,2,4-Trimethylbenzene	1.447	1.543	1.417	1.672	2.205	1.407	1.196	0.848
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.797	0.878	0.826	1.084	1.086	0.888	0.71	0.557
1,2,3-Trimethylbenzene	0.901	0.757	0.988	0.799	0.739	0.694	0.801	0.684
m-Diethylbenzene	1.295	1.444	1.499	1.687	2.03	2.586	2.127	1.664
p-Diethylbenzene	0.635	0.702	0.576	0.866	0.948	1.019	0.923	0.678
1-Undecene	0.236	1.648	0.186	0.923	0.313	0.336	0.31	0.32
n-Undecane	1.938	2.365	1.96	1.913	4.317	3.903	2.64	2.951
1-Dodecene	0.246	0.226	0.241	0.186	0.575	0.381	0.203	0.285
n-Dodecane	0.184	0.221	0.203	0.223	0.843	0.586	0.233	0.439
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	0.265	1.063	0.39	ND
TNMOC (speciated)	105.47	114.18	106.32	113.10	185.97	96.25	70.18	90.81
TNMOC (w/ unknowns)	141.41	157.49	144.81	145.08	222.32	140.47	117.23	131.45

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 17888 D1	SFSD 17889 D2	SFSD 18161	SFSD 18163	SFSD 18219	SFSD 18294	SFSD 18290	SFSD 18389
Sampling Date:	7/29/2000	7/29/2000	8/10/2000	8/16/2000	8/22/2000	8/28/2000	9/3/2000	9/15/2000
Analysis Date:	VOID	VOID	8/28/2000	8/28/2000	9/5/2000	9/11/2000	9/13/2000	9/29/2000
Ethylene			1.82	1.737	2.192	1.758	3.296	2.759
Acetylene			1.015	1.034	1.562	1.214	2.251	1.618
Ethane			2.97	2.98	4.3	5.815	3.312	3.157
Propylene			1.715	1.392	1.535	1.15	1.664	1.717
Propane			16.175	11.13	10.163	10.406	11.628	5.789
Propyne			ND	ND	ND	ND	ND	ND
Isobutane			1.424	0.851	1.36	1.704	1.644	1.293
Isobutene/1-Butene			1.381	1.257	2.469	1.236	2.089	1.618
1,3-Butadiene			0.145	ND	0.143	ND	0.259	0.209
n-Butane			1.96	1.842	2.708	3.134	7.032	2.401
trans-2-Butene			0.385	0.39	0.398	0.372	0.429	0.471
cis-2-Butene			0.536	0.514	0.579	0.522	0.676	0.605
3-Methyl-1-butene			ND	ND	ND	ND	ND	ND
Isopentane			6.025	4.628	9.905	16.515	49.494	6.488
1-Pentene			ND	0.444	0.425	0.382	0.757	0.558
2-Methyl-1-butene			ND	0.293	0.433	0.339	0.453	0.458
n-Pentane			1.36	1.427	2.17	3.042	11.773	2.102
Isoprene			2.043	0.705	0.94	0.81	2.174	0.78
trans-2-Pentene			0.606	0.482	0.501	0.452	0.895	0.628
cis-2-Pentene			0.541	0.517	0.571	0.517	0.879	0.597
2-Methyl-2-butene			0.288	0.267	0.404	0.25	0.68	0.476
2,2-Dimethylbutane			0.905	0.818	0.897	0.88	3.012	0.893
Cyclopentene			0.455	0.326	0.452	0.307	0.348	ND
4-Methyl-1-pentene			ND	ND	ND	ND	ND	ND
Cyclopentane			0.555	0.538	0.622	0.557	1.737	0.584
2,3-Dimethylbutane			0.913	0.87	1.004	0.883	1.437	1.079
2-Methylpentane			2.367	1.295	1.696	1.343	2.713	1.597
3-Methylpentane			1.082	1.047	1.4	1.082	1.996	1.338
2-Methyl-1-pentene			ND	ND	ND	ND	ND	ND
1-Hexene			0.897	0.835	0.875	0.767	1.101	0.908
2-Ethyl-1-butene			ND	ND	ND	ND	ND	ND
n-Hexane			0.856	0.81	1.026	0.999	2.599	1.118
trans-2-Hexene			ND	ND	ND	ND	ND	ND
cis-2-Hexene			ND	ND	ND	ND	ND	ND
Methylcyclopentane			0.681	0.695	0.81	0.732	1.474	0.943
2,4-Dimethylpentane			0.678	0.662	0.789	0.711	1.053	0.877
Benzene			1.29	1.448	2.097	1.685	2.409	1.958
Cyclohexane			0.789	0.732	1.01	3.597	71.49	2.27
2-Methylhexane			0.565	0.366	0.479	0.412	1.146	0.618
2,3-Dimethylpentane			0.827	0.843	0.859	0.832	1.49	1.034
3-Methylhexane			1.527	1.335	1.381	1.112	3.162	1.432
1-Heptene			0.186	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane			1.069	1.179	1.368	1.257	5.198	1.655
n-Heptane			0.563	0.52	0.678	0.638	1.955	0.775
Methylcyclohexane			0.708	0.573	0.633	0.59	2.198	0.762
2,2,3-Trimethylpentane			ND	ND	ND	0.148	0.506	0.212
2,3,4-Trimethylpentane			0.471	0.477	0.533	0.471	1.016	0.66
Toluene			3.185	2.854	4.927	6.246	22.785	4.83
2-Methylheptane			0.38	0.374	0.409	0.458	0.781	0.513
3-Methylheptane			0.452	0.407	0.466	0.431	0.903	0.542
1-Octene			0.194	0.188	0.14	0.108	ND	0.175
n-Octane			0.485	0.493	0.557	0.635	1.652	0.665
Ethylbenzene			0.703	0.587	0.821	0.835	3.166	1.034
m-Xylene/p-Xylene			1.567	1.163	1.761	1.3	4.105	2.485
Styrene			0.509	0.501	0.654	1.117	4.846	0.589
o-Xylene			0.695	0.611	0.843	0.657	1.854	1.018
1-Nonene			ND	ND	ND	ND	ND	ND
n-Nonane			0.455	0.407	0.466	0.458	1.211	0.484
Isopropylbenzene			0.291	0.253	0.291	0.337	0.943	0.291
a-Pinene			1.028	0.6	0.843	1.44	6.154	0.869
n-Propylbenzene			0.555	0.657	0.668	0.59	0.911	0.725
m-Ethyltoluene			0.781	0.63	1.02	0.899	2.717	1.052
p-Ethyltoluene			0.934	0.845	0.98	0.805	0.919	1.102
1,3,5-Trimethylbenzene			0.425	0.423	0.433	0.302	0.749	0.6
o-Ethyltoluene			0.767	0.547	0.635	0.614	0.773	0.594
b-Pinene			ND	ND	ND	0.614	4.049	ND
1,2,4-Trimethylbenzene			0.907	0.783	0.932	0.606	1.777	1.149
1-Decene			ND	ND	ND	ND	ND	ND
n-Decane			0.662	0.727	0.627	0.673	1.737	0.568
1,2,3-Trimethylbenzene			0.913	0.967	0.808	0.732	0.964	0.636
m-Diethylbenzene			2.477	2.345	2.52	1.696	0.923	1.45
p-Diethylbenzene			0.77	0.77	0.805	1.222	0.308	1.27
1-Undecene			0.32	0.576	0.789	0.528	0.211	0.335
n-Undecane			2.402	3.026	2.078	3.643	1.879	2.199
1-Dodecene			0.339	0.215	0.291	0.277	0.713	ND
n-Dodecane			0.487	0.49	0.458	0.614	1.943	0.359
1-Tridecene			ND	ND	ND	ND	ND	ND
n-Tridecane			0.18	ND	ND	ND	0.457	ND
TNMOC (speciated)			80.64	68.70	86.59	96.46	278.86	79.97
TNMOC (w/ unknowns)			130.58	110.25	153.86	146.63	323.81	117.17

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 18436	SFSD 18478 D1	SFSD 18478 R1	SFSD 18479 D2	SFSD 18479 R2	SFSD 18524	SFSD 18554	SFSD 18625
Sampling Date:	9/21/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	10/3/2000	10/9/2000	10/21/2000
Analysis Date:	10/12/2000	10/26/2000	10/27/2000	10/26/2000	10/27/2000	10/27/2000	10/28/2000	11/7/2000
Ethylene	1.972	1.789	1.805	1.74	1.73	2.346	1.344	2.076
Acetylene	0.923	1.132	1.108	1.114	1.136	1.535	0.99	1.399
Ethane	3.159	3.278	3.291	3.317	3.364	4.039	4.205	6.618
Propylene	1.061	1.055	1.047	0.931	0.967	1.293	0.86	1.229
Propane	6.081	4.183	4.201	3.76	3.805	6.469	5.608	8.813
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	2.451	1.15	1.169	0.839	0.88	1.071	0.951	1.569
Isobutene/1-Butene	1.167	1.152	1.134	0.97	0.992	1.183	1.006	1.321
1,3-Butadiene	0.156	0.124	0.128	0.148	0.173	0.159	ND	0.117
n-Butane	2.238	1.809	1.864	1.827	1.833	2.736	2.126	3.921
trans-2-Butene	0.299	0.285	0.291	0.313	0.305	0.35	0.293	0.342
cis-2-Butene	0.407	0.421	0.421	0.398	0.402	0.443	0.396	0.433
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
Isopentane	8.079	7.159	6.927	5.276	4.976	13.717	8.301	11.367
1-Pentene	0.372	0.366	0.38	0.394	0.317	0.295	0.311	0.357
2-Methyl-1-butene	0.307	0.297	0.309	0.281	0.256	0.339	0.23	0.295
n-Pentane	2.03	2.266	2.317	1.522	1.579	2.333	1.642	2.321
Isoprene	0.409	0.48	0.465	0.535	0.528	0.37	0.354	0.482
trans-2-Pentene	0.358	0.364	0.396	0.39	0.384	0.407	0.325	0.397
cis-2-Pentene	0.39	0.417	0.421	0.439	0.392	0.415	0.453	0.372
2-Methyl-2-butene	0.276	0.295	0.295	0.301	0.262	0.356	0.23	0.299
2,2-Dimethylbutane	0.652	0.628	0.486	0.593	0.561	0.64	0.581	0.584
Cyclopentene	0.254	1.374	1.378	0.341	0.372	0.329	0.114	0.304
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.457	0.327	0.372	0.319	0.37	0.431	0.38	0.414
2,3-Dimethylbutane	0.726	0.699	0.669	0.709	0.663	0.78	0.685	0.696
2-Methylpentane	1.766	0.87	0.904	0.878	0.829	1.205	0.898	1.055
3-Methylpentane	0.986	0.833	0.864	0.829	0.844	1.033	0.811	0.909
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	0.553	0.652	0.675	0.648	0.705	0.62	0.549	0.709
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.016	0.815	0.854	0.858	0.955	1.002	0.951	0.926
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclopentane	0.618	0.593	0.559	0.537	0.571	0.614	0.535	0.603
2,4-Dimethylpentane	0.531	0.508	0.539	0.567	0.531	0.555	0.494	0.541
Benzene	1.719	1.738	1.825	1.758	1.813	2.197	1.39	2.106
Cyclohexane	1.626	1.301	1.341	1.028	0.652	0.955	2.411	0.389
2-Methylhexane	2.195	0.411	0.404	0.482	0.435	0.47	0.307	0.344
2,3-Dimethylpentane	2.067	0.618	0.63	0.797	0.654	0.669	0.589	0.605
3-Methylhexane	4.713	0.545	0.531	0.675	0.488	0.541	0.406	0.423
1-Heptene	0.211	0.287	0.28	0.289	0.27	ND	ND	0.195
2,2,4-Trimethylpentane	0.886	0.772	0.803	0.866	0.917	0.996	0.801	0.928
n-Heptane	1.427	1.118	1.15	1.228	1.181	0.677	0.508	0.512
Methylcyclohexane	0.695	1.254	1.234	1.307	1.222	0.561	0.427	0.418
2,2,3-Trimethylpentane	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.398	0.317	0.343	0.36	0.329	0.36	0.366	0.391
Toluene	3.844	3.047	3.248	2.953	3.242	3.199	1.986	2.828
2-Methylheptane	0.319	0.445	0.516	0.555	0.535	0.535	0.449	0.476
3-Methylheptane	0.344	0.352	0.364	0.429	0.386	0.343	0.299	0.346
1-Octene	0.132	0.126	0.154	ND	ND	ND	ND	0.132
n-Octane	0.486	0.618	0.679	0.758	0.764	0.48	0.388	0.425
Ethylbenzene	0.866	0.526	0.624	0.569	0.65	0.756	0.469	0.565
m-Xylene/p-Xylene	1.913	1.976	2.144	1.386	1.675	1.909	1.063	1.607
Styrene	0.411	0.754	0.705	1.965	2.083	0.87	0.547	0.788
o-Xylene	0.752	0.585	0.63	0.567	0.683	0.793	0.502	0.626
1-Nonene	ND	0.244	0.209	0.341	0.37	0.215	ND	0.295
n-Nonane	0.445	0.502	0.543	0.52	0.626	0.411	0.362	0.372
Isopropylbenzene	0.689	0.278	0.325	0.303	0.329	0.321	0.354	0.329
a-Pinene	2.783	ND	ND	ND	0.116	0.433	0.128	ND
n-Propylbenzene	0.449	0.356	0.331	0.384	0.443	0.555	0.469	0.41
m-Ethyltoluene	0.781	0.677	0.801	0.644	0.652	1.041	0.724	0.975
p-Ethyltoluene	0.996	0.402	0.484	0.518	0.614	0.516	0.506	0.452
1,3,5-Trimethylbenzene	0.356	0.258	0.305	0.372	0.419	0.285	0.238	0.367
o-Ethyltoluene	0.516	0.358	0.394	0.394	0.433	0.469	0.421	0.435
b-Pinene	ND	0.457	0.612	1.801	1.848	0.876	0.242	1.176
1,2,4-Trimethylbenzene	0.896	0.709	0.774	1.181	1.303	1.053	0.661	0.709
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.671	0.465	0.528	0.551	0.628	0.811	0.622	0.694
1,2,3-Trimethylbenzene	0.587	0.624	0.628	0.638	0.628	0.736	0.514	0.756
m-Diethylbenzene	2.374	0.795	0.805	1.181	1.301	1.982	0.98	1.342
p-Diethylbenzene	1.226	0.392	0.5	0.427	0.622	0.817	0.638	0.771
1-Undecene	0.569	0.142	0.335	2.159	2.494	0.407	0.295	0.414
n-Undecane	2.587	1.343	1.411	5.691	4.894	2.417	1.823	2.83
1-Dodecene	0.159	ND	ND	5.547	5.823	0.132	ND	ND
n-Dodecane	0.319	0.327	0.372	7.12	7.313	0.862	0.61	0.261
1-Tridecene	ND	ND	ND	6.453	7.47	ND	ND	ND
n-Tridecane	0.106	ND	ND	6.343	7.465	0.333	0.152	ND
TNMOC (speciated)	81.21	60.44	62.23	91.31	94.45	78.05	58.27	77.16
TNMOC (w/ unknowns)	144.92	101.38	103.26	120.54	125.19	123.98	88.33	122.34

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 18661 D1	SFSD 18661 R1	SFSD 18662 D2	SFSD 18662 R2	SFSD 18700	SFSD 18727	SFSD 18747	SFSD 18775
Sampling Date:	10/27/2000	10/27/2000	10/27/2000	10/27/2000	11/2/2000	11/8/2000	11/14/2000	11/20/2000
Analysis Date:	11/7/2000	11/7/2000	11/7/2000	11/7/2000	11/14/2000	11/15/2000	11/20/2000	12/8/2000
Ethylene	1.817	1.722	2.013	1.824	1.507	1.684	3.161	25.531
Acetylene	1.276	1.21	1.344	1.219	1.24	1.599	2.892	15.632
Ethane	4.446	4.265	4.486	4.074	4.783	4.558	8.561	13.423
Propylene	1.108	1.053	1.049	0.996	1.028	0.841	1.418	11.381
Propane	9.011	8.49	8.378	7.456	7.389	4.845	9.76	10.377
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	1.212	1.134	1.805	1.594	1.304	1.21	2.503	6.782
Isobutene/1-Butene	1.444	1.444	1.45	1.325	1.151	1.083	1.482	6.437
1,3-Butadiene	0.113	0.132	0.127	0.11	ND	ND	0.153	1.567
n-Butane	4.314	4.045	4.826	4.289	3.378	3.488	7.713	39.762
trans-2-Butene	0.357	0.327	0.391	0.355	0.291	0.304	0.408	1.665
cis-2-Butene	0.486	0.435	0.482	0.49	0.42	0.412	0.493	1.699
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND	ND	0.523
Isopentane	18.972	18.329	19.486	18.459	11.425	8.947	13.346	31.029
1-Pentene	0.355	0.338	0.369	0.278	0.291	0.316	0.35	1.368
2-Methyl-1-butene	0.278	0.291	0.306	0.27	0.246	0.193	0.295	1.841
n-Pentane	3.452	3.172	3.936	3.444	1.979	1.875	3.414	10.335
Isoprene	1.204	1.176	1.236	1.089	0.312	0.318	0.321	1.37
trans-2-Pentene	0.482	0.435	0.51	0.471	0.297	0.299	0.395	2.391
cis-2-Pentene	0.461	0.425	0.482	0.386	0.391	0.406	0.34	1.418
2-Methyl-2-butene	0.359	0.323	0.414	0.389	0.231	0.168	0.28	3.033
2,2-Dimethylbutane	0.69	0.637	0.686	0.626	0.605	0.561	0.688	2.324
Cyclopentene	0.338	0.31	0.335	0.202	0.329	0.603	0.437	1.01
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.476	0.493	0.537	0.465	0.386	0.38	0.484	1.107
2,3-Dimethylbutane	0.745	0.643	0.82	0.673	0.548	0.544	0.764	3.531
2-Methylpentane	1.008	0.909	1.153	1.04	0.792	0.79	1.516	7.64
3-Methylpentane	0.958	0.902	1.064	0.996	0.781	0.794	1.27	5.513
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	0.374
1-Hexene	0.749	0.713	0.749	0.732	0.537	0.588	0.754	0.9
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.019	1.059	1.295	1.227	0.958	0.879	1.605	5.038
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND	ND	ND	ND	1.621
Methylcyclopentane	0.645	0.637	0.752	0.703	0.516	0.48	0.775	2.814
2,4-Dimethylpentane	0.565	0.563	0.573	0.539	0.471	0.51	0.682	1.594
Benzene	2.07	1.97	2.185	2.091	1.851	1.815	2.473	8.81
Cyclohexane	1.081	1.051	0.996	0.909	0.316	0.395	0.439	1.6
2-Methylhexane	0.418	0.391	0.439	0.423	0.293	0.295	0.467	2.149
2,3-Dimethylpentane	0.699	0.658	0.709	0.692	0.567	0.594	0.839	1.508
3-Methylhexane	0.435	0.433	0.478	0.467	0.325	0.361	0.614	2.814
1-Heptene	ND	ND	ND	ND	ND	0.14	0.219	ND
2,2,4-Trimethylpentane	2.115	2.13	2.231	2.066	1.028	0.682	1.151	8.584
n-Heptane	0.586	0.548	0.601	0.552	0.45	0.478	0.749	1.657
Methylcyclohexane	0.437	0.403	0.514	0.425	0.414	0.427	0.497	1.621
2,2,3-Trimethylpentane	0.18	0.134	0.242	0.166	ND	ND	0.166	1.073
2,3,4-Trimethylpentane	0.452	0.408	0.452	0.42	0.318	0.297	0.476	3.082
Toluene	8.93	8.096	10.089	8.609	3.079	2.59	4.248	16.259
2-Methylheptane	0.469	0.323	0.374	0.518	0.278	0.418	0.414	0.881
3-Methylheptane	0.389	0.363	0.401	0.391	0.299	0.308	0.406	0.952
1-Octene	0.155	0.163	ND	ND	ND	ND	0.183	ND
n-Octane	0.752	0.722	0.779	0.684	0.456	0.437	0.575	1.096
Ethylbenzene	0.858	0.737	0.817	0.817	0.639	0.529	0.741	3.665
m-Xylene/p-Xylene	1.962	1.69	2.452	1.96	0.805	1.059	1.66	11.222
Styrene	2.042	1.684	2.501	1.93	1.055	0.601	0.406	0.866
o-Xylene	0.862	0.743	1.034	0.843	0.573	0.507	0.779	4.575
1-Nonene	0.253	0.193	0.285	0.153	0.677	ND	0.115	0.19
n-Nonane	0.558	0.48	0.607	0.567	0.329	0.346	0.391	0.72
Isopropylbenzene	0.446	0.346	0.423	0.384	0.352	0.342	0.361	0.492
a-Pinene	1.726	1.72	2.236	1.89	0.505	ND	ND	5.427
n-Propylbenzene	0.718	0.624	0.605	0.541	0.798	0.599	0.641	0.902
m-Ethyltoluene	1.117	1.113	1.308	1.117	0.928	0.703	0.69	3.362
p-Ethyltoluene	0.565	0.488	0.639	0.529	0.667	0.473	0.601	1.636
1,3,5-Trimethylbenzene	0.38	0.274	0.363	0.352	0.244	0.238	0.338	1.992
o-Ethyltoluene	0.484	0.363	0.505	0.433	0.448	0.342	0.433	1.726
b-Pinene	1.669	1.503	2.036	1.769	1.873	0.809	0.675	1.195
1,2,4-Trimethylbenzene	0.981	0.811	1.106	0.934	0.594	0.645	0.682	5.19
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	0.843	0.671	1.159	1.03	0.794	0.639	0.628	1.021
1,2,3-Trimethylbenzene	0.703	0.628	0.779	0.79	0.599	0.577	0.533	1.073
m-Diethylbenzene	1.588	1.268	1.023	0.936	1.89	0.951	0.89	0.485
p-Diethylbenzene	0.843	0.609	0.985	0.51	1.378	1.253	0.618	0.454
1-Undecene	0.669	0.442	0.718	0.361	0.902	0.567	0.374	ND
n-Undecane	2.459	2.456	3.227	2.745	2.085	2.261	1.401	0.695
1-Dodecene	ND	ND	ND	ND	0.308	ND	ND	ND
n-Dodecane	0.684	0.588	1.352	1.285	0.357	0.535	0.219	0.538
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	0.18	ND	0.293	0.187	0.155	ND	ND	0.247
TNMOC (speciated)	100.10	92.84	108.00	96.20	72.22	61.89	93.35	320.79
TNMOC (w/ unknowns)	144.32	137.45	159.18	147.99	128.64	99.09	122.15	352.06

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Sioux Falls, SD
Appendix K

Sample No.:	SFSD 18806	SFSD 18829	SFSD 18930	SFSD 18933	SFSD 18971	SFSD 18988
Sampling Date:	11/26/2000	12/2/2000	12/8/2000	12/14/2000	12/20/2000	12/26/2000
Analysis Date:	12/12/2000	12/18/2000	1/5/2001	1/5/2001	1/9/2001	1/10/2001
Ethylene	5.192	2.176	3.161	6.435	2.764	4.26
Acetylene	4.63	1.676	2.851	6.182	2.717	4.242
Ethane	10.684	7.69	6.487	13.479	7.856	14.676
Propylene	1.946	1.199	1.462	2.159	1.161	1.646
Propane	12.331	9.893	8.32	16.55	10.094	14.644
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	43.305	2.506	2.052	3.146	2.124	3.712
Isobutene/1-Butene	1.994	1.571	1.464	1.81	1.191	1.536
1,3-Butadiene	0.278	0.113	0.238	0.356	0.122	0.24
n-Butane	30.877	7.893	5.377	10.126	6.348	11.56
trans-2-Butene	0.561	0.364	0.36	0.425	0.234	0.382
cis-2-Butene	0.615	0.525	0.448	0.49	0.318	0.461
3-Methyl-1-butene	ND	ND	ND	ND	ND	ND
Isopentane	22.454	18.339	13.937	14.632	14.212	11.788
1-Pentene	0.485	0.421	0.337	0.301	0.236	0.307
2-Methyl-1-butene	0.45	0.322	0.316	0.374	0.232	0.333
n-Pentane	4.751	3.368	5.822	4.126	2.521	3.97
Isoprene	0.51	0.418	0.333	0.51	0.195	0.315
trans-2-Pentene	0.586	0.393	0.37	0.504	0.251	0.421
cis-2-Pentene	0.402	0.4	0.299	0.408	0.212	0.35
2-Methyl-2-butene	0.582	0.362	0.418	0.596	0.279	0.406
2,2-Dimethylbutane	0.981	0.684	0.642	0.849	0.418	0.564
Cyclopentene	0.46	0.646	0.402	0.6	0.305	0.279
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND
Cyclopentane	0.745	0.483	0.525	0.59	0.277	0.504
2,3-Dimethylbutane	1.094	0.63	0.665	1.021	0.511	0.803
2-Methylpentane	2.312	1.347	1.188	3.935	1.144	1.884
3-Methylpentane	1.82	0.944	0.99	1.837	0.901	1.406
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND
1-Hexene	0.715	0.738	0.548	0.515	0.298	0.53
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.1	1.188	1.071	1.946	1.124	1.912
trans-2-Hexene	ND	ND	ND	ND	ND	ND
cis-2-Hexene	0.253	ND	ND	ND	ND	ND
Methylcyclopentane	1.098	0.609	0.801	1.197	0.652	0.979
2,4-Dimethylpentane	0.72	0.538	0.427	0.778	0.386	0.59
Benzene	3.025	2.331	2.4	3.99	2.054	3.024
Cyclohexane	1.121	0.423	0.523	0.569	0.236	0.635
2-Methylhexane	0.632	0.272	0.299	0.86	0.262	0.663
2,3-Dimethylpentane	0.887	0.632	0.575	0.946	0.461	0.77
3-Methylhexane	0.774	0.379	0.345	0.787	0.373	0.622
1-Heptene	ND	0.182	ND	ND	ND	ND
2,2,4-Trimethylpentane	1.835	1.05	1.402	1.952	0.996	1.521
n-Heptane	0.822	0.565	0.506	0.82	0.433	0.777
Methylcyclohexane	0.755	0.477	0.504	0.669	0.303	0.614
2,2,3-Trimethylpentane	0.199	ND	0.146	0.278	0.176	0.185
2,3,4-Trimethylpentane	0.619	0.379	0.408	0.638	0.296	0.5
Toluene	5.421	3.536	5.061	7.655	3.288	4.706
2-Methylheptane	0.454	0.345	0.308	0.448	0.178	0.273
3-Methylheptane	0.441	0.349	0.55	0.421	0.217	0.318
1-Octene	ND	0.134	0.146	ND	ND	ND
n-Octane	0.651	0.527	1.238	0.795	0.249	0.483
Ethylbenzene	0.864	0.529	0.937	1.605	0.438	0.927
m-Xylene/p-Xylene	2.31	0.931	2.207	4.197	1.133	2.468
Styrene	0.487	1.167	1.209	1.638	0.217	0.352
o-Xylene	0.902	0.504	1	1.598	0.483	0.944
1-Nonene	0.232	0.213	0.188	0.172	ND	ND
n-Nonane	0.414	0.362	0.32	0.425	0.157	0.307
Isopropylbenzene	0.285	0.314	0.295	0.316	0.152	0.206
a-Pinene	0.425	ND	0.586	0.349	ND	ND
n-Propylbenzene	0.301	0.502	0.623	0.506	0.159	0.324
m-Ethyltoluene	0.908	1.054	1.084	1.251	0.421	0.76
p-Ethyltoluene	0.444	0.498	0.603	0.728	0.24	0.371
1,3,5-Trimethylbenzene	0.182	0.234	0.469	0.805	0.135	0.26
o-Ethyltoluene	0.287	0.364	0.427	0.464	0.221	0.378
b-Pinene	0.613	0.921	0.584	0.801	0.124	0.457
1,2,4-Trimethylbenzene	0.745	0.542	1.088	1.565	0.279	0.616
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.052	0.596	11.404	1.548	0.21	0.436
1,2,3-Trimethylbenzene	0.429	0.59	0.785	0.579	0.208	0.436
m-Diethylbenzene	0.559	0.95	1.328	1.563	0.281	0.71
p-Diethylbenzene	0.366	0.699	0.87	0.726	0.178	0.5
1-Undecene	0.201	0.456	0.374	0.232	ND	0.178
n-Undecane	2.916	2.257	43.881	5.41	0.609	1.65
1-Dodecene	ND	0.128	0.105	ND	ND	ND
n-Dodecane	0.592	0.245	14.119	3.458	0.217	0.324
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.117	ND	0.78	0.316	ND	ND
TNMOC (speciated)	188.20	93.07	160.99	146.96	74.47	112.40
TNMOC (w/ unknowns)	222.84	137.79	207.14	250.23	94.15	140.40

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17093	SLCU 17083	SLCU 17101	SLCU 17114	SLCU 17134	SLCU 17148	SLCU 17160	SLCU 17195
Sampling Date:	11/12/1999	11/20/1999	11/26/1999	12/2/1999	12/9/1999	12/14/1999	12/20/1999	1/7/2000
Analysis Date:	12/10/1999	12/10/1999	12/21/1999	12/22/1999	VOID	12/22/1999	1/19/2000	2/4/2000
Ethylene	20.09	17.42	4.94	7.49		10.16	12.70	15.80
Acetylene	16.10	15.88	4.16	6.45		10.34	11.76	16.02
Ethane	11.39	11.87	4.71	8.82		11.16	13.92	18.22
Propylene	8.47	7.30	2.34	3.00		4.03	4.81	5.70
Propane	21.37	14.03	6.23	7.61		9.90	12.11	16.46
Propyne	ND	ND	ND	ND		ND	ND	ND
Isobutane	15.14	10.86	3.56	2.98		4.72	7.08	8.64
Isobutene/1-Butene	6.44	5.50	2.46	3.64		3.31	3.91	5.14
1,3-Butadiene	1.75	1.41	0.40	0.47		0.71	0.96	0.93
n-Butane	47.47	34.61	11.44	8.93		15.20	22.99	24.55
trans-2-Butene	2.12	1.45	0.58	4.31		0.81	1.19	1.18
cis-2-Butene	2.20	1.67	0.79	ND		0.95	1.24	1.29
3-Methyl-1-butene	0.62	0.52	0.18	0.16		0.21	0.30	0.32
Isopentane	37.76	23.13	7.56	6.66		10.38	13.64	16.89
1-Pentene	1.97	1.55	0.74	0.67		0.85	1.32	1.34
2-Methyl-1-butene	3.62	2.01	0.76	0.56		0.92	1.15	2.28
n-Pentane	22.02	16.00	4.94	5.02		6.88	9.57	11.97
Isoprene	1.63	1.15	0.50	0.61		0.66	0.96	0.86
trans-2-Pentene	3.22	2.43	0.91	0.88		1.11	1.36	1.39
cis-2-Pentene	2.08	1.42	0.68	0.64		0.73	0.98	1.01
2-Methyl-2-butene	4.04	3.19	0.98	1.37		1.23	1.85	1.72
2,2-Dimethylbutane	2.23	1.48	0.85	1.02		0.98	1.24	1.50
Cyclopentene	0.56	0.18	0.25	0.32		0.16	0.22	ND
4-Methyl-1-pentene	0.24	ND	ND	ND		ND	ND	ND
Cyclopentane	2.04	1.47	0.58	0.97		0.82	0.95	1.22
2,3-Dimethylbutane	4.57	3.52	1.33	1.60		2.00	2.30	2.44
2-Methylpentane	13.61	9.88	3.53	3.42		4.57	6.36	7.45
3-Methylpentane	8.25	6.07	5.33	2.13		3.05	3.54	4.62
2-Methyl-1-pentene	0.72	0.48	0.22	0.19		0.21	0.31	0.28
1-Hexene	0.81	0.54	0.22	0.22		0.26	0.34	0.48
2-Ethyl-1-butene	ND	ND	ND	ND		ND	ND	ND
n-Hexane	11.35	8.20	2.63	2.76		4.09	4.91	6.08
trans-2-Hexene	1.11	0.54	0.15	0.39		0.19	0.34	0.36
cis-2-Hexene	2.22	0.37	0.11	0.12		0.14	0.27	0.20
Methylcyclopentane	5.60	4.16	1.45	1.47		2.05	2.63	3.14
2,4-Dimethylpentane	4.10	3.20	1.21	1.12		1.67	2.14	2.42
Benzene	15.61	11.03	3.58	4.20		5.75	6.73	8.28
Cyclohexane	16.65	6.35	1.77	2.10		1.90	16.76	15.00
2-Methylhexane	5.28	4.06	1.44	1.17		1.86	1.97	3.60
2,3-Dimethylpentane	7.19	5.58	1.79	1.65		2.91	3.18	4.43
3-Methylhexane	5.81	4.60	1.58	1.49		2.45	3.75	3.50
1-Heptene	ND	ND	0.18	0.27		ND	0.61	ND
2,2,4-Trimethylpentane	12.34	9.14	2.71	2.67		4.69	5.37	6.63
n-Heptane	5.87	4.17	1.40	1.38		2.14	2.51	3.04
Methylcyclohexane	4.58	3.24	1.29	1.55		1.75	2.16	2.28
2,2,3-Trimethylpentane	2.68	1.69	0.71	0.55		0.80	0.84	1.46
2,3,4-Trimethylpentane	4.63	3.49	1.21	1.23		1.94	2.13	2.39
Toluene	39.60	26.82	7.87	10.06		12.25	16.46	20.54
2-Methylheptane	2.02	1.40	0.63	0.83		0.85	0.88	1.13
3-Methylheptane	2.33	1.59	0.67	0.78		0.90	0.96	1.13
1-Octene	0.21	0.12	ND	0.11		ND	ND	ND
n-Octane	2.52	1.78	0.87	0.90		0.95	1.22	1.56
Ethylbenzene	5.75	3.78	1.37	1.63		1.78	2.31	2.70
m-Xylene/p-Xylene	21.30	13.76	4.56	5.55		6.25	7.78	9.76
Styrene	2.32	1.62	1.27	1.50		1.01	1.22	2.22
o-Xylene	7.36	5.02	1.73	2.02		2.50	2.88	3.74
1-Nonene	0.56	0.40	0.30	0.30		0.34	0.33	0.63
n-Nonane	1.76	1.21	0.74	1.15		0.64	0.83	1.07
Isopropylbenzene	0.83	0.68	0.78	0.71		0.67	0.44	0.47
a-Pinene	0.76	0.61	0.40	0.54		0.57	ND	0.48
n-Propylbenzene	1.40	1.13	0.68	1.05		0.59	0.84	0.99
m-Ethyltoluene	4.52	3.80	1.72	1.86		2.19	2.21	2.82
p-Ethyltoluene	2.39	2.03	1.19	1.30		1.10	1.25	1.46
1,3,5-Trimethylbenzene	3.04	2.63	0.89	1.28		0.94	1.15	1.70
o-Ethyltoluene	2.34	2.27	0.97	0.90		0.91	0.94	1.41
b-Pinene	ND	0.36	0.77	0.35		0.81	0.31	0.36
1,2,4-Trimethylbenzene	7.22	5.51	2.10	2.14		2.39	3.24	3.51
1-Decene	7.22	ND	ND	ND		ND	ND	ND
n-Decane	3.05	2.06	1.19	2.37		2.32	0.92	1.38
1,2,3-Trimethylbenzene	2.08	3.35	1.25	1.12		1.14	1.16	1.38
m-Diethylbenzene	2.11	3.19	2.26	2.36		2.42	1.77	2.49
p-Diethylbenzene	3.30	1.31	2.09	1.97		2.08	1.57	1.84
1-Undecene	0.71	0.64	0.51	ND		ND	0.59	0.57
n-Undecane	2.39	4.04	3.23	6.12		3.04	2.86	4.13
1-Dodecene	ND	0.36	ND	ND		ND	ND	ND
n-Dodecane	0.72	0.53	0.28	ND		0.14	0.20	0.37
1-Tridecene	ND	ND	ND	ND		ND	ND	ND
n-Tridecane	ND	0.47	0.05	ND		0.16	0.14	0.28
TNMOC (speciated)	497.37	359.31	134.74	153.15		189.62	249.86	302.60
TNMOC (w/ unknowns)	626.55	601.68	278.77	296.04		322.87	403.77	488.10

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17200	SLCU 17226	SLCU 17222	SLCU 17238	SLCU 17241	SLCU 17262	SLCU 17276	SLCU 17303
Sampling Date:	1/13/2000	1/19/2000	1/25/2000	1/31/2000	2/6/2000	2/12/2000	2/18/2000	2/24/2000
Analysis Date:	2/4/2000	2/4/2000	2/16/2000	2/17/2000	2/22/2000	2/22/2000	3/7/2000	3/7/2000
Ethylene	15.22	20.32	12.78	16.70	27.19	5.43	14.42	2.81
Acetylene	15.77	20.33	12.29	16.77	26.92	5.25	15.10	3.50
Ethane	21.06	15.84	13.53	20.76	30.70	7.21	14.35	5.11
Propylene	5.22	8.84	5.46	6.05	9.73	2.36	5.69	1.41
Propane	18.05	18.58	13.56	19.30	29.42	5.58	13.02	4.04
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	10.38	13.17	11.42	9.48	20.15	3.62	8.63	1.75
Isobutene/1-Butene	4.75	6.96	4.16	4.48	8.54	2.17	4.61	1.64
1,3-Butadiene	0.88	1.55	0.99	1.12	1.69	0.42	1.09	0.21
n-Butane	31.61	41.40	24.46	25.35	58.98	11.31	31.87	5.27
trans-2-Butene	1.85	2.19	1.11	1.05	2.77	0.68	1.21	0.43
cis-2-Butene	1.68	2.09	1.23	1.23	2.50	0.80	1.37	0.52
3-Methyl-1-butene	0.39	0.60	0.32	0.34	0.66	0.16	0.37	ND
Isopentane	19.59	28.94	17.32	19.34	39.52	7.19	19.23	3.63
1-Pentene	1.35	1.70	1.66	1.05	2.11	0.59	1.04	0.43
2-Methyl-1-butene	2.22	2.73	1.35	1.24	2.71	0.73	1.59	0.44
n-Pentane	12.26	18.77	11.58	12.33	23.32	5.24	11.18	2.63
Isoprene	0.99	1.63	0.79	0.75	1.55	0.59	0.78	0.38
trans-2-Pentene	1.77	2.71	1.65	1.61	3.25	0.82	1.65	0.48
cis-2-Pentene	1.18	1.75	1.04	1.03	1.86	0.61	1.08	0.43
2-Methyl-2-butene	2.09	3.22	1.93	1.94	3.98	0.75	2.08	0.39
2,2-Dimethylbutane	1.57	2.11	1.48	1.54	2.45	0.88	1.37	0.64
Cyclopentene	ND	0.37	0.49	0.30	0.23	0.32	0.53	ND
4-Methyl-1-pentene	ND	0.17	0.15	0.14	0.30	ND	ND	ND
Cyclopentane	1.46	1.73	1.09	1.16	2.07	0.64	1.05	0.45
2,3-Dimethylbutane	2.64	4.26	2.62	2.78	5.04	1.20	2.72	0.87
2-Methylpentane	8.61	12.26	7.94	8.04	14.04	3.68	7.38	2.16
3-Methylpentane	4.86	7.33	4.40	4.89	8.88	1.93	4.42	1.15
2-Methyl-1-pentene	0.37	0.61	0.35	0.33	0.76	0.20	0.41	0.11
1-Hexene	0.53	1.13	0.77	0.47	0.67	0.27	0.33	0.19
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	6.52	10.02	6.45	6.42	12.02	2.41	5.77	1.42
trans-2-Hexene	0.36	0.69	0.37	0.34	0.70	0.17	0.37	ND
cis-2-Hexene	0.24	0.36	0.26	0.24	0.50	ND	0.28	ND
Methylcyclopentane	3.47	5.22	3.18	3.45	6.01	1.26	3.18	0.85
2,4-Dimethylpentane	2.66	3.83	2.32	2.73	5.14	1.22	2.53	0.81
Benzene	8.21	12.57	8.09	8.90	15.56	3.66	8.52	2.43
Cyclohexane	2.59	3.36	5.35	5.30	5.09	2.83	2.53	1.80
2-Methylhexane	3.59	4.97	3.15	3.47	5.45	1.53	2.09	0.48
2,3-Dimethylpentane	4.75	6.82	3.99	4.76	8.97	2.05	3.77	0.95
3-Methylhexane	3.82	5.85	2.85	4.20	5.29	2.06	4.04	1.67
1-Heptene	ND	0.81	0.77	ND	0.76	0.26	0.45	ND
2,2,4-Trimethylpentane	6.91	9.73	5.30	7.91	13.53	2.34	6.44	1.68
n-Heptane	2.78	5.19	2.70	3.28	5.37	1.07	2.38	0.72
Methylcyclohexane	2.74	4.34	2.32	3.37	4.09	1.15	2.37	0.87
2,2,3-Trimethylpentane	1.18	2.25	0.97	1.50	2.45	0.32	1.03	0.25
2,3,4-Trimethylpentane	2.54	3.79	2.10	2.79	5.13	0.97	2.52	0.69
Toluene	20.23	34.27	18.50	22.98	38.77	6.67	18.22	3.96
2-Methylheptane	1.04	1.80	1.15	1.20	2.30	0.47	1.01	0.53
3-Methylheptane	1.18	2.19	1.15	1.44	2.11	0.62	1.18	0.43
1-Octene	ND	ND	0.58	ND	0.35	0.20	0.17	0.07
n-Octane	1.54	2.22	1.33	1.81	2.50	0.65	1.21	0.52
Ethylbenzene	2.81	4.77	2.57	3.30	5.01	1.10	2.45	0.76
m-Xylene/p-Xylene	10.23	17.87	9.55	11.85	19.75	3.53	9.42	2.32
Styrene	1.23	2.84	2.06	1.98	1.26	0.94	0.64	0.47
o-Xylene	3.59	6.48	3.53	4.36	6.99	1.42	3.40	1.01
1-Nonene	0.43	0.76	0.66	0.42	0.72	ND	0.29	0.24
n-Nonane	1.04	1.54	1.27	1.30	1.39	0.45	0.76	0.51
Isopropylbenzene	0.47	0.72	0.51	0.57	0.57	0.43	0.54	0.36
a-Pinene	0.58	0.45	ND	ND	0.30	ND	ND	ND
n-Propylbenzene	0.86	1.39	1.09	0.89	1.43	0.76	0.80	0.61
m-Ethyltoluene	2.75	4.77	2.68	3.01	4.31	1.60	2.54	1.10
p-Ethyltoluene	1.54	2.46	1.46	1.62	2.30	0.77	1.50	0.73
1,3,5-Trimethylbenzene	1.40	3.21	1.99	2.17	2.39	0.61	1.07	0.51
o-Ethyltoluene	1.52	2.49	1.91	2.02	2.11	0.68	1.20	0.67
b-Pinene	0.41	0.58	0.53	0.42	1.20	0.50	0.69	0.39
1,2,4-Trimethylbenzene	3.35	7.66	3.86	3.81	6.16	1.69	3.22	1.21
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.63	2.56	2.18	1.89	2.43	0.76	1.17	0.86
1,2,3-Trimethylbenzene	1.33	2.17	1.39	1.41	1.85	1.06	1.25	1.09
m-Diethylbenzene	2.00	2.23	1.95	2.15	3.22	2.13	1.62	1.10
p-Diethylbenzene	1.41	1.46	2.00	1.27	1.82	1.28	0.78	1.27
1-Undecene	0.53	0.73	1.00	0.73	1.56	0.70	0.51	0.52
n-Undecane	3.00	4.77	5.14	4.61	8.05	5.90	2.87	2.28
1-Dodecene	ND	0.28	0.30	0.10	3.08	ND	0.20	ND
n-Dodecane	0.30	0.49	0.45	0.48	4.49	0.24	0.32	0.14
1-Tridecene	ND	ND	0.10	ND	5.31	ND	ND	ND
n-Tridecane	ND	0.22	0.38	0.28	5.99	0.20	ND	ND
TNMOC (speciated)	307.10	436.46	279.40	318.28	567.80	129.26	275.91	79.29
TNMOC (w/ unknowns)	463.22	651.75	575.30	641.67	652.57	187.59	358.69	132.78

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17306	SLCU 17323	SLCU 17327	SLCU 17372	SLCU 17383	SLCU 17402	SLCU 17421 D1	SLCU 17421 R1
Sampling Date:	3/1/2000	3/7/2000	3/13/2000	3/19/2000	3/25/2000	3/31/2000	4/6/2000	4/6/2000
Analysis Date:	3/21/2000	3/28/2000	4/3/2000	4/3/2000	4/4/2000	4/10/2000	4/18/2000	4/19/2000
Ethylene	3.02	11.63	11.27	2.70	19.33	4.05	5.00	5.10
Acetylene	3.43	14.37	11.67	3.04	19.35	4.23	5.16	5.15
Ethane	4.88	16.78	12.41	5.70	16.71	11.69	4.36	4.38
Propylene	1.54	4.29	4.28	1.33	7.12	2.14	2.42	2.43
Propane	4.87	10.84	11.20	6.20	21.04	10.69	4.72	4.72
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	1.63	5.41	6.66	1.84	10.98	3.95	2.91	2.99
Isobutene/1-Butene	1.72	3.49	3.50	1.61	5.67	1.93	2.27	2.29
1,3-Butadiene	0.24	0.65	0.91	0.12	1.44	0.23	0.39	0.39
n-Butane	4.47	16.84	22.16	4.71	40.50	7.81	10.29	10.35
trans-2-Butene	0.41	0.88	0.90	0.35	1.33	0.39	0.56	0.56
cis-2-Butene	0.55	1.06	1.11	0.47	1.58	0.55	0.72	0.72
3-Methyl-1-butene	ND	0.30	0.32	ND	0.56	0.12	0.20	0.20
Isopentane	3.62	14.36	18.97	3.60	32.30	7.23	9.15	9.09
1-Pentene	0.55	0.85	1.27	0.49	1.81	0.61	0.56	3.53
2-Methyl-1-butene	0.41	1.14	1.50	0.43	2.77	0.55	0.68	0.76
n-Pentane	2.42	8.51	11.60	2.24	18.91	4.87	5.35	5.35
Isoprene	0.42	0.90	0.90	0.31	1.10	0.35	0.65	0.63
trans-2-Pentene	0.53	1.34	1.65	0.41	2.84	0.58	0.91	1.02
cis-2-Pentene	0.48	0.91	1.05	0.42	1.69	0.50	0.63	0.65
2-Methyl-2-butene	0.41	1.50	1.99	0.29	3.72	0.57	0.85	0.86
2,2-Dimethylbutane	0.73	1.17	1.29	0.66	1.88	0.77	0.78	0.82
Cyclopentene	0.28	0.35	0.37	0.31	0.35	0.22	0.28	0.27
4-Methyl-1-pentene	ND	0.46	ND	0.23	0.18	ND	ND	0.11
Cyclopentane	0.51	0.94	1.06	0.47	1.63	0.59	0.67	0.67
2,3-Dimethylbutane	1.02	2.27	2.72	0.91	4.59	1.16	1.45	1.51
2-Methylpentane	2.13	6.52	7.48	1.89	12.42	2.45	3.65	3.74
3-Methylpentane	1.21	3.64	4.38	1.05	7.78	1.64	2.17	2.21
2-Methyl-1-pentene	ND	0.28	0.39	0.13	0.69	ND	0.21	0.19
1-Hexene	ND	0.42	0.37	0.23	0.64	0.12	0.26	0.26
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	1.49	5.44	5.90	0.99	10.04	2.64	2.83	3.33
trans-2-Hexene	ND	0.26	0.34	ND	0.72	ND	0.20	0.19
cis-2-Hexene	ND	0.21	0.32	ND	0.54	ND	0.12	0.11
Methylcyclopentane	0.81	2.65	3.01	0.84	5.04	1.28	1.62	1.55
2,4-Dimethylpentane	0.88	2.05	2.66	0.75	4.50	1.04	1.35	1.24
Benzene	2.54	6.75	8.55	2.69	13.99	2.95	3.87	3.97
Cyclohexane	5.53	39.36	12.57	0.86	4.69	6.98	3.17	3.18
2-Methylhexane	0.48	1.79	2.15	0.33	3.61	0.74	1.06	0.95
2,3-Dimethylpentane	1.24	2.96	4.26	0.83	7.33	1.43	2.12	1.90
3-Methylhexane	2.19	4.18	4.16	1.91	5.89	1.51	2.43	2.52
1-Heptene	ND	0.80	ND	0.19	ND	ND	0.30	0.37
2,2,4-Trimethylpentane	1.94	5.35	7.61	1.33	12.79	2.00	2.88	2.86
n-Heptane	0.85	2.46	2.50	0.68	4.02	1.42	1.35	1.51
Methylcyclohexane	1.00	2.18	2.24	0.84	3.59	1.54	1.25	1.49
2,2,3-Trimethylpentane	0.21	0.76	0.96	0.26	1.65	0.22	0.31	0.36
2,3,4-Trimethylpentane	0.73	2.09	2.66	0.56	4.50	0.78	1.14	1.14
Toluene	4.92	15.80	21.08	3.44	35.32	6.85	10.05	10.66
2-Methylheptane	0.61	0.96	1.06	0.48	1.38	0.58	0.58	0.62
3-Methylheptane	0.49	1.20	1.00	0.39	1.47	0.65	0.60	0.77
1-Octene	0.15	0.35	0.51	0.22	0.15	ND	0.19	0.18
n-Octane	0.62	1.14	1.33	0.50	1.85	0.78	0.88	0.87
Ethylbenzene	0.87	2.24	2.57	0.60	4.39	1.09	1.26	1.48
m-Xylene/p-Xylene	3.09	8.43	9.98	1.71	17.23	3.60	5.05	5.14
Styrene	0.54	0.79	0.90	0.21	0.83	0.49	0.96	0.79
o-Xylene	1.16	3.12	3.59	0.74	6.11	1.46	1.99	2.03
1-Nonene	ND	0.40	0.34	0.22	0.40	0.37	0.27	0.33
n-Nonane	0.81	0.88	0.96	0.44	2.09	0.81	1.37	1.40
Isopropylbenzene	0.39	0.36	0.36	0.42	0.35	0.30	0.37	0.30
a-Pinene	ND	ND	0.27	ND	ND	ND	0.20	0.25
n-Propylbenzene	0.48	0.78	0.87	0.55	1.13	0.50	0.64	0.67
m-Ethyltoluene	1.23	2.31	2.32	0.89	3.89	1.16	1.18	1.48
p-Ethyltoluene	0.76	1.19	1.30	0.58	1.87	0.89	0.61	0.93
1,3,5-Trimethylbenzene	0.36	0.90	1.04	0.23	2.38	0.43	0.96	1.14
o-Ethyltoluene	0.73	1.42	1.18	0.35	2.06	0.40	0.86	0.85
b-Pinene	0.53	0.32	0.75	0.41	0.48	0.19	0.39	0.38
1,2,4-Trimethylbenzene	1.21	2.82	2.96	0.79	5.02	0.92	2.38	2.27
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.39	0.81	0.95	0.68	2.75	1.11	1.73	1.65
1,2,3-Trimethylbenzene	0.69	0.83	1.20	0.46	1.19	0.45	0.57	0.62
m-Diethylbenzene	1.53	0.51	0.50	0.66	1.12	0.84	0.50	0.84
p-Diethylbenzene	1.16	0.58	0.64	0.91	0.79	0.38	0.46	0.49
1-Undecene	0.45	0.51	0.43	0.39	0.47	0.20	0.22	0.26
n-Undecane	3.39	2.95	2.49	2.08	2.98	1.82	2.25	2.08
1-Dodecene	ND	0.19	0.10	ND	ND	ND	ND	ND
n-Dodecane	0.23	0.32	0.23	0.11	0.32	ND	0.32	0.32
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	0.57	ND	0.30	ND	ND	ND	ND	0.12
TNMOC (speciated)	89.73	263.50	264.47	73.66	421.88	120.79	130.06	136.56
TNMOC (w/ unknowns)	164.57	346.89	340.18	128.27	513.18	170.62	182.74	188.99

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17423 D2	SLCU 17423 R2	SLCU 17442 D1	SLCU 17442 R1	SLCU 17444 D2	SLCU 17444 R2	SLCU 17453	SLCU 17470
Sampling Date:	4/6/2000	4/6/2000	4/12/2000	4/12/2000	4/12/2000	4/12/2000	4/18/2000	4/24/2000
Analysis Date:	4/18/2000	4/19/2000	4/18/2000	4/19/2000	4/18/2000	4/19/2000	5/2/2000	5/2/2000
Ethylene	5.39	5.39	6.23	5.73	6.85	6.90	6.17	4.13
Acetylene	5.33	5.23	5.70	5.18	6.19	6.02	6.13	4.41
Ethane	4.38	4.32	5.41	5.41	5.39	5.39	5.08	4.60
Propylene	2.61	2.60	2.94	2.65	3.16	3.20	3.07	2.04
Propane	4.38	4.36	6.28	5.96	6.28	6.29	5.36	5.62
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	3.11	2.97	4.02	3.74	4.37	4.40	2.78	2.26
Isobutene/1-Butene	2.40	2.50	2.56	2.25	2.91	2.91	2.93	1.75
1,3-Butadiene	0.41	0.39	0.43	0.21	0.58	0.57	0.51	0.32
n-Butane	10.86	10.67	14.56	13.17	16.03	16.01	9.26	6.33
trans-2-Butene	0.59	0.61	0.70	0.64	0.75	0.78	0.72	0.51
cis-2-Butene	0.74	0.78	0.87	0.81	0.91	0.98	0.89	0.64
3-Methyl-1-butene	0.21	0.22	0.21	0.21	0.35	0.27	0.20	0.14
Isopentane	9.52	9.39	13.92	12.46	15.33	15.20	10.39	7.53
1-Pentene	0.77	0.84	0.84	0.78	0.98	0.94	0.72	0.53
2-Methyl-1-butene	0.77	0.78	1.03	0.91	1.16	1.19	0.98	0.62
n-Pentane	5.71	5.28	8.01	7.15	8.88	8.75	5.64	4.08
Isoprene	0.47	0.49	0.63	0.61	0.65	0.67	0.56	0.43
trans-2-Pentene	1.08	1.04	1.33	1.24	1.47	1.47	1.06	0.77
cis-2-Pentene	0.68	0.69	0.89	0.80	0.95	0.96	0.78	0.61
2-Methyl-2-butene	0.91	0.88	1.35	1.20	1.47	1.45	1.11	0.65
2,2-Dimethylbutane	0.90	0.92	1.06	0.97	1.12	1.13	0.99	0.84
Cyclopentene	0.32	0.26	0.19	0.17	0.15	0.17	0.23	0.16
4-Methyl-1-pentene	ND	0.11	0.09	0.12	0.09	0.11	ND	ND
Cyclopentane	0.68	0.67	0.85	0.81	0.92	0.94	0.64	0.60
2,3-Dimethylbutane	1.58	1.57	2.09	1.85	2.25	2.25	1.80	1.44
2-Methylpentane	4.30	4.33	5.15	4.64	5.54	5.47	4.13	3.41
3-Methylpentane	2.24	2.27	3.19	2.87	3.49	3.51	2.60	1.91
2-Methyl-1-pentene	0.21	0.23	0.26	0.24	0.34	0.33	0.22	0.15
1-Hexene	0.32	0.30	0.25	0.25	0.28	0.29	0.24	0.16
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	3.41	3.41	4.24	3.83	4.65	4.59	3.33	2.44
trans-2-Hexene	0.23	0.17	0.30	0.20	0.29	0.29	0.32	0.15
cis-2-Hexene	0.13	0.11	0.17	0.16	0.18	0.19	0.17	0.12
Methylcyclopentane	1.66	1.57	2.24	2.01	2.47	2.46	1.83	1.43
2,4-Dimethylpentane	1.30	1.28	1.70	1.53	1.88	1.84	1.60	1.26
Benzene	4.42	4.30	5.64	4.92	5.98	5.97	5.27	3.35
Cyclohexane	9.23	9.10	2.56	3.19	1.51	1.54	3.28	1.06
2-Methylhexane	0.90	0.95	1.51	1.32	1.54	1.52	1.21	0.91
2,3-Dimethylpentane	1.91	1.77	2.68	2.38	2.81	2.79	2.48	1.91
3-Methylhexane	2.70	2.71	2.65	2.46	2.87	2.90	2.45	1.77
1-Heptene	0.42	0.35	0.33	0.33	0.46	0.36	0.30	0.20
2,2,4-Trimethylpentane	2.89	2.87	3.96	3.35	4.06	3.87	3.62	2.54
n-Heptane	1.52	1.40	1.84	1.66	1.96	1.93	1.56	1.19
Methylcyclohexane	1.62	1.60	1.80	1.68	1.91	1.92	1.58	1.18
2,2,3-Trimethylpentane	0.40	0.38	0.53	0.59	0.59	0.58	0.50	0.32
2,3,4-Trimethylpentane	1.18	1.19	1.60	1.44	1.81	1.80	1.52	1.10
Toluene	10.68	10.59	14.25	12.99	15.24	15.14	13.29	8.09
2-Methylheptane	0.63	0.68	0.76	0.68	0.79	0.79	0.76	0.58
3-Methylheptane	0.76	0.76	0.76	0.70	0.79	0.79	0.96	0.70
1-Octene	0.20	0.16	0.10	ND	0.15	0.16	ND	ND
n-Octane	0.80	0.79	0.99	0.96	1.00	1.05	1.00	0.68
Ethylbenzene	2.51	1.45	1.79	1.61	1.91	1.90	1.65	1.06
m-Xylene/p-Xylene	4.96	4.94	6.41	5.66	6.90	6.96	5.89	3.56
Styrene	0.85	0.73	0.40	0.40	0.39	0.42	0.36	0.35
o-Xylene	1.99	1.95	2.39	2.13	2.59	2.53	2.21	1.41
1-Nonene	0.27	0.31	0.21	0.13	0.23	0.22	0.18	0.13
n-Nonane	1.46	1.44	1.06	0.92	1.12	1.10	0.73	0.56
Isopropylbenzene	0.33	0.32	0.37	0.52	0.44	0.46	0.28	0.30
a-Pinene	0.10	0.20	0.46	0.73	0.36	0.34	ND	ND
n-Propylbenzene	0.59	0.60	0.66	0.59	0.68	0.68	0.64	0.44
m-Ethyltoluene	1.50	1.37	1.67	1.51	1.88	1.69	1.66	1.23
p-Ethyltoluene	0.95	0.75	0.90	0.93	1.01	0.98	1.01	0.75
1,3,5-Trimethylbenzene	0.85	0.96	1.07	0.98	0.99	1.13	0.73	0.41
o-Ethyltoluene	0.74	1.04	0.94	0.86	1.00	1.13	0.83	0.37
b-Pinene	0.53	0.57	0.32	0.30	0.67	0.57	0.75	0.62
1,2,4-Trimethylbenzene	2.27	2.24	2.51	2.04	2.70	2.55	2.13	1.27
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.65	1.62	1.13	1.03	1.18	1.07	0.69	0.73
1,2,3-Trimethylbenzene	0.55	0.56	0.73	0.59	0.68	0.64	0.66	0.62
m-Diethylbenzene	0.82	0.81	0.67	0.61	1.03	0.71	0.87	0.74
p-Diethylbenzene	0.53	0.50	0.45	0.40	0.45	0.46	0.60	0.59
1-Undecene	0.26	0.36	0.21	0.17	0.20	0.18	0.30	0.33
n-Undecane	2.27	1.97	1.61	1.48	1.37	1.40	1.85	2.04
1-Dodecene	0.27	ND	ND	ND	0.26	0.17	ND	ND
n-Dodecane	0.29	0.28	0.25	0.25	0.24	0.19	0.24	0.20
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	0.12	ND	0.18	0.28	0.15	0.23	0.13
TNMOC (speciated)	144.38	141.36	167.85	153.39	180.33	178.68	146.70	105.45
TNMOC (w/ unknowns)	192.15	189.73	208.44	192.27	215.15	210.36	188.29	146.03

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17487	SLCU 17493	SLCU 17497	SLCU 17305	SLCU 17559 D1	SLCU 17560 D2	SLCU 17548 D1	SLCU 17548 R1
Sampling Date:	4/30/2000	5/6/2000	5/12/2000	5/18/2000	5/24/2000	5/24/2000	5/30/2000	5/30/2000
Analysis Date:	5/11/2000	6/2/2000	6/2/2000	6/15/2000	VOID	VOID	6/14/2000	6/15/2000
Ethylene	6.34	4.50	4.76	4.97			4.46	4.48
Acetylene	5.82	4.44	4.89	4.51			3.63	3.65
Ethane	8.85	4.85	6.77	6.48			3.58	3.61
Propylene	2.95	2.35	2.19	2.39			2.39	2.43
Propane	8.36	7.44	5.33	7.21			5.31	5.37
Propyne	ND	ND	ND	ND			ND	ND
Isobutane	4.14	3.24	1.86	2.79			2.53	2.51
Isobutene/1-Butene	2.62	2.08	2.10	2.34			2.21	2.21
1,3-Butadiene	0.52	0.29	0.34	0.43			0.41	0.38
n-Butane	11.30	8.76	4.11	6.21			6.79	6.71
trans-2-Butene	0.72	0.55	0.50	0.60			0.62	0.61
cis-2-Butene	0.91	0.74	0.67	0.77			0.91	1.04
3-Methyl-1-butene	0.26	ND	0.10	0.19			0.19	0.21
Isopentane	14.26	13.05	5.91	9.26			9.91	9.88
1-Pentene	0.92	0.58	0.64	0.75			1.85	1.64
2-Methyl-1-butene	1.20	0.85	0.60	0.79			0.89	0.78
n-Pentane	8.19	7.20	4.12	6.58			6.18	6.17
Isoprene	0.59	0.71	0.49	0.57			2.01	2.02
trans-2-Pentene	1.43	1.01	0.77	0.99			1.14	1.13
cis-2-Pentene	0.91	0.72	0.61	0.71			0.76	0.76
2-Methyl-2-butene	1.42	0.79	0.62	0.83			0.95	0.92
2,2-Dimethylbutane	1.12	1.07	0.82	0.96			1.08	1.09
Cyclopentene	0.29	ND	0.31	0.19			0.33	0.28
4-Methyl-1-pentene	0.14	ND	ND	0.11			0.15	0.18
Cyclopentane	0.87	0.79	0.61	0.72			0.70	0.82
2,3-Dimethylbutane	2.19	1.89	1.37	1.67			1.69	1.80
2-Methylpentane	6.55	4.71	2.99	3.54			4.03	3.98
3-Methylpentane	3.32	2.93	1.92	2.37			2.46	2.45
2-Methyl-1-pentene	0.30	0.21	0.17	0.23			0.18	0.21
1-Hexene	0.33	0.22	0.13	0.22			0.43	0.45
2-Ethyl-1-butene	ND	ND	ND	ND			ND	ND
n-Hexane	4.20	4.33	2.36	2.96			3.23	3.18
trans-2-Hexene	0.25	ND	ND	0.23			0.21	0.22
cis-2-Hexene	0.18	ND	ND	0.14			0.12	0.13
Methylcyclopentane	2.26	2.08	1.29	1.67			1.58	1.63
2,4-Dimethylpentane	1.88	1.72	1.19	1.37			1.45	1.44
Benzene	5.39	4.83	3.60	4.53			3.96	3.97
Cyclohexane	1.56	9.93	1.60	3.17			22.40	22.21
2-Methylhexane	1.45	1.75	0.88	1.14			0.93	0.98
2,3-Dimethylpentane	2.69	2.75	1.64	2.09			1.91	2.03
3-Methylhexane	3.04	3.78	2.02	2.40			3.94	3.88
1-Heptene	0.39	0.35	ND	0.32			0.48	0.56
2,2,4-Trimethylpentane	4.81	4.61	2.24	3.06			3.41	3.63
n-Heptane	1.90	2.45	1.18	1.53			1.66	1.66
Methylcyclohexane	1.92	2.19	1.24	1.54			1.57	1.58
2,2,3-Trimethylpentane	0.70	0.75	0.53	0.53			0.49	0.45
2,3,4-Trimethylpentane	1.99	2.04	1.09	1.32			1.46	1.45
Toluene	15.04	18.74	9.26	12.41			11.87	11.51
2-Methylheptane	0.89	1.17	0.67	0.66			0.70	0.59
3-Methylheptane	0.89	1.29	0.60	0.87			0.82	0.81
1-Octene	0.13	0.24	ND	0.21			0.42	0.40
n-Octane	1.00	1.65	0.70	0.94			1.14	1.14
Ethylbenzene	1.76	3.53	1.22	1.59			1.70	1.62
m-Xylene/p-Xylene	6.41	17.02	3.83	5.13			5.43	5.25
Styrene	0.38	0.33	0.59	1.13			0.40	0.36
o-Xylene	2.46	6.86	1.54	1.97			2.12	2.03
1-Nonene	0.21	0.51	ND	0.61			0.50	0.60
n-Nonane	0.60	1.17	0.53	0.97			1.02	1.02
Isopropylbenzene	0.32	0.43	0.50	0.44			0.38	0.40
a-Pinene	0.25	0.33	ND	0.83			0.52	0.65
n-Propylbenzene	0.63	1.49	0.80	0.62			0.48	0.47
m-Ethyltoluene	1.77	4.77	1.66	1.51			1.35	1.52
p-Ethyltoluene	1.03	1.85	0.82	1.20			0.76	1.02
1,3,5-Trimethylbenzene	0.69	3.77	0.48	0.98			0.83	0.92
o-Ethyltoluene	0.84	2.54	0.63	0.59			0.74	0.73
b-Pinene	0.48	0.46	0.50	0.84			1.64	1.53
1,2,4-Trimethylbenzene	2.01	9.78	1.38	1.90			2.14	2.09
1-Decene	ND	ND	ND	ND			ND	ND
n-Decane	0.83	1.48	0.81	0.80			0.77	0.77
1,2,3-Trimethylbenzene	0.65	2.18	0.74	0.77			0.51	0.45
m-Diethylbenzene	0.28	1.32	1.61	1.51			0.80	0.74
p-Diethylbenzene	0.59	0.90	0.76	0.92			0.42	0.19
1-Undecene	0.36	0.50	1.54	0.35			1.32	1.12
n-Undecane	1.92	2.50	2.32	2.80			0.98	1.20
1-Dodecene	0.15	0.22	0.13	0.40			0.38	0.31
n-Dodecane	0.23	0.86	0.17	0.30			0.33	0.35
1-Tridecene	ND	0.52	0.52	0.92			ND	ND
n-Tridecane	0.21	0.94	0.24	0.45			0.35	0.28
TNMOC (speciated)	174.41	208.88	111.08	141.96			157.41	156.83
TNMOC (w/ unknowns)	241.21	271.20	168.68	209.83			217.95	214.50

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17550 D2	SLCU 17550 R2	SLCU 17557	SLCU 17599	SLCU 17613 D1	SLCU 17613 R1	SLCU 17615 D2	SLCU 17615 R2
Sampling Date:	5/30/2000	5/30/2000	6/5/2000	6/11/2000	6/18/2000	6/18/2000	6/18/2000	6/18/2000
Analysis Date:	6/14/2000	6/15/2000	VOID	6/23/2000	6/23/2000	6/27/2000	6/23/2000	6/27/2000
Ethylene	4.32	4.31		6.42	3.05	3.18	2.93	3.05
Acetylene	3.64	3.62		5.27	2.40	2.64	2.50	2.59
Ethane	3.52	3.45		4.60	3.52	3.71	3.46	3.69
Propylene	2.31	2.22		3.43	1.45	1.59	1.48	1.51
Propane	4.85	4.89		9.41	6.08	6.22	6.42	6.57
Propyne	ND	ND		ND	0.12	ND	ND	ND
Isobutane	2.50	2.45		11.65	2.58	2.76	2.63	2.76
Isobutene/1-Butene	2.15	2.09		3.14	1.35	1.55	1.39	1.57
1,3-Butadiene	0.34	0.36		0.74	0.20	0.20	0.20	0.21
n-Butane	6.61	6.47		9.96	5.72	5.90	5.67	5.80
trans-2-Butene	0.30	0.63		0.78	0.44	0.53	0.43	0.52
cis-2-Butene	0.92	0.90		0.96	0.57	0.75	0.57	0.72
3-Methyl-1-butene	0.32	0.21		0.35	0.12	0.12	0.12	0.15
Isopentane	9.93	9.75		28.44	7.90	8.04	7.84	7.94
1-Pentene	1.59	1.67		0.83	0.61	0.67	0.64	0.77
2-Methyl-1-butene	0.84	0.80		1.35	0.51	0.43	0.52	0.49
n-Pentane	5.45	5.45		14.61	4.69	4.84	4.61	4.72
Isoprene	1.94	1.86		1.47	0.77	0.88	0.79	0.96
trans-2-Pentene	1.20	1.13		1.63	0.75	0.81	0.71	0.81
cis-2-Pentene	0.76	0.76		1.09	0.63	0.74	0.60	0.73
2-Methyl-2-butene	0.95	0.91		1.52	0.48	0.53	0.50	0.51
2,2-Dimethylbutane	0.92	0.90		1.35	0.94	1.13	0.85	1.03
Cyclopentene	0.33	0.26		0.37	0.16	0.21	0.18	0.26
4-Methyl-1-pentene	0.18	0.12		0.27	0.28	0.28	0.13	0.22
Cyclopentane	0.76	0.74		2.20	0.64	0.78	0.66	0.75
2,3-Dimethylbutane	1.67	1.48		2.49	1.44	1.59	1.42	1.49
2-Methylpentane	4.38	3.89		6.93	2.71	2.80	2.99	3.01
3-Methylpentane	2.27	2.31		3.99	1.91	2.04	1.84	1.98
2-Methyl-1-pentene	0.27	0.24		0.38	0.18	0.19	0.17	0.18
1-Hexene	0.27	0.31		0.37	0.14	0.18	0.15	0.14
2-Ethyl-1-butene	ND	ND		ND	ND	ND	ND	ND
n-Hexane	2.92	2.81		5.86	ND	2.48	2.40	2.40
trans-2-Hexene	0.22	0.23		0.38	0.12	0.20	0.14	0.28
cis-2-Hexene	0.16	0.15		0.23	0.11	0.13	0.11	0.14
Methylcyclopentane	1.56	1.61		2.86	1.33	1.39	1.25	1.36
2,4-Dimethylpentane	1.43	1.42		1.99	1.14	1.31	1.14	1.30
Benzene	3.98	3.90		6.77	3.17	3.34	3.25	3.27
Cyclohexane	20.37	20.47		149.85	0.98	1.08	2.99	1.25
2-Methylhexane	1.19	1.11		1.82	0.77	0.91	0.85	0.90
2,3-Dimethylpentane	2.55	2.13		3.05	1.55	1.89	1.62	1.87
3-Methylhexane	3.15	2.63		3.35	1.84	1.94	1.60	1.90
1-Heptene	0.48	0.32		0.50	0.25	0.26	0.18	0.28
2,2,4-Trimethylpentane	3.09	3.14		5.09	2.35	2.48	2.34	2.50
n-Heptane	1.54	1.52		2.41	1.12	1.23	1.13	1.25
Methylcyclohexane	1.63	1.49		2.48	1.16	1.30	1.13	1.23
2,2,3-Trimethylpentane	0.58	0.45		0.62	0.38	0.36	0.33	0.33
2,3,4-Trimethylpentane	1.44	1.38		2.09	1.09	1.15	1.04	1.12
Toluene	11.99	11.04		21.60	7.65	8.29	7.66	7.93
2-Methylheptane	0.81	0.69		0.89	0.57	0.61	0.54	0.60
3-Methylheptane	0.69	0.79		1.28	0.64	0.66	0.53	0.64
1-Octene	0.27	0.22		0.32	0.18	0.21	0.16	0.17
n-Octane	0.97	0.85		1.28	0.74	0.93	0.78	0.89
Ethylbenzene	1.76	1.53		2.41	1.09	1.30	1.16	1.26
m-Xylene/p-Xylene	5.71	4.94		8.09	3.28	3.84	3.45	3.74
Styrene	0.52	0.43		0.83	0.31	0.44	0.35	0.51
o-Xylene	2.25	1.97		2.99	1.28	1.56	1.32	1.45
1-Nonene	0.38	0.45		0.28	0.11	0.25	0.15	0.25
n-Nonane	1.00	0.90		1.02	0.53	0.71	0.56	0.69
Isopropylbenzene	0.47	0.34		0.55	0.28	0.52	0.35	0.49
a-Pinene	0.61	0.42		1.31	0.31	0.48	0.29	0.41
n-Propylbenzene	0.83	0.57		0.73	0.45	0.65	0.49	0.79
m-Ethyltoluene	1.68	1.21		2.12	0.96	1.26	1.14	1.31
p-Ethyltoluene	0.90	0.71		1.54	0.82	1.05	0.89	1.01
1,3,5-Trimethylbenzene	0.97	0.96		1.06	0.65	0.76	0.64	0.81
o-Ethyltoluene	0.83	0.67		0.96	0.59	0.74	0.61	0.75
b-Pinene	0.57	0.46		1.04	0.89	1.05	0.79	0.77
1,2,4-Trimethylbenzene	2.27	1.94		2.83	1.26	1.52	1.38	1.58
1-Decene	ND	ND		ND	ND	ND	ND	ND
n-Decane	1.34	0.83		1.68	0.77	0.87	0.75	0.91
1,2,3-Trimethylbenzene	0.92	0.55		0.82	0.49	0.56	0.53	0.60
m-Diethylbenzene	1.03	0.80		2.00	1.56	1.58	1.26	1.58
p-Diethylbenzene	0.32	0.59		0.69	0.54	0.47	0.55	0.45
1-Undecene	1.02	0.15		1.85	2.14	1.86	1.30	1.29
n-Undecane	1.26	1.06		2.87	1.64	1.79	1.54	2.29
1-Dodecene	0.26	0.22		0.39	0.29	0.27	0.23	0.28
n-Dodecane	0.25	0.22		0.55	0.25	0.19	0.23	0.19
1-Tridecene	ND	ND		ND	ND	ND	ND	ND
n-Tridecane	0.18	0.14		0.33	0.12	ND	0.14	0.13
TNMOC (speciated)	153.78	144.55		379.64	100.04	111.13	103.63	110.23
TNMOC (w/ unknowns)	208.06	188.90		455.53	152.36	142.01	145.55	150.08

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17692 D1	SLCU 17693 D2	SLCU 17698	SLCU 17755	SLCU 17837	SLCU 17972 D1	SLCU 17974 D2	SLCU 17990 D1
Sampling Date:	6/23/2000	6/23/2000	6/29/2000	7/5/2000	7/11/2000	7/23/2000	7/23/2000	7/29/2000
Analysis Date:	7/11/2000	VOID	VOID	7/12/2000	7/20/2000	8/15/2000	VOID	8/3/2000
Ethylene	2.99			2.56	4.59	5.03		7.72
Acetylene	2.48			1.80	4.00	3.51		6.21
Ethane	2.39			2.48	2.59	2.85		5.31
Propylene	1.52			1.42	2.33	2.39		3.41
Propane	3.27			3.06	5.89	6.16		10.19
Propyne	ND			ND	ND	ND		ND
Isobutane	2.76			1.30	2.77	4.20		5.42
Isobutene/1-Butene	1.65			1.96	2.01	2.20		2.89
1,3-Butadiene	0.23			0.19	0.42	0.43		0.64
n-Butane	3.88			3.83	6.85	8.19		18.02
trans-2-Butene	0.49			0.51	0.57	0.38		0.97
cis-2-Butene	0.62			0.70	0.71	0.79		1.25
3-Methyl-1-butene	0.11			0.15	0.21	0.25		0.50
Isopentane	12.54			6.23	13.57	31.84		30.46
1-Pentene	0.13			ND	0.37	0.83		1.49
2-Methyl-1-butene	0.46			0.58	0.95	0.67		2.05
n-Pentane	4.33			4.13	8.94	9.04		16.90
Isoprene	1.09			1.19	1.41	2.92		2.33
trans-2-Pentene	0.69			0.74	1.15	1.26		2.32
cis-2-Pentene	0.62			0.63	0.83	0.89		1.40
2-Methyl-2-butene	0.50			0.55	0.99	1.12		2.44
2,2-Dimethylbutane	0.88			0.81	1.05	1.12		1.47
Cyclopentene	0.24			0.21	0.41	0.39		0.46
4-Methyl-1-pentene	ND			ND	ND	ND		0.17
Cyclopentane	0.60			0.58	0.87	0.98		1.39
2,3-Dimethylbutane	1.32			1.21	2.05	2.15		3.69
2-Methylpentane	2.48			2.58	4.61	6.29		9.46
3-Methylpentane	1.82			1.58	2.92	3.27		5.52
2-Methyl-1-pentene	0.13			0.15	0.25	ND		0.38
1-Hexene	0.16			0.14	0.17	0.60		0.94
2-Ethyl-1-butene	ND			ND	ND	ND		ND
n-Hexane	2.15			1.74	3.66	5.19		7.49
trans-2-Hexene	0.14			0.13	0.23	0.14		0.48
cis-2-Hexene	ND			ND	0.15	0.17		0.32
Methylcyclopentane	1.23			1.00	1.87	2.26		3.56
2,4-Dimethylpentane	1.03			0.98	1.55	1.73		2.96
Benzene	2.99			2.77	5.47	5.51		9.74
Cyclohexane	1.51			0.86	8.45	11.27		2.19
2-Methylhexane	0.75			0.57	1.24	1.49		2.38
2,3-Dimethylpentane	1.49			1.36	2.33	2.52		4.25
3-Methylhexane	1.82			2.10	2.51	3.77		3.79
1-Heptene	0.15			ND	ND	ND		0.65
2,2,4-Trimethylpentane	1.99			2.15	4.32	4.83		7.14
n-Heptane	1.01			0.87	1.66	1.99		2.95
Methylcyclohexane	0.92			0.98	1.57	2.19		3.11
2,2,3-Trimethylpentane	0.36			0.30	0.55	0.55		0.91
2,3,4-Trimethylpentane	0.89			0.88	1.64	1.82		2.66
Toluene	23.16			5.94	14.39	18.01		24.40
2-Methylheptane	0.55			0.49	0.72	0.72		1.00
3-Methylheptane	0.61			0.55	0.86	0.89		1.33
1-Octene	0.18			0.12	0.18	0.22		0.22
n-Octane	0.71			0.63	0.92	1.00		1.48
Ethylbenzene	1.15			0.94	1.98	2.23		2.69
m-Xylene/p-Xylene	3.29			2.81	6.49	7.55		9.67
Styrene	0.58			0.37	0.55	1.00		0.56
o-Xylene	1.30			1.14	2.37	2.77		3.46
1-Nonene	0.12			0.13	0.20	0.23		0.18
n-Nonane	0.58			0.53	0.88	0.95		0.93
Isopropylbenzene	0.49			0.45	0.41	0.32		0.24
a-Pinene	0.36			0.57	3.48	0.68		0.99
n-Propylbenzene	0.60			0.61	0.67	0.71		0.63
m-Ethyltoluene	1.15			0.97	1.64	2.07		2.20
p-Ethyltoluene	0.89			1.01	1.13	1.30		1.25
1,3,5-Trimethylbenzene	0.68			0.60	0.99	1.24		1.36
o-Ethyltoluene	0.66			0.61	0.83	0.82		1.05
b-Pinene	ND			ND	ND	ND		ND
1,2,4-Trimethylbenzene	1.34			1.06	2.02	2.88		3.20
1-Decene	ND			ND	ND	ND		ND
n-Decane	0.78			0.70	1.26	1.33		1.19
1,2,3-Trimethylbenzene	1.02			0.83	0.76	0.68		1.13
m-Diethylbenzene	1.19			2.02	2.18	0.91		1.32
p-Diethylbenzene	0.52			1.44	0.91	0.58		0.63
1-Undecene	0.19			0.34	0.37	0.20		0.19
n-Undecane	1.78			2.27	3.71	2.33		1.80
1-Dodecene	0.21			0.18	0.33	0.20		0.24
n-Dodecane	0.33			0.18	0.32	0.55		0.51
1-Tridecene	ND			ND	ND	ND		ND
n-Tridecane	0.31			0.37	0.46	0.40		0.24
TNMOC (speciated)	113.50			85.77	161.65	197.93		264.04
TNMOC (w/ unknowns)	150.16			150.62	244.12	250.55		321.34

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 17990 R1	SLCU 17992 D2	SLCU 17992 R2	SLCU 18088	SLCU 18098	SLCU 18154	SLCU 18221	SLCU 18323
Sampling Date:	7/29/2000	7/29/2000	7/29/2000	8/4/2000	8/10/2000	8/16/2000	8/22/2000	8/28/2000
Analysis Date:	8/15/2000	8/3/2000	8/15/2000	8/21/2000	8/21/2000	8/23/2000	9/5/2000	9/11/2000
Ethylene	8.45	7.91	8.30	5.29	3.13	3.35	4.74	3.89
Acetylene	6.74	6.43	6.70	4.30	2.40	2.59	3.48	2.67
Ethane	5.79	5.38	5.79	4.11	3.29	2.25	2.71	2.24
Propylene	3.72	3.47	3.80	2.56	1.60	1.64	2.21	1.98
Propane	11.15	10.72	11.69	5.82	4.17	3.60	5.61	3.73
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	6.04	5.50	5.89	3.78	2.03	2.01	2.55	1.93
Isobutene/1-Butene	3.21	2.94	3.23	2.47	1.65	1.66	2.04	2.02
1,3-Butadiene	0.71	0.62	0.68	0.41	0.26	0.28	0.39	0.34
n-Butane	19.54	18.18	19.44	8.56	5.60	5.32	6.97	5.46
trans-2-Butene	1.07	1.00	1.06	0.71	0.52	0.52	0.60	0.57
cis-2-Butene	1.26	1.19	1.26	0.89	0.68	0.65	0.76	0.73
3-Methyl-1-butene	0.56	0.50	0.56	0.29	0.19	0.18	0.23	0.21
Isopentane	33.05	30.71	32.75	29.00	10.00	9.93	12.88	10.91
1-Pentene	1.95	1.53	1.69	0.56	0.67	0.62	0.78	0.66
2-Methyl-1-butene	2.16	1.96	2.14	1.08	0.78	0.73	0.99	0.81
n-Pentane	18.47	16.97	18.42	11.48	6.40	6.35	7.20	5.76
Isoprene	2.54	2.33	2.51	1.60	1.94	1.33	1.46	1.10
trans-2-Pentene	2.52	2.39	2.56	1.39	0.89	0.83	1.09	0.92
cis-2-Pentene	1.53	1.43	1.51	0.89	0.70	0.64	0.77	0.72
2-Methyl-2-butene	2.70	2.47	2.64	1.14	0.70	0.71	1.04	0.84
2,2-Dimethylbutane	1.67	1.50	1.70	1.19	0.89	0.81	0.90	0.83
Cyclopentene	0.50	0.53	0.58	0.35	0.17	0.27	0.41	0.12
4-Methyl-1-pentene	ND	0.25	ND	ND	ND	ND	ND	ND
Cyclopentane	1.52	1.41	1.50	0.95	0.70	0.65	0.80	0.66
2,3-Dimethylbutane	3.95	3.71	3.94	2.16	1.53	1.40	1.89	1.53
2-Methylpentane	11.00	9.88	10.62	5.51	3.25	3.39	4.99	3.33
3-Methylpentane	6.01	5.54	5.94	3.69	2.30	2.11	2.77	2.19
2-Methyl-1-pentene	0.43	0.47	0.43	0.28	0.18	ND	0.21	ND
1-Hexene	1.10	0.86	1.09	0.28	0.22	0.73	0.78	0.70
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	8.07	7.49	7.99	5.42	3.03	2.55	3.64	2.93
trans-2-Hexene	0.55	0.49	0.52	0.18	0.19	0.13	0.29	0.19
cis-2-Hexene	0.34	0.32	0.34	0.18	0.11	0.09	0.15	0.11
Methylcyclopentane	3.87	3.58	3.81	2.32	1.54	1.36	1.91	1.51
2,4-Dimethylpentane	3.25	3.06	3.19	1.63	1.21	1.06	1.57	1.17
Benzene	10.70	9.76	10.50	6.13	3.89	3.90	5.33	3.85
Cyclohexane	2.41	2.23	2.41	67.50	1.19	1.98	1.07	2.42
2-Methylhexane	2.57	2.40	2.53	1.35	1.17	0.85	1.21	0.94
2,3-Dimethylpentane	4.63	4.30	4.58	2.06	1.68	1.44	2.11	1.68
3-Methylhexane	4.40	3.86	4.41	2.70	2.02	1.77	2.26	1.71
1-Heptene	ND	0.71	ND	ND	ND	ND	0.31	ND
2,2,4-Trimethylpentane	8.77	7.27	8.66	4.14	2.70	2.61	3.37	2.98
n-Heptane	3.23	2.99	3.22	1.86	1.39	1.12	1.70	1.36
Methylcyclohexane	3.22	2.61	2.74	1.72	1.05	1.01	1.63	0.90
2,2,3-Trimethylpentane	1.00	0.93	1.01	0.54	0.35	0.32	0.59	0.36
2,3,4-Trimethylpentane	3.09	2.80	3.03	1.63	1.04	0.99	1.36	1.12
Toluene	28.63	24.59	27.00	17.34	12.16	9.46	11.90	9.63
2-Methylheptane	1.13	1.03	1.08	0.80	0.50	0.55	0.64	0.51
3-Methylheptane	1.35	1.36	1.29	0.91	0.59	0.54	0.80	0.62
1-Octene	0.30	0.34	0.38	0.24	0.15	0.16	0.16	0.13
n-Octane	1.65	1.51	1.53	1.22	0.66	0.68	0.95	0.63
Ethylbenzene	2.79	2.67	2.62	2.22	1.36	1.09	1.51	1.06
m-Xylene/p-Xylene	9.87	9.77	9.35	6.81	4.40	3.51	5.28	3.51
Styrene	0.51	0.51	0.46	1.13	0.34	0.39	0.58	0.32
o-Xylene	3.50	3.46	3.35	2.54	1.56	1.36	1.96	1.31
1-Nonene	0.47	0.21	0.36	0.19	ND	ND	0.16	ND
n-Nonane	0.93	0.93	0.89	0.82	0.47	0.44	1.54	0.48
Isopropylbenzene	0.27	0.27	0.27	0.27	0.22	0.29	0.21	0.20
a-Pinene	0.83	0.94	0.78	0.95	0.63	0.44	0.56	0.45
n-Propylbenzene	0.66	0.69	0.68	0.70	0.56	0.53	0.56	0.51
m-Ethyltoluene	2.29	2.29	2.25	1.85	1.18	1.16	1.56	1.02
p-Ethyltoluene	1.35	1.32	1.29	1.22	0.91	0.99	1.12	0.77
1,3,5-Trimethylbenzene	1.35	1.23	1.24	0.92	0.51	0.49	0.97	0.66
o-Ethyltoluene	0.84	0.99	0.80	0.85	0.52	0.64	0.92	0.52
b-Pinene	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	3.03	2.97	2.30	1.33	1.28	1.96	1.15
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.27	1.28	1.12	1.57	0.64	0.67	1.51	0.66
1,2,3-Trimethylbenzene	0.70	0.98	0.67	0.97	0.67	0.66	0.85	0.72
m-Diethylbenzene	1.04	1.32	1.03	2.29	1.88	2.24	1.38	1.73
p-Diethylbenzene	0.67	0.52	0.62	0.82	0.66	0.73	0.55	0.92
1-Undecene	0.24	0.19	0.27	0.59	0.32	0.60	0.55	0.46
n-Undecane	1.85	1.93	1.82	3.51	1.85	1.99	2.54	2.16
1-Dodecene	0.36	0.20	0.21	0.36	0.33	0.25	0.11	0.19
n-Dodecane	1.04	0.46	0.60	0.79	0.20	0.27	0.46	0.50
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	0.25	0.25	0.22	0.53	0.19	0.31	0.36	0.87
TNMOC (speciated)	288.71	266.85	282.43	254.79	114.18	107.41	141.37	111.78
TNMOC (w/ unknowns)	350.44	328.17	346.60	329.40	167.15	177.77	196.94	168.12

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Appendix K

Sample No.:	SLCU 18338	SLCU 18394	SLCU 18387	SLCU 18429	SLCU 18458	SLCU 18460	SLCU 18495	SLCU 18552
Sampling Date:	9/3/2000	9/12/2000	9/15/2000	9/21/2000	9/27/2000	9/27/2000	10/3/2000	10/9/2000
Analysis Date:	VOID	VOID	10/2/2000	10/12/2000	10/19/2000	VOID	10/27/2000	10/28/2000
Ethylene			7.48	12.89	11.03		8.66	5.26
Acetylene			4.91	6.81	9.62		6.69	4.64
Ethane			3.46	11.58	6.15		3.72	6.52
Propylene			3.67	5.79	4.99		4.21	2.26
Propane			6.68	11.78	13.21		6.00	7.98
Propyne			ND	ND	ND		ND	ND
Isobutane			3.50	6.19	8.33		4.46	3.89
Isobutene/1-Butene			3.52	4.44	4.02		4.06	1.97
1,3-Butadiene			0.63	1.15	0.98		0.81	0.43
n-Butane			9.11	15.07	17.50		12.58	11.87
trans-2-Butene			0.84	1.11	1.01		1.03	0.60
cis-2-Butene			1.01	1.25	1.18		1.11	0.72
3-Methyl-1-butene			0.32	0.46	0.48		0.31	0.21
Isopentane			15.92	23.02	28.82		22.25	17.57
1-Pentene			1.10	1.30	1.20		1.01	0.58
2-Methyl-1-butene			1.29	1.72	1.54		1.48	0.82
n-Pentane			9.78	15.67	14.48		10.65	6.69
Isoprene			1.62	0.98	1.00		0.73	1.07
trans-2-Pentene			1.41	1.88	1.87		2.15	1.04
cis-2-Pentene			0.96	1.18	1.11		1.16	0.67
2-Methyl-2-butene			1.41	2.13	2.16		2.24	1.06
2,2-Dimethylbutane			1.09	1.44	1.23		0.95	0.92
Cyclopentene			0.42	0.26	3.91		0.61	0.48
4-Methyl-1-pentene			0.13	ND	0.19		ND	ND
Cyclopentane			0.94	1.23	1.21		1.01	0.68
2,3-Dimethylbutane			2.38	3.18	3.64		2.46	1.72
2-Methylpentane			6.08	8.37	7.24		5.69	3.51
3-Methylpentane			3.53	5.08	4.99		3.97	2.61
2-Methyl-1-pentene			0.25	0.41	0.47		0.36	ND
1-Hexene			1.11	0.98	1.00		0.77	0.75
2-Ethyl-1-butene			ND	ND	ND		ND	ND
n-Hexane			4.67	7.40	8.43		5.67	3.34
trans-2-Hexene			0.34	0.48	ND		ND	ND
cis-2-Hexene			0.23	0.31	0.54		0.61	0.64
Methylcyclopentane			2.41	3.64	3.55		2.88	1.64
2,4-Dimethylpentane			1.80	2.77	2.51		2.09	1.23
Benzene			6.99	9.87	9.98		7.55	4.72
Cyclohexane			1.78	2.06	8.32		1.47	3.24
2-Methylhexane			1.49	2.34	2.35		1.95	1.07
2,3-Dimethylpentane			2.49	3.80	3.69		3.00	1.70
3-Methylhexane			3.40	4.37	2.78		2.32	1.28
1-Heptene			0.66	ND	ND		ND	ND
2,2,4-Trimethylpentane			4.93	8.02	7.45		5.81	3.29
n-Heptane			2.46	3.15	3.04		2.75	1.31
Methylcyclohexane			2.17	2.66	2.54		2.06	1.11
2,2,3-Trimethylpentane			0.68	0.93	1.39		1.10	0.60
2,3,4-Trimethylpentane			1.97	2.87	2.52		2.22	1.21
Toluene			18.02	28.32	26.06		19.07	10.62
2-Methylheptane			0.84	1.23	1.33		1.05	0.66
3-Methylheptane			0.93	1.35	1.24		0.83	0.59
1-Octene			0.36	0.28	0.16		ND	ND
n-Octane			1.14	1.68	1.50		1.16	0.95
Ethylbenzene			2.17	3.78	3.35		2.24	1.69
m-Xylene/p-Xylene			7.79	13.52	13.24		7.93	5.45
Styrene			0.44	1.86	1.82		0.94	0.68
o-Xylene			2.73	4.70	4.47		2.92	1.94
1-Nonene			0.35	0.31	0.84		0.50	0.29
n-Nonane			0.87	1.38	3.18		1.13	0.64
Isopropylbenzene			0.22	0.30	0.34		0.30	0.32
a-Pinene			0.81	1.11	0.53		ND	2.55
n-Propylbenzene			0.88	0.92	1.04		0.67	0.51
m-Ethyltoluene			2.10	3.01	3.16		2.03	1.53
p-Ethyltoluene			1.45	1.72	1.93		1.21	0.82
1,3,5-Trimethylbenzene			1.23	1.78	2.09		1.37	0.73
o-Ethyltoluene			0.98	1.52	2.02		1.05	0.69
b-Pinene			ND	ND	ND		0.66	1.06
1,2,4-Trimethylbenzene			2.56	4.16	5.13		2.79	1.77
1-Decene			ND	ND	ND		ND	ND
n-Decane			0.97	2.07	5.11		1.42	1.17
1,2,3-Trimethylbenzene			0.84	1.13	1.71		0.95	0.68
m-Diethylbenzene			2.46	1.82	0.93		1.59	1.32
p-Diethylbenzene			1.56	1.34	0.55		0.69	0.55
1-Undecene			0.82	0.60	0.67		0.33	0.44
n-Undecane			4.17	2.89	4.29		2.25	2.90
1-Dodecene			0.27	0.28	0.18		0.16	0.18
n-Dodecane			0.42	0.52	0.88		0.45	1.52
1-Tridecene			ND	ND	ND		ND	ND
n-Tridecane			0.11	0.20	0.21		0.18	0.47
TNMOC (speciated)			190.47	285.77	301.58		208.43	155.59
TNMOC (w/ unknowns)			270.33	370.39	392.11		253.00	192.16

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 18590	SLCU 18622	SLCU 18671 D1	SLCU 18671 R1	SLCU 18673 D2	SLCU 18673 R2	SLCU 18710	SLCU 18725
Sampling Date:	10/15/2000	10/21/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000	11/2/2000	11/8/2000
Analysis Date:	11/2/2000	11/2/2000	11/6/2000	11/7/2000	11/6/2000	11/7/2000	11/14/2000	11/15/2000
Ethylene	9.19	2.23	7.45	7.34	7.44	7.31	13.43	6.95
Acetylene	7.86	1.52	6.22	6.14	6.20	6.10	12.99	6.70
Ethane	5.44	2.70	5.71	5.65	5.20	5.09	13.98	8.33
Propylene	3.86	1.69	3.32	3.24	3.18	3.17	5.06	2.81
Propane	9.53	3.58	7.12	7.04	6.25	6.04	12.17	9.16
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	7.23	1.52	4.12	4.01	4.09	3.99	7.09	3.61
Isobutene/1-Butene	3.12	1.90	2.81	2.81	2.64	2.55	3.80	2.58
1,3-Butadiene	0.70	0.19	0.60	0.62	0.61	0.59	1.00	0.50
n-Butane	15.83	3.74	12.71	12.51	12.25	12.01	19.35	9.15
trans-2-Butene	0.86	0.38	0.68	0.65	0.69	0.65	0.92	0.54
cis-2-Butene	0.96	0.50	0.78	0.76	0.79	0.76	1.08	0.69
3-Methyl-1-butene	0.26	ND	0.19	0.20	0.24	0.21	0.29	0.14
Isopentane	28.62	6.22	16.34	13.39	12.66	12.20	21.08	12.74
1-Pentene	0.79	0.40	0.78	0.67	0.73	0.71	0.80	0.49
2-Methyl-1-butene	1.22	0.33	0.85	0.79	0.83	0.81	1.27	0.63
n-Pentane	13.86	2.72	6.96	6.85	6.98	6.85	10.26	5.38
Isoprene	0.84	0.36	0.65	0.65	0.66	0.62	0.82	0.54
trans-2-Pentene	1.54	0.49	1.08	1.05	1.07	1.03	1.47	0.78
cis-2-Pentene	0.99	0.44	0.71	0.70	0.73	0.67	0.94	0.55
2-Methyl-2-butene	1.79	0.32	1.13	1.09	1.10	1.10	1.83	0.84
2,2-Dimethylbutane	0.99	0.58	0.99	0.92	0.98	0.90	1.06	0.88
Cyclopentene	0.61	0.62	0.45	0.38	0.48	0.30	0.83	0.44
4-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclopentane	0.92	0.43	0.81	0.77	0.80	0.75	0.99	0.58
2,3-Dimethylbutane	2.35	0.83	1.90	1.86	1.69	1.78	2.53	1.35
2-Methylpentane	5.30	0.99	3.89	3.87	3.84	3.79	5.59	2.64
3-Methylpentane	3.93	0.96	2.91	2.87	2.82	2.78	3.90	2.04
2-Methyl-1-pentene	ND	ND	ND	ND	ND	ND	ND	ND
1-Hexene	1.09	0.66	0.95	0.86	0.91	0.89	0.91	0.75
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	7.41	1.31	4.17	4.09	4.54	4.13	6.19	3.14
trans-2-Hexene	ND	ND	ND	ND	ND	ND	ND	ND
cis-2-Hexene	0.78	0.55	0.42	0.35	0.41	0.34	0.77	0.84
Methylcyclopentane	3.09	0.69	2.09	2.08	2.17	2.11	2.91	1.54
2,4-Dimethylpentane	2.07	0.68	1.48	1.45	1.54	1.52	2.25	1.33
Benzene	7.24	2.56	5.41	5.60	5.62	5.52	8.21	5.12
Cyclohexane	53.65	0.55	1.27	1.30	1.08	1.07	1.40	0.81
2-Methylhexane	1.68	0.43	1.37	1.36	1.35	1.37	1.98	0.99
2,3-Dimethylpentane	3.15	1.00	2.23	2.20	2.37	2.31	3.50	2.00
3-Methylhexane	2.01	0.46	1.62	1.59	1.65	1.65	2.37	1.20
1-Heptene	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	6.17	1.55	4.32	4.16	4.26	4.17	6.44	3.44
n-Heptane	2.32	0.69	1.70	1.64	1.77	1.75	3.29	1.48
Methylcyclohexane	1.68	0.57	1.34	1.33	1.45	1.45	2.60	1.13
2,2,3-Trimethylpentane	0.93	ND	0.51	0.65	0.76	0.68	0.81	0.41
2,3,4-Trimethylpentane	2.20	0.61	1.57	1.54	1.63	1.62	2.41	1.29
Toluene	18.43	3.82	13.88	13.21	14.30	13.60	20.28	10.52
2-Methylheptane	0.97	0.44	0.74	0.70	0.77	0.78	1.05	0.69
3-Methylheptane	0.75	0.37	0.69	0.65	0.73	0.65	0.87	0.60
1-Octene	ND	ND	0.12	0.12	ND	ND	0.18	ND
n-Octane	1.09	0.56	0.94	0.86	0.90	0.88	1.20	0.84
Ethylbenzene	2.37	0.77	1.86	2.02	1.66	1.93	2.72	1.52
m-Xylene/p-Xylene	8.53	1.98	6.64	5.98	6.57	5.89	9.63	5.12
Styrene	1.03	0.81	0.85	0.72	1.03	0.72	1.19	0.84
o-Xylene	3.09	0.81	2.44	2.17	2.41	2.14	3.56	1.92
1-Nonene	0.35	0.19	0.49	0.44	0.43	0.29	0.54	0.30
n-Nonane	0.93	0.41	0.65	0.61	0.69	0.61	0.89	0.68
Isopropylbenzene	0.39	0.35	0.34	0.33	0.37	0.34	0.41	0.38
a-Pinene	0.57	ND	1.51	1.57	0.38	0.32	0.35	0.18
n-Propylbenzene	0.73	0.51	0.58	0.55	0.58	0.47	0.80	0.62
m-Ethyltoluene	2.07	0.87	1.59	1.50	1.69	1.51	2.51	1.43
p-Ethyltoluene	1.08	0.67	1.05	0.88	1.00	0.79	1.47	1.01
1,3,5-Trimethylbenzene	1.16	0.39	1.03	0.91	1.05	0.94	1.38	0.63
o-Ethyltoluene	1.02	0.46	0.94	0.81	0.93	0.61	1.10	0.69
b-Pinene	ND	1.02	0.92	0.71	ND	0.50	0.49	0.47
1,2,4-Trimethylbenzene	2.83	1.10	2.11	1.93	2.08	1.91	3.05	1.70
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.44	0.75	1.00	0.97	0.99	0.96	1.39	1.17
1,2,3-Trimethylbenzene	1.04	0.73	0.72	0.62	0.58	0.68	1.04	0.73
m-Diethylbenzene	1.09	1.76	0.91	1.07	1.06	1.07	1.49	0.80
p-Diethylbenzene	0.63	0.81	0.57	0.39	0.59	0.38	0.72	0.72
1-Undecene	0.67	0.57	0.35	0.24	0.37	0.22	0.41	0.34
n-Undecane	3.36	2.47	1.47	1.37	1.78	1.34	2.47	1.95
1-Dodecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Dodecane	0.69	0.61	0.51	0.43	0.44	0.40	0.48	0.45
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	0.25	ND	0.16	ND	0.19	0.12	0.33	ND
TNMOC (speciated)	280.64	71.13	166.60	158.71	160.03	153.38	252.51	142.78
TNMOC (w/ unknowns)	334.99	118.63	197.14	185.87	190.39	180.32	306.61	185.43

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1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 18770	SLCU 18792 D1	SLCU 18792 R1	SLCU 18794 D2	SLCU 18794 R2	SLCU 18804	SLCU 18814	SLCU 18911
Sampling Date:	11/16/2000	11/21/2000	11/21/2000	11/21/2000	11/21/2000	11/26/2000	12/2/2000	12/8/2000
Analysis Date:	12/5/2000	12/5/2000	12/8/2000	12/5/2000	12/8/2000	12/12/2000	12/18/2000	12/19/2000
Ethylene	10.76	36.03	35.71	35.98	35.85	17.61	40.34	37.46
Acetylene	10.05	36.33	36.82	35.40	36.45	16.09	38.68	38.00
Ethane	12.04	39.35	38.46	39.83	38.22	20.21	42.17	33.19
Propylene	4.39	13.37	13.24	13.31	13.17	6.41	16.40	14.05
Propane	9.00	42.35	42.13	42.02	41.52	17.65	35.48	30.69
Propyne	ND	ND	ND	ND	ND	ND	ND	ND
Isobutane	4.35	27.31	27.03	27.29	26.73	9.96	23.96	36.29
Isobutene/1-Butene	3.77	8.64	8.62	8.69	8.59	4.42	16.25	12.56
1,3-Butadiene	0.85	2.52	2.50	2.48	2.51	1.19	0.93	2.71
n-Butane	11.59	69.07	68.91	69.29	67.88	27.27	67.65	105.58
trans-2-Butene	0.76	2.29	2.30	2.29	2.37	1.13	2.67	3.07
cis-2-Butene	0.84	2.47	2.45	2.45	2.43	1.19	2.60	3.13
3-Methyl-1-butene	0.70	2.12	1.50	2.16	0.85	0.24	0.96	0.74
Isopentane	18.97	69.25	70.59	67.86	63.49	31.50	63.24	76.42
1-Pentene	0.74	2.53	2.19	2.43	2.04	1.07	2.30	2.38
2-Methyl-1-butene	0.96	3.33	3.30	3.31	3.28	1.51	3.72	3.68
n-Pentane	7.60	28.88	28.58	28.67	28.31	12.68	28.45	34.32
Isoprene	0.68	1.64	1.65	1.66	1.60	0.97	ND	1.70
trans-2-Pentene	1.03	3.62	3.61	3.58	3.57	1.71	3.99	3.98
cis-2-Pentene	0.91	2.07	2.05	2.08	2.04	1.04	2.29	2.15
2-Methyl-2-butene	1.32	4.93	4.95	4.91	4.86	2.22	2.24	5.68
2,2-Dimethylbutane	0.94	2.30	2.34	2.31	2.30	1.44	2.53	2.96
Cyclopentene	0.63	1.53	1.52	1.63	1.64	0.98	2.95	1.28
4-Methyl-1-pentene	0.14	0.31	0.31	0.30	0.28	ND	ND	ND
Cyclopentane	0.82	2.32	2.32	2.30	2.31	1.18	2.31	2.61
2,3-Dimethylbutane	1.91	7.04	7.06	6.99	6.86	2.82	7.37	7.62
2-Methylpentane	4.00	16.82	16.82	16.43	16.29	7.23	16.41	18.09
3-Methylpentane	2.95	11.20	11.17	11.20	11.10	4.76	10.75	11.72
2-Methyl-1-pentene	0.22	0.72	0.77	0.64	0.69	0.37	0.84	0.84
1-Hexene	0.96	1.54	1.45	1.48	1.40	1.02	1.72	1.40
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	ND	ND
n-Hexane	5.20	16.52	16.42	17.57	17.20	6.68	15.41	17.14
trans-2-Hexene	ND	0.23	0.12	0.24	0.12	ND	0.25	0.24
cis-2-Hexene	0.97	1.05	ND	1.03	0.93	0.91	1.25	1.27
Methylcyclopentane	2.21	8.31	8.29	8.34	8.26	3.57	8.24	8.93
2,4-Dimethylpentane	1.82	6.17	6.07	6.20	6.13	2.99	6.81	7.05
Benzene	7.85	20.89	21.06	20.90	19.68	10.41	20.08	21.59
Cyclohexane	1.70	5.28	4.91	4.10	5.08	1.86	4.17	4.52
2-Methylhexane	1.43	5.56	5.51	5.57	5.48	2.35	5.76	6.49
2,3-Dimethylpentane	2.93	10.10	10.07	10.07	9.92	4.98	11.75	11.58
3-Methylhexane	1.76	6.92	6.82	7.14	7.01	2.79	7.15	8.90
1-Heptene	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	5.45	18.76	18.76	18.85	18.60	8.70	23.16	22.97
n-Heptane	2.11	7.58	7.19	7.18	6.83	3.04	7.22	7.97
Methylcyclohexane	1.61	6.40	6.00	6.04	6.14	2.71	5.80	6.53
2,2,3-Trimethylpentane	0.75	2.38	2.35	2.34	2.30	1.07	2.98	2.92
2,3,4-Trimethylpentane	1.92	6.66	6.63	6.61	6.53	3.11	8.51	8.69
Toluene	13.71	52.90	54.00	53.31	47.88	22.10	51.66	55.02
2-Methylheptane	0.95	1.86	1.89	1.89	2.45	0.85	1.92	2.08
3-Methylheptane	0.70	2.05	2.07	2.04	1.97	0.97	2.24	2.39
1-Octene	0.31	0.27	0.22	0.23	0.30	0.19	0.19	0.18
n-Octane	0.85	2.87	2.95	2.92	2.71	1.34	3.17	3.30
Ethylbenzene	1.70	5.99	6.29	6.10	5.54	2.53	6.18	7.00
m-Xylene/p-Xylene	7.18	22.02	22.74	22.69	20.57	9.31	23.40	26.59
Styrene	0.77	1.98	2.17	1.91	1.74	1.03	0.70	1.89
o-Xylene	2.40	8.15	8.42	8.30	7.78	3.38	8.85	9.78
1-Nonene	0.51	0.98	1.04	1.02	0.97	0.60	1.05	0.96
n-Nonane	0.66	2.06	2.12	2.08	2.00	0.78	2.02	1.82
Isopropylbenzene	0.35	0.43	0.52	0.44	0.40	0.30	0.41	0.46
a-Pinene	ND	0.56	0.59	0.61	0.59	0.38	ND	0.56
n-Propylbenzene	0.66	1.25	1.34	1.29	1.22	0.74	1.28	1.46
m-Ethyltoluene	1.81	4.24	4.56	4.34	4.23	2.11	5.00	5.33
p-Ethyltoluene	0.90	2.34	2.44	2.35	2.27	1.12	2.24	2.54
1,3,5-Trimethylbenzene	0.86	2.75	2.92	2.82	2.81	1.05	3.06	3.30
o-Ethyltoluene	0.82	2.20	2.37	2.27	2.21	1.06	2.27	2.85
b-Pinene	0.70	0.23	0.24	0.21	0.20	0.49	0.39	0.43
1,2,4-Trimethylbenzene	2.06	6.32	6.38	6.62	6.31	2.66	6.80	7.54
1-Decene	ND	ND	ND	ND	ND	ND	ND	ND
n-Decane	1.08	3.07	3.21	3.33	3.23	1.08	2.48	2.59
1,2,3-Trimethylbenzene	0.83	1.31	1.46	1.41	1.35	0.97	1.35	1.73
m-Diethylbenzene	0.91	0.72	1.24	0.82	0.79	0.87	1.30	1.74
p-Diethylbenzene	0.60	0.68	0.89	0.58	0.53	0.54	0.50	0.70
1-Undecene	0.57	0.24	0.27	0.30	0.28	0.34	0.43	0.49
n-Undecane	1.91	2.08	2.21	2.41	2.86	2.28	1.82	3.39
1-Dodecene	ND	0.15	0.12	0.18	0.14	0.17	0.26	ND
n-Dodecane	0.35	0.61	0.78	0.72	0.73	0.72	0.49	0.84
1-Tridecene	ND	ND	ND	ND	ND	ND	ND	ND
n-Tridecane	0.22	0.31	0.20	0.39	0.23	0.26	0.18	0.25
TNMOC (speciated)	195.90	695.24	696.21	694.67	673.13	311.24	699.30	778.27
TNMOC (w/ unknowns)	259.88	770.08	774.93	774.48	745.84	365.64	820.33	876.35

Reported in ppbC

1999/2000 SNMOC Raw Monitoring Data - Salt Lake City, UT
Appendix K

Sample No.:	SLCU 19009
Sampling Date:	12/14/2000
Analysis Date:	1/9/2001

Ethylene	6.63
Acetylene	6.54
Ethane	7.90
Propylene	2.77
Propane	7.83
Propyne	ND
Isobutane	6.29
Isobutene/1-Butene	2.74
1,3-Butadiene	0.47
n-Butane	15.98
trans-2-Butene	0.65
cis-2-Butene	0.74
3-Methyl-1-butene	0.20
Isopentane	16.26
1-Pentene	0.27
2-Methyl-1-butene	0.75
n-Pentane	6.17
Isoprene	0.37
trans-2-Pentene	0.78
cis-2-Pentene	0.47
2-Methyl-2-butene	1.02
2,2-Dimethylbutane	0.64
Cyclopentene	0.41
4-Methyl-1-pentene	ND
Cyclopentane	0.57
2,3-Dimethylbutane	1.21
2-Methylpentane	2.92
3-Methylpentane	2.02
2-Methyl-1-pentene	0.11
1-Hexene	0.40
2-Ethyl-1-butene	ND
n-Hexane	2.89
trans-2-Hexene	0.18
cis-2-Hexene	0.74
Methylcyclopentane	1.60
2,4-Dimethylpentane	1.17
Benzene	4.95
Cyclohexane	0.66
2-Methylhexane	0.94
2,3-Dimethylpentane	1.95
3-Methylhexane	1.06
1-Heptene	ND
2,2,4-Trimethylpentane	3.55
n-Heptane	1.38
Methylcyclohexane	0.85
2,2,3-Trimethylpentane	0.51
2,3,4-Trimethylpentane	1.35
Toluene	9.31
2-Methylheptane	0.33
3-Methylheptane	0.44
1-Octene	ND
n-Octane	0.61
Ethylbenzene	1.34
m-Xylene/p-Xylene	4.62
Styrene	1.24
o-Xylene	1.79
1-Nonene	0.30
n-Nonane	0.45
Isopropylbenzene	0.18
a-Pinene	ND
n-Propylbenzene	0.39
m-Ethyltoluene	1.42
p-Ethyltoluene	0.69
1,3,5-Trimethylbenzene	0.32
o-Ethyltoluene	0.34
b-Pinene	0.61
1,2,4-Trimethylbenzene	1.47
1-Decene	ND
n-Decane	0.82
1,2,3-Trimethylbenzene	0.57
m-Diethylbenzene	1.25
p-Diethylbenzene	0.40
1-Undecene	0.35
n-Undecane	2.00
1-Dodecene	ND
n-Dodecane	0.99
1-Tridecene	ND
n-Tridecane	0.24
TNMOC (speciated)	149.31
TNMOC (w/ unknowns)	197.74

Reported in ppbC

1999/2000 Carbonyl Raw Monitoring Data - Arlington, TX
Appendix L

SAMPLE #	17079	17117	17178	17174	17204 D1	17204 R1	17205 D2	17205 R2	17225	17244
SAMPLE DATE	11/26/1999	12/8/1999	12/20/1999	1/1/2000	1/13/2000	1/13/2000	1/13/2000	1/13/2000	1/25/2000	2/6/2000
ANALYSIS DATE	12/2/1999	12/13/1999	2/12/2000	2/12/2000	2/12/2000	2/12/2000	2/12/2000	2/12/2000	2/15/2000	void
FILE NAME	O9LB020	O9LM013	Q0BK040	Q0BK041	Q0BK042	Q0BK043	Q0BK044	Q0BK045	Q0BO008	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.03	2.34	1.44	3.60	1.99	2.05	2.15	2.17	2.62	
Acetaldehyde	1.01	1.15	0.65	1.64	0.84	0.82	0.87	0.88	1.06	
Acetone	1.77	0.80	1.11	1.42	1.81	1.81	1.90	1.91	1.83	
Propionaldehyde	0.12	0.19	0.07	0.17	0.08	0.08	0.08	0.08	0.12	
Crotonaldehyde	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	
Butyr/Isobutyraldehyde	0.15	0.15	0.16	0.28	0.20	0.20	0.23	0.22	0.22	
Benzaldehyde	0.06	0.06	0.05	0.06	0.06	0.05	0.06	0.06	0.07	
Isovaleraldehyde	0.01	0.01	0.03	0.04	0.03	0.03	0.04	0.05	0.03	
Valeraldehyde	0.03	0.04	0.03	0.04	0.02	0.02	0.03	0.03	0.04	
Tolualdehydes	0.04	0.05	0.01	0.04	0.02	0.02	0.02	0.02	0.03	
Hexaldehyde	0.05	0.05	0.03	0.05	0.05	0.04	0.05	0.05	0.05	
2,5-Dimethylbenzaldehyde	ND	0.01	ND	ND	ND	ND	ND	ND	ND	

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Arlington, TX
Appendix L

SAMPLE #	17248	17271	17309	17336	17379	17427 D1	17427 R1	17429 D2	17429 R2	17452 D1
SAMPLE DATE	2/6/2000	2/18/2000	3/1/2000	3/13/2000	3/25/2000	4/6/2000	4/6/2000	4/6/2000	4/6/2000	4/18/2000
ANALYSIS DATE	2/16/2000	2/28/2000	3/15/2000	4/4/2000	4/10/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	5/18/2000
FILE NAME	Q0BP005	F0B!005	F0CO010	Q0DD011	Q0DJ008	Q0DR008	Q0DR009	Q0DR010	Q0DR011	Q0ER015
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.38	2.23	2.80	2.41	2.27	1.93	1.92	2.48	2.53	3.12
Acetaldehyde	1.00	0.86	1.22	0.99	0.84	0.64	0.64	0.83	0.83	0.93
Acetone	1.59	1.72	2.13	1.70	0.56	0.81	0.81	0.88	0.88	0.66
Propionaldehyde	0.11	0.11	0.16	0.12	0.12	0.09	0.09	0.10	0.10	0.16
Crotonaldehyde	0.02	0.01	0.01	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.28	0.18	0.22	0.18	0.16	0.10	0.10	0.12	0.14	0.11
Benzaldehyde	0.05	0.06	0.06	0.07	0.07	0.06	0.04	0.05	0.05	0.10
Isovaleraldehyde	0.03	ND	0.01	ND	ND	0.04	0.03	0.04	0.04	0.04
Valeraldehyde	0.03	0.03	0.04	0.04	0.05	0.02	0.02	0.03	0.03	0.04
Tolualdehydes	0.03	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.04
Hexaldehyde	0.04	0.05	0.05	0.05	0.08	0.05	0.05	0.06	0.06	0.07
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Arlington, TX
Appendix L

SAMPLE #	17452 R1	17473 D2	17473 R2	17478	17579	17608 D1	17608 R1	17610 D2	17610 R2	17770 D1
SAMPLE DATE	4/18/2000	4/18/2000	4/18/2000	4/30/2000	5/12/2000	6/17/2000	6/17/2000	6/17/2000	6/17/2000	6/29/2000
ANALYSIS DATE	5/19/2000	5/19/2000	5/19/2000	5/18/2000	void	6/29/2000	6/29/2000	6/29/2000	6/29/2000	7/19/2000
FILE NAME	Q0ER016	Q0ER017	Q0ER018	Q0ER012		Q0F!022	Q0F!023	Q0F!024	Q0F!025	Q0GR026
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.31	3.69	3.76	4.35		2.34	2.45	2.20	2.26	3.82
Acetaldehyde	0.96	1.09	1.11	1.66		0.77	0.81	0.71	0.78	1.22
Acetone	0.66	0.68	0.66	0.60		0.39	0.39	0.38	0.39	0.98
Propionaldehyde	0.15	0.18	0.18	0.25		0.12	0.13	0.12	0.14	0.21
Crotonaldehyde	ND	ND	ND	ND		ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.12	0.14	0.14	0.16		0.20	0.20	0.17	0.19	0.16
Benzaldehyde	0.11	0.12	0.12	0.13		0.12	0.12	0.11	0.13	0.14
Isovaleraldehyde	0.05	0.06	0.06	0.03		0.04	0.05	0.03	0.05	0.13
Valeraldehyde	0.04	0.05	0.05	0.06		0.04	0.04	0.03	0.03	0.08
Tolualdehydes	0.07	0.05	0.05	0.04		0.03	0.04	0.04	0.03	0.02
Hexaldehyde	0.07	0.09	0.08	0.09		0.07	0.07	0.07	0.05	0.08
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND		ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Arlington, TX
Appendix L

SAMPLE #	17770 R1	17772 D2	17772 R2	17825	17979 D1	17979 R1	17977 D2	17977 R2	18157	18250
SAMPLE DATE	6/29/2000	6/29/2000	6/29/2000	7/11/2000	7/23/2000	7/23/2000	7/23/2000	7/23/2000	8/16/2000	8/28/2000
ANALYSIS DATE	7/19/2000	7/19/2000	7/19/2000	9/22/2000	9/7/2000	9/7/2000	9/7/2000	9/7/2000	9/26/2000	9/27/2000
FILE NAME	Q0GR027	Q0GR028	Q0GR029	F0IV007A	F0IF043	F0IF043A	F0IF045	F0IF046	F0IZ014	F0IZ023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.88	3.85	3.85	4.41	5.12	5.13	4.99	5.01	3.97	4.01
Acetaldehyde	1.23	1.20	1.23	1.05	1.29	1.30	1.26	1.26	1.19	1.22
Acetone	0.94	1.06	1.05	0.81	0.95	0.95	1.03	1.04	0.62	0.87
Propionaldehyde	0.20	0.14	0.14	0.15	0.20	0.19	0.19	0.19	0.17	0.12
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	0.003	0.001u
Butyr/Isobutyraldehyde	0.16	0.17	0.17	0.32	0.09	0.09	0.08	0.09	0.33	0.35
Benzaldehyde	0.12	0.12	0.13	0.26	0.06	0.06	0.06	0.06	0.13	0.11
Isovaleraldehyde	0.10	0.10	0.13	0.01	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.06	0.05	0.07	0.07	0.06	0.06	0.06	0.06	0.10	0.09
Tolualdehydes	0.03	0.05	0.02	0.06	ND	ND	ND	ND	0.03	0.04
Hexaldehyde	0.08	0.09	0.08	0.09	0.09	0.08	0.09	0.09	0.09	0.08
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Arlington, TX
Appendix L

SAMPLE #	18382	18428	18533	18589	18717	18766	18817	18935	18985
SAMPLE DATE	9/9/2000	9/21/2000	10/3/2000	10/15/2000	11/8/2000	11/20/2000	12/2/2000	12/14/2000	12/26/2000
ANALYSIS DATE	void	10/26/2000	10/27/2000	10/30/2000	11/22/2000	12/4/2000	12/19/2000	1/12/2001	1/12/2001
FILE NAME		F0JZ017	F0JZ026	F0J$009	F0KV020	Q0LD016	Q0LR017	Q1AI018A	Q1AI026A
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde		3.47	3.64	3.93	1.17	5.18	1.66	4.16	1.59
Acetaldehyde		0.91	0.96	1.50	0.59	2.13	0.76	2.31	0.91
Acetone		0.49	0.65	0.61	0.86	3.37	1.13	3.19	1.29
Propionaldehyde		0.12	0.09	0.19	0.06	0.36	0.12	0.37	0.15
Crotonaldehyde		ND	ND	ND	0.001	0.14	0.04	0.11	0.05
Butyr/Isobutyraldehyde		0.19	0.31	0.35	0.19	0.33	0.10	0.30	0.11
Benzaldehyde		0.10	0.09	0.10	0.05	0.12	0.04	0.12	0.05
Isovaleraldehyde		ND	ND	ND	0.004	0.03	0.01	0.02	0.01
Valeraldehyde		0.05	0.04	0.06	0.02	0.07	0.02	0.05	0.03
Tolualdehydes		0.04	0.02	0.05	0.03	0.14	0.04	0.14	0.05
Hexaldehyde		0.05	0.07	0.08	0.04	0.18	0.08	0.16	0.09
2,5-Dimethylbenzaldehyde		ND	ND	ND	ND	0.01	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Arlington, TX (Field Blanks)
Appendix L

Data File ID	F0KV008	Q1AI027
FB ID	18718 FB	18986 FB
Sample date	11/8/2000	12/26/2000
Date Analyzed	11/22/2000	1/12/2001
	(µg/cartridge)	*(µg/cartridge)*
Formaldehyde	0.084	0.114
Acetaldehyde	0.106	0.179
Acetone	0.215	0.291
Propionaldehyde	0.003	0.016
Crotonaldehyde	ND	ND
Butyraldehyde	0.313	0.016
Benzaldehyde	0.003	0.017
Isovaleraldehyde	ND	ND
Valeraldehyde	0.006	ND
Tolualdehydes	0.012	0.060
Hexaldehyde	0.023	ND
2,5-Dimethylbenzaldehyde	ND	ND

1999/2000 Carbonyl Raw Monitoring Data - Beulah, ND
Appendix L

SAMPLE #	17388	17765	17935 D1	17935 R1	17936 D2	17936 R2	18010	18137	18160	18203
SAMPLE DATE	3/25/2000	7/5/2000	7/23/2000	7/23/2000	7/23/2000	7/23/2000	7/29/2000	8/10/2000	8/16/2000	8/22/2000
ANALYSIS DATE	4/10/2000	7/18/2000	9/22/2000	9/22/2000	9/22/2000	9/23/2000	9/7/2000	9/26/2000	9/27/2000	9/27/2000
FILE NAME	Q0DJ009	Q0GR013	F0IV016A	F0IV017A	F0IV018A	F0IV019A	F0IF034	F0IZ011	F0IZ015	F0IZ019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.79	1.63	1.89	1.94	1.87	1.89	2.49	2.96	2.08	2.17
Acetaldehyde	0.47	1.04	0.97	1.06	1.03	1.01	1.30	1.25	0.82	0.91
Acetone	1.05	1.09	1.31	1.38	1.04	1.04	1.40	1.23	1.45	2.43
Propionaldehyde	0.03	0.07	0.06	0.06	0.06	0.06	0.15	0.12	0.09	0.10
Crotonaldehyde	ND	ND	0.0002u	0.001u	0.01	0.01	ND	0.02	ND	ND
Butyr/Isobutyraldehyde	0.07	0.15	0.43	0.48	0.37	0.36	0.06	0.30	0.46	0.41
Benzaldehyde	0.004	0.04	0.17	0.18	0.12	0.12	0.03	0.09	0.03	0.02
Isovaleraldehyde	ND	0.01	ND	ND	ND	ND	ND	0.01	ND	ND
Valeraldehyde	0.02	0.05	0.04	0.04	0.03	0.04	0.03	0.05	0.04	0.04
Tolualdehydes	ND	0.01	0.03	0.03	0.03	0.03	ND	0.02	0.02	0.01
Hexaldehyde	0.003	0.09	0.08	0.09	0.08	0.09	0.08	0.15	0.11	0.08
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Beulah, ND
Appendix L

SAMPLE #	18246	18247	18313	18400 D1	18400 R1	18401 D2	18401 R2	18407	18435	18484
SAMPLE DATE	8/28/2000	8/28/2000	9/3/2000	9/9/2000	9/9/2000	9/9/2000	9/9/2000	9/15/2000	9/21/2000	9/27/2000
ANALYSIS DATE	9/27/2000	void	10/11/2000	10/12/2000	10/12/2000	10/12/2000	10/12/2000	10/11/2000	10/26/2000	10/27/2000
FILE NAME	F0IZ024		F0JK006	F0JK022	F0JK023	F0JK024	F0JK025	F0JK007	F0JZ018	F0JZ023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.89		1.09	1.73	1.75	1.69	1.69	2.01	0.78	1.80
Acetaldehyde	0.73		0.54	0.72	0.73	0.71	0.71	0.90	0.39	1.06
Acetone	1.98		1.02	2.12	2.15	2.04	2.05	2.55	1.31	2.43
Propionaldehyde	0.06		0.03	0.09	0.08	0.08	0.09	0.09	0.04	0.10
Crotonaldehyde	ND		ND	ND	ND	ND	ND	ND	ND	0.001
Butyr/Isobutyraldehyde	0.42		0.54	0.42	0.47	0.43	0.43	0.45	0.26	0.36
Benzaldehyde	0.02		0.01	0.02	0.03	0.02	0.02	0.02	0.02	0.04
Isovaleraldehyde	ND		ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.04		0.03	0.04	0.04	0.04	0.04	0.03	0.03	0.04
Tolualdehydes	0.01		ND	0.03	0.03	0.03	0.03	0.01	0.002	0.01
Hexaldehyde	0.11		0.05	0.10	0.10	0.10	0.10	0.07	0.07	0.09
2,5-Dimethylbenzaldehyde	ND		0.01	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Beulah, ND
Appendix L

SAMPLE #	18539 D1	18539 R1	18541 D2	18541 R2	18545	18585	18630	18657	18714	18759
SAMPLE DATE	10/3/2000	10/3/2000	10/3/2000	10/3/2000	10/9/2000	10/15/2000	10/21/2000	10/27/2000	11/8/2000	11/14/2000
ANALYSIS DATE	10/27/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000	10/30/2000	void	11/6/2000	11/23/2000	12/4/2000
FILE NAME	F0JZ038	F0JZ039	F0JZ040	F0JZ041	F0JZ033	F0J$010		F0KF007	F0KV022	Q0LD006
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.04	1.04	0.96	0.97	9.96	10.66		10.97	1.19	1.41
Acetaldehyde	0.49	0.49	0.44	0.45	4.15	6.46		3.95	0.49	0.56
Acetone	1.65	1.65	1.56	1.58	6.39	3.84		4.84	1.35	1.59
Propionaldehyde	0.04	0.04	0.04	0.04	0.36	0.95		0.48	0.05	0.06
Crotonaldehyde	ND	ND	ND	ND	0.04	0.03		0.05	ND	0.01
Butyr/Isobutyraldehyde	0.18	0.21	0.20	0.20	0.61	3.29		1.01	0.15	0.08
Benzaldehyde	0.01	0.02	0.01	0.01	0.21	0.22		0.15	0.02	0.01
Isovaleraldehyde	ND	ND	ND	ND	ND	ND		ND	ND	ND
Valeraldehyde	0.02	0.02	0.02	0.02	0.80	1.46		0.97	0.02	0.02
Tolualdehydes	0.01	0.01	0.01	0.01	0.12	0.17		0.13	0.01	0.04
Hexaldehyde	0.06	0.06	0.05	0.05	2.24	3.35		2.53	0.05	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND		ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Beulah, ND
Appendix L

SAMPLE #	18782	18799	18824	18960	18958	18966	18962
SAMPLE DATE	11/20/2000	11/26/2000	12/2/2000	12/8/2000	12/14/2000	12/20/2000	12/26/2000
ANALYSIS DATE	12/4/2000	12/19/2000	12/19/2000	1/12/2001	1/29/2001	1/29/2001	1/29/2001
FILE NAME	Q0LD017	Q0LR013	Q0LR018	Q1AI028	Q1A#004	Q1A#005	Q1A#007
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.86	0.86	0.74	0.70	0.75	0.93	1.05
Acetaldehyde	0.40	0.40	0.40	0.35	0.57	0.54	0.56
Acetone	0.87	1.09	0.83	0.76	1.01	1.46	1.06
Propionaldehyde	0.05	0.09	0.06	0.05	0.07	0.07	0.08
Crotonaldehyde	0.01	0.02	0.01	0.02	0.02	0.02	0.02
Butyr/Isobutyraldehyde	0.05	0.06	0.04	0.06	0.04	0.04	0.04
Benzaldehyde	0.01	0.01	0.003	0.01	0.01	0.01	0.01
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.004	0.003	0.01	0.03	ND	ND	0.01
Tolualdehydes	0.04	0.01	0.003	0.03	0.02	0.04	0.03
Hexaldehyde	0.04	0.06	0.04	0.05	0.03	0.04	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Beulah, ND (Field Blanks)
Appendix L

Data File ID	Q0LD007	Q1A#006
FB ID	18760 FB	18967 FB
Sample date	11/14/2000	12/20/2000
Date Analyzed	12/4/2000	1/29/2001
	(µg/cartridge)	*(µg/cartridge)*
Formaldehyde	0.070	0.032
Acetaldehyde	0.145	0.095
Acetone	0.055	0.175
Propionaldehyde	ND	0.008
Crotonaldehyde	ND	ND
Butyraldehyde	ND	0.005
Benzaldehyde	ND	0.028
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	0.005
Tolualdehydes	0.044	0.065
Hexaldehyde	0.024	0.028
2,5-Dimethylbenzaldehyde	ND	ND

1999/2000 Carbonyl Raw Monitoring Data - Camden, NJ
Appendix L

SAMPLE #	17100	17089	17161	17163	17165	17207	17219	17256	17256	17274
SAMPLE DATE	11/20/1999	11/26/1999	12/2/1999	12/8/1999	12/20/1999	1/1/2000	1/13/2000	1/25/2000	2/6/2000	2/18/2000
ANALYSIS DATE	12/13/1999	12/3/1999	2/11/2000	2/11/2000	2/11/2000	2/11/2000	2/15/2000	2/28/2000	2/28/2000	3/9/2000
FILE NAME	O9LM007	O9LB023	Q0BK014	Q0BK015	Q0BK016	Q0BK017	Q0BO014	F0B!007	F0B!007	Q0CI011
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.25	4.76	2.63	3.89	2.77	3.22	2.66	2.79	3.15	2.91
Acetaldehyde	2.05	0.88	1.19	1.51	1.18	1.89	1.21	1.21	1.37	1.33
Acetone	0.88	0.27	1.96	2.18	1.59	1.81	1.63	1.21	1.37	2.08
Propionaldehyde	0.30	0.13	0.10	0.13	0.10	0.18	0.12	0.12	0.14	0.14
Crotonaldehyde	0.01	0.01	ND	ND	ND	ND	ND	0.01	0.01	ND
Butyr/Isobutyraldehyde	0.28	0.14	0.24	0.32	0.32	0.37	0.23	0.13	0.15	0.24
Benzaldehyde	0.11	0.08	0.06	0.09	0.06	0.11	0.06	0.04	0.05	0.07
Isovaleraldehyde	0.03	ND	ND	ND	ND	0.08	0.03	ND	ND	0.05
Valeraldehyde	0.09	0.06	0.03	0.04	0.04	0.06	0.04	0.03	0.03	0.04
Tolualdehydes	0.09	0.04	0.03	0.02	0.02	0.03	0.02	0.03	0.03	0.02
Hexaldehyde	0.10	0.07	0.03	0.03	0.04	0.04	0.03	0.03	0.04	0.04
2,5-Dimethylbenzaldehyde	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Camden, NJ
Appendix L

SAMPLE #	17368	17381	17377	17431	17466 D1	17466 R1	17468 D2	17468 R2	17490	17513
SAMPLE DATE	3/1/2000	3/13/2000	3/25/2000	4/6/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/30/2000	5/12/2000
ANALYSIS DATE	4/4/2000	void	4/10/2000	4/18/2000	5/19/2000	5/19/2000	5/19/2000	5/19/2000	5/18/2000	6/7/2000
FILE NAME	Q0DD018		Q0DJ010	Q0DR006	Q0ER019	Q0ER020	Q0ER021	Q0ER022	Q0ER013	Q0FG012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	4.65		5.01	4.28	2.15	2.09	3.37	3.38	4.21	6.90
Acetaldehyde	1.83		1.72	1.40	0.69	0.69	0.91	0.85	1.49	2.15
Acetone	2.56		1.70	47.82	1.22	1.20	2.62	2.60	2.73	1.46
Propionaldehyde	0.17		0.18	ND	0.08	0.08	0.09	0.09	0.17	0.28
Crotonaldehyde	ND		0.01	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.32		0.27	0.16	0.15	0.15	0.19	0.18	0.19	0.24
Benzaldehyde	0.10		0.08	0.06	0.03	0.04	0.04	0.04	0.05	0.14
Isovaleraldehyde	0.05		0.06	0.06	0.01	0.03	0.03	0.03	0.06	0.10
Valeraldehyde	0.06		0.07	0.06	0.03	0.04	0.04	0.04	0.07	0.10
Tolualdehydes	0.05		0.03	0.01	0.001	0.001	0.01	0.02	0.02	0.02
Hexaldehyde	0.08		0.07	0.06	0.03	0.04	0.06	0.06	0.07	0.10
2,5-Dimethylbenzaldehyde	ND		ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Camden, NJ
Appendix L

SAMPLE #	17534	17572 D1	17572 R1	17574 D2	17574 R2	17679	17809 D1	17809 R1	17811 D2	17811 R2
SAMPLE DATE	5/24/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/17/2000	6/29/2000	6/29/2000	6/29/2000	6/29/2000
ANALYSIS DATE	6/19/2000	6/29/2000	6/29/2000	6/29/2000	6/29/2000	6/28/2000	7/19/2000	7/19/2000	7/19/2000	7/19/2000
FILE NAME	Q9FS005	Q0F!013	Q0F!014	Q0F!015	Q0F!016	Q0F!011	Q0GR030	Q0GR031	Q0GR032	Q0GR033
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.95	2.55	2.60	4.23	4.04	9.81	4.46	4.56	4.84	4.89
Acetaldehyde	1.69	0.69	0.71	0.81	0.82	2.02	1.44	1.45	1.44	1.42
Acetone	1.17	1.10	1.10	3.93	3.76	0.60	0.72	0.74	0.90	0.92
Propionaldehyde	0.14	0.09	0.10	0.10	0.08	0.16	0.19	0.21	0.18	0.19
Crotonaldehyde	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.19	0.16	0.15	0.16	0.14	0.18	0.20	0.19	0.20	0.18
Benzaldehyde	0.09	0.05	0.05	0.07	0.06	0.19	0.09	0.10	0.10	0.10
Isovaleraldehyde	0.09	0.05	0.02	0.18	0.18	0.30	0.04	0.03	0.11	0.10
Valeraldehyde	0.11	0.03	0.03	0.08	0.08	0.17	0.06	0.05	0.08	0.06
Tolualdehydes	0.03	0.02	0.01	0.04	0.04	0.06	0.01	0.02	0.02	0.02
Hexaldehyde	0.09	0.04	0.04	0.07	0.08	0.09	0.06	0.06	0.06	0.08
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Camden, NJ
Appendix L

SAMPLE #	17827	17944	18058	18206 D1	18206 R1	18208 D2	18208 R2	18239	18385	18498
SAMPLE DATE	7/11/2000	7/23/2000	8/4/2000	8/16/2000	8/16/2000	8/16/2000	8/16/2000	8/28/2000	9/9/2000	10/3/2000
ANALYSIS DATE	9/22/2000	9/7/2000	9/26/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	10/11/2000	10/27/2000
FILE NAME	F0IV009A	F0IF033	F0IZ009	F0IZ028	F0IZ029	F0IZ030	F0IZ031	F0IZ025	F0JK008	F0JZ028
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.78	7.07	7.30	3.29	3.36	4.69	4.89	6.45	9.19	11.91
Acetaldehyde	1.48	2.28	2.29	1.02	1.05	1.21	1.01	1.46	3.27	4.58
Acetone	2.21	1.48	0.66	1.39	1.43	1.51	1.60	0.84	1.18	2.27
Propionaldehyde	0.15	0.30	0.29	0.11	0.12	0.09	0.11	0.18	0.41	0.63
Crotonaldehyde	ND	ND	ND	ND	ND	ND	0.001	ND	ND	0.01
Butyr/Isobutyraldehyde	0.32	0.15	0.34	0.31	0.34	0.28	0.29	0.32	0.41	0.47
Benzaldehyde	0.09	0.06	0.20	0.06	0.06	0.06	0.07	0.13	0.12	0.18
Isovaleraldehyde	ND	ND	ND	0.01	0.01	ND	ND	ND	ND	ND
Valeraldehyde	0.06	0.09	0.13	0.05	0.04	0.07	0.07	0.19	0.17	0.31
Tolualdehydes	0.02	ND	0.04	0.02	0.03	ND	0.02	0.03	0.07	0.08
Hexaldehyde	0.001	0.06	0.10	0.04	0.05	0.07	0.07	0.09	0.11	0.27
2,5-Dimethylbenzaldehyde	ND	ND	ND	0.001	ND	0.003	0.004	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Camden, NJ
Appendix L

SAMPLE #	18587	18665	18768	18819	18932	18954 D1	18956 D2
SAMPLE DATE	10/15/2000	10/27/2000	11/20/2000	12/2/2000	12/14/2000	12/26/2000	12/26/2000
ANALYSIS DATE	10/30/2000	11/6/2000	12/4/2000	void	1/12/2001	void	void
FILE NAME	F0J$011	F0KF009	Q0LD018		Q1AI019A		
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	10.95	9.60	2.39		5.34		
Acetaldehyde	4.10	3.37	0.37		1.79		
Acetone	3.78	3.68	0.34		5.89		
Propionaldehyde	0.42	0.34	0.21		0.33		
Crotonaldehyde	0.03	0.03	0.21		0.10		
Butyr/Isobutyraldehyde	0.48	0.44	0.23		0.31		
Benzaldehyde	0.27	0.16	0.13		0.11		
Isovaleraldehyde	ND	ND	0.03		0.02		
Valeraldehyde	0.20	0.16	0.12		0.11		
Tolualdehydes	0.08	0.09	0.13		0.20		
Hexaldehyde	0.14	0.15	0.31		0.33		
2,5-Dimethylbenzaldehyde	0.01	0.001	ND		ND		

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Camden, NJ (Field Blank)
Appendix L

Data File ID	O9LB007	Q0CI006	Q0DD008	Q0F!006	Q0LD019
FB ID	17090 FB	17275 FB	17369 FB	17680 FB	18769 FB
Sample date	11/26/1999	2/18/2000	3/1/2000	6/17/2000	11/20/2000
Date Analyzed	12/2/1999	3/9/2000	4/4/2000	6/28/2000	12/4/2000
	(µg/cartridge)	*(µg/cartridge)*	*(µg/cartridge)*	*(µg/cartridge)*	*(µg/cartridge)*
Formaldehyde	0.03	0.19	0.26	0.092	0.115
Acetaldehyde	0.03	0.05	0.07	0.058	0.121
Acetone	0.08	0.13	0.13	0.129	0.218
Propionaldehyde	ND	ND	ND	ND	ND
Crotonaldehyde	ND	ND	ND	ND	ND
Butyraldehyde	0.05	0.05	0.05	0.179	0.003
Benzaldehyde	0.03	ND	ND	ND	ND
Isovaleraldehyde	ND	ND	ND	0.020	ND
Valeraldehyde	ND	ND	ND	ND	0.006
Tolualdehydes	ND	ND	ND	ND	0.048
Hexaldehyde	0.02	0.02	0.03	0.014	0.036
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND

1999/2000 Carbonyl Raw Monitoring Data - Clinton, IA
Appendix L

SAMPLE #	18600	18619	18697	18753	18920	18969
SAMPLE DATE	10/11/2000	10/21/2000	11/2/2000	11/14/2000	12/8/2000	12/20/2000
ANALYSIS DATE	10/30/2000	10/31/2000	11/22/2000	12/4/2000	1/11/2001	1/29/2001
FILE NAME	F0J$006	F0J$019	F0KV013	Q0LD008	Q1AI011a	Q1A#008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.11	2.23	1.19	0.66	1.16	0.99
Acetaldehyde	2.83	1.88	0.97	0.29	0.93	0.91
Acetone	3.16	1.17	1.21	0.79	1.34	1.23
Propionaldehyde	0.21	0.07	0.06	0.03	0.14	0.10
Crotonaldehyde	0.03	0.02	0.01	0.01	0.07	0.05
Butyr/Isobutyraldehyde	0.37	0.19	0.16	0.04	0.12	0.07
Benzaldehyde	0.08	0.06	0.04	0.01	0.05	0.03
Isovaleraldehyde	ND	ND	0.07	0.01	0.02	0.01
Valeraldehyde	0.10	0.08	0.03	0.01	0.04	0.02
Tolualdehydes	0.17	0.03	0.01	0.01	0.05	0.04
Hexaldehyde	0.11	0.03	0.06	0.10	0.19	0.07
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	0.02	0.004

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Clinton, IA (Field Blank)
Appendix L

Data File ID	**Q1A#009**
ERG Sample ID	**18970 FB**
Date Sampled	**12/20/2000**
Date Analyzed	**1/29/2001**
	(µg/cartridge)
Formaldehyde	0.04
Acetaldehyde	0.10
Acetone	0.37
Propionaldehyde	0.01
Crotonaldehyde	ND
Butyraldehyde	0.01
Benzaldehyde	0.05
Isovaleraldehyde	ND
Valeraldehyde	0.007
Tolualdehydes	0.08
Hexaldehyde	0.04
2,5-Dimethylbenzaldehyde	ND

1999/2000 Carbonyl Raw Monitoring Data - Cedar Rapids, IA
Appendix L

SAMPLE #	17690	17847	17860	18002 D1	18002 R1	18000 D2	18000 R2	18235	18199D1	18200D2
SAMPLE DATE	6/23/2000	7/5/2000	7/17/2000	7/29/2000	7/29/2000	7/29/2000	7/29/2000	8/10/2000	8/22/2000	8/22/2000
ANALYSIS DATE	7/18/2000	9/22/2000	9/22/2000	9/7/2000	9/7/2000	9/7/2000	9/7/2000	void	void	void
FILE NAME	Q0GR011	F0IV006A	F0IV011A	F0IF056	F0IF057	F0IF058	F0IF059			
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.72	1.49	2.96	3.18	3.19	3.19	3.26			
Acetaldehyde	1.20	1.07	1.15	1.09	1.09	1.09	1.11			
Acetone	0.19	0.30	0.72	0.69	0.70	0.91	0.95			
Propionaldehyde	0.16	0.13	0.41	0.29	0.29	0.28	0.30			
Crotonaldehyde	ND	ND	0.01	ND	ND	ND	ND			
Butyr/Isobutyraldehyde	0.17	0.13	0.29	0.09	0.07	0.08	0.09			
Benzaldehyde	0.06	0.03	0.27	0.05	0.05	0.05	0.05			
Isovaleraldehyde	0.07	ND	0.06	ND	ND	ND	ND			
Valeraldehyde	0.05	0.04	0.09	0.05	0.05	0.07	0.06			
Tolualdehydes	0.02u	0.08	0.07	ND	ND	ND	ND			
Hexaldehyde	0.09	0.10	0.30	0.22	0.22	0.21	0.22			
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND			

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Cedar Rapids, IA
Appendix L

SAMPLE #	18256	18317	18391	18464 D1	18464 R1	18466 D2	18466 R2	18551	18616	18679
SAMPLE DATE	8/30/2000	9/3/2000	9/15/2000	9/27/2000	9/27/2000	9/27/2000	9/27/2000	10/9/2000	10/21/2000	11/2/2000
ANALYSIS DATE	10/11/2000	10/11/2000	10/11/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000	10/31/2000	11/22/2000
FILE NAME	F0JK009	F0JK010	F0JK011	F0JZ042	F0JZ043	F0JZ044	F0JZ045	F0JZ034	F0J$020	F0KV017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.20	4.01	1.65	1.88	1.84	1.76	1.77	2.57	3.57	1.54
Acetaldehyde	0.88	2.02	0.87	4.47	4.38	4.25	4.27	1.42	2.58	8.58
Acetone	0.54	0.69	1.52	0.81	0.78	1.13	1.14	2.88	2.02	0.94
Propionaldehyde	0.20	0.38	0.17	0.17	0.16	0.12	0.12	0.13	0.31	0.12
Crotonaldehyde	ND	ND	ND	ND	ND	0.01	0.01	0.01	ND	0.003
Butyr/Isobutyraldehyde	0.15	0.33	0.53	0.34	0.35	0.40	0.40	0.37	0.47	0.62
Benzaldehyde	0.06	0.08	0.08	0.05	0.06	0.06	0.06	0.25	0.07	0.06
Isovaleraldehyde	0.04	0.09	0.04	0.14	0.13	0.13	0.14	0.07	0.06	0.66
Valeraldehyde	0.06	0.11	0.06	0.07	0.06	0.06	0.06	0.05	0.11	0.06
Tolualdehydes	0.05	0.10	0.02	0.02	0.02	0.02	0.02	0.02	0.05	0.03
Hexaldehyde	0.25	0.42	0.13	0.15	0.15	0.14	0.14	0.11	0.18	0.10
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Cedar Rapids, IA
Appendix L

SAMPLE #	18738	18791	18903	18941
SAMPLE DATE	11/14/2000	11/26/2000	12/8/2000	12/20/2000
ANALYSIS DATE	11/23/2000	12/19/2000	12/19/2000	1/12/2001
FILE NAME	F0KV025	Q0LR014	Q0LR024	Q1AI024a
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.81	1.01	0.98	1.60
Acetaldehyde	0.49	0.96	0.67	1.77
Acetone	0.84	1.45	0.99	1.19
Propionaldehyde	0.05	0.17	0.11	0.16
Crotonaldehyde	ND	0.02	0.03	0.07
Butyr/Isobutyraldehyde	0.15	0.10	0.09	0.14
Benzaldehyde	0.02	0.02	0.01	0.03
Isovaleraldehyde	0.02	0.01	0.01	0.03
Valeraldehyde	0.02	0.02	0.02	0.02
Tolualdehydes	0.02	0.02	0.03	0.06
Hexaldehyde	0.03	0.05	0.02	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	0.004

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Cedar Rapids, IA (Field Blank)
Appendix L

Data File ID	**F0J$021**
ERG Sample ID	**18617 FB**
Date Sampled	**10/21/2000**
Date Analyzed	**10/31/2000**
	(µg/cartridge)
Formaldehyde	0.04
Acetaldehyde	0.07
Acetone	0.12
Propionaldehyde	ND
Crotonaldehyde	ND
Butyraldehyde	0.31
Benzaldehyde	ND
Isovaleraldehyde	ND
Valeraldehyde	0.005
Tolualdehydes	0.05
Hexaldehyde	0.04
2,5-Dimethylbenzaldehyde	ND

1999/2000 Carbonyl Raw Monitoring Data - Davenport, IA
Appendix L

SAMPLE #	18594	18730	18699	18755	18918	18977
SAMPLE DATE	10/11/2000	10/21/2000	11/2/2000	11/14/2000	12/8/2000	12/20/2000
ANALYSIS DATE	void	11/22/2000	11/22/2000	12/4/2000	1/11/2001	1/29/2001
FILE NAME		F0KV012	F0KV014	Q0LD009	Q1AI012a	Q1A#012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde		2.71	1.18	0.45	0.88	1.24
Acetaldehyde		2.06	0.71	0.28	0.62	0.80
Acetone		1.04	1.24	0.75	0.99	1.14
Propionaldehyde		ND	0.06	0.03	0.10	0.11
Crotonaldehyde		0.02	0.01	0.01	0.06	0.05
Butyr/Isobutyraldehyde		0.04	0.17	0.03	0.07	0.06
Benzaldehyde		0.09	0.09	0.02	0.03	0.03
Isovaleraldehyde		ND	ND	0.02	0.01	ND
Valeraldehyde		0.09	0.03	0.002	0.03	0.01
Tolualdehydes		0.10	0.08	0.06	0.06	0.04
Hexaldehyde		ND	0.06	0.07	0.09	0.04
2,5-Dimethylbenzaldehyde		ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Davenport, IA (Field Blank)
Appendix L

Data File ID	Q1A#013
ERG Sample ID	18978
Date Sampled	12/20/2000
Date Analyzed	1/30/2001
	(µg/cartridge)
Formaldehyde	0.04
Acetaldehyde	0.10
Acetone	0.20
Propionaldehyde	0.01
Crotonaldehyde	ND
Butyraldehyde	0.01
Benzaldehyde	0.04
Isovaleraldehyde	ND
Valeraldehyde	ND
Tolualdehydes	0.21
Hexaldehyde	0.03
2,5-Dimethylbenzaldehyde	ND

1999/2000 Carbonyl Raw Monitoring Data - Denver, CO
Appendix L

SAMPLE #	17182	17219	17211	17234	17260	17265	17269	17311	17313	18411
SAMPLE DATE	1/7/2000	1/14/2000	1/20/2000	1/25/2000	2/6/2000	2/12/2000	2/18/2000	2/24/2000	3/2/2000	9/18/2000
ANALYSIS DATE	2/12/2000	2/12/2000	2/12/2000	2/15/2000	2/28/2000	2/28/2000	2/28/2000	3/15/2000	3/15/2000	10/12/2000
FILE NAME	Q0BK019	Q0BK020	Q0BK021	Q0BO009	F0B!008	F0B!009	F0B!010	F0CO008	F0CO011	F0JK012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	7.34	10.85	11.52	4.96	3.28	4.84	4.57	3.99	3.83	9.57
Acetaldehyde	2.91	5.74	6.03	2.30	1.35	2.64	2.44	1.64	1.81	3.72
Acetone	2.80	5.71	5.99	2.50	1.69	2.91	2.89	2.50	2.50	5.30
Propionaldehyde	0.19	0.35	0.47	0.18	0.12	0.25	0.22	0.13	0.15	0.39
Crotonaldehyde	0.05	0.18	0.14	0.05	0.02	0.04	0.03	0.03	0.03	0.03
Butyr/Isobutyraldehyde	0.38	0.66	0.82	0.33	0.14	0.28	0.26	0.28	0.19	0.88
Benzaldehyde	0.17	0.29	0.25	0.11	0.07	0.12	0.12	0.09	0.10	0.15
Isovaleraldehyde	0.14	0.31	0.35	0.09	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.07	0.11	0.15	0.05	0.04	0.06	0.05	0.04	0.05	0.18
Tolualdehydes	0.14	0.24	0.21	0.09	0.07	0.11	0.11	0.09	0.09	0.07
Hexaldehyde	0.09	0.14	0.13	0.05	0.07	0.10	0.08	0.08	0.07	0.26
2,5-Dimethylbenzaldehyde	0.04	0.07	0.07	0.02	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Denver, CO
Appendix L

SAMPLE #	18433	18492	18559	18556	18598	18604	18606	18627	18660	18681
SAMPLE DATE	9/25/2000	9/30/2000	10/3/2000	10/12/2000	10/15/2000	10/18/2000	10/21/2000	10/27/2000	10/30/2000	11/2/2000
ANALYSIS DATE	10/27/2000	10/27/2000	void	10/30/2000	10/30/2000	10/31/2000	10/30/2000	11/6/2000	11/6/2000	void
FILE NAME	F0JZ022	F0JZ025		F0J$008	F0J$012	F0J$017	F0J$018	F0KF006	F0KF010	
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	6.22	5.71		7.47	6.59	8.61	7.54	7.69	7.12	
Acetaldehyde	2.31	1.88		2.94	3.33	4.00	3.25	3.63	2.95	
Acetone	3.76	3.04		4.21	4.62	6.05	4.63	4.47	3.89	
Propionaldehyde	0.33	0.20		0.33	0.32	0.35	0.29	0.35	0.25	
Crotonaldehyde	0.02	0.01		0.03	0.02	0.04	0.04	0.04	0.05	
Butyr/Isobutyraldehyde	0.50	0.39		0.58	0.42	0.51	0.48	0.52	0.42	
Benzaldehyde	0.12	0.10		0.12	0.11	0.17	0.13	0.14	0.16	
Isovaleraldehyde	ND	ND		ND	ND	ND	ND	ND	ND	
Valeraldehyde	0.14	0.12		0.12	0.13	0.15	0.14	0.15	0.12	
Tolualdehydes	0.07	0.03		0.09	0.05	0.09	0.08	0.14	0.13	
Hexaldehyde	0.21	0.20		0.17	0.18	0.19	0.16	0.25	0.16	
2,5-Dimethylbenzaldehyde	ND	ND		ND	ND	ND	ND	ND	ND	

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Denver, CO
Appendix L

SAMPLE #	18720	18779	18784	18808	18828	18908	18922	18939	18975
SAMPLE DATE	11/8/2000	11/14/2000	11/20/2000	11/26/2000	12/2/2000	12/8/2000	12/14/2000	12/20/2000	12/26/2000
ANALYSIS DATE	11/22/2000	12/4/2000	12/4/2000	12/19/2000	void	1/11/2001	1/12/2001	1/12/2001	1/30/2001
FILE NAME	F0KV019	Q0LD010	Q0LD020	Q0LR015		Q1AI013A	Q1AI020A	Q1AI025A	Q1A#015
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.31	6.03	8.56	7.21		10.79	9.10	6.31	6.64
Acetaldehyde	1.95	3.22	3.09	2.22		4.08	4.03	2.01	2.65
Acetone	5.10	4.06	4.89	3.51		5.28	4.43	2.49	3.64
Propionaldehyde	0.15	0.40	0.38	0.27		0.54	0.46	0.26	0.31
Crotonaldehyde	0.03	0.09	0.08	0.08		0.17	0.18	0.10	0.11
Butyr/Isobutyraldehyde	0.32	0.32	0.31	0.24		0.46	0.36	0.22	0.19
Benzaldehyde	0.08	0.11	0.12	0.08		0.16	0.16	0.08	0.09
Isovaleraldehyde	0.06	ND	0.01	0.01		0.03	0.03	0.009	ND
Valeraldehyde	0.09	0.08	0.12	0.17		0.17	0.13	0.11	0.10
Tolualdehydes	0.09	0.16	0.14	0.14		0.35	0.29	0.11	0.15
Hexaldehyde	0.16	0.39	0.50	0.48		0.69	0.52	0.38	0.31
2,5-Dimethylbenzaldehyde	ND	0.01	ND	ND		ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Denver, CO (Field Blank)
Appendix L

Data File ID	F0KV007	Q0LD011	Q1AI021A
FB ID	18721 FB	18780 FB	18923 FB
Sample date	11/8/2000	11/14/2000	12/14/2000
Date Analyzed	11/22/2000	12/4/2000	1/12/2001
	(µg/cartridge)	*(µg/cartridge)*	*(µg/cartridge)*
Formaldehyde	0.033	0.071	0.032
Acetaldehyde	0.076	0.100	0.096
Acetone	0.185	0.136	0.127
Propionaldehyde	ND	ND	ND
Crotonaldehyde	ND	ND	ND
Butyraldehyde	0.163	ND	ND
Benzaldehyde	ND	ND	ND
Isovaleraldehyde	ND	ND	ND
Valeraldehyde	ND	ND	ND
Tolualdehydes	0.003	0.099	0.018
Hexaldehyde	0.017	0.029	0.039
2,5-Dimethylbenzaldehyde	ND	ND	ND

1999/2000 Carbonyl Raw Monitoring Data - Des Moines, IA
Appendix L

SAMPLE #	18582	18608	18684	18740	18810	18906	18945	18952
SAMPLE DATE	10/15/2000	10/21/2000	11/2/2000	11/14/2000	11/30/2001	12/8/2000	12/14/2001	12/26/2000
ANALYSIS DATE	10/31/2000	10/31/2000	11/22/2000	11/23/2000	void	void	void	1/30/2001
FILE NAME	F0J$013	F0J$022	F0KV016	F0KV024				Q1A#014
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.90	2.70	1.32	1.00				2.00
Acetaldehyde	0.98	1.39	0.60	0.49				1.16
Acetone	1.55	1.23	1.31	1.26				1.32
Propionaldehyde	0.07	0.04	0.05	0.04				0.13
Crotonaldehyde	0.02	0.02	0.004	0.003				0.08
Butyr/Isobutyraldehyde	0.24	0.15	0.14	0.14				0.10
Benzaldehyde	0.07	0.07	0.08	0.06				0.05
Isovaleraldehyde	ND	ND	ND	ND				ND
Valeraldehyde	0.04	0.07	0.03	0.02				0.02
Tolualdehydes	0.02	0.05	0.05	0.07				0.06
Hexaldehyde	0.05	0.02	0.07	0.06				0.10
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND				ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Elizabeth, NJ
Appendix L

SAMPLE #	17236	17267	17338	17317	17330	17371	17404	17433 D1	17433 R1	17435 D2
SAMPLE DATE	1/29/2000	2/10/2000	2/22/2000	3/5/2000	3/10/2000	3/17/2000	3/29/2000	4/10/2000	4/10/2000	4/10/2000
ANALYSIS DATE	2/15/2000	2/28/2000	void	3/15/2000	4/4/2000	4/4/2000	4/10/2000	4/18/2000	4/18/2000	4/18/2000
FILE NAME	Q0BO012	F0B!011	void	F0CO012	Q0DD010	Q0DD016	Q0DJ013	Q0DR017	Q0DR018	Q0DR019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.11	3.29		1.24	1.44	1.10	1.34	1.28	1.26	1.32
Acetaldehyde	1.00	1.84		0.64	0.73	0.58	0.73	0.66	0.68	0.65
Acetone	1.29	2.92		1.25	1.19	1.19	1.28	1.11	1.10	1.12
Propionaldehyde	0.10	0.20		0.06	0.08	0.05	0.07	0.07	0.06	0.06
Crotonaldehyde	0.02	0.02		0.013	0.01	ND	0.020	ND	ND	ND
Butyr/Isobutyraldehyde	0.18	0.24		0.09	0.12	0.11	0.15	0.11	0.12	0.11
Benzaldehyde	0.06	0.07		0.03	0.04	0.03	0.04	0.03	0.03	0.03
Isovaleraldehyde	0.13	ND		ND	0.06	0.03	0.09	0.06	0.06	0.06
Valeraldehyde	0.03	0.04		0.019	0.03	0.018	0.03	0.03	0.03	0.03
Tolualdehydes	0.05	0.07		0.03	0.015	0.013	0.01u	0.011	0.012	0.015
Hexaldehyde	0.03	0.07		0.03	0.03	0.03	0.04	0.03	0.03	0.04
2,5-Dimethylbenzaldehyde	ND	ND		ND	ND	ND	ND	ND	0.00	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Elizabeth, NJ
Appendix L

SAMPLE #	17435 R2	17475	17485	17596 D1	17596 R1	17598 D2	17598 R2	17741 D1	17741 R1	17743 D2
SAMPLE DATE	4/10/2000	4/22/2000	5/4/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/17/2000	6/17/2000	6/17/2000
ANALYSIS DATE	4/18/2000	5/18/2000	5/19/2000	6/29/2000	6/29/2000	6/29/2000	6/29/2000	7/18/2000	7/18/2000	7/18/2000
FILE NAME	Q0DR020	Q0ER011	Q0ER026	Q0F!018	Q0F!019	Q0F!020	Q0F!021	Q0GR017	Q0GR018	Q0GR019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.31	1.06	2.56	2.15	2.19	2.15	2.17	4.04	4.14	4.59
Acetaldehyde	0.67	0.48	1.65	0.85	0.88	0.80	0.81	1.56	1.52	1.75
Acetone	1.14	0.68	0.92	0.75	0.77	0.76	0.76	0.62	0.60	0.65
Propionaldehyde	0.06	0.06	0.28	0.09	0.10	0.09	0.09	0.23	0.22	0.23
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.11	0.29	0.27	0.17	0.17	0.17	0.17	0.18	0.22	0.25
Benzaldehyde	0.03	0.03	0.05	0.04	0.04	0.04	0.04	0.12	0.10	0.18
Isovaleraldehyde	0.06	0.017	0.07	0.05	0.06	0.05	0.06	0.18	0.15	0.22
Valeraldehyde	0.03	0.02	0.06	0.04	0.03	0.03	0.03	0.03	0.06	0.10
Tolualdehydes	0.009u	0.007u	0.03	0.01u	0.01u	0.01u	0.01u	0.07	0.04	0.03
Hexaldehyde	0.03	0.03	0.06	0.04	0.04	0.04	0.03	0.09	0.07	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Elizabeth, NJ
Appendix L

SAMPLE #	17743 R2	17830	17995 D1	17995 R1	17997 D2	17997 R2	18195	18310	18403	18474
SAMPLE DATE	6/17/2000	7/11/2000	7/23/2000	7/23/2000	7/23/2000	7/23/2000	8/16/2000	8/28/2000	9/9/2000	9/21/2000
ANALYSIS DATE	7/18/2000	9/22/2000	9/7/2000	9/7/2000	9/7/2000	9/7/2000	9/27/2000	10/12/2000	10/12/2000	10/26/2000
FILE NAME	Q0GR020	F0IV008A	F0IF035	F0IF036	F0IF037	F0IF038	F0IZ016	F0JK013	F0JK014	F0JZ019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	4.72	1.00	5.16	4.86	4.60	4.40	5.18	11.61	6.61	4.42
Acetaldehyde	1.79	0.08	1.95	1.84	1.74	1.66	1.79	1.82	2.69	1.52
Acetone	0.63	0.05	1.19	1.12	1.19	1.14	0.93	0.23	0.98	0.98
Propionaldehyde	0.24	ND	0.35	0.33	0.32	0.30	0.27	0.29	0.44	0.21
Crotonaldehyde	ND	0.09	ND	ND	ND	ND	0.01	0.03	0.01	0.002
Butyr/Isobutyraldehyde	0.22	0.03	0.21	0.19	0.19	0.18	0.36	0.28	0.47	0.33
Benzaldehyde	0.12	0.32	0.06	0.05	0.05	0.05	0.11	0.27	0.09	0.06
Isovaleraldehyde	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.06	0.31	0.11	0.11	0.09	0.10	0.10	0.37	0.13	0.09
Tolualdehydes	0.03	0.11	ND	ND	ND	ND	0.06	0.10	0.04	0.02
Hexaldehyde	0.05	0.11	0.05	0.07	0.07	0.07	0.08	0.22	0.09	0.05
2,5-Dimethylbenzaldehyde	ND	0.04	ND	ND	ND	ND	ND	0.02	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Elizabeth, NJ
Appendix L

SAMPLE #	18531	18602	18732	18822	18937	18964
SAMPLE DATE	10/3/2000	10/15/2000	11/8/2000	12/2/2000	12/14/2000	12/26/2000
ANALYSIS DATE	10/27/2000	10/31/2000	11/23/2000	12/19/2000	1/12/2001	1/30/2001
FILE NAME	F0JZ029	F0J$014	F0KV021	Q0LR021	Q1AI022A	Q1A#018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.35	6.37	3.82	1.54	3.01	2.19
Acetaldehyde	2.27	3.50	2.05	0.54	1.46	0.76
Acetone	1.20	1.82	2.28	0.59	1.59	0.78
Propionaldehyde	0.29	0.50	0.22	0.14	0.24	0.15
Crotonaldehyde	0.02	ND	0.03	0.04	0.07	0.05
Butyr/Isobutyraldehyde	0.40	0.57	0.32	0.18	0.20	0.18
Benzaldehyde	0.10	0.08	0.08	0.02	0.05	0.02
Isovaleraldehyde	ND	ND	0.06	0.01	0.02	0.02
Valeraldehyde	0.12	0.19	0.09	0.17	0.10	0.21
Tolualdehydes	0.03	0.05	0.08	0.02	0.11	0.02
Hexaldehyde	0.07	0.07	0.07	0.07	0.17	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Elizabeth, NJ (Field Blank)
Appendix L

Data File ID	**F0KV009**
FB ID	**18733 FB**
Sample date	**11/8/2000**
Date Analyzed	**11/22/2000**
	(µg/cartridge)
Formaldehyde	0.040
Acetaldehyde	0.085
Acetone	0.169
Propionaldehyde	ND
Crotonaldehyde	ND
Butyraldehyde	0.160
Benzaldehyde	-0.006
Isovaleraldehyde	ND
Valeraldehyde	ND
Tolualdehydes	0.001
Hexaldehyde	0.018
2,5-Dimethylbenzaldehyde	ND

1999/2000 Carbonyl Raw Monitoring Data - El Paso, TX
Appendix L

SAMPLE #	17075	17086	17123	17171	17180	17198	17221	17250	17279	17334
SAMPLE DATE	11/14/1999	11/26/1999	12/8/1999	12/20/1999	1/1/2000	1/13/2000	1/25/2000	2/6/2000	2/18/2000	3/7/2000
ANALYSIS DATE	12/2/1999	12/3/1999	12/17/1999	2/12/2000	2/12/2000	2/12/2000	2/15/2000	2/16/2000	3/9/2000	4/4/2000
FILE NAME	O9LB011	O9LB022	O9LQ010	Q0BK022	Q0BK023	Q0BK024	Q0BO010	Q0BP006	Q0CI012	Q0DD009
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.84	2.71	2.86	2.64	2.19	8.45	3.93	4.58	2.46	1.51
Acetaldehyde	1.90	1.19	1.27	1.17	0.77	2.86	1.80	2.37	1.11	0.54
Acetone	2.40	1.73	1.53	1.27	0.88	2.54	2.07	2.41	1.18	0.79
Propionaldehyde	0.21	0.11	0.12	0.08	0.07	0.17	0.18	0.25	0.10	0.05
Crotonaldehyde	0.02	0.02	0.02	0.01	ND	0.04	0.03	0.04	ND	ND
Butyr/Isobutyraldehyde	0.22	0.13	0.15	0.14	0.12	0.29	0.24	0.30	0.12	0.08
Benzaldehyde	0.09	0.08	0.08	0.07	0.05	0.15	0.10	0.11	0.07	0.04
Isovaleraldehyde	0.02	ND	ND	0.12	0.03	0.10	0.10	0.12	0.06	0.06
Valeraldehyde	0.04	0.03	0.03	0.03	0.02	0.07	0.05	0.07	0.03	0.03
Tolualdehydes	0.08	0.07	0.07	0.05	0.04	0.11	0.09	0.10	0.07	0.03
Hexaldehyde	0.06	0.05	0.04	0.03	0.03	0.18	0.05	0.06	0.04	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	0.03	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - El Paso, TX
Appendix L

SAMPLE #	17332	17395	17449	17492	17502	17538 D1	17538 R1	17540 D2	17540 R2	17593
SAMPLE DATE	3/13/2000	3/25/2000	4/18/2000	4/30/2000	5/12/2000	5/24/2000	5/24/2000	5/24/2000	5/24/2000	6/11/2000
ANALYSIS DATE	4/4/2000	4/10/2000	5/18/2000	5/19/2000	6/8/2000	6/19/2000	6/19/2000	6/19/2000	6/19/2000	6/28/2000
FILE NAME	Q0DD012	Q0DJ011	Q0ER007	Q0ER023	Q0FG014	Q9FS008	Q9FS009	Q9FS010	Q9FS011	Q0F!008
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.74	3.12	3.38	1.86	2.28	2.75	2.82	2.66	2.72	2.82
Acetaldehyde	1.78	1.66	1.46	0.64	0.77	0.86	0.93	0.89	0.90	1.13
Acetone	2.03	2.11	1.89	1.40	1.33	2.38	2.39	2.33	2.36	1.06
Propionaldehyde	0.19	0.17	0.21	0.06	0.06	0.07	0.08	0.08	0.08	0.14
Crotonaldehyde	0.018	0.013	ND	ND	0.01	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.20	0.18	0.19	0.09	0.13	0.14	0.12	0.13	0.12	0.19
Benzaldehyde	0.10	0.08	0.07	0.04	0.06	0.05	0.05	0.05	0.05	0.07
Isovaleraldehyde	0.12	0.11	0.09	0.04	0.07	0.06	0.05	0.04	0.06	0.03
Valeraldehyde	0.06	0.06	0.03	0.02	0.03	0.01	0.02	0.01	0.01	0.03
Tolualdehydes	0.07	0.06	0.08	0.02	0.06	0.01u	0.01u	0.04	0.04	0.03
Hexaldehyde	0.06	0.06	0.05	0.03	0.03	0.02	0.02	0.03	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - El Paso, TX
Appendix L

SAMPLE #	17817	17908	18085 D1	18087 D2	18146	18211	18332	18421	18472	18526
SAMPLE DATE	6/29/2000	7/17/2000	7/29/2000	7/29/2000	8/4/2000	8/22/2000	8/28/2000	9/9/2000	9/21/2000	10/3/2000
ANALYSIS DATE	7/18/2000	9/22/2000	void	void	void	9/27/2000	10/12/2000	10/12/2000	10/27/2000	10/27/2000
FILE NAME	Q0GR012	F0IV012A				F0IZ020	F0JK016	F0JK017	F0JZ020	F0JZ030
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.35	4.77				2.64	5.03	4.77	4.20	7.06
Acetaldehyde	0.24	2.06				0.79	1.75	1.84	1.64	3.90
Acetone	0.07	1.36				0.64	1.30	2.08	2.32	3.31
Propionaldehyde	0.05	0.38				0.09	0.29	0.25	0.19	0.47
Crotonaldehyde	ND	0.01				0.001	0.001	0.001	0.001	0.03
Butyr/Isobutyraldehyde	0.10	0.38				0.26	0.41	0.39	0.35	0.51
Benzaldehyde	0.06	0.16				0.06	0.09	0.08	0.09	0.18
Isovaleraldehyde	0.042	0.03				ND	0.02	0.02	ND	0.04
Valeraldehyde	0.02	0.06				0.03	0.05	0.05	0.04	0.09
Tolualdehydes	0.05	0.06				0.03	0.05	0.04	0.06	0.16
Hexaldehyde	0.03	0.07				0.04	0.05	0.05	0.06	0.15
2,5-Dimethylbenzaldehyde	ND	ND				ND	ND	0.0004	0.01	0.02

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - El Paso, TX
Appendix L

SAMPLE #	18736	18751	18774	18826	18927	18982
SAMPLE DATE	11/8/2000	11/14/2000	11/20/2000	12/2/2000	12/14/2000	12/26/2000
ANALYSIS DATE	void	void	12/5/2000	12/19/2000	1/12/2001	1/30/2001
FILE NAME			Q0LD021	Q0LR022	Q1AI023A	Q1A#019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde			3.46	1.84	3.86	0.60
Acetaldehyde			1.70	0.67	2.54	0.40
Acetone			1.85	0.99	2.83	1.16
Propionaldehyde			0.25	0.10	0.50	0.07
Crotonaldehyde			0.05	0.02	0.11	0.01
Butyr/Isobutyraldehyde			0.17	0.07	0.30	0.05
Benzaldehyde			0.08	0.02	0.15	0.03
Isovaleraldehyde			0.01	0.001	0.02	ND
Valeraldehyde			0.03	0.01	0.06	0.02
Tolualdehydes			0.07	0.03	0.24	0.04
Hexaldehyde			0.06	0.03	0.39	0.04
2,5-Dimethylbenzaldehyde			0.003	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - El Paso, TX (Field Blank)
Appendix L

Data File ID	Q0BK025	Q0ER006	Q1A#020
FB ID	17199 FB	17450 FB	18983 FB
Sample date	1/13/2000	4/18/2000	12/26/2000
Date Analyzed	2/12/2000	5/18/2000	1/30/2001
	(µg/cartridge)	*(µg/cartridge)*	*(µg/cartridge)*
Formaldehyde	0.01	0.01	0.064
Acetaldehyde	0.01	0.12	0.068
Acetone	0.03	0.10	0.153
Propionaldehyde	ND	ND	ND
Crotonaldehyde	ND	ND	ND
Butyraldehyde	0.03	ND	0.006
Benzaldehyde	ND	ND	ND
Isovaleraldehyde	ND	ND	ND
Valeraldehyde	ND	ND	0.005
Tolualdehydes	ND	ND	0.059
Hexaldehyde	0.02	ND	ND
2,5-Dimethylbenzaldehyde	ND	ND	ND

1999/2000 Carbonyl Raw Monitoring Data - Muscatine, IA
Appendix L

SAMPLE #	18596	18621	18695	18749	18910
SAMPLE DATE	10/11/2000	10/21/2000	11/2/2000	11/14/2000	12/8/2000
ANALYSIS DATE	10/30/2000	10/31/2000	11/22/2000	12/4/2000	1/11/2001
FILE NAME	F0J$007	F0J$025	F0KV015	Q0LD012	Q1AI015a
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.29	2.52	1.53	0.54	1.51
Acetaldehyde	6.52	2.28	0.90	0.31	0.97
Acetone	2.32	1.30	1.05	0.79	1.17
Propionaldehyde	0.14	0.06	0.06	0.03	0.15
Crotonaldehyde	0.01	0.02	0.01	0.01	0.06
Butyr/Isobutyraldehyde	0.66	0.16	0.16	0.06	0.11
Benzaldehyde	0.11	0.09	0.07	0.01	0.05
Isovaleraldehyde	0.95	ND	ND	0.02	0.01
Valeraldehyde	0.14	0.09	0.02	ND	0.04
Tolualdehydes	0.09	0.06	0.05	0.35	0.10
Hexaldehyde	0.10	0.05	0.05	0.05	0.18
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Portland, OR
Appendix L

SAMPLE #	16482	16507	16686	16724	16825	16881	16957	16985	17017	17048
SAMPLE DATE	8/22/1999	8/28/1999	9/9/1999	9/15/1999	9/21/1999	10/3/1999	10/15/1999	10/21/1999	10/27/1999	11/8/1999
ANALYSIS DATE	void	9/11/1999	9/23/1999	10/1/1999	10/14/1999	10/14/1999	11/5/1999	11/6/1999	11/6/1999	11/13/1999
FILE NAME		O9IJ027	O9IV014	O9I$037	O9JM021	O9JM022	O9KE022	O9KE025	O9KE027	O9KL022
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde		3.56	2.61	2.47	3.60	5.74	2.30	3.47	5.06	1.93
Acetaldehyde		1.64	1.10	0.83	2.01	2.93	1.12	2.19	1.60	1.16
Acetone		0.75	1.51	2.05	3.26	4.36	2.42	4.06	1.75	1.59
Propionaldehyde		0.31	0.14	0.10	0.24	0.36	0.11	0.21	0.11	0.09
Crotonaldehyde		ND	0.01	ND	0.01	0.01	0.01	0.02	0.02	0.02
Butyr/Isobutyraldehyde		0.27	0.20	0.13	0.27	0.36	0.17	0.33	0.24	0.16
Benzaldehyde		0.09	0.07	0.06	0.11	0.19	0.07	0.14	0.09	0.07
Isovaleraldehyde		0.03	0.02	0.01	0.02	0.05	0.01	0.02	0.01	0.02
Valeraldehyde		0.07	0.06	0.04	0.06	0.12	0.04	0.10	0.09	0.04
Tolualdehydes		0.05	0.03	0.04	0.05	0.12	0.05	0.08	0.07	0.05
Hexaldehyde		0.08	0.07	0.05	0.08	0.12	0.06	0.10	0.24	0.04
2,5-Dimethylbenzaldehyde		ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Portland, OR
Appendix L

SAMPLE #	17064	17107	17137	17167	17192	17213 D1	17213 R1	17214 D2	17214 R2	17230
SAMPLE DATE	11/20/1999	12/2/1999	12/14/1999	12/26/1999	1/7/2000	1/19/2000	1/19/2000	1/19/2000	1/19/2000	1/31/2000
ANALYSIS DATE	12/2/1999	12/13/1999	12/17/1999	2/11/2000	2/11/2000	3/9/2000	3/9/2000	3/9/2000	3/9/2000	2/15/2000
FILE NAME	O9LB018	O9LM009	O9LQ012	Q0BK010	Q0BK011	Q0CI007	Q0CI008	Q0CI009	Q0CI010	Q0BO013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.08	2.09	1.09	1.44	2.79	2.33	2.35	2.35	2.34	2.53
Acetaldehyde	0.59	0.68	0.47	0.67	1.51	1.09	1.09	1.09	1.10	1.25
Acetone	0.75	1.29	5.46	0.93	5.81	3.14	3.21	3.16	3.13	1.94
Propionaldehyde	0.06	0.07	ND	0.05	0.11	0.08	0.10	0.09	0.08	0.08
Crotonaldehyde	0.01	0.01	0.01	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.10	0.13	0.11	0.10	0.37	0.21	0.21	0.22	0.22	0.20
Benzaldehyde	0.04	0.06	0.03	0.03	0.10	0.06	0.06	0.06	0.06	0.07
Isovaleraldehyde	0.01	0.07	ND	0.02	0.07	0.04	0.05	0.02	0.03	0.05
Valeraldehyde	0.03	0.03	0.05	0.02	0.17	0.09	0.09	0.08	0.08	0.03
Tolualdehydes	0.04	0.06	0.02	0.004u	0.05	0.01u	0.01u	0.03	0.02	0.04
Hexaldehyde	0.04	0.05	0.02	0.03	0.05	0.03	0.04	0.03	0.03	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Portland, OR
Appendix L

SAMPLE #	17252	17300	17319	17341	17398	17437	17462	17481	17509	17529 D1
SAMPLE DATE	2/12/2000	2/24/2000	3/7/2000	3/19/2000	3/31/2000	4/12/2000	4/24/2000	5/6/2000	5/18/2000	5/30/2000
ANALYSIS DATE	2/28/2000	3/10/2000	3/15/2000	4/4/2000	4/11/2000	4/18/2000	5/18/2000	5/19/2000	6/8/2000	6/19/2000
FILE NAME	F0B!012	Q0CI015	F0CO014	Q0DD014	Q0DJ015	Q0DR007	Q0ER009	Q0ER027	Q0FG016	Q9FS013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.71	2.11	2.47	1.27	2.90	3.91	2.64	2.09	2.58	2.41
Acetaldehyde	0.93	1.07	1.09	0.63	1.47	2.55	1.56	1.08	1.31	1.09
Acetone	1.35	1.87	2.58	0.67	2.86	2.35	2.72	1.87	1.64	1.74
Propionaldehyde	0.07	0.08	0.08	0.07	0.15	0.27	0.16	0.11	0.13	0.10
Crotonaldehyde	0.01	ND	0.01	ND	ND	0.03	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.11	0.18	0.13	0.13	0.23	0.31	0.22	0.17	0.22	0.19
Benzaldehyde	0.06	0.06	0.06	0.03	0.10	0.14	0.09	0.06	0.09	0.05
Isovaleraldehyde	ND	0.03	0.01	ND	ND	0.06	0.03	0.04	0.04	0.03
Valeraldehyde	0.02	0.04	0.04	0.02	0.06	0.13	0.06	0.04	0.05	0.06
Tolualdehydes	0.04	0.02u	0.05	0.01u	0.03	0.06	0.02	0.01u	0.02	0.02
Hexaldehyde	0.04	0.04	0.04	0.02	0.06	0.11	0.06	0.05	0.07	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Portland, OR
Appendix L

SAMPLE #	17529 R1	17530 D2	17530 R2	17585	17684	17758	17854	17981 D1	17981 R1	17982 D2
SAMPLE DATE	5/30/2000	5/30/2000	5/30/2000	6/11/2000	6/23/2000	7/5/2000	7/17/2000	7/29/2000	7/29/2000	7/29/2000
ANALYSIS DATE	6/19/2000	6/19/2000	6/20/2000	6/28/2000	6/29/2000	7/18/2000	9/11/2000	9/7/2000	9/7/2000	9/7/2000
FILE NAME	Q9FS014	Q9FS015	Q9FS016	Q0F!009	Q0F!012	Q0GR015	F0IK012	F0IF048	F0IF049	F0IF050
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.45	2.47	2.41	1.24	9.83	2.55	5.30	3.62	3.59	3.61
Acetaldehyde	1.10	1.11	1.11	0.68	3.63	1.00	2.43	1.43	1.40	1.42
Acetone	1.73	1.90	1.86	0.58	3.54	1.91	2.28	1.85	1.83	1.97
Propionaldehyde	0.11	0.09	0.09	0.05	0.26	0.08	0.30	0.16	0.17	0.17
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.20	0.20	0.19	0.13	0.38	0.22	0.14	0.12	0.08	0.08
Benzaldehyde	0.05	0.06	0.05	0.05	0.23	0.07	0.11	0.06	0.06	0.06
Isovaleraldehyde	0.02	0.02	0.01	0.02	0.12	0.02	ND	ND	ND	ND
Valeraldehyde	0.04	0.05	0.05	0.02	0.15	0.03	0.12	0.09	0.09	0.09
Tolualdehydes	0.03	0.01u	0.003u	0.02u	0.14	0.02	0.10	ND	ND	ND
Hexaldehyde	0.06	0.04	0.05	0.03	0.42	0.05	0.10	0.05	0.04	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	0.03	0.01	0.01	0.02

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Portland, OR
Appendix L

SAMPLE #	17982 R2	18095	18190	18306
SAMPLE DATE	7/29/2000	8/10/2000	8/22/2000	9/3/2000
ANALYSIS DATE	9/7/2000	9/26/2000	9/26/2000	10/11/2000
FILE NAME	F0IF051	F0IZ012	F0IZ022	F0JK005
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.61	2.72	4.22	1.94
Acetaldehyde	1.43	1.32	1.88	1.17
Acetone	1.97	1.72	3.03	2.07
Propionaldehyde	0.17	0.13	0.17	0.10
Crotonaldehyde	ND	0.01	0.01	0.004
Butyr/Isobutyraldehyde	0.08	0.43	0.47	0.42
Benzaldehyde	0.05	0.07	0.11	0.05
Isovaleraldehyde	ND	0.01	0.02	0.02
Valeraldehyde	0.08	0.04	0.05	0.03
Tolualdehydes	ND	0.02	0.03	0.01u
Hexaldehyde	0.04	0.05	0.07	0.04
2,5-Dimethylbenzaldehyde	0.02	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	17094	17084	17102	17115	17135	17149	17159	17196	17201	17227
SAMPLE DATE	11/12/1999	11/20/1999	11/26/1999	12/2/1999	12/9/1999	12/14/1999	12/20/1999	1/7/2000	1/13/2000	1/19/2000
ANALYSIS DATE	12/3/1999	12/2/1999	12/13/1999	12/13/1999	12/17/1999	12/17/1999	2/12/2000	2/12/2000	2/12/2000	2/15/2000
FILE NAME	O9LB021	O9LB019	O9LM008	O9LM010	O9LQ011	O9LQ013	Q0BK028	Q0BK026	Q0BK027	Q0BO007
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	4.68	3.18	2.01	0.98	1.93	2.14	2.73	3.15	2.92	3.40
Acetaldehyde	2.83	1.49	0.78	0.49	0.99	0.87	0.98	1.40	1.11	1.31
Acetone	4.90	2.37	1.30	0.62	1.66	1.31	1.79	2.26	2.53	3.78
Propionaldehyde	0.28	0.18	0.08	0.05	0.14	0.11	0.09	0.14	0.11	0.12
Crotonaldehyde	0.03	0.03	0.02	0.01	0.02	0.02	0.02	0.03	ND	0.03
Butyr/Isobutyraldehyde	0.47	0.22	0.11	0.08	0.17	0.13	0.22	0.30	0.24	0.31
Benzaldehyde	0.16	0.12	0.05	0.03	0.08	0.07	0.08	0.10	0.08	0.14
Isovaleraldehyde	ND	ND	0.09	ND	ND	ND	0.16	0.20	0.16	0.14
Valeraldehyde	0.08	0.05	0.04	0.02	0.04	0.03	0.04	0.06	0.04	0.06
Tolualdehydes	0.14	0.11	0.06	0.03	0.03	0.03	0.04	0.05	0.04	0.06
Hexaldehyde	0.14	0.07	0.05	0.03	0.04	0.03	0.05	0.06	0.05	0.07
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	17223	17239	17242	17263	17277	17304	17307	17324	17328	17373
SAMPLE DATE	1/25/2000	1/31/2000	2/6/2000	2/12/2000	2/18/2000	2/24/2000	3/1/2000	3/7/2000	3/13/2000	3/19/2000
ANALYSIS DATE	2/15/2000	2/15/2000	2/16/2000	2/28/2000	3/9/2000	3/10/2000	3/15/2000	3/15/2000	4/4/2000	4/4/2000
FILE NAME	Q0BO011	Q0BO015	Q0BP007	F0B!013	Q0CI013	Q0CI016	F0CO009	F0CO013	Q0DD013	Q0DD017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.09	3.79	4.76	1.46	2.63	0.92	1.72	2.53	2.82	1.23
Acetaldehyde	0.92	1.54	2.18	0.56	1.03	0.36	0.53	0.91	1.10	0.51
Acetone	2.15	2.57	3.94	1.09	2.04	0.93	1.32	1.97	2.07	1.00
Propionaldehyde	0.09	0.17	0.23	0.05	0.12	0.03	0.06	0.09	0.12	0.05
Crotonaldehyde	ND	0.04	0.04	0.01	ND	ND	0.01	0.016	0.02	ND
Butyr/Isobutyraldehyde	0.23	0.31	0.39	0.06	0.18	0.07	0.20	0.15	0.21	0.09
Benzaldehyde	0.07	0.10	0.12	0.04	0.08	0.03	0.06	0.06	0.08	0.03
Isovaleraldehyde	0.08	0.18	0.25	ND	0.13	ND	ND	ND	0.090	0.05
Valeraldehyde	0.03	0.05	0.08	0.02	0.04	0.013	0.014	0.03	0.04	0.02
Tolualdehydes	0.03	0.05	0.08	0.04	0.02	0.014	0.03	0.05	0.05	0.01u
Hexaldehyde	0.05	0.05	0.08	0.03	0.04	0.02	0.03	0.05	0.06	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	17384	17402	17422 D1	17422 R1	17424 D2	17424 R2	17443 D1	17443 R1	17445 D2	17445 R2
SAMPLE DATE	3/25/2000	3/31/2000	4/6/2000	4/6/2000	4/6/2000	4/6/2000	4/12/2000	4/12/2000	4/12/2000	4/12/2000
ANALYSIS DATE	4/10/2000	4/11/2000	4/18/2000	4/18/2000	4/18/2000	4/18/2000	4/19/2000	4/19/2000	4/19/2000	4/19/2000
FILE NAME	Q0DJ012	Q0DJ016	Q0DR012	Q0DR013	Q0DR015	Q0DR016	Q0DR021	Q0DR022	Q0DR023	Q0DR024
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.75	1.51	2.40	2.43	2.38	2.32	2.66	2.74	2.69	2.74
Acetaldehyde	1.69	0.66	0.97	0.97	0.99	0.97	1.15	1.19	1.20	1.19
Acetone	2.91	1.40	2.24	2.25	2.21	2.22	2.54	2.58	2.63	2.66
Propionaldehyde	0.17	0.06	0.09	0.09	0.09	0.09	0.12	0.14	0.12	0.13
Crotonaldehyde	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.27	0.12	0.15	0.13	0.13	0.14	0.16	0.16	0.18	0.18
Benzaldehyde	0.12	0.05	0.07	0.07	0.07	0.06	0.08	0.07	0.07	0.07
Isovaleraldehyde	0.21	0.10	0.13	0.12	0.12	0.13	0.15	0.10	0.16	0.16
Valeraldehyde	0.08	0.03	0.04	0.03	0.03	0.03	0.05	0.04	0.05	0.05
Tolualdehydes	0.07	0.013	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02
Hexaldehyde	0.07	0.03	0.04	0.05	0.05	0.04	0.06	0.06	0.06	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	17454	17471	17488	17494	17498	17506	17561	17549 D1	17549 R1	17551 D2
SAMPLE DATE	4/18/2000	4/24/2000	4/30/2000	5/6/2000	5/12/2000	5/18/2000	5/24/2000	5/30/2000	5/30/2000	5/30/2000
ANALYSIS DATE	5/18/2000	5/18/2000	5/19/2000	6/7/2000	6/8/2000	6/8/2000	void	6/20/2000	6/20/2000	6/20/2000
FILE NAME	Q0ER008	Q0ER010	Q0ER024	Q0FG011	Q0FG015	Q0FG017		Q9FS017	Q9FS018	Q9FS019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.69	1.70	2.23	2.48	1.53	2.36		3.33	3.39	3.24
Acetaldehyde	0.69	0.73	1.09	1.35	0.69	1.02		1.36	1.40	1.39
Acetone	1.43	1.74	1.85	1.82	1.49	2.32		2.03	2.03	2.21
Propionaldehyde	0.06	0.07	0.10	0.06	0.06	0.07		0.11	0.13	0.12
Crotonaldehyde	ND	ND	ND	0.01	ND	0.01		ND	ND	ND
Butyr/Isobutyraldehyde	0.10	0.12	0.15	0.11	0.12	0.16		0.17	0.16	0.14
Benzaldehyde	0.05	0.05	0.08	0.08	0.08	0.07		0.10	0.11	0.09
Isovaleraldehyde	0.08	0.04	0.11	0.12	0.09	0.12		0.12	0.11	0.12
Valeraldehyde	0.03	0.02	0.04	0.07	0.03	0.05		0.05	0.05	0.04
Tolualdehydes	0.02	0.02	0.03	0.02	0.02	0.02		ND	ND	0.01u
Hexaldehyde	0.04	0.05	0.06	0.02	0.04	0.05		0.06	0.07	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND		ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	17551 R2	17558	17600	17612 D1	17612 R1	17614 D2	17614 R2	17695 D1	17695 R1	17694 D2
SAMPLE DATE	5/30/2000	6/5/2000	6/11/2000	6/18/2000	6/18/2000	6/18/2000	6/18/2000	6/23/2000	6/23/2000	6/23/2000
ANALYSIS DATE	6/20/2000	6/19/2000	6/28/2000	6/29/2000	6/29/2000	6/29/2000	6/29/2000	7/18/2000	7/19/2000	7/19/2000
FILE NAME	Q9FS020	Q9FS006	Q0F!010	Q0F!027	Q0F!028	Q0F!029	Q0F!030	Q0GR021	Q0GR022	Q0GR023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.14	17.89	26.57	2.79	2.89	2.88	2.88	3.21	3.04	2.86
Acetaldehyde	1.32	3.10	4.36	1.41	1.40	1.41	1.41	1.11	1.12	1.01
Acetone	2.22	4.04	2.93	1.38	1.39	1.62	1.61	2.54	2.47	2.43
Propionaldehyde	0.11	0.31	0.38	0.11	0.11	0.11	0.10	0.07	0.06	0.07
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.17	0.44	0.57	0.16	0.14	0.16	0.17	0.15	0.14	0.14
Benzaldehyde	0.10	0.24	0.26	0.08	0.07	0.08	0.07	0.07	0.07	0.06
Isovaleraldehyde	0.120	0.40	0.51	0.18	0.18	0.17	0.19	0.18	0.17	0.14
Valeraldehyde	0.04	0.26	0.33	0.05	0.06	0.04	0.06	0.05	0.03	0.02
Tolualdehydes	0.01u	0.17	0.21	0.03	0.01u	0.01u	0.02	0.02	0.02	0.02
Hexaldehyde	0.06	0.58	0.73	0.06	0.04	0.04	0.04	0.01	0.02	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	17694 R2	17699	17756	17838	17975 D1	17975 R1	17973 D2	17973 R2	17993 D1	17993 R1
SAMPLE DATE	6/23/2000	6/29/2000	7/5/2000	7/11/2000	7/23/2000	7/23/2000	7/23/2000	7/23/2000	7/29/2000	7/29/2000
ANALYSIS DATE	7/19/2000	void	7/18/2000	9/22/2000	9/7/2000	9/7/2000	9/7/2000	9/7/2000	9/7/2000	9/7/2000
FILE NAME	Q0GR024		Q0GR016	F0IV010A	F0IF039	F0IF040	F0IF041	F0IF042	F0IF052	F0IF053
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.84		11.77	35.58	4.72	4.34	4.41	4.42	7.29	7.25
Acetaldehyde	1.03		2.00	4.49	1.87	1.71	1.69	1.70	2.97	2.96
Acetone	2.42		4.20	1.12	3.08	2.83	2.77	2.78	3.19	3.16
Propionaldehyde	0.06		0.18	0.62	0.29	0.28	0.28	0.28	0.45	0.45
Crotonaldehyde	ND		ND	0.04	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.14		0.32	0.43	0.15	0.14	0.14	0.14	0.21	0.23
Benzaldehyde	0.06		0.20	0.55	0.07	0.07	0.07	0.09	0.13	0.18
Isovaleraldehyde	0.17		0.35	0.61	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.04		0.14	0.50	0.08	0.08	0.06	0.13	0.12	0.10
Tolualdehydes	0.02		ND	0.17	ND	ND	ND	ND	ND	ND
Hexaldehyde	0.02		0.41	0.74	0.10	0.10	0.09	0.10	0.16	0.18
2,5-Dimethylbenzaldehyde	ND		ND	ND	0.03	0.02	0.02	0.02	0.04	0.05

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	17991 D2	17991 R2	18089	18099	18155	18222	18324	18395	18388	18430
SAMPLE DATE	7/29/2000	7/29/2000	8/4/2000	8/10/2000	8/16/2000	8/22/2000	8/28/2000	9/12/2000	9/15/2000	9/21/2000
ANALYSIS DATE	9/7/2000	9/7/2000	9/26/2000	9/26/2000	9/27/2000	9/27/2000	10/12/2000	void	10/12/2000	10/27/2000
FILE NAME	F0IF054	F0IF055	F0IZ010	F0IZ013	F0IZ018	F0IZ021	F0JK018		F0JK019	F0JZ021
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	7.48	7.36	35.93	3.76	3.86	6.64	7.21		7.71	6.93
Acetaldehyde	3.07	3.00	6.67	1.23	1.33	1.72	1.55		2.44	2.42
Acetone	3.70	3.63	0.85	2.09	1.99	1.72	2.04		2.74	1.83
Propionaldehyde	0.46	0.45	0.74	0.16	0.18	0.21	0.20		0.28	0.27
Crotonaldehyde	ND	ND	0.03	0.005	0.01	0.004	0.001		0.02	0.03
Butyr/Isobutyraldehyde	0.23	0.23	0.45	0.42	0.40	0.43	0.43		0.37	0.46
Benzaldehyde	0.19	0.20	0.52	0.09	0.08	0.11	0.10		0.13	0.17
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND		ND	ND
Valeraldehyde	0.09	0.10	0.64	0.09	0.08	0.11	0.10		0.11	0.13
Tolualdehydes	ND	ND	0.10	0.04	0.04	0.04	0.04		0.05	0.08
Hexaldehyde	0.15	0.18	0.95	0.07	0.08	0.14	0.12		0.14	0.16
2,5-Dimethylbenzaldehyde	0.03	0.05	ND	ND	ND	ND	ND		ND	0.004

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	18459	18461	18494	18553	18591	18623	18672 D1	18672 R1	18674 D2	18674 R2
SAMPLE DATE	9/27/2000	9/27/2000	10/3/2000	10/9/2000	10/15/2000	10/21/2000	10/27/2000	10/27/2000	10/27/2000	10/27/2000
ANALYSIS DATE	10/27/2000	void	10/27/2000	10/27/2000	10/31/2000	10/31/2000	11/14/2000	11/14/2000	11/14/2000	11/14/2000
FILE NAME	F0JZ024		F0JZ031	F0JZ032	F0J$016	F0J$023	F0KM024	F0KM025	F0KM026	F0KM027
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	8.22		5.85	5.41	5.62	4.52	5.39	5.41	5.50	5.48
Acetaldehyde	2.69		1.45	1.60	1.59	0.95	1.31	1.32	1.31	1.32
Acetone	3.66		2.92	3.22	3.12	1.52	1.89	1.91	2.03	2.03
Propionaldehyde	0.25		0.13	0.17	0.15	0.09	0.16	0.13	0.13	0.13
Crotonaldehyde	0.02		0.02	0.01	0.02	ND	0.02	0.01	0.01	0.01
Butyr/Isobutyraldehyde	0.51		0.36	0.49	0.40	0.33	0.28	0.29	0.30	0.30
Benzaldehyde	0.18		0.13	0.10	0.10	0.07	0.10	0.10	0.10	0.10
Isovaleraldehyde	ND		ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.14		0.09	0.08	0.07	0.06	0.07	0.07	0.07	0.07
Tolualdehydes	0.09		0.08	0.03	0.04	0.04	0.06	0.05	0.05	0.05
Hexaldehyde	0.19		0.15	0.11	0.10	0.10	0.11	0.11	0.11	0.11
2,5-Dimethylbenzaldehyde	ND		ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT
Appendix L

SAMPLE #	18711	18726	18771	18793 D1	18793 R1	18795 D2	18795 R2	18805	18815	18912
SAMPLE DATE	11/2/2000	11/8/2000	11/16/2000	11/21/2000	11/21/2000	11/21/2000	11/21/2000	11/26/2000	12/2/2000	12/8/2000
ANALYSIS DATE	11/14/2000	11/23/2000	12/4/2000	12/19/2000	12/19/2000	12/19/2000	12/19/2000	12/19/2000	12/19/2000	1/11/2001
FILE NAME	F0KM022	F0KV023	Q0LD013	Q0LR025	Q0LR026	Q0LR027	Q0LR028	Q0LR016	Q0LR023	Q1AI017A
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.14	3.47	3.00	6.98	7.01	6.62	6.94	31.23	6.63	6.90
Acetaldehyde	1.50	1.13	0.93	4.11	4.09	3.94	4.11	6.98	2.96	3.19
Acetone	2.64	2.20	1.71	6.07	6.08	5.88	6.13	5.68	4.53	5.11
Propionaldehyde	0.14	0.10	0.12	0.67	0.65	0.64	0.66	0.69	0.45	0.51
Crotonaldehyde	0.02	0.01	0.04	0.16	0.16	0.15	0.16	0.17	0.16	0.15
Butyr/Isobutyraldehyde	0.27	0.21	0.12	0.46	0.45	0.45	0.46	0.57	0.35	0.39
Benzaldehyde	0.12	0.08	0.04	0.22	0.21	0.22	0.23	0.33	0.19	0.19
Isovaleraldehyde	ND	ND	0.01	0.03	0.03	0.03	0.04	0.05	0.03	0.01
Valeraldehyde	0.06	0.05	0.04	0.08	0.08	0.08	0.09	0.46	0.08	0.04
Tolualdehydes	0.10	0.05	0.06	0.21	0.21	0.22	0.23	0.54	0.21	0.23
Hexaldehyde	0.11	0.07	0.15	0.49	0.51	0.49	0.51	1.41	0.38	0.46
2,5-Dimethylbenzaldehyde	ND	ND	ND	0.04	0.04	0.04	0.04	ND	ND	0.04

u - Concentration is below the detection limit.

1999/2000 Carbonyl Raw Monitoring Data - Salt Lake City, UT (Field Blank)
Appendix L

Data File ID	Q0DJ007	Q0LD014
FB ID	17385 FB	18772 FB
Sample date	3/25/2000	11/13/2000
Date Analyzed	4/10/2000	12/4/2000
	(µg/cartridge)	*(µg/cartridge)*
Formaldehyde	0.023	0.054
Acetaldehyde	0.06	0.147
Acetone	0.09	0.158
Propionaldehyde	ND	ND
Crotonaldehyde	ND	ND
Butyraldehyde	0.04	ND
Benzaldehyde	0.03	ND
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	ND
Tolualdehydes	ND	0.062
Hexaldehyde	0.03	0.025
2,5-Dimethylbenzaldehyde	ND	ND

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,16480		Sample,16508			Field Blank,16509	
File I.D.			ENG1629.D			ENG1627.D	
Date Sampled	8/22/1999		8/28/1999			8/28/1999	
Date Analyzed	VOID		10/11/99			10/11/99	
Actual Vol (m^3)			Actual Vol (m^3)	183		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine			ND	ND		ND	ND
Pyridine			ND	ND		ND	ND
Ethyl methanesulfonate			ND	ND		ND	ND
2-Picoline			ND	ND		ND	ND
N-Nitrosomethylethylamine			ND	ND		ND	ND
Methyl methanesulfonate			ND	ND		ND	ND
N-Nitrosodiethylamine			ND	ND		ND	ND
Phenol			27.63	0.151		ND	ND
Pentachloroethane			ND	ND		ND	ND
bis (2-Chloroethyl)ether			ND	ND		ND	ND
Aniline			ND	ND		ND	ND
2-Chlorophenol			ND	ND		ND	ND
1,3-Dichlorobenzene			ND	ND		ND	ND
1,4-Dichlorobenzene			9.13	0.050	U	ND	ND
Benzyl alcohol			ND	ND		ND	ND
2-Methylphenol			ND	ND		ND	ND
1,2-Dichlorobenzene			ND	ND		ND	ND
bis(2-Chloroisopropyl)ether			ND	ND		ND	ND
3&4-Methylphenol			ND	ND		ND	ND
N-Nitrosopyrrolidine			ND	ND		ND	ND
N-Nitrosodipropylamine			ND	ND		ND	ND
o-Toluidine			ND	ND		ND	ND
Hexachloroethane			ND	ND		ND	ND
Acetophenone			27.63	0.151		ND	ND
Nitrobenzene			ND	ND		ND	ND
N-Nitrosopiperidine			ND	ND		ND	ND
Isophorone			ND	ND		ND	ND
2-Nitrophenol			ND	ND		ND	ND
2,4-Dimethylphenol			ND	ND		ND	ND
bis(2-Chloroethoxy)methane			9.13	0.050	U	ND	ND
2,4-Dichlorophenol			ND	ND		ND	ND
4-Chloroaniline			ND	ND		ND	ND
1,2,4-Trichlorobenzene			ND	ND		ND	ND
Naphthalene			ND	ND		ND	ND
2,6-Dichlorophenol			ND	ND		ND	ND
Hexachloropropene			ND	ND		ND	ND
Hexachlorobutadiene			ND	ND		ND	ND
N-Nitrosodibutylamine			ND	ND		ND	ND
4-Chloro-3-methylphenol			ND	ND		ND	ND
Safrole			47.42	0.259		ND	ND
2-Methylnaphthalene			ND	ND		ND	ND
1,2,4,5-Tetrachlorobenzene			ND	ND		ND	ND
2,4,6-Trichlorophenol			ND	ND		ND	ND
Hexachlorocyclopentadiene			ND	ND		ND	ND
2,4,5-Trichlorphenol			ND	ND		ND	ND
2-Nitroaniline			ND	ND		ND	ND
Isosafrole			ND	ND		ND	ND
2-Chloronaphthalene			ND	ND		ND	ND
1,4-Naphthoquinone			ND	ND		ND	ND
Dimethyl phthalate			56.72	0.310		ND	ND
1,3-Dintrobenzene			ND	ND		ND	ND
2,6-Dinitrotoluene			ND	ND		ND	ND
3-Nitroaniline			ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,16480		Sample,16508		Field Blank,16509	
File I.D.			ENG1629.D		ENG1627.D	
Date Sampled	8/22/1999		8/28/1999		8/28/1999	
Date Analyzed	VOID		10/11/99		10/11/99	
Actual Vol (m^3)			Actual Vol (m^3)	183	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene			ND	ND	ND	ND
2,4-Dinitrophenol			ND	ND	ND	ND
4-Nitrophenol			ND	ND	ND	ND
Acenaphthene			25.37	0.139	ND	ND
2,4-Dinitrotoluene			ND	ND	ND	ND
2-Naphthylamine			ND	ND	ND	ND
Dibenzofuran			ND	ND	ND	ND
Pentachlorobenzene			ND	ND	ND	ND
1-Naphthylamine			ND	ND	ND	ND
Diethyl phthalate			ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol			ND	ND	ND	ND
4-Nitroaniline			ND	ND	ND	ND
4-Chlorophenyl-phenyl ether			ND	ND	ND	ND
Fluorene			ND	ND	ND	ND
5-Nitro-o-toluidine			ND	ND	ND	ND
4,6-Dinitro-2-methylphenol			ND	ND	ND	ND
Diphenylamine			ND	ND	ND	ND
Azobenzene			ND	ND	ND	ND
Phenacetin			ND	ND	ND	ND
Diallate			ND	ND	ND	ND
4-Bromophenyl phenyl ether			ND	ND	ND	ND
4-Aminobiphenyl			ND	ND	ND	ND
Hexachlorobenzene			5.39	0.029	ND	ND
Pronamide			ND	ND	ND	ND
Pentachlorophenol			ND	ND	ND	ND
Pentachloronitrobenzene			ND	ND	ND	ND
Phenanthrene			ND	ND	ND	ND
Dinoseb			ND	ND	ND	ND
Anthracene			ND	ND	ND	ND
Carbazole			ND	ND	ND	ND
Di-n-butyl phthalate			ND	ND	ND	ND
Benzidine			ND	ND	ND	ND
Isodrin			ND	ND	ND	ND
Fluoranthene			ND	ND	ND	ND
Pyrene			ND	ND	ND	ND
4-Dimethylaminoazobenzene			ND	ND	ND	ND
Chlorobenzilate			ND	ND	ND	ND
3,3'-Dimethylbenzidine			ND	ND	ND	ND
Butyl benzyl phthalate			ND	ND	ND	ND
2-Acetylaminofluorene			ND	ND	ND	ND
3-Methylcholanthrene			ND	ND	ND	ND
3,3'-Dichlorobenzidine			ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate			9.02	0.049 U	ND	ND
Benzo(a)anthracene			ND	ND	ND	ND
Chrysene			ND	ND	ND	ND
Di-n-octyl phthalate			ND	ND	ND	ND
7,12-Dimethylbenz(a)anthracene			16.17	0.088 U	ND	ND
Benzo(b)fluoranthene			ND	ND	ND	ND
Benzo(k)fluoranthene			ND	ND	ND	ND
Benzo(a)pyrene			ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene			ND	ND	ND	ND
Dibenz(a,h)anthracene			ND	ND	ND	ND
Benzo(g,h,i)perylene			ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,16687		Field Blank,16688		Sample,16725	
File I.D.	ENG1630.D		ENG1628.D			
Date Sampled	9/9/1999		9/9/1999		9/15/1999	
Date Analyzed	10/11/99		10/11/99		VOID	
Actual Vol (m^3)	Actual Vol (m^3)	202.217	Actual Vol (m^3)	0		
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND		
Pyridine	ND	ND	ND	ND		
Ethyl methanesulfonate	ND	ND	ND	ND		
2-Picoline	ND	ND	ND	ND		
N-Nitrosomethylethylamine	ND	ND	ND	ND		
Methyl methanesulfonate	ND	ND	ND	ND		
N-Nitrosodiethylamine	ND	ND	ND	ND		
Phenol	109.72	0.543	ND	ND		
Pentachloroethane	ND	ND	ND	ND		
bis (2-Chloroethyl)ether	ND	ND	ND	ND		
Aniline	ND	ND	ND	ND		
2-Chlorophenol	ND	ND	ND	ND		
1,3-Dichlorobenzene	ND	ND	ND	ND		
1,4-Dichlorobenzene	13.39	0.066	ND	ND		
Benzyl alcohol	ND	ND	ND	ND		
2-Methylphenol	16.27	0.080	ND	ND		
1,2-Dichlorobenzene	ND	ND	ND	ND		
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND		
3&4-Methylphenol	ND	ND	ND	ND		
N-Nitrosopyrrolidine	ND	ND	ND	ND		
N-Nitrosodipropylamine	ND	ND	ND	ND		
o-Toluidine	ND	ND	ND	ND		
Hexachloroethane	ND	ND	ND	ND		
Acetophenone	109.72	0.543	ND	ND		
Nitrobenzene	ND	ND	ND	ND		
N-Nitrosopiperidine	ND	ND	ND	ND		
Isophorone	ND	ND	ND	ND		
2-Nitrophenol	ND	ND	ND	ND		
2,4-Dimethylphenol	ND	ND	ND	ND		
bis(2-Chloroethoxy)methane	13.39	0.066 U	ND	ND		
2,4-Dichlorophenol	ND	ND	ND	ND		
4-Chloroaniline	16.27	0.080 U	ND	ND		
1,2,4-Trichlorobenzene	ND	ND	ND	ND		
Naphthalene	ND	ND	ND	ND		
2,6-Dichlorophenol	ND	ND	ND	ND		
Hexachloropropene	ND	ND	ND	ND		
Hexachlorobutadiene	ND	ND	ND	ND		
N-Nitrosodibutylamine	ND	ND	ND	ND		
4-Chloro-3-methylphenol	ND	ND	ND	ND		
Safrole	53.49	0.265	ND	ND		
2-Methylnaphthalene	ND	ND	ND	ND		
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND		
2,4,6-Trichlorophenol	ND	ND	ND	ND		
Hexachlorocyclopentadiene	ND	ND	ND	ND		
2,4,5-Trichlorphenol	ND	ND	ND	ND		
2-Nitroaniline	ND	ND	ND	ND		
Isosafrole	ND	ND	ND	ND		
2-Chloronaphthalene	ND	ND	ND	ND		
1,4-Naphthoquinone	ND	ND	ND	ND		
Dimethyl phthalate	111.11	0.549	ND	ND		
1,3-Dintrobenzene	ND	ND	ND	ND		
2,6-Dinitrotoluene	ND	ND	ND	ND		
3-Nitroaniline	ND	ND	ND	ND		

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,16687		Field Blank,16688		Sample,16725	
File I.D.	ENG1630.D		ENG1628.D			
Date Sampled	9/9/1999		9/9/1999		9/15/1999	
Date Analyzed	10/11/99		10/11/99		VOID	
Actual Vol (m^3)	Actual Vol (m^3)	202.217	Actual Vol (m^3)	0		

Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND		ND	ND		
2,4-Dinitrophenol	ND	ND		ND	ND		
4-Nitrophenol	ND	ND		ND	ND		
Acenaphthene	40.94	0.202		ND	ND		
2,4-Dinitrotoluene	ND	ND		ND	ND		
2-Naphthylamine	ND	ND		ND	ND		
Dibenzofuran	ND	ND		ND	ND		
Pentachlorobenzene	ND	ND		ND	ND		
1-Naphthylamine	ND	ND		ND	ND		
Diethyl phthalate	ND	ND		ND	ND		
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		
4-Nitroaniline	ND	ND		ND	ND		
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		
Fluorene	ND	ND		ND	ND		
5-Nitro-o-toluidine	ND	ND		ND	ND		
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		
Diphenylamine	ND	ND		ND	ND		
Azobenzene	ND	ND		ND	ND		
Phenacetin	ND	ND		ND	ND		
Diallate	9.48	0.047		ND	ND		
4-Bromophenyl phenyl ether	ND	ND		ND	ND		
4-Aminobiphenyl	ND	ND		ND	ND		
Hexachlorobenzene	6.10	0.030	U	ND	ND		
Pronamide	ND	ND		ND	ND		
Pentachlorophenol	ND	ND		ND	ND		
Pentachloronitrobenzene	ND	ND		ND	ND		
Phenanthrene	ND	ND		ND	ND		
Dinoseb	ND	ND		ND	ND		
Anthracene	ND	ND		ND	ND		
Carbazole	ND	ND		ND	ND		
Di-n-butyl phthalate	ND	ND		ND	ND		
Benzidine	ND	ND		ND	ND		
Isodrin	ND	ND		ND	ND		
Fluoranthene	ND	ND		ND	ND		
Pyrene	ND	ND		ND	ND		
4-Dimethylaminoazobenzene	ND	ND		ND	ND		
Chlorobenzilate	ND	ND		ND	ND		
3,3'-Dimethylbenzidine	ND	ND		ND	ND		
Butyl benzyl phthalate	ND	ND		ND	ND		
2-Acetylaminofluorene	ND	ND		ND	ND		
3-Methylcholanthrene	ND	ND		ND	ND		
3,3'-Dichlorobenzidine	ND	ND		ND	ND		
bis(2-Ethylhexyl)phthalate	12.89	0.064		ND	ND		
Benzo(a)anthracene	ND	ND		ND	ND		
Chrysene	ND	ND		ND	ND		
Di-n-octyl phthalate	ND	ND		ND	ND		
7,12-Dimethylbenz(a)anthracene	39.17	0.194		ND	ND		
Benzo(b)fluoranthene	ND	ND		ND	ND		
Benzo(k)fluoranthene	ND	ND		ND	ND		
Benzo(a)pyrene	ND	ND		ND	ND		
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		
Dibenz(a,h)anthracene	ND	ND		ND	ND		
Benzo(g,h,i)perylene	ND	ND		ND	ND		

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank,16726		Sample,16826		Field Blank,16827	
File I.D.			ENG1706.D		ENG1704.D	
Date Sampled	9/15/1999		9/21/1999		9/21/1999	
Date Analyzed	VOID		10/25/99		10/25/99	
Actual Vol (m^3)	Actual Vol (m^3)		Actual Vol (m^3)	181.4	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine			ND	ND	ND	ND
Pyridine			ND	ND	ND	ND
Ethyl methanesulfonate			ND	ND	ND	ND
2-Picoline			ND	ND	ND	ND
N-Nitrosomethylethylamine			ND	ND	ND	ND
Methyl methanesulfonate			ND	ND	ND	ND
N-Nitrosodiethylamine			ND	ND	ND	ND
Phenol			64.86	0.358	ND	ND
Pentachloroethane			ND	ND	ND	ND
bis (2-Chloroethyl)ether			ND	ND	ND	ND
Aniline			ND	ND	ND	ND
2-Chlorophenol			ND	ND	ND	ND
1,3-Dichlorobenzene			ND	ND	ND	ND
1,4-Dichlorobenzene			17.93	0.099	ND	ND
Benzyl alcohol			ND	ND	ND	ND
2-Methylphenol			ND	ND	ND	ND
1,2-Dichlorobenzene			ND	ND	ND	ND
bis(2-Chloroisopropyl)ether			ND	ND	ND	ND
3&4-Methylphenol			ND	ND	ND	ND
N-Nitrosopyrrolidine			ND	ND	ND	ND
N-Nitrosodipropylamine			ND	ND	ND	ND
o-Toluidine			ND	ND	ND	ND
Hexachloroethane			ND	ND	ND	ND
Acetophenone			64.86	0.358	ND	ND
Nitrobenzene			ND	ND	ND	ND
N-Nitrosopiperidine			ND	ND	ND	ND
Isophorone			ND	ND	ND	ND
2-Nitrophenol			ND	ND	ND	ND
2,4-Dimethylphenol			ND	ND	ND	ND
bis(2-Chloroethoxy)methane			17.93	0.099	ND	ND
2,4-Dichlorophenol			ND	ND	ND	ND
4-Chloroaniline			ND	ND	ND	ND
1,2,4-Trichlorobenzene			ND	ND	ND	ND
Naphthalene			ND	ND	ND	ND
2,6-Dichlorophenol			ND	ND	ND	ND
Hexachloropropene			ND	ND	ND	ND
Hexachlorobutadiene			ND	ND	ND	ND
N-Nitrosodibutylamine			ND	ND	ND	ND
4-Chloro-3-methylphenol			ND	ND	ND	ND
Safrole			ND	ND	ND	ND
2-Methylnaphthalene			ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene			ND	ND	ND	ND
2,4,6-Trichlorophenol			ND	ND	ND	ND
Hexachlorocyclopentadiene			ND	ND	ND	ND
2,4,5-Trichlorphenol			ND	ND	ND	ND
2-Nitroaniline			ND	ND	ND	ND
Isosafrole			ND	ND	ND	ND
2-Chloronaphthalene			ND	ND	ND	ND
1,4-Naphthoquinone			ND	ND	ND	ND
Dimethyl phthalate			136.06	0.750	ND	ND
1,3-Dintrobenzene			ND	ND	ND	ND
2,6-Dinitrotoluene			ND	ND	ND	ND
3-Nitroaniline			ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank,16726		Sample,16826		Field Blank,16827	
File I.D.			ENG1706.D		ENG1704.D	
Date Sampled	9/15/1999		9/21/1999		9/21/1999	
Date Analyzed	VOID		10/25/99		10/25/99	
Actual Vol (m^3)	Actual Vol (m^3)		Actual Vol (m^3)	181.4	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene			ND	ND	ND	ND
2,4-Dinitrophenol			ND	ND	ND	ND
4-Nitrophenol			ND	ND	ND	ND
Acenaphthene			79.31	0.437	ND	ND
2,4-Dinitrotoluene			ND	ND	ND	ND
2-Naphthylamine			ND	ND	ND	ND
Dibenzofuran			ND	ND	ND	ND
Pentachlorobenzene			ND	ND	ND	ND
1-Naphthylamine			ND	ND	ND	ND
Diethyl phthalate			ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol			ND	ND	ND	ND
4-Nitroaniline			ND	ND	ND	ND
4-Chlorophenyl-phenyl ether			ND	ND	ND	ND
Fluorene			ND	ND	ND	ND
5-Nitro-o-toluidine			ND	ND	ND	ND
4,6-Dinitro-2-methylphenol			ND	ND	ND	ND
Diphenylamine			ND	ND	ND	ND
Azobenzene			ND	ND	ND	ND
Phenacetin			ND	ND	ND	ND
Diallate			ND	ND	ND	ND
4-Bromophenyl phenyl ether			ND	ND	ND	ND
4-Aminobiphenyl			ND	ND	ND	ND
Hexachlorobenzene			8.37	0.046	ND	ND
Pronamide			ND	ND	ND	ND
Pentachlorophenol			ND	ND	ND	ND
Pentachloronitrobenzene			ND	ND	ND	ND
Phenanthrene			ND	ND	ND	ND
Dinoseb			ND	ND	ND	ND
Anthracene			ND	ND	ND	ND
Carbazole			ND	ND	ND	ND
Di-n-butyl phthalate			ND	ND	ND	ND
Benzidine			ND	ND	ND	ND
Isodrin			ND	ND	ND	ND
Fluoranthene			ND	ND	ND	ND
Pyrene			ND	ND	ND	ND
4-Dimethylaminoazobenzene			ND	ND	ND	ND
Chlorobenzilate			ND	ND	ND	ND
3,3'-Dimethylbenzidine			ND	ND	ND	ND
Butyl benzyl phthalate			ND	ND	ND	ND
2-Acetylaminofluorene			ND	ND	ND	ND
3-Methylcholanthrene			ND	ND	ND	ND
3,3'-Dichlorobenzidine			ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate			13.76	0.076	ND	ND
Benzo(a)anthracene			ND	ND	ND	ND
Chrysene			ND	ND	ND	ND
Di-n-octyl phthalate			ND	ND	ND	ND
7,12-Dimethylbenz(a)anthracene			44.14	0.243	ND	ND
Benzo(b)fluoranthene			ND	ND	ND	ND
Benzo(k)fluoranthene			ND	ND	ND	ND
Benzo(a)pyrene			ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene			ND	ND	ND	ND
Dibenz(a,h)anthracene			ND	ND	ND	ND
Benzo(g,h,i)perylene			ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,16882		Field Blank,16883		Sample,16958	
File I.D.	ENG1707.D		ENG1705.D		ENG1717.D	
Date Sampled	10/3/1999		10/3/1999		10/15/1999	
Date Analyzed	10/25/99		10/25/99		11/04/99	
Actual Vol (m^3)	Actual Vol (m^3)	176.2	Actual Vol (m^3)	0	Actual Vol (m^3)	206.2
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	45.24	0.22
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	16.48	0.09	ND	ND	20.21	0.10
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	69.38	0.39	ND	ND	109.56	0.53
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	37.50	0.21	ND	ND	62.85	0.30
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,16882			Field Blank,16883		Sample,16958		
File I.D.	ENG1707.D			ENG1705.D		ENG1717.D		
Date Sampled	10/3/1999			10/3/1999		10/15/1999		
Date Analyzed	10/25/99			10/25/99		11/04/99		
Actual Vol (m^3)	Actual Vol (m^3)	176.2		Actual Vol (m^3)	0	Actual Vol (m^3)	206.2	
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	
Acenaphthylene	ND	ND		ND	ND	ND	ND	
2,4-Dinitrophenol	ND	ND		ND	ND	ND	ND	
4-Nitrophenol	ND	ND		ND	ND	ND	ND	
Acenaphthene	ND	ND		ND	ND	ND	ND	
2,4-Dinitrotoluene	ND	ND		ND	ND	ND	ND	
2-Naphthylamine	ND	ND		ND	ND	ND	ND	
Dibenzofuran	8.21	0.05	U	ND	ND	ND	ND	
Pentachlorobenzene	ND	ND		ND	ND	ND	ND	
1-Naphthylamine	ND	ND		ND	ND	ND	ND	
Diethyl phthalate	ND	ND		ND	ND	ND	ND	
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND	ND	ND	
4-Nitroaniline	ND	ND		ND	ND	ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND	ND	ND	
Fluorene	ND	ND		ND	ND	ND	ND	
5-Nitro-o-toluidine	ND	ND		ND	ND	ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND	ND	ND	
Diphenylamine	ND	ND		ND	ND	ND	ND	
Azobenzene	ND	ND		ND	ND	ND	ND	
Phenacetin	ND	ND		ND	ND	ND	ND	
Diallate	ND	ND		ND	ND	ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND	ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND	ND	ND	
Hexachlorobenzene	ND	ND		ND	ND	ND	ND	
Pronamide	ND	ND		ND	ND	ND	ND	
Pentachlorophenol	ND	ND		ND	ND	ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND	ND	ND	
Phenanthrene	18.57	0.11		ND	ND	6.72	0.03	U
Dinoseb	ND	ND		ND	ND	ND	ND	
Anthracene	ND	ND		ND	ND	ND	ND	
Carbazole	ND	ND		ND	ND	ND	ND	
Di-n-butyl phthalate	27.74	0.16		ND	ND	10.25	0.05	U
Benzidine	ND	ND		ND	ND	ND	ND	
Isodrin	ND	ND		ND	ND	ND	ND	
Fluoranthene	ND	ND		ND	ND	ND	ND	
Pyrene	ND	ND		ND	ND	ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND	ND	ND	
Chlorobenzilate	ND	ND		ND	ND	ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND	ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND	ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND	ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND	ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND	ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND		ND	ND	ND	ND	
Benzo(a)anthracene	ND	ND		ND	ND	ND	ND	
Chrysene	ND	ND		ND	ND	ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND	ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND	ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND	ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND	ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND	ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND	ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND	ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank,16959		Sample,16986		Field Blank,16987	
File I.D.	ENG1715.D		ENG1718.D		ENG1716.D	
Date Sampled	10/15/1999		10/21/1999		10/21/1999	
Date Analyzed	11/04/99		11/04/99		11/04/99	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	204.2	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	82.90	0.41	ND	ND
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	24.49	0.12	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	173.13	0.85	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	93.38	0.46	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank,16959		Sample,16986		Field Blank,16987	
File I.D.	ENG1715.D		ENG1718.D		ENG1716.D	
Date Sampled	10/15/1999		10/21/1999		10/21/1999	
Date Analyzed	11/04/99		11/04/99		11/04/99	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	204.2	Actual Vol (m^3)	0

Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	14.32	0.07		ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	13.34	0.07		ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	ND	ND		ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	12.47	0.06	U	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	23.19	0.11		ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	ND	ND		ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	12.57	0.06		ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	ND	ND		ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,17018		Field Blank,17019		Sample,17049	
File I.D.	ENG1724.D		ENG1722.D		ENG1725.D	
Date Sampled	10/27/1999		10/27/1999		11/8/1999	
Date Analyzed	11/30/99		11/30/99		11/30/99	
Actual Vol (m^3)	Actual Vol (m^3)	182.7	Actual Vol (m^3)	0	Actual Vol (m^3)	193
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	26.18	0.14	ND	ND	32.20	0.17
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	14.12	0.07
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	81.16	0.44	ND	ND	122.26	0.63
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	44.47	0.24	ND	ND	62.79	0.33
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample,17018		Field Blank,17019		Sample,17049		
File I.D.	ENG1724.D		ENG1722.D		ENG1725.D		
Date Sampled	10/27/1999		10/27/1999		11/8/1999		
Date Analyzed	11/30/99		11/30/99		11/30/99		
Actual Vol (m^3)	Actual Vol (m^3)	182.7	Actual Vol (m^3)	0	Actual Vol (m^3)	193	
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	
Acenaphthylene	ND	ND	ND	ND	ND	ND	
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	
4-Nitrophenol	ND	ND	ND	ND	ND	ND	
Acenaphthene	ND	ND	ND	ND	ND	ND	
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
2-Naphthylamine	ND	ND	ND	ND	ND	ND	
Dibenzofuran	ND	ND	ND	ND	ND	ND	
Pentachlorobenzene	ND	ND	ND	ND	ND	ND	
1-Naphthylamine	ND	ND	ND	ND	ND	ND	
Diethyl phthalate	ND	ND	ND	ND	ND	ND	
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND	
4-Nitroaniline	ND	ND	ND	ND	ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND	ND	ND	
Fluorene	ND	ND	ND	ND	ND	ND	
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	
Diphenylamine	ND	ND	ND	ND	ND	ND	
Azobenzene	ND	ND	ND	ND	ND	ND	
Phenacetin	ND	ND	ND	ND	ND	ND	
Diallate	ND	ND	ND	ND	ND	ND	
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
4-Aminobiphenyl	ND	ND	ND	ND	ND	ND	
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	
Pronamide	ND	ND	ND	ND	ND	ND	
Pentachlorophenol	ND	ND	ND	ND	ND	ND	
Pentachloronitrobenzene	ND	ND	ND	ND	ND	ND	
Phenanthrene	ND	ND	ND	ND	5.20	0.03	U
Dinoseb	ND	ND	ND	ND	ND	ND	
Anthracene	ND	ND	ND	ND	ND	ND	
Carbazole	ND	ND	ND	ND	ND	ND	
Di-n-butyl phthalate	23.98	0.13	ND	ND	12.04	0.06	U
Benzidine	ND	ND	ND	ND	ND	ND	
Isodrin	ND	ND	ND	ND	ND	ND	
Fluoranthene	ND	ND	ND	ND	ND	ND	
Pyrene	ND	ND	ND	ND	ND	ND	
4-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	ND	
Chlorobenzilate	ND	ND	ND	ND	ND	ND	
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	
2-Acetylaminofluorene	ND	ND	ND	ND	ND	ND	
3-Methylcholanthrene	ND	ND	ND	ND	ND	ND	
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	
Chrysene	ND	ND	ND	ND	ND	ND	
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND	ND	ND	
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND	
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank,17050		Sample,17066		Field Blank,17065	
File I.D.	ENG1723.D		ENG1731.D		ENG1728.D	
Date Sampled	11/8/1999		11/20/1999		11/20/1999	
Date Analyzed	11/30/99		12/15/99		12/15/99	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	207.6	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	28.83	0.14	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	11.99	0.06	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank,17050		Sample,17066		Field Blank,17065	
File I.D.	ENG1723.D		ENG1731.D		ENG1728.D	
Date Sampled	11/8/1999		11/20/1999		11/20/1999	
Date Analyzed	11/30/99		12/15/99		12/15/99	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	207.6	Actual Vol (m^3)	0

Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	ND	ND		ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	ND	ND		ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	ND	ND		ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	ND	ND		ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	ND	ND		ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	ND	ND		ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	7.76	0.04	U	ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	ND	ND		ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17108		Field Blank, 17109		Sample, 17120		
File I.D.	ENG1732.D		ENG1729.D		ENG1733.D		
Date Sampled	12/2/1999		12/2/1999		12/8/1999		
Date Analyzed	12/15/99		12/15/99		12/15/99		
Actual Vol (m^3)	Actual Vol (m^3)	228.4	Actual Vol (m^3)	0	Actual Vol (m^3)	225.9	
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
Pyridine	ND	ND	ND	ND	ND	ND	
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND	
2-Picoline	ND	ND	ND	ND	ND	ND	
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND	
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND	
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND	
Phenol	ND	ND	ND	ND	17.85	0.08	U
Pentachloroethane	ND	ND	ND	ND	ND	ND	
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	
Aniline	ND	ND	ND	ND	ND	ND	
2-Chlorophenol	ND	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
Benzyl alcohol	ND	ND	ND	ND	ND	ND	
2-Methylphenol	ND	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	
3&4-Methylphenol	ND	ND	ND	ND	ND	ND	
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND	
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND	
o-Toluidine	ND	ND	ND	ND	ND	ND	
Hexachloroethane	ND	ND	ND	ND	ND	ND	
Acetophenone	ND	ND	ND	ND	ND	ND	
Nitrobenzene	ND	ND	ND	ND	ND	ND	
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND	
Isophorone	ND	ND	ND	ND	ND	ND	
2-Nitrophenol	ND	ND	ND	ND	ND	ND	
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	
4-Chloroaniline	ND	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	
Naphthalene	35.96	0.16	ND	ND	93.09	0.41	
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND	
Hexachloropropene	ND	ND	ND	ND	ND	ND	
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND	
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	
Safrole	ND	ND	ND	ND	ND	ND	
2-Methylnaphthalene	15.26	0.07	ND	ND	40.32	0.18	
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND	
2-Nitroaniline	ND	ND	ND	ND	ND	ND	
Isosafrole	ND	ND	ND	ND	ND	ND	
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND	
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND	
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
3-Nitroaniline	ND	ND	ND	ND	ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17108		Field Blank, 17109		Sample, 17120	
File I.D.	ENG1732.D		ENG1729.D		ENG1733.D	
Date Sampled	12/2/1999		12/2/1999		12/8/1999	
Date Analyzed	12/15/99		12/15/99		12/15/99	
Actual Vol (m^3)	Actual Vol (m^3)	228.4	Actual Vol (m^3)	0	Actual Vol (m^3)	225.9
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND
2-Naphthylamine	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND
Pentachlorobenzene	ND	ND	ND	ND	ND	ND
1-Naphthylamine	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND
Diphenylamine	ND	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND	ND
Phenacetin	ND	ND	ND	ND	ND	ND
Diallate	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND
4-Aminobiphenyl	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND
Pronamide	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Dinoseb	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND	ND
Isodrin	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	ND
Chlorobenzilate	ND	ND	ND	ND	ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND	ND	ND
3-Methylcholanthrene	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17121		Sample, 17138			Field Blank, 17139	
File I.D.	ENG1730.D		ENG1748.D			ENG1741.D	
Date Sampled	12/8/1999		12/14/1999			12/14/1999	
Date Analyzed	12/15/99		02/01/00			01/21/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	239.9		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND		ND	ND
Pyridine	ND	ND	ND	ND		ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND		ND	ND
2-Picoline	ND	ND	ND	ND		ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND		ND	ND
Methyl methanesulfonate	ND	ND	ND	ND		ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND		ND	ND
Phenol	ND	ND	7.39	0.03	U	ND	ND
Pentachloroethane	ND	ND	ND	ND		ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND		ND	ND
Aniline	ND	ND	ND	ND		ND	ND
2-Chlorophenol	ND	ND	ND	ND		ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND		ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND		ND	ND
Benzyl alcohol	ND	ND	ND	ND		ND	ND
2-Methylphenol	ND	ND	ND	ND		ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND		ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND		ND	ND
3&4-Methylphenol	ND	ND	ND	ND		ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND		ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND		ND	ND
o-Toluidine	ND	ND	ND	ND		ND	ND
Hexachloroethane	ND	ND	ND	ND		ND	ND
Acetophenone	ND	ND	ND	ND		ND	ND
Nitrobenzene	ND	ND	ND	ND		ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND		ND	ND
Isophorone	ND	ND	ND	ND		ND	ND
2-Nitrophenol	ND	ND	ND	ND		ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND		ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND		ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND		ND	ND
4-Chloroaniline	ND	ND	ND	ND		ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND		ND	ND
Naphthalene	ND	ND	32.33	0.13		ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND		ND	ND
Hexachloropropene	ND	ND	ND	ND		ND	ND
Hexachlorobutadiene	ND	ND	ND	ND		ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND		ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND		ND	ND
Safrole	ND	ND	ND	ND		ND	ND
2-Methylnaphthalene	ND	ND	11.77	0.05		ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND		ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND		ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND		ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND		ND	ND
2-Nitroaniline	ND	ND	ND	ND		ND	ND
Isosafrole	ND	ND	ND	ND		ND	ND
2-Chloronaphthalene	ND	ND	ND	ND		ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND		ND	ND
Dimethyl phthalate	ND	ND	ND	ND		ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND		ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND		ND	ND
3-Nitroaniline	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17121		Sample, 17138		Field Blank, 17139	
File I.D.	ENG1730.D		ENG1748.D		ENG1741.D	
Date Sampled	12/8/1999		12/14/1999		12/14/1999	
Date Analyzed	12/15/99		02/01/00		01/21/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	239.9	Actual Vol (m^3)	0

Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	ND	ND		ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	ND	ND		ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	ND	ND		ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	ND	ND		ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	ND	ND		ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	ND	ND		ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	6.88	0.03	U	ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	ND	ND		ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17169			Field Blank, 17170		Sample, 17193	
File I.D.	ENG1743.D			ENG1742.D		ENG1751.D	
Date Sampled	12/26/1999			12/26/1999		1/7/2000	
Date Analyzed	01/21/00			01/21/00		02/01/00	
Actual Vol (m^3)	Actual Vol (m^3)	237.3		Actual Vol (m^3)	0	Actual Vol (m^3)	221.5
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND		ND	ND	ND	ND
Pyridine	ND	ND		ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND		ND	ND	ND	ND
2-Picoline	ND	ND		ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND		ND	ND	ND	ND
Methyl methanesulfonate	ND	ND		ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND		ND	ND	ND	ND
Phenol	8.16	0.03	U	ND	ND	89.56	0.40
Pentachloroethane	ND	ND		ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND		ND	ND	ND	ND
Aniline	ND	ND		ND	ND	ND	ND
2-Chlorophenol	ND	ND		ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND		ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND		ND	ND	17.48	0.08
Benzyl alcohol	ND	ND		ND	ND	ND	ND
2-Methylphenol	ND	ND		ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND		ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND		ND	ND	ND	ND
3&4-Methylphenol	ND	ND		ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND		ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND		ND	ND	ND	ND
o-Toluidine	ND	ND		ND	ND	ND	ND
Hexachloroethane	ND	ND		ND	ND	ND	ND
Acetophenone	ND	ND		ND	ND	ND	ND
Nitrobenzene	ND	ND		ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND		ND	ND	ND	ND
Isophorone	ND	ND		ND	ND	ND	ND
2-Nitrophenol	ND	ND		ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND		ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND		ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND		ND	ND	ND	ND
4-Chloroaniline	ND	ND		ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND		ND	ND	ND	ND
Naphthalene	20.55	0.09		ND	ND	185.57	0.84
2,6-Dichlorophenol	ND	ND		ND	ND	ND	ND
Hexachloropropene	ND	ND		ND	ND	ND	ND
Hexachlorobutadiene	ND	ND		ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND		ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND		ND	ND	ND	ND
Safrole	ND	ND		ND	ND	ND	ND
2-Methylnaphthalene	8.36	0.04	U	ND	ND	98.36	0.44
1,2,4,5-Tetrachlorobenzene	ND	ND		ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND		ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND		ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND		ND	ND	ND	ND
2-Nitroaniline	ND	ND		ND	ND	ND	ND
Isosafrole	ND	ND		ND	ND	ND	ND
2-Chloronaphthalene	ND	ND		ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND		ND	ND	ND	ND
Dimethyl phthalate	ND	ND		ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND		ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND		ND	ND	ND	ND
3-Nitroaniline	ND	ND		ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17169			Field Blank, 17170			Sample, 17193		
File I.D.	ENG1743.D			ENG1742.D			ENG1751.D		
Date Sampled	12/26/1999			12/26/1999			1/7/2000		
Date Analyzed	01/21/00			01/21/00			02/01/00		
Actual Vol (m^3)	Actual Vol (m^3)	237.3		Actual Vol (m^3)	0		Actual Vol (m^3)	221.5	
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	
Acenaphthylene	ND	ND		ND	ND		7.88	0.04	U
2,4-Dinitrophenol	ND	ND		ND	ND		ND	ND	
4-Nitrophenol	ND	ND		ND	ND		ND	ND	
Acenaphthene	ND	ND		ND	ND		22.94	0.10	
2,4-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
2-Naphthylamine	ND	ND		ND	ND		ND	ND	
Dibenzofuran	ND	ND		ND	ND		11.89	0.05	
Pentachlorobenzene	ND	ND		ND	ND		ND	ND	
1-Naphthylamine	ND	ND		ND	ND		ND	ND	
Diethyl phthalate	ND	ND		ND	ND		ND	ND	
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		ND	ND	
4-Nitroaniline	ND	ND		ND	ND		ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		ND	ND	
Fluorene	ND	ND		ND	ND		13.60	0.06	
5-Nitro-o-toluidine	ND	ND		ND	ND		ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		ND	ND	
Diphenylamine	ND	ND		ND	ND		ND	ND	
Azobenzene	ND	ND		ND	ND		ND	ND	
Phenacetin	ND	ND		ND	ND		ND	ND	
Diallate	ND	ND		ND	ND		ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND		ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND		ND	ND	
Hexachlorobenzene	ND	ND		ND	ND		ND	ND	
Pronamide	ND	ND		ND	ND		ND	ND	
Pentachlorophenol	ND	ND		ND	ND		ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND		ND	ND	
Phenanthrene	ND	ND		ND	ND		21.09	0.10	
Dinoseb	ND	ND		ND	ND		ND	ND	
Anthracene	ND	ND		ND	ND		3.10	0.01	
Carbazole	ND	ND		ND	ND		ND	ND	
Di-n-butyl phthalate	6.83	0.03	U	ND	ND		10.09	0.05	
Benzidine	ND	ND		ND	ND		ND	ND	
Isodrin	ND	ND		ND	ND		ND	ND	
Fluoranthene	ND	ND		ND	ND		ND	ND	
Pyrene	ND	ND		ND	ND		ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND		ND	ND	
Chlorobenzilate	ND	ND		ND	ND		ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND		ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND		ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND		ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND		ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND		ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND		ND	ND		ND	ND	
Benzo(a)anthracene	ND	ND		ND	ND		ND	ND	
Chrysene	ND	ND		ND	ND		ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND		ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND		ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17194		Sample, 17215		Field Blank, 17216	
File I.D.	ENG1749.D		ENG1752.D		ENG1750.D	
Date Sampled	1/7/2000		1/19/2000		1/19/2000	
Date Analyzed	02/01/00		02/01/00		02/01/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	225.9	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	25.42	0.11	ND	ND
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	107.08	0.47	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	54.12	0.24	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17194		Sample, 17215		Field Blank, 17216	
File I.D.	ENG1749.D		ENG1752.D		ENG1750.D	
Date Sampled	1/7/2000		1/19/2000		1/19/2000	
Date Analyzed	02/01/00		02/01/00		02/01/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	225.9	Actual Vol (m^3)	0

Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	39.31	0.17		ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	17.07	0.08		ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	ND	ND		ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	16.71	0.07		ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	30.01	0.13		ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	6.28	0.03	U	ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	8.63	0.04	U	ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	5.64	0.02	U	ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17231		Field Blank, 17232		Sample, 17253	
File I.D.	ENG1758.D		ENG1755.D		ENG1759.D	
Date Sampled	1/31/2000		1/31/2000		2/12/2000	
Date Analyzed	03/02/00		03/02/00		03/02/00	
Actual Vol (m^3)	Actual Vol (m^3)	205.9	Actual Vol (m^3)	0	Actual Vol (m^3)	201.8
Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	26.94	0.13	ND	ND	89.56	0.44
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	17.48	0.09
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	83.15	0.40	ND	ND	185.57	0.92
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	37.75	0.18	ND	ND	98.36	0.49
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17231			Field Blank, 17232		Sample, 17253		
File I.D.	ENG1758.D			ENG1755.D		ENG1759.D		
Date Sampled	1/31/2000			1/31/2000		2/12/2000		
Date Analyzed	03/02/00			03/02/00		03/02/00		
Actual Vol (m^3)	Actual Vol (m^3)	205.9		Actual Vol (m^3)	0	Actual Vol (m^3)	201.8	
Compound	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**	
Acenaphthylene	ND	ND		ND	ND	7.88	0.04	U
2,4-Dinitrophenol	ND	ND		ND	ND	ND	ND	
4-Nitrophenol	ND	ND		ND	ND	ND	ND	
Acenaphthene	2.67	0.01	U	ND	ND	22.94	0.11	
2,4-Dinitrotoluene	ND	ND		ND	ND	ND	ND	
2-Naphthylamine	ND	ND		ND	ND	ND	ND	
Dibenzofuran	ND	ND		ND	ND	11.89	0.06	
Pentachlorobenzene	ND	ND		ND	ND	ND	ND	
1-Naphthylamine	ND	ND		ND	ND	ND	ND	
Diethyl phthalate	ND	ND		ND	ND	ND	ND	
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND	ND	ND	
4-Nitroaniline	ND	ND		ND	ND	ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND	ND	ND	
Fluorene	ND	ND		ND	ND	13.60	0.07	
5-Nitro-o-toluidine	ND	ND		ND	ND	ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND	ND	ND	
Diphenylamine	ND	ND		ND	ND	ND	ND	
Azobenzene	ND	ND		ND	ND	ND	ND	
Phenacetin	ND	ND		ND	ND	ND	ND	
Diallate	ND	ND		ND	ND	ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND	ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND	ND	ND	
Hexachlorobenzene	ND	ND		ND	ND	ND	ND	
Pronamide	ND	ND		ND	ND	ND	ND	
Pentachlorophenol	ND	ND		ND	ND	ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND	ND	ND	
Phenanthrene	5.22	0.03	U	ND	ND	21.09	0.10	
Dinoseb	ND	ND		ND	ND	ND	ND	
Anthracene	ND	ND		ND	ND	3.10	0.02	
Carbazole	ND	ND		ND	ND	ND	ND	
Di-n-butyl phthalate	8.60	0.04	U	ND	ND	10.09	0.05	U
Benzidine	ND	ND		ND	ND	ND	ND	
Isodrin	ND	ND		ND	ND	ND	ND	
Fluoranthene	ND	ND		ND	ND	ND	ND	
Pyrene	ND	ND		ND	ND	ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND	ND	ND	
Chlorobenzilate	ND	ND		ND	ND	ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND	ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND	ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND	ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND	ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND	ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND		ND	ND	ND	ND	
Benzo(a)anthracene	ND	ND		ND	ND	ND	ND	
Chrysene	ND	ND		ND	ND	ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND	ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND	ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND	ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND	ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND	ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND	ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND	ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17254		Sample, 17301			Field Blank, 17302	
File I.D.	ENG1756.D		ENG1760.D			ENG1757.D	
Date Sampled	2/12/2000		2/24/2000			2/24/2000	
Date Analyzed	03/02/00		03/02/00			03/02/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	232.3		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**
N-Nitrosodimethylamine	ND	ND	ND	ND		ND	ND
Pyridine	ND	ND	ND	ND		ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND		ND	ND
2-Picoline	ND	ND	ND	ND		ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND		ND	ND
Methyl methanesulfonate	ND	ND	ND	ND		ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND		ND	ND
Phenol	ND	ND	17.28	0.07	U	ND	ND
Pentachloroethane	ND	ND	ND	ND		ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND		ND	ND
Aniline	ND	ND	ND	ND		ND	ND
2-Chlorophenol	ND	ND	ND	ND		ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND		ND	ND
1,4-Dichlorobenzene	ND	ND	13.80	0.06		ND	ND
Benzyl alcohol	ND	ND	ND	ND		ND	ND
2-Methylphenol	ND	ND	ND	ND		ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND		ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND		ND	ND
3&4-Methylphenol	ND	ND	ND	ND		ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND		ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND		ND	ND
o-Toluidine	ND	ND	ND	ND		ND	ND
Hexachloroethane	ND	ND	ND	ND		ND	ND
Acetophenone	ND	ND	ND	ND		ND	ND
Nitrobenzene	ND	ND	ND	ND		ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND		ND	ND
Isophorone	ND	ND	ND	ND		ND	ND
2-Nitrophenol	ND	ND	ND	ND		ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND		ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND		ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND		ND	ND
4-Chloroaniline	ND	ND	ND	ND		ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND		ND	ND
Naphthalene	ND	ND	72.74	0.31		ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND		ND	ND
Hexachloropropene	ND	ND	ND	ND		ND	ND
Hexachlorobutadiene	ND	ND	ND	ND		ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND		ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND		ND	ND
Safrole	ND	ND	ND	ND		ND	ND
2-Methylnaphthalene	ND	ND	29.44	0.13		ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND		ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND		ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND		ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND		ND	ND
2-Nitroaniline	ND	ND	ND	ND		ND	ND
Isosafrole	ND	ND	ND	ND		ND	ND
2-Chloronaphthalene	ND	ND	ND	ND		ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND		ND	ND
Dimethyl phthalate	ND	ND	ND	ND		ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND		ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND		ND	ND
3-Nitroaniline	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17254		Sample, 17301		Field Blank, 17302	
File I.D.	ENG1756.D		ENG1760.D		ENG1757.D	
Date Sampled	2/12/2000		2/24/2000		2/24/2000	
Date Analyzed	03/02/00		03/02/00		03/02/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	232.3	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**
Acenaphthylene	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND
2-Naphthylamine	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND
Pentachlorobenzene	ND	ND	ND	ND	ND	ND
1-Naphthylamine	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND
Diphenylamine	ND	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND	ND
Phenacetin	ND	ND	ND	ND	ND	ND
Diallate	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND
4-Aminobiphenyl	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND
Pronamide	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Dinoseb	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND	ND
Isodrin	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND	ND	ND
Chlorobenzilate	ND	ND	ND	ND	ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND	ND	ND
3-Methylcholanthrene	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17320		Field Blank, 17321		Sample, 17342	
File I.D.	ENG1777.D		ENG1768.D		ENG1778.D	
Date Sampled	3/6/2000		3/6/2000		3/17/2000	
Date Analyzed	04/19/00		04/17/00		04/19/00	
Actual Vol (m^3)	Actual Vol (m^3)	233.90	Actual Vol (m^3)	0	Actual Vol (m^3)	212.4
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	33.43	0.14	ND	ND	51.16	0.24
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	88.06	0.38	ND	ND	89.61	0.42
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	36.12	0.15	ND	ND	32.61	0.15
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17320			Field Blank, 17321			Sample, 17342		
File I.D.	ENG1777.D			ENG1768.D			ENG1778.D		
Date Sampled	3/6/2000			3/6/2000			3/17/2000		
Date Analyzed	04/19/00			04/17/00			04/19/00		
Actual Vol (m^3)	Actual Vol (m^3)	233.90		Actual Vol (m^3)	0		Actual Vol (m^3)	212.4	
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	
Acenaphthylene	ND	ND		ND	ND		ND	ND	
2,4-Dinitrophenol	ND	ND		ND	ND		ND	ND	
4-Nitrophenol	ND	ND		ND	ND		ND	ND	
Acenaphthene	2.97	0.01	U	ND	ND		3.60	0.02	U
2,4-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
2-Naphthylamine	ND	ND		ND	ND		ND	ND	
Dibenzofuran	2.84	0.01	U	ND	ND		3.02	0.01	U
Pentachlorobenzene	ND	ND		ND	ND		ND	ND	
1-Naphthylamine	ND	ND		ND	ND		ND	ND	
Diethyl phthalate	ND	ND		ND	ND		ND	ND	
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		ND	ND	
4-Nitroaniline	ND	ND		ND	ND		ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		ND	ND	
Fluorene	1.93	0.01	U	ND	ND		2.62	0.01	U
5-Nitro-o-toluidine	ND	ND		ND	ND		ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		ND	ND	
Diphenylamine	ND	ND		ND	ND		ND	ND	
Azobenzene	ND	ND		ND	ND		ND	ND	
Phenacetin	ND	ND		ND	ND		ND	ND	
Diallate	ND	ND		ND	ND		ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND		ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND		ND	ND	
Hexachlorobenzene	ND	ND		ND	ND		ND	ND	
Pronamide	ND	ND		ND	ND		ND	ND	
Pentachlorophenol	ND	ND		ND	ND		ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND		ND	ND	
Phenanthrene	4.93	0.02	U	ND	ND		4.95	0.02	U
Dinoseb	ND	ND		ND	ND		ND	ND	
Anthracene	ND	ND		ND	ND		ND	ND	
Carbazole	ND	ND		ND	ND		ND	ND	
Di-n-butyl phthalate	7.82	0.03	U	ND	ND		7.22	0.03	U
Benzidine	ND	ND		ND	ND		ND	ND	
Isodrin	ND	ND		ND	ND		ND	ND	
Fluoranthene	ND	ND		ND	ND		ND	ND	
Pyrene	1.07	0.0046	U	ND	ND		ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND		ND	ND	
Chlorobenzilate	ND	ND		ND	ND		ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND		ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND		ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND		ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND		ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND		ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND		ND	ND		ND	ND	
Benzo(a)anthracene	ND	ND		ND	ND		ND	ND	
Chrysene	ND	ND		ND	ND		ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND		ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND		ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17343		Sample, 17399			Field Blank, 17400	
File I.D.	ENG1769.D		ENG1779.D			ENG1770.D	
Date Sampled	3/17/2000		3/31/2000			3/31/2000	
Date Analyzed	04/17/00		04/19/00			04/17/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	211.4		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND		ND	ND
Pyridine	ND	ND	ND	ND		ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND		ND	ND
2-Picoline	ND	ND	ND	ND		ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND		ND	ND
Methyl methanesulfonate	ND	ND	ND	ND		ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND		ND	ND
Phenol	ND	ND	10.28	0.05	U	ND	ND
Pentachloroethane	ND	ND	ND	ND		ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND		ND	ND
Aniline	ND	ND	ND	ND		ND	ND
2-Chlorophenol	ND	ND	ND	ND		ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND		ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND		ND	ND
Benzyl alcohol	ND	ND	ND	ND		ND	ND
2-Methylphenol	ND	ND	ND	ND		ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND		ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND		ND	ND
3&4-Methylphenol	ND	ND	ND	ND		ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND		ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND		ND	ND
o-Toluidine	ND	ND	ND	ND		ND	ND
Hexachloroethane	ND	ND	ND	ND		ND	ND
Acetophenone	ND	ND	ND	ND		ND	ND
Nitrobenzene	ND	ND	ND	ND		ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND		ND	ND
Isophorone	ND	ND	ND	ND		ND	ND
2-Nitrophenol	ND	ND	ND	ND		ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND		ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND		ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND		ND	ND
4-Chloroaniline	ND	ND	ND	ND		ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND		ND	ND
Naphthalene	ND	ND	18.72	0.09		ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND		ND	ND
Hexachloropropene	ND	ND	ND	ND		ND	ND
Hexachlorobutadiene	ND	ND	ND	ND		ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND		ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND		ND	ND
Safrole	ND	ND	ND	ND		ND	ND
2-Methylnaphthalene	ND	ND	7.02	0.03	U	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND		ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND		ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND		ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND		ND	ND
2-Nitroaniline	ND	ND	ND	ND		ND	ND
Isosafrole	ND	ND	ND	ND		ND	ND
2-Chloronaphthalene	ND	ND	ND	ND		ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND		ND	ND
Dimethyl phthalate	ND	ND	ND	ND		ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND		ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND		ND	ND
3-Nitroaniline	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17343		Sample, 17399		Field Blank, 17400	
File I.D.	ENG1769.D		ENG1779.D		ENG1770.D	
Date Sampled	3/17/2000		3/31/2000		3/31/2000	
Date Analyzed	04/17/00		04/19/00		04/17/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	211.4	Actual Vol (m^3)	0

Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	ND	ND		ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	ND	ND		ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	ND	ND		ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	ND	ND		ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	ND	ND		ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	ND	ND		ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	5.38	0.03	U	ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	ND	ND		ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17438		Field Blank, 17439		Sample, 17463	
File I.D.	ENG1818.D		ENG1816.D		ENG1819.D	
Date Sampled	4/12/2000		4/12/2000		4/24/2000	
Date Analyzed	05/11/00		05/11/00		05/11/00	
Actual Vol (m^3)	Actual Vol (m^3)	237.2	Actual Vol (m^3)	0	Actual Vol (m^3)	215.0
Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	83.73	0.35	ND	ND	61.12	0.28
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	134.03	0.57	ND	ND	75.15	0.35
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	69.59	0.29	ND	ND	35.76	0.17
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17438			Field Blank, 17439			Sample, 17463		
File I.D.	ENG1818.D			ENG1816.D			ENG1819.D		
Date Sampled	4/12/2000			4/12/2000			4/24/2000		
Date Analyzed	05/11/00			05/11/00			05/11/00		
Actual Vol (m^3)	Actual Vol (m^3)	237.2		Actual Vol (m^3)	0		Actual Vol (m^3)	215.0	
Compound	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**	
Acenaphthylene	ND	ND		ND	ND		ND	ND	
2,4-Dinitrophenol	ND	ND		ND	ND		ND	ND	
4-Nitrophenol	ND	ND		ND	ND		ND	ND	
Acenaphthene	8.95	0.04		ND	ND		1.11	0.01	U
2,4-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
2-Naphthylamine	ND	ND		ND	ND		ND	ND	
Dibenzofuran	8.42	0.04	U	ND	ND		1.64	0.01	U
Pentachlorobenzene	ND	ND		ND	ND		ND	ND	
1-Naphthylamine	ND	ND		ND	ND		ND	ND	
Diethyl phthalate	3.05	0.01	U	ND	ND		2.34	0.01	U
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		ND	ND	
4-Nitroaniline	ND	ND		ND	ND		ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		ND	ND	
Fluorene	7.85	0.03	U	ND	ND		1.34	0.01	U
5-Nitro-o-toluidine	ND	ND		ND	ND		ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		ND	ND	
Diphenylamine	ND	ND		ND	ND		ND	ND	
Azobenzene	ND	ND		ND	ND		ND	ND	
Phenacetin	ND	ND		ND	ND		ND	ND	
Diallate	ND	ND		ND	ND		ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND		ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND		ND	ND	
Hexachlorobenzene	ND	ND		ND	ND		ND	ND	
Pronamide	ND	ND		ND	ND		ND	ND	
Pentachlorophenol	ND	ND		ND	ND		ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND		ND	ND	
Phenanthrene	11.54	0.05		ND	ND		2.85	0.01	U
Dinoseb	ND	ND		ND	ND		ND	ND	
Anthracene	ND	ND		ND	ND		ND	ND	
Carbazole	ND	ND		ND	ND		ND	ND	
Di-n-butyl phthalate	21.46	0.09		ND	ND		7.86	0.04	U
Benzidine	ND	ND		ND	ND		ND	ND	
Isodrin	ND	ND		ND	ND		ND	ND	
Fluoranthene	ND	ND		ND	ND		28.84	0.13	
Pyrene	ND	ND		ND	ND		ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND		ND	ND	
Chlorobenzilate	ND	ND		ND	ND		ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND		ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND		ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND		ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND		ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND		ND	ND	
bis(2-Ethylhexyl)phthalate	1.56	0.01	U	ND	ND		6.85	0.03	U
Benzo(a)anthracene	ND	ND		ND	ND		ND	ND	
Chrysene	ND	ND		ND	ND		ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND		ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND		ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17464		Sample, 17482		Field Blank, 17483	
File I.D.	ENG1817.D		ENG1836.D		ENG1833.D	
Date Sampled	4/24/2000		5/6/2000		5/6/2000	
Date Analyzed	05/11/00		06/20/00		06/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	184.6	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	23.55	0.13	ND	ND
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	53.91	0.29	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	26.68	0.14	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17464		Sample, 17482			Field Blank, 17483	
File I.D.	ENG1817.D		ENG1836.D			ENG1833.D	
Date Sampled	4/24/2000		5/6/2000			5/6/2000	
Date Analyzed	05/11/00		06/20/00			06/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	184.6		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	5.11	0.03	U	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	3.05	0.02	U	ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	ND	ND		ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	2.95	0.02	U	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	5.12	0.03	U	ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	ND	ND		ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	9.71	0.05	U	ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	14.56	0.08	U	ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17510			Field Blank, 17511			Sample, 17531		
File I.D.	ENG1837.D			ENG1834.D			ENG1838.D		
Date Sampled	5/18/2000			5/18/2000			5/31/2000		
Date Analyzed	06/20/00			06/20/00			06/20/00		
Actual Vol (m^3)	Actual Vol (m^3)	206.8		Actual Vol (m^3)	0		Actual Vol (m^3)	195.0	
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	
N-Nitrosodimethylamine	ND	ND		ND	ND		ND	ND	
Pyridine	ND	ND		ND	ND		ND	ND	
Ethyl methanesulfonate	ND	ND		ND	ND		ND	ND	
2-Picoline	ND	ND		ND	ND		ND	ND	
N-Nitrosomethylethylamine	ND	ND		ND	ND		ND	ND	
Methyl methanesulfonate	ND	ND		ND	ND		ND	ND	
N-Nitrosodiethylamine	ND	ND		ND	ND		ND	ND	
Phenol	18.85	0.09	U	ND	ND		11.43	0.06	U
Pentachloroethane	ND	ND		ND	ND		ND	ND	
bis (2-Chloroethyl)ether	ND	ND		ND	ND		ND	ND	
Aniline	ND	ND		ND	ND		ND	ND	
2-Chlorophenol	ND	ND		ND	ND		ND	ND	
1,3-Dichlorobenzene	ND	ND		ND	ND		ND	ND	
1,4-Dichlorobenzene	2.56	0.01	U	ND	ND		4.86	0.02	U
Benzyl alcohol	ND	ND		ND	ND		ND	ND	
2-Methylphenol	ND	ND		ND	ND		ND	ND	
1,2-Dichlorobenzene	ND	ND		ND	ND		ND	ND	
bis(2-Chloroisopropyl)ether	ND	ND		ND	ND		ND	ND	
3&4-Methylphenol	ND	ND		ND	ND		ND	ND	
N-Nitrosopyrrolidine	ND	ND		ND	ND		ND	ND	
N-Nitrosodipropylamine	ND	ND		ND	ND		ND	ND	
o-Toluidine	ND	ND		ND	ND		ND	ND	
Hexachloroethane	ND	ND		ND	ND		ND	ND	
Acetophenone	ND	ND		ND	ND		ND	ND	
Nitrobenzene	ND	ND		ND	ND		ND	ND	
N-Nitrosopiperidine	ND	ND		ND	ND		ND	ND	
Isophorone	ND	ND		ND	ND		ND	ND	
2-Nitrophenol	ND	ND		ND	ND		ND	ND	
2,4-Dimethylphenol	ND	ND		ND	ND		ND	ND	
bis(2-Chloroethoxy)methane	ND	ND		ND	ND		ND	ND	
2,4-Dichlorophenol	ND	ND		ND	ND		ND	ND	
4-Chloroaniline	ND	ND		ND	ND		ND	ND	
1,2,4-Trichlorobenzene	ND	ND		ND	ND		ND	ND	
Naphthalene	26.74	0.13		ND	ND		27.47	0.14	
2,6-Dichlorophenol	ND	ND		ND	ND		ND	ND	
Hexachloropropene	ND	ND		ND	ND		ND	ND	
Hexachlorobutadiene	ND	ND		ND	ND		ND	ND	
N-Nitrosodibutylamine	ND	ND		ND	ND		ND	ND	
4-Chloro-3-methylphenol	ND	ND		ND	ND		ND	ND	
Safrole	ND	ND		ND	ND		ND	ND	
2-Methylnaphthalene	12.47	0.06		ND	ND		11.71	0.06	
1,2,4,5-Tetrachlorobenzene	ND	ND		ND	ND		ND	ND	
2,4,6-Trichlorophenol	ND	ND		ND	ND		ND	ND	
Hexachlorocyclopentadiene	ND	ND		ND	ND		ND	ND	
2,4,5-Trichlorphenol	ND	ND		ND	ND		ND	ND	
2-Nitroaniline	ND	ND		ND	ND		ND	ND	
Isosafrole	ND	ND		ND	ND		ND	ND	
2-Chloronaphthalene	ND	ND		ND	ND		ND	ND	
1,4-Naphthoquinone	ND	ND		ND	ND		ND	ND	
Dimethyl phthalate	ND	ND		ND	ND		ND	ND	
1,3-Dintrobenzene	ND	ND		ND	ND		ND	ND	
2,6-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
3-Nitroaniline	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17510			Field Blank, 17511			Sample, 17531		
File I.D.	ENG1837.D			ENG1834.D			ENG1838.D		
Date Sampled	5/18/2000			5/18/2000			5/31/2000		
Date Analyzed	06/20/00			06/20/00			06/20/00		
Actual Vol (m^3)	Actual Vol (m^3)	206.8		Actual Vol (m^3)	0		Actual Vol (m^3)	195.0	
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	
Acenaphthylene	ND	ND		ND	ND		ND	ND	
2,4-Dinitrophenol	ND	ND		ND	ND		ND	ND	
4-Nitrophenol	ND	ND		ND	ND		ND	ND	
Acenaphthene	ND	ND		ND	ND		1.42	0.01	U
2,4-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
2-Naphthylamine	ND	ND		ND	ND		ND	ND	
Dibenzofuran	ND	ND		ND	ND		0.83	0.004	U
Pentachlorobenzene	ND	ND		ND	ND		ND	ND	
1-Naphthylamine	ND	ND		ND	ND		ND	ND	
Diethyl phthalate	ND	ND		ND	ND		ND	ND	
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		ND	ND	
4-Nitroaniline	ND	ND		ND	ND		ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		ND	ND	
Fluorene	ND	ND		ND	ND		ND	ND	
5-Nitro-o-toluidine	ND	ND		ND	ND		ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		ND	ND	
Diphenylamine	ND	ND		ND	ND		ND	ND	
Azobenzene	ND	ND		ND	ND		ND	ND	
Phenacetin	ND	ND		ND	ND		ND	ND	
Diallate	ND	ND		ND	ND		ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND		ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND		ND	ND	
Hexachlorobenzene	ND	ND		ND	ND		ND	ND	
Pronamide	ND	ND		ND	ND		ND	ND	
Pentachlorophenol	ND	ND		ND	ND		ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND		ND	ND	
Phenanthrene	ND	ND		ND	ND		ND	ND	
Dinoseb	ND	ND		ND	ND		ND	ND	
Anthracene	ND	ND		ND	ND		ND	ND	
Carbazole	ND	ND		ND	ND		ND	ND	
Di-n-butyl phthalate	5.09	0.02	U	ND	ND		9.94	0.05	U
Benzidine	ND	ND		ND	ND		ND	ND	
Isodrin	ND	ND		ND	ND		ND	ND	
Fluoranthene	ND	ND		ND	ND		ND	ND	
Pyrene	ND	ND		ND	ND		ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND		ND	ND	
Chlorobenzilate	ND	ND		ND	ND		ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND		ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND		ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND		ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND		ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND		ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND		ND	ND		ND	ND	
Benzo(a)anthracene	ND	ND		ND	ND		ND	ND	
Chrysene	ND	ND		ND	ND		ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND		ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND		ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17532		Sample, 17586			Field Blank, 17587	
File I.D.	ENG1835.D		ENG1843.D			ENG1841.D	
Date Sampled	5/31/2000		6/11/2000			6/11/2000	
Date Analyzed	06/20/00		07/18/00			07/18/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	180.6		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**
N-Nitrosodimethylamine	ND	ND	ND	ND		ND	ND
Pyridine	ND	ND	ND	ND		ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND		ND	ND
2-Picoline	ND	ND	ND	ND		ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND		ND	ND
Methyl methanesulfonate	ND	ND	ND	ND		ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND		ND	ND
Phenol	ND	ND	ND	ND		ND	ND
Pentachloroethane	ND	ND	ND	ND		ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND		ND	ND
Aniline	ND	ND	ND	ND		ND	ND
2-Chlorophenol	ND	ND	ND	ND		ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND		ND	ND
1,4-Dichlorobenzene	ND	ND	6.93	0.04	U	ND	ND
Benzyl alcohol	ND	ND	ND	ND		ND	ND
2-Methylphenol	ND	ND	ND	ND		ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND		ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND		ND	ND
3&4-Methylphenol	ND	ND	ND	ND		ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND		ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND		ND	ND
o-Toluidine	ND	ND	ND	ND		ND	ND
Hexachloroethane	ND	ND	ND	ND		ND	ND
Acetophenone	ND	ND	ND	ND		ND	ND
Nitrobenzene	ND	ND	ND	ND		ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND		ND	ND
Isophorone	ND	ND	ND	ND		ND	ND
2-Nitrophenol	ND	ND	ND	ND		ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND		ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND		ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND		ND	ND
4-Chloroaniline	ND	ND	ND	ND		ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND		ND	ND
Naphthalene	ND	ND	30.80	0.17		ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND		ND	ND
Hexachloropropene	ND	ND	ND	ND		ND	ND
Hexachlorobutadiene	ND	ND	ND	ND		ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND		ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND		ND	ND
Safrole	ND	ND	ND	ND		ND	ND
2-Methylnaphthalene	ND	ND	14.77	0.08		ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND		ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND		ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND		ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND		ND	ND
2-Nitroaniline	ND	ND	ND	ND		ND	ND
Isosafrole	ND	ND	ND	ND		ND	ND
2-Chloronaphthalene	ND	ND	ND	ND		ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND		ND	ND
Dimethyl phthalate	ND	ND	ND	ND		ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND		ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND		ND	ND
3-Nitroaniline	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17532		Sample, 17586			Field Blank, 17587	
File I.D.	ENG1835.D		ENG1843.D			ENG1841.D	
Date Sampled	5/31/2000		6/11/2000			6/11/2000	
Date Analyzed	06/20/00		07/18/00			07/18/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	180.6		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	ND	ND		ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	ND	ND		ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	5.40	0.03	U	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	ND	ND		ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	ND	ND		ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	ND	ND		ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	5.55	0.03	U	ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	ND	ND		ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17685 - *			Field Blank, 17686			Sample, 17759		
File I.D.	ENG1844.D			ENG1842.D			ENG1856.D		
Date Sampled	6/23/2000			6/23/2000			7/5/2000		
Date Analyzed	07/18/00			07/18/00			08/14/00		
Actual Vol (m^3)	Actual Vol (m^3)	222.8		Actual Vol (m^3)	0		Actual Vol (m^3)	193.5	
Compound	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**	
N-Nitrosodimethylamine	ND	ND		ND	ND		ND	ND	
Pyridine	ND	ND		ND	ND		ND	ND	
Ethyl methanesulfonate	ND	ND		ND	ND		ND	ND	
2-Picoline	ND	ND		ND	ND		ND	ND	
N-Nitrosomethylethylamine	ND	ND		ND	ND		ND	ND	
Methyl methanesulfonate	ND	ND		ND	ND		ND	ND	
N-Nitrosodiethylamine	ND	ND		ND	ND		ND	ND	
Phenol	17.59	0.08	U	ND	ND		69.68	0.36	
Pentachloroethane	ND	ND		ND	ND		ND	ND	
bis (2-Chloroethyl)ether	ND	ND		ND	ND		ND	ND	
Aniline	ND	ND		ND	ND		ND	ND	
2-Chlorophenol	ND	ND		ND	ND		ND	ND	
1,3-Dichlorobenzene	ND	ND		ND	ND		ND	ND	
1,4-Dichlorobenzene	4.32	0.02	U	ND	ND		4.96	0.03	U
Benzyl alcohol	ND	ND		ND	ND		ND	ND	
2-Methylphenol	ND	ND		ND	ND		ND	ND	
1,2-Dichlorobenzene	ND	ND		ND	ND		ND	ND	
bis(2-Chloroisopropyl)ether	ND	ND		ND	ND		ND	ND	
3&4-Methylphenol	ND	ND		ND	ND		ND	ND	
N-Nitrosopyrrolidine	ND	ND		ND	ND		ND	ND	
N-Nitrosodipropylamine	ND	ND		ND	ND		ND	ND	
o-Toluidine	ND	ND		ND	ND		ND	ND	
Hexachloroethane	ND	ND		ND	ND		ND	ND	
Acetophenone	ND	ND		ND	ND		ND	ND	
Nitrobenzene	ND	ND		ND	ND		ND	ND	
N-Nitrosopiperidine	ND	ND		ND	ND		ND	ND	
Isophorone	ND	ND		ND	ND		ND	ND	
2-Nitrophenol	ND	ND		ND	ND		ND	ND	
2,4-Dimethylphenol	ND	ND		ND	ND		ND	ND	
bis(2-Chloroethoxy)methane	ND	ND		ND	ND		ND	ND	
2,4-Dichlorophenol	ND	ND		ND	ND		ND	ND	
4-Chloroaniline	ND	ND		ND	ND		ND	ND	
1,2,4-Trichlorobenzene	ND	ND		ND	ND		ND	ND	
Naphthalene	41.34	0.19		ND	ND		54.60	0.28	
2,6-Dichlorophenol	ND	ND		ND	ND		ND	ND	
Hexachloropropene	ND	ND		ND	ND		ND	ND	
Hexachlorobutadiene	ND	ND		ND	ND		ND	ND	
N-Nitrosodibutylamine	ND	ND		ND	ND		ND	ND	
4-Chloro-3-methylphenol	ND	ND		ND	ND		ND	ND	
Safrole	ND	ND		ND	ND		ND	ND	
2-Methylnaphthalene	19.90	0.09		ND	ND		27.21	0.14	
1,2,4,5-Tetrachlorobenzene	ND	ND		ND	ND		ND	ND	
2,4,6-Trichlorophenol	ND	ND		ND	ND		ND	ND	
Hexachlorocyclopentadiene	ND	ND		ND	ND		ND	ND	
2,4,5-Trichlorphenol	ND	ND		ND	ND		ND	ND	
2-Nitroaniline	ND	ND		ND	ND		ND	ND	
Isosafrole	ND	ND		ND	ND		ND	ND	
2-Chloronaphthalene	ND	ND		ND	ND		ND	ND	
1,4-Naphthoquinone	ND	ND		ND	ND		ND	ND	
Dimethyl phthalate	ND	ND		ND	ND		ND	ND	
1,3-Dintrobenzene	ND	ND		ND	ND		ND	ND	
2,6-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
3-Nitroaniline	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17685 - *			Field Blank, 17686			Sample, 17759		
File I.D.	ENG1844.D			ENG1842.D			ENG1856.D		
Date Sampled	6/23/2000			6/23/2000			7/5/2000		
Date Analyzed	07/18/00			07/18/00			08/14/00		
Actual Vol (m^3)	Actual Vol (m^3)	222.8		Actual Vol (m^3)	0		Actual Vol (m^3)	193.5	
Compound	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**	
Acenaphthylene	ND	ND		ND	ND		ND	ND	
2,4-Dinitrophenol	ND	ND		ND	ND		ND	ND	
4-Nitrophenol	ND	ND		ND	ND		ND	ND	
Acenaphthene	5.71	0.03	U	ND	ND		3.65	0.02	U
2,4-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
2-Naphthylamine	ND	ND		ND	ND		ND	ND	
Dibenzofuran	4.60	0.02	U	ND	ND		3.54	0.02	U
Pentachlorobenzene	ND	ND		ND	ND		ND	ND	
1-Naphthylamine	ND	ND		ND	ND		ND	ND	
Diethyl phthalate	1.97	0.01	U	ND	ND		8.92	0.05	
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		ND	ND	
4-Nitroaniline	ND	ND		ND	ND		ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		ND	ND	
Fluorene	3.78	0.02	U	ND	ND		2.94	0.02	U
5-Nitro-o-toluidine	ND	ND		ND	ND		ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		ND	ND	
Diphenylamine	ND	ND		ND	ND		ND	ND	
Azobenzene	ND	ND		ND	ND		ND	ND	
Phenacetin	ND	ND		ND	ND		ND	ND	
Diallate	ND	ND		ND	ND		ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND		ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND		ND	ND	
Hexachlorobenzene	ND	ND		ND	ND		ND	ND	
Pronamide	ND	ND		ND	ND		ND	ND	
Pentachlorophenol	ND	ND		ND	ND		ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND		ND	ND	
Phenanthrene	7.96	0.04	U	ND	ND		6.07	0.03	U
Dinoseb	ND	ND		ND	ND		ND	ND	
Anthracene	ND	ND		ND	ND		ND	ND	
Carbazole	ND	ND		ND	ND		ND	ND	
Di-n-butyl phthalate	6.20	0.03	U	ND	ND		14.13	0.07	
Benzidine	ND	ND		ND	ND		ND	ND	
Isodrin	ND	ND		ND	ND		ND	ND	
Fluoranthene	ND	ND		ND	ND		ND	ND	
Pyrene	ND	ND		ND	ND		ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND		ND	ND	
Chlorobenzilate	ND	ND		ND	ND		ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND		ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND		ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND		ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND		ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND		ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND		ND	ND		ND	ND	
Benzo(a)anthracene	ND	ND		ND	ND		ND	ND	
Chrysene	ND	ND		ND	ND		ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND		ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND		ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17760		Sample, 17855		Field Blank, 17856	
File I.D.	ENG1853.D		ENG1857.D		ENG1854.D	
Date Sampled	7/5/2000		7/17/2000		7/17/2000	
Date Analyzed	08/14/00		08/14/00		08/14/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	213.4	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	87.02	0.41	ND	ND
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	15.70	0.07	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	94.35	0.44	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	44.95	0.21	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 17760		Sample, 17855		Field Blank, 17856	
File I.D.	ENG1853.D		ENG1857.D		ENG1854.D	
Date Sampled	7/5/2000		7/17/2000		7/17/2000	
Date Analyzed	08/14/00		08/14/00		08/14/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	213.4	Actual Vol (m^3)	0

Compound	**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**
Acenaphthylene	ND	ND	ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND
4-Nitrophenol	ND	ND	ND	ND		ND	ND
Acenaphthene	ND	ND	5.92	0.03		ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND
2-Naphthylamine	ND	ND	ND	ND		ND	ND
Dibenzofuran	ND	ND	7.01	0.03	U	ND	ND
Pentachlorobenzene	ND	ND	ND	ND		ND	ND
1-Naphthylamine	ND	ND	ND	ND		ND	ND
Diethyl phthalate	ND	ND	ND	ND		ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND
4-Nitroaniline	ND	ND	ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND
Fluorene	ND	ND	6.33	0.03	U	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND
Diphenylamine	ND	ND	ND	ND		ND	ND
Azobenzene	ND	ND	ND	ND		ND	ND
Phenacetin	ND	ND	ND	ND		ND	ND
Diallate	ND	ND	ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND
Hexachlorobenzene	ND	ND	ND	ND		ND	ND
Pronamide	ND	ND	ND	ND		ND	ND
Pentachlorophenol	ND	ND	ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND
Phenanthrene	ND	ND	10.66	0.05		ND	ND
Dinoseb	ND	ND	ND	ND		ND	ND
Anthracene	ND	ND	ND	ND		ND	ND
Carbazole	ND	ND	ND	ND		ND	ND
Di-n-butyl phthalate	ND	ND	19.92	0.09		ND	ND
Benzidine	ND	ND	ND	ND		ND	ND
Isodrin	ND	ND	ND	ND		ND	ND
Fluoranthene	ND	ND	1.80	0.01	U	ND	ND
Pyrene	ND	ND	ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND
Chlorobenzilate	ND	ND	ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND
Chrysene	ND	ND	ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17984			Field Blank, 17985		Sample, 18096		
File I.D.	ENG1858.D			ENG1855.D		ENG1863.D		
Date Sampled	7/29/2000			7/29/2000		8/10/2000		
Date Analyzed	08/14/00			08/14/00		09/20/00		
Actual Vol (m^3)	Actual Vol (m^3)	210.8		Actual Vol (m^3)	0	Actual Vol (m^3)	210.5	
Compound	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**	**Final Conc (µg)**	**Final µg/m^3**	
N-Nitrosodimethylamine	ND	ND		ND	ND	ND	ND	
Pyridine	ND	ND		ND	ND	ND	ND	
Ethyl methanesulfonate	ND	ND		ND	ND	ND	ND	
2-Picoline	ND	ND		ND	ND	ND	ND	
N-Nitrosomethylethylamine	ND	ND		ND	ND	ND	ND	
Methyl methanesulfonate	ND	ND		ND	ND	ND	ND	
N-Nitrosodiethylamine	ND	ND		ND	ND	ND	ND	
Phenol	18.75	0.09	U	ND	ND	61.25	0.29	
Pentachloroethane	ND	ND		ND	ND	ND	ND	
bis (2-Chloroethyl)ether	ND	ND		ND	ND	ND	ND	
Aniline	ND	ND		ND	ND	ND	ND	
2-Chlorophenol	ND	ND		ND	ND	ND	ND	
1,3-Dichlorobenzene	ND	ND		ND	ND	ND	ND	
1,4-Dichlorobenzene	5.45	0.03	U	ND	ND	6.45	0.03	U
Benzyl alcohol	ND	ND		ND	ND	ND	ND	
2-Methylphenol	ND	ND		ND	ND	ND	ND	
1,2-Dichlorobenzene	ND	ND		ND	ND	ND	ND	
bis(2-Chloroisopropyl)ether	ND	ND		ND	ND	ND	ND	
3&4-Methylphenol	ND	ND		ND	ND	ND	ND	
N-Nitrosopyrrolidine	ND	ND		ND	ND	ND	ND	
N-Nitrosodipropylamine	ND	ND		ND	ND	ND	ND	
o-Toluidine	ND	ND		ND	ND	ND	ND	
Hexachloroethane	ND	ND		ND	ND	ND	ND	
Acetophenone	ND	ND		ND	ND	ND	ND	
Nitrobenzene	ND	ND		ND	ND	ND	ND	
N-Nitrosopiperidine	ND	ND		ND	ND	ND	ND	
Isophorone	ND	ND		ND	ND	ND	ND	
2-Nitrophenol	ND	ND		ND	ND	ND	ND	
2,4-Dimethylphenol	ND	ND		ND	ND	ND	ND	
bis(2-Chloroethoxy)methane	ND	ND		ND	ND	ND	ND	
2,4-Dichlorophenol	ND	ND		ND	ND	ND	ND	
4-Chloroaniline	ND	ND		ND	ND	ND	ND	
1,2,4-Trichlorobenzene	ND	ND		ND	ND	ND	ND	
Naphthalene	47.24	0.22		ND	ND	69.48	0.33	
2,6-Dichlorophenol	ND	ND		ND	ND	ND	ND	
Hexachloropropene	ND	ND		ND	ND	ND	ND	
Hexachlorobutadiene	ND	ND		ND	ND	ND	ND	
N-Nitrosodibutylamine	ND	ND		ND	ND	ND	ND	
4-Chloro-3-methylphenol	ND	ND		ND	ND	ND	ND	
Safrole	ND	ND		ND	ND	ND	ND	
2-Methylnaphthalene	21.22	0.10		ND	ND	34.35	0.16	
1,2,4,5-Tetrachlorobenzene	ND	ND		ND	ND	ND	ND	
2,4,6-Trichlorophenol	ND	ND		ND	ND	ND	ND	
Hexachlorocyclopentadiene	ND	ND		ND	ND	ND	ND	
2,4,5-Trichlorphenol	ND	ND		ND	ND	ND	ND	
2-Nitroaniline	ND	ND		ND	ND	ND	ND	
Isosafrole	ND	ND		ND	ND	ND	ND	
2-Chloronaphthalene	ND	ND		ND	ND	ND	ND	
1,4-Naphthoquinone	ND	ND		ND	ND	ND	ND	
Dimethyl phthalate	ND	ND		ND	ND	ND	ND	
1,3-Dintrobenzene	ND	ND		ND	ND	ND	ND	
2,6-Dinitrotoluene	ND	ND		ND	ND	ND	ND	
3-Nitroaniline	ND	ND		ND	ND	ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 17984			Field Blank, 17985			Sample, 18096		
File I.D.	ENG1858.D			ENG1855.D			ENG1863.D		
Date Sampled	7/29/2000			7/29/2000			8/10/2000		
Date Analyzed	08/14/00			08/14/00			09/20/00		
Actual Vol (m^3)	Actual Vol (m^3)	210.8		Actual Vol (m^3)	0		Actual Vol (m^3)	210.5	
Compound	**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m3**		**Final Conc (µg)**	**Final µg/m^3**	
Acenaphthylene	ND	ND		ND	ND		ND	ND	
2,4-Dinitrophenol	ND	ND		ND	ND		ND	ND	
4-Nitrophenol	ND	ND		ND	ND		ND	ND	
Acenaphthene	4.89	0.02	U	ND	ND		3.35	0.02	U
2,4-Dinitrotoluene	ND	ND		ND	ND		ND	ND	
2-Naphthylamine	ND	ND		ND	ND		ND	ND	
Dibenzofuran	4.74	0.02	U	ND	ND		2.86	0.01	U
Pentachlorobenzene	ND	ND		ND	ND		ND	ND	
1-Naphthylamine	ND	ND		ND	ND		ND	ND	
Diethyl phthalate	ND	ND		ND	ND		2.72	0.01	U
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		ND	ND	
4-Nitroaniline	ND	ND		ND	ND		ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		ND	ND	
Fluorene	4.22	0.02	U	ND	ND		3.04	0.01	U
5-Nitro-o-toluidine	ND	ND		ND	ND		ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		ND	ND	
Diphenylamine	ND	ND		ND	ND		ND	ND	
Azobenzene	ND	ND		ND	ND		ND	ND	
Phenacetin	ND	ND		ND	ND		ND	ND	
Diallate	ND	ND		ND	ND		ND	ND	
4-Bromophenyl phenyl ether	ND	ND		ND	ND		ND	ND	
4-Aminobiphenyl	ND	ND		ND	ND		ND	ND	
Hexachlorobenzene	ND	ND		ND	ND		ND	ND	
Pronamide	ND	ND		ND	ND		ND	ND	
Pentachlorophenol	ND	ND		ND	ND		ND	ND	
Pentachloronitrobenzene	ND	ND		ND	ND		ND	ND	
Phenanthrene	8.86	0.04	U	ND	ND		6.13	0.03	U
Dinoseb	ND	ND		ND	ND		ND	ND	
Anthracene	ND	ND		ND	ND		ND	ND	
Carbazole	ND	ND		ND	ND		ND	ND	
Di-n-butyl phthalate	10.47	0.05	U	ND	ND		9.97	0.05	U
Benzidine	ND	ND		ND	ND		ND	ND	
Isodrin	ND	ND		ND	ND		ND	ND	
Fluoranthene	ND	ND		ND	ND		ND	ND	
Pyrene	ND	ND		ND	ND		ND	ND	
4-Dimethylaminoazobenzene	ND	ND		ND	ND		ND	ND	
Chlorobenzilate	ND	ND		ND	ND		ND	ND	
3,3'-Dimethylbenzidine	ND	ND		ND	ND		ND	ND	
Butyl benzyl phthalate	ND	ND		ND	ND		ND	ND	
2-Acetylaminofluorene	ND	ND		ND	ND		ND	ND	
3-Methylcholanthrene	ND	ND		ND	ND		ND	ND	
3,3'-Dichlorobenzidine	ND	ND		ND	ND		ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND		ND	ND		3.08	0.01	U
Benzo(a)anthracene	ND	ND		ND	ND		ND	ND	
Chrysene	ND	ND		ND	ND		ND	ND	
Di-n-octyl phthalate	ND	ND		ND	ND		ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(b)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(k)fluoranthene	ND	ND		ND	ND		ND	ND	
Benzo(a)pyrene	ND	ND		ND	ND		ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		ND	ND	
Dibenz(a,h)anthracene	ND	ND		ND	ND		ND	ND	
Benzo(g,h,i)perylene	ND	ND		ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 18096-Rep			Field Blank, 18097		Field Blank, 18097-Rep	
File I.D.	ENG1864.D			ENG1861.D		ENG1862.D	
Date Sampled	8/10/2000			8/10/2000		8/10/2000	
Date Analyzed	09/20/00			09/20/00		09/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	210.5		Actual Vol (m^3)	0	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND		ND	ND	ND	ND
Pyridine	ND	ND		ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND		ND	ND	ND	ND
2-Picoline	ND	ND		ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND		ND	ND	ND	ND
Methyl methanesulfonate	ND	ND		ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND		ND	ND	ND	ND
Phenol	62.67	0.30		ND	ND	ND	ND
Pentachloroethane	ND	ND		ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND		ND	ND	ND	ND
Aniline	ND	ND		ND	ND	ND	ND
2-Chlorophenol	ND	ND		ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND		ND	ND	ND	ND
1,4-Dichlorobenzene	6.38	0.03	U	ND	ND	ND	ND
Benzyl alcohol	ND	ND		ND	ND	ND	ND
2-Methylphenol	ND	ND		ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND		ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND		ND	ND	ND	ND
3&4-Methylphenol	ND	ND		ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND		ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND		ND	ND	ND	ND
o-Toluidine	ND	ND		ND	ND	ND	ND
Hexachloroethane	ND	ND		ND	ND	ND	ND
Acetophenone	ND	ND		ND	ND	ND	ND
Nitrobenzene	ND	ND		ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND		ND	ND	ND	ND
Isophorone	ND	ND		ND	ND	ND	ND
2-Nitrophenol	ND	ND		ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND		ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND		ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND		ND	ND	ND	ND
4-Chloroaniline	ND	ND		ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND		ND	ND	ND	ND
Naphthalene	65.29	0.31		ND	ND	ND	ND
2,6-Dichlorophenol	ND	ND		ND	ND	ND	ND
Hexachloropropene	ND	ND		ND	ND	ND	ND
Hexachlorobutadiene	ND	ND		ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND		ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND		ND	ND	ND	ND
Safrole	ND	ND		ND	ND	ND	ND
2-Methylnaphthalene	31.43	0.15		ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND		ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND		ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND		ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND		ND	ND	ND	ND
2-Nitroaniline	ND	ND		ND	ND	ND	ND
Isosafrole	ND	ND		ND	ND	ND	ND
2-Chloronaphthalene	ND	ND		ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND		ND	ND	ND	ND
Dimethyl phthalate	ND	ND		ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND		ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND		ND	ND	ND	ND
3-Nitroaniline	ND	ND		ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 18096-Rep			Field Blank, 18097		Field Blank, 18097-Rep	
File I.D.	ENG1864.D			ENG1861.D		ENG1862.D	
Date Sampled	8/10/2000			8/10/2000		8/10/2000	
Date Analyzed	09/20/00			09/20/00		09/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	210.5		Actual Vol (m^3)	0	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND		ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND		ND	ND	ND	ND
4-Nitrophenol	ND	ND		ND	ND	ND	ND
Acenaphthene	3.70	0.02	U	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND		ND	ND	ND	ND
2-Naphthylamine	ND	ND		ND	ND	ND	ND
Dibenzofuran	2.90	0.01	U	ND	ND	ND	ND
Pentachlorobenzene	ND	ND		ND	ND	ND	ND
1-Naphthylamine	ND	ND		ND	ND	ND	ND
Diethyl phthalate	1.79	0.01	U	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND	ND	ND
4-Nitroaniline	ND	ND		ND	ND	ND	ND
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND	ND	ND
Fluorene	2.79	0.01	U	ND	ND	ND	ND
5-Nitro-o-toluidine	ND	ND		ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND	ND	ND
Diphenylamine	ND	ND		ND	ND	ND	ND
Azobenzene	ND	ND		ND	ND	ND	ND
Phenacetin	ND	ND		ND	ND	ND	ND
Diallate	ND	ND		ND	ND	ND	ND
4-Bromophenyl phenyl ether	ND	ND		ND	ND	ND	ND
4-Aminobiphenyl	ND	ND		ND	ND	ND	ND
Hexachlorobenzene	ND	ND		ND	ND	ND	ND
Pronamide	ND	ND		ND	ND	ND	ND
Pentachlorophenol	ND	ND		ND	ND	ND	ND
Pentachloronitrobenzene	ND	ND		ND	ND	ND	ND
Phenanthrene	5.37	0.03	U	ND	ND	ND	ND
Dinoseb	ND	ND		ND	ND	ND	ND
Anthracene	ND	ND		ND	ND	ND	ND
Carbazole	ND	ND		ND	ND	ND	ND
Di-n-butyl phthalate	9.44	0.04	U	ND	ND	ND	ND
Benzidine	ND	ND		ND	ND	ND	ND
Isodrin	ND	ND		ND	ND	ND	ND
Fluoranthene	ND	ND		ND	ND	ND	ND
Pyrene	ND	ND		ND	ND	ND	ND
4-Dimethylaminoazobenzene	ND	ND		ND	ND	ND	ND
Chlorobenzilate	ND	ND		ND	ND	ND	ND
3,3'-Dimethylbenzidine	ND	ND		ND	ND	ND	ND
Butyl benzyl phthalate	ND	ND		ND	ND	ND	ND
2-Acetylaminofluorene	ND	ND		ND	ND	ND	ND
3-Methylcholanthrene	ND	ND		ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND		ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	2.96	0.01	U	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND		ND	ND	ND	ND
Chrysene	ND	ND		ND	ND	ND	ND
Di-n-octyl phthalate	ND	ND		ND	ND	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND		ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND		ND	ND	ND	ND
Benzo(a)pyrene	ND	ND		ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND		ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND		ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 18191			Sample, 18191-Rep			Field Blank, 18192	
File I.D.	ENG1867.D			ENG1868.D			ENG1865.D	
Date Sampled	8/22/2000			8/22/2000			8/22/2000	
Date Analyzed	09/20/00			09/20/00			09/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	212.2		Actual Vol (m^3)	212.2		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND		ND	ND		ND	ND
Pyridine	ND	ND		ND	ND		ND	ND
Ethyl methanesulfonate	ND	ND		ND	ND		ND	ND
2-Picoline	ND	ND		ND	ND		ND	ND
N-Nitrosomethylethylamine	ND	ND		ND	ND		ND	ND
Methyl methanesulfonate	ND	ND		ND	ND		ND	ND
N-Nitrosodiethylamine	ND	ND		ND	ND		ND	ND
Phenol	78.75	0.37		76.24	0.36		ND	ND
Pentachloroethane	ND	ND		ND	ND		ND	ND
bis (2-Chloroethyl)ether	ND	ND		ND	ND		ND	ND
Aniline	ND	ND		ND	ND		ND	ND
2-Chlorophenol	ND	ND		ND	ND		ND	ND
1,3-Dichlorobenzene	ND	ND		ND	ND		ND	ND
1,4-Dichlorobenzene	6.01	0.03	U	6.34	0.03	U	ND	ND
Benzyl alcohol	ND	ND		ND	ND		ND	ND
2-Methylphenol	ND	ND		ND	ND		ND	ND
1,2-Dichlorobenzene	4.67	0.02	U	4.75	0.02	U	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND		ND	ND		ND	ND
3&4-Methylphenol	ND	ND		ND	ND		ND	ND
N-Nitrosopyrrolidine	ND	ND		ND	ND		ND	ND
N-Nitrosodipropylamine	ND	ND		ND	ND		ND	ND
o-Toluidine	ND	ND		ND	ND		ND	ND
Hexachloroethane	ND	ND		ND	ND		ND	ND
Acetophenone	ND	ND		ND	ND		ND	ND
Nitrobenzene	ND	ND		ND	ND		ND	ND
N-Nitrosopiperidine	ND	ND		ND	ND		ND	ND
Isophorone	ND	ND		ND	ND		ND	ND
2-Nitrophenol	ND	ND		ND	ND		ND	ND
2,4-Dimethylphenol	ND	ND		ND	ND		ND	ND
bis(2-Chloroethoxy)methane	ND	ND		ND	ND		ND	ND
2,4-Dichlorophenol	ND	ND		ND	ND		ND	ND
4-Chloroaniline	ND	ND		ND	ND		ND	ND
1,2,4-Trichlorobenzene	ND	ND		ND	ND		ND	ND
Naphthalene	125.13	0.59		124.14	0.58		ND	ND
2,6-Dichlorophenol	ND	ND		ND	ND		ND	ND
Hexachloropropene	ND	ND		ND	ND		ND	ND
Hexachlorobutadiene	ND	ND		ND	ND		ND	ND
N-Nitrosodibutylamine	ND	ND		ND	ND		ND	ND
4-Chloro-3-methylphenol	ND	ND		ND	ND		ND	ND
Safrole	ND	ND		ND	ND		ND	ND
2-Methylnaphthalene	70.52	0.33		68.93	0.32		ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND		ND	ND		ND	ND
2,4,6-Trichlorophenol	ND	ND		ND	ND		ND	ND
Hexachlorocyclopentadiene	ND	ND		ND	ND		ND	ND
2,4,5-Trichlorphenol	ND	ND		ND	ND		ND	ND
2-Nitroaniline	ND	ND		ND	ND		ND	ND
Isosafrole	ND	ND		ND	ND		ND	ND
2-Chloronaphthalene	ND	ND		ND	ND		ND	ND
1,4-Naphthoquinone	ND	ND		ND	ND		ND	ND
Dimethyl phthalate	ND	ND		ND	ND		ND	ND
1,3-Dintrobenzene	ND	ND		ND	ND		ND	ND
2,6-Dinitrotoluene	ND	ND		ND	ND		ND	ND
3-Nitroaniline	ND	ND		ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Sample, 18191			Sample, 18191-Rep			Field Blank, 18192	
File I.D.	ENG1867.D			ENG1868.D			ENG1865.D	
Date Sampled	8/22/2000			8/22/2000			8/22/2000	
Date Analyzed	09/20/00			09/20/00			09/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	212.2		Actual Vol (m^3)	212.2		Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND		ND	ND		ND	ND
2,4-Dinitrophenol	ND	ND		ND	ND		ND	ND
4-Nitrophenol	ND	ND		ND	ND		ND	ND
Acenaphthene	7.20	0.03		7.20	0.03		ND	ND
2,4-Dinitrotoluene	ND	ND		ND	ND		ND	ND
2-Naphthylamine	ND	ND		ND	ND		ND	ND
Dibenzofuran	5.88	0.03	U	6.30	0.03	U	ND	ND
Pentachlorobenzene	ND	ND		ND	ND		ND	ND
1-Naphthylamine	ND	ND		ND	ND		ND	ND
Diethyl phthalate	4.00	0.02	U	3.36	0.02	U	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND		ND	ND		ND	ND
4-Nitroaniline	ND	ND		ND	ND		ND	ND
4-Chlorophenyl-phenyl ether	ND	ND		ND	ND		ND	ND
Fluorene	5.95	0.03	U	6.10	0.03	U	ND	ND
5-Nitro-o-toluidine	ND	ND		ND	ND		ND	ND
4,6-Dinitro-2-methylphenol	ND	ND		ND	ND		ND	ND
Diphenylamine	ND	ND		ND	ND		ND	ND
Azobenzene	ND	ND		ND	ND		ND	ND
Phenacetin	ND	ND		ND	ND		ND	ND
Diallate	ND	ND		ND	ND		ND	ND
4-Bromophenyl phenyl ether	ND	ND		ND	ND		ND	ND
4-Aminobiphenyl	ND	ND		ND	ND		ND	ND
Hexachlorobenzene	ND	ND		ND	ND		ND	ND
Pronamide	ND	ND		ND	ND		ND	ND
Pentachlorophenol	ND	ND		ND	ND		ND	ND
Pentachloronitrobenzene	ND	ND		ND	ND		ND	ND
Phenanthrene	12.27	0.06		12.27	0.06		ND	ND
Dinoseb	ND	ND		ND	ND		ND	ND
Anthracene	ND	ND		ND	ND		ND	ND
Carbazole	ND	ND		ND	ND		ND	ND
Di-n-butyl phthalate	16.62	0.08		15.99	0.08		ND	ND
Benzidine	ND	ND		ND	ND		ND	ND
Isodrin	ND	ND		ND	ND		ND	ND
Fluoranthene	ND	ND		ND	ND		ND	ND
Pyrene	ND	ND		ND	ND		ND	ND
4-Dimethylaminoazobenzene	ND	ND		ND	ND		ND	ND
Chlorobenzilate	ND	ND		ND	ND		ND	ND
3,3'-Dimethylbenzidine	ND	ND		ND	ND		ND	ND
Butyl benzyl phthalate	ND	ND		ND	ND		ND	ND
2-Acetylaminofluorene	ND	ND		ND	ND		ND	ND
3-Methylcholanthrene	ND	ND		ND	ND		ND	ND
3,3'-Dichlorobenzidine	ND	ND		ND	ND		ND	ND
bis(2-Ethylhexyl)phthalate	3.01	0.01	U	4.32	0.02	U	ND	ND
Benzo(a)anthracene	ND	ND		ND	ND		ND	ND
Chrysene	ND	ND		ND	ND		ND	ND
Di-n-octyl phthalate	ND	ND		ND	ND		ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND		ND	ND		ND	ND
Benzo(b)fluoranthene	ND	ND		ND	ND		ND	ND
Benzo(k)fluoranthene	ND	ND		ND	ND		ND	ND
Benzo(a)pyrene	ND	ND		ND	ND		ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND		ND	ND		ND	ND
Dibenz(a,h)anthracene	ND	ND		ND	ND		ND	ND
Benzo(g,h,i)perylene	ND	ND		ND	ND		ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 18192-Rep		Sample, 18307		Sample, 18307-Rep	
File I.D.	ENG1866.D		ENG1869.D		ENG1870.D	
Date Sampled	8/22/2000		9/3/2000		9/3/2000	
Date Analyzed	09/20/00		09/20/00		09/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	224.5	Actual Vol (m^3)	224.5
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	16.47	0.07	18.02	0.08
Pentachloroethane	ND	ND	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	14.60	0.07	15.24	0.07
Benzyl alcohol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	55.27	0.25	52.74	0.23
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
Safrole	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	27.45	0.12	26.95	0.12
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 18192-Rep		Sample, 18307			Sample, 18307-Rep		
File I.D.	ENG1866.D		ENG1869.D			ENG1870.D		
Date Sampled	8/22/2000		9/3/2000			9/3/2000		
Date Analyzed	09/20/00		09/20/00			09/20/00		
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	224.5		Actual Vol (m^3)	224.5	
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**		**Final Conc (µg)**	**Final µg/m^3**	
Acenaphthylene	ND	ND	ND	ND		ND	ND	
2,4-Dinitrophenol	ND	ND	ND	ND		ND	ND	
4-Nitrophenol	ND	ND	ND	ND		ND	ND	
Acenaphthene	ND	ND	0.81	0.004	U	1.16	0.01	U
2,4-Dinitrotoluene	ND	ND	ND	ND		ND	ND	
2-Naphthylamine	ND	ND	ND	ND		ND	ND	
Dibenzofuran	ND	ND	1.29	0.01	U	1.74	0.01	U
Pentachlorobenzene	ND	ND	ND	ND		ND	ND	
1-Naphthylamine	ND	ND	ND	ND		ND	ND	
Diethyl phthalate	ND	ND	4.01	0.02	U	4.35	0.02	U
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND		ND	ND	
4-Nitroaniline	ND	ND	ND	ND		ND	ND	
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND		ND	ND	
Fluorene	ND	ND	1.28	0.01	U	1.31	0.01	U
5-Nitro-o-toluidine	ND	ND	ND	ND		ND	ND	
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND		ND	ND	
Diphenylamine	ND	ND	ND	ND		ND	ND	
Azobenzene	ND	ND	ND	ND		ND	ND	
Phenacetin	ND	ND	ND	ND		ND	ND	
Diallate	ND	ND	ND	ND		ND	ND	
4-Bromophenyl phenyl ether	ND	ND	ND	ND		ND	ND	
4-Aminobiphenyl	ND	ND	ND	ND		ND	ND	
Hexachlorobenzene	ND	ND	ND	ND		ND	ND	
Pronamide	ND	ND	ND	ND		ND	ND	
Pentachlorophenol	ND	ND	ND	ND		ND	ND	
Pentachloronitrobenzene	ND	ND	ND	ND		ND	ND	
Phenanthrene	ND	ND	3.70	0.02	U	3.59	0.02	U
Dinoseb	ND	ND	ND	ND		ND	ND	
Anthracene	ND	ND	ND	ND		ND	ND	
Carbazole	ND	ND	ND	ND		ND	ND	
Di-n-butyl phthalate	ND	ND	7.95	0.04	U	7.68	0.03	U
Benzidine	ND	ND	ND	ND		ND	ND	
Isodrin	ND	ND	ND	ND		ND	ND	
Fluoranthene	ND	ND	ND	ND		ND	ND	
Pyrene	ND	ND	ND	ND		ND	ND	
4-Dimethylaminoazobenzene	ND	ND	ND	ND		ND	ND	
Chlorobenzilate	ND	ND	ND	ND		ND	ND	
3,3'-Dimethylbenzidine	ND	ND	ND	ND		ND	ND	
Butyl benzyl phthalate	ND	ND	ND	ND		ND	ND	
2-Acetylaminofluorene	ND	ND	ND	ND		ND	ND	
3-Methylcholanthrene	ND	ND	ND	ND		ND	ND	
3,3'-Dichlorobenzidine	ND	ND	ND	ND		ND	ND	
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND		ND	ND	
Benzo(a)anthracene	ND	ND	ND	ND		ND	ND	
Chrysene	ND	ND	ND	ND		ND	ND	
Di-n-octyl phthalate	ND	ND	ND	ND		ND	ND	
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND		ND	ND	
Benzo(b)fluoranthene	ND	ND	ND	ND		ND	ND	
Benzo(k)fluoranthene	ND	ND	ND	ND		ND	ND	
Benzo(a)pyrene	ND	ND	ND	ND		ND	ND	
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND		ND	ND	
Dibenz(a,h)anthracene	ND	ND	ND	ND		ND	ND	
Benzo(g,h,i)perylene	ND	ND	ND	ND		ND	ND	

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 18308		Field Blank, 18308-Rep	
File I.D.	ENG1871.D		ENG1872.D	
Date Sampled	9/3/2000		9/3/2000	
Date Analyzed	09/20/00		09/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
N-Nitrosodimethylamine	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND
Phenol	ND	ND	ND	ND
Pentachloroethane	ND	ND	ND	ND
bis (2-Chloroethyl)ether	ND	ND	ND	ND
Aniline	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND
N-Nitrosopyrrolidine	ND	ND	ND	ND
N-Nitrosodipropylamine	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND
N-Nitrosopiperidine	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND
Hexachloropropene	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND
N-Nitrosodibutylamine	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND
Safrole	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND
2,4,5-Trichlorphenol	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND
Isosafrole	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND
1,4-Naphthoquinone	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND
1,3-Dintrobenzene	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

1999/2000 Semivolatile Raw Monitoring Data - Portland, OR
Appendix M

Sample I.D.	Field Blank, 18308		Field Blank, 18308-Rep	
File I.D.	ENG1871.D		ENG1872.D	
Date Sampled	9/3/2000		9/3/2000	
Date Analyzed	09/20/00		09/20/00	
Actual Vol (m^3)	Actual Vol (m^3)	0	Actual Vol (m^3)	0
Compound	**Final Conc (µg)**	**Final µg/m^3**	**Final Conc (µg)**	**Final µg/m^3**
Acenaphthylene	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND
2-Naphthylamine	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND
Pentachlorobenzene	ND	ND	ND	ND
1-Naphthylamine	ND	ND	ND	ND
Diethyl phthalate	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND
4-Chlorophenyl-phenyl ether	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
Diphenylamine	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND
Phenacetin	ND	ND	ND	ND
Diallate	ND	ND	ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND
4-Aminobiphenyl	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND
Pronamide	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND
Dinoseb	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND
Isodrin	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND
4-Dimethylaminoazobenzene	ND	ND	ND	ND
Chlorobenzilate	ND	ND	ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND
Butyl benzyl phthalate	ND	ND	ND	ND
2-Acetylaminofluorene	ND	ND	ND	ND
3-Methylcholanthrene	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND
Di-n-octyl phthalate	ND	ND	ND	ND
7,12-Dimethylbenz(a)anthracene	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND

* Note on 6/23/00 COC - "Leak in head/not on tight/observed at pickup."
ND - Not Detected
U - Under Dectection Limit

TECHNICAL REPORT DATA

(Please read Instructions on reverse before completing)

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16. ABSTRACT

Reporting data results for the Urban Air Toxics Monitoring Program (UATMP) for the combined years for three months in 1999 and all of the year 2000.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Carbonyls, SNMOC, VOC	Air Pollution control	

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