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1997 Nonmethane Organic Compounds (NMOC) And Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program

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Final Report
EPA Contract No. 68-D3-0095
Delivery Order 12

Prepared for:

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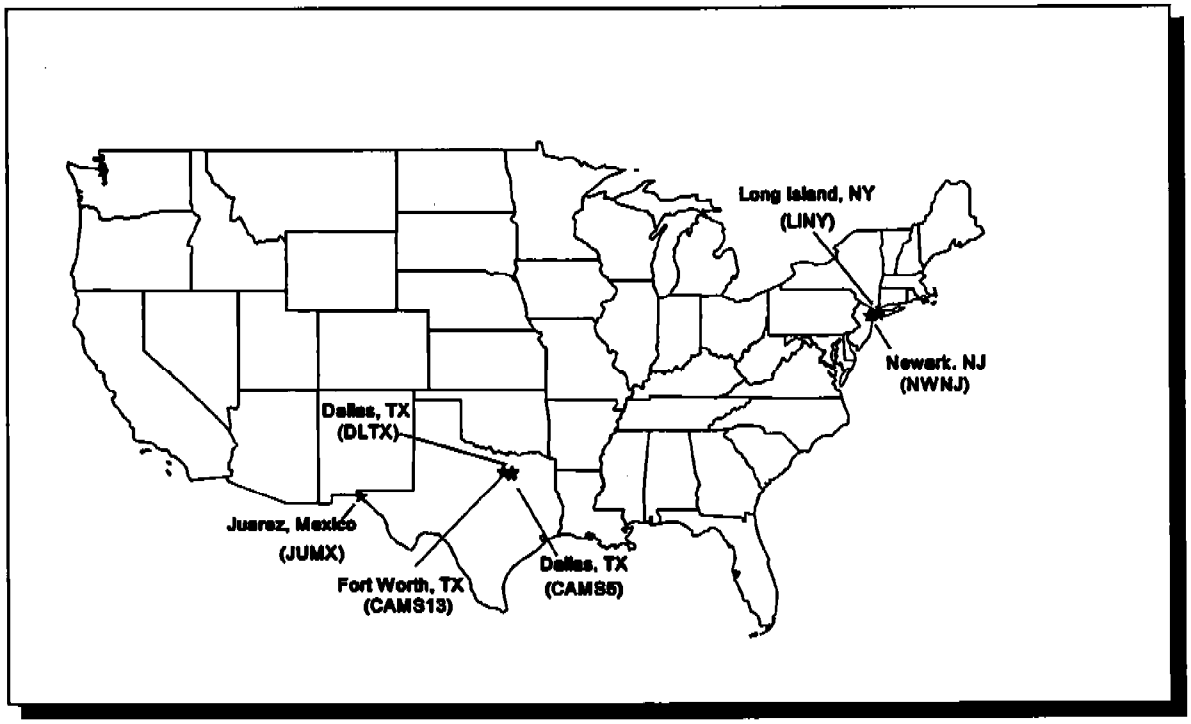
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711



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January 1999

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LIST OF ABBREVIATIONS

AIRS	Aerometric Information and Retrieval System
AQS	Air Quality Subsystem (of the Aerometric Information and Retrieval System)
BTEX	benzene, toluene, ethylbenzene, and xylene (*o*-, *m*-, and *p*-xylene)
EPA	U.S. Environmental Protection Agency
FID	flame ionization detection
GC	gas chromatography
HPLC	high-performance liquid chromatography
mph	miles per hour
MSD	mass selective detection
NAAQS	national ambient air quality standard
ND	nondetect
NJDEP	New Jersey Department of Environmental Protection
NYSDEC	New York State Department of Environmental Conservation
PDFID	preconcentration direct flame ionization detection
ppbC	parts per billion (by volume, on a carbon basis)
ppbv	parts per billion (by volume)
RPD	relative percent difference
SNMOC	speciated nonmethane organic compounds
TNRCC	Texas Natural Resources Conservation Commission
total NMOC	total nonmethane organic compounds
TRI	Toxics Release Inventory
UV	ultraviolet
VOC	volatile organic compounds

Monitoring Stations

CAMS5	Dallas, Texas (1)
CAMS13	Fort Worth, Texas
DLTX	Dallas, Texas (2)
JUMX	Juarez, Mexico
LINY	Long Island, New York
NWNJ	Newark, New Jersey

ABOUT THIS REPORT

This report presents the results of ambient air monitoring conducted in 1997 as part of the Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) monitoring program—a program designed to characterize the magnitude and composition of selected air pollution components that affect ozone formation processes. During the summer of 1997, ambient air samples were collected between 6:00 a.m. and 9:00 a.m., local time, at six monitoring locations in three metropolitan areas. Depending on options selected by sponsoring agencies, the samples were analyzed for NMOC, SNMOC, volatile organic compounds (VOC), carbonyls, or some combination of these categories. Overall, nearly 50,000 ambient air concentrations were measured during the 1997 program. This report not only summarizes this large amount of air monitoring data, but includes a series of statistical and numerical analyses to identify notable air quality trends. To provide sponsoring agencies a different perspective on the air monitoring results, most of the analyses in this report (e.g., comparisons to selected meteorological conditions and comparisons to concentrations of ozone and nitrogen oxides) are different from those documented in previous NMOC/SNMOC reports.

When reading this report, it is important to note that the 1997 NMOC/SNMOC monitoring program only characterizes levels of air pollution at six locations in three metropolitan areas. Due to spatial variations in emissions sources and meteorological conditions, data trends identified for the six monitoring locations may not necessarily apply to other locations within these metropolitan areas, let alone to other urban settings. Further, though the NMOC/SNMOC monitoring data are extensive and useful as inputs to regional ozone forecasting models, the monitoring data alone are not sufficient for understanding how pollutants react and interact in the atmosphere to form ozone. As a result, further research and data analyses on the monitoring results are encouraged. To facilitate these ongoing research efforts, the NMOC/SNMOC monitoring data have been made publicly available in electronic format from the Environmental Protection Agency's Aerometric Information Retrieval System.

The remainder of this report describes the goals of the NMOC/SNMOC monitoring program, reviews the scope of the 1997 program, and summarizes and interprets ambient air monitoring data collected in the summer of 1997. For a quick overview of the major findings of this report, readers should refer to Section 4.4, Section 5.4, Section 6.4, and Section 7.4 for summaries of the NMOC, SNMOC, VOC, and carbonyl monitoring, respectively. For the benefit of sponsoring agencies, the final report for the 1998 NMOC/SNMOC program will focus almost exclusively on how ambient air concentrations of selected pollutants have changed from year to year—a topic that is not addressed in this report.

1.0 Introduction

The U.S. Environmental Protection Agency (EPA) requires state environmental agencies to develop and implement plans to reduce ozone concentrations in areas that are not in attainment with the ozone national ambient air quality standard (NAAQS). Implementing effective ozone control strategies has proven to be a complicated task, largely because of the numerous variables that affect ozone formation processes. To help state environmental agencies characterize some of these variables, EPA sponsors the Nonmethane Organic Compounds (NMOC) and Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program. This program is designed to measure ambient air concentrations of four classes of compounds that affect ozone formation: total NMOC, SNMOC, volatile organic compounds (VOC), and carbonyls. Since the program's inception in 1984, many state agencies have participated in EPA's program by installing air monitoring stations within their jurisdictions. This report summarizes and interprets results from the 1997 NMOC/SNMOC Monitoring Program, which included up to 3 months of daily measurements of ambient air quality in or near three metropolitan areas.

This summary report provides a qualitative overview of air pollution at the NMOC/SNMOC monitoring stations, as well as a quantitative analysis of the monitoring data and several other factors that are known to affect ozone formation processes. So that new and historical data can easily be compared, the report presents descriptive summary statistics in a format identical to that of previous NMOC/SNMOC reports. To offer greater insight into the current data, however, much of the report focuses on topics that previous annual NMOC/SNMOC reports have not addressed in detail, such as data correlations between concentrations of organic compounds, ozone, and nitrogen oxides and selected meteorological conditions. These analyses ultimately should help state environmental agencies better understand the complex interaction of pollutants in ozone non-attainment areas.

Although extensive, the analyses in this report do not provide a comprehensive account of all factors relevant to ozone formation. To characterize non-attainment areas more completely, state environmental agencies should not only review air monitoring data, but also evaluate

emissions trends of ozone precursors and conduct computer simulations of atmospheric transport of these emissions and photochemical reactions. Therefore, even though this report thoroughly characterizes the large volume of NMOC/SNMOC monitoring data, additional analyses should be performed so that the many factors that affect ambient air quality can be fully appreciated. To facilitate further analysis of the NMOC/SNMOC sampling results, the entire set of ambient air monitoring data will be available on the Air Quality Subsystem (AQS) of the Aerometric Information and Retrieval System (AIRS), an electronic database maintained by EPA.

This report is organized into eight sections; Table 1-1 lists the contents of each report section. Sections 2 and 3 present necessary background information on the monitoring program and data analysis methodologies, and Sections 4 through 7 summarize and interpret the monitoring data collected for total NMOC, SNMOC, VOC, and carbonyls. All figures and tables cited in the text appear at the end of their respective sections (figures first, followed by tables).

Table 1-1
Organization of the 1997 NMOC/SNMOC Summary Report

Report Section	Section Title	Overview of Contents
2	The 1997 NMOC/SNMOC Program	This section provides background information on sampling locations; lists air monitoring options and sampling schedules implemented at these locations; and characterizes the sampling and analytical methods used to measure ambient air concentrations.
3	Data Analysis Methodology	This section presents the methodology used throughout the report to interpret the ambient air monitoring data; discusses the significance of data summary parameters; outlines the approach for evaluating both spatial and temporal variations in ambient air concentrations; and describes the statistical analyses used to quantify correlations between different data sets.
4	NMOC Data Interpretation	These sections use the methodology presented in Section 3 to interpret the air monitoring data for total NMOC, SNMOC, VOC, and carbonyls; summarize the monitoring data and identify trends and patterns in levels of air pollution; note the significance of spatial and temporal variations observed in the measured concentrations; and, where appropriate, discuss how trends in the monitoring data might indicate appropriate ozone control policies.
5	SNMOC Data Interpretation	
6	VOC Data Interpretation	
7	Carbonyl Data Interpretation	
8	Conclusions and Recommendations	This section summarizes the most significant findings of the report and makes several recommendations for further work in characterizing ambient air concentrations of hydrocarbons, VOC, and carbonyls.
9	References	This section lists the references cited throughout this summary report.

2.0 The 1997 NMOC/SNMOC Monitoring Program

Because it is important to understand the scope of any air monitoring program before interpreting trends and patterns in the corresponding results, this section presents relevant background information for the 1997 NMOC/SNMOC program. This program included six monitoring stations that collected 3-hour integrated samples of ambient air according to site-specific schedules, roughly from June 1 to September 30, 1997. Depending on the monitoring options that were selected for each station, air samples were analyzed for either total NMOC, SNMOC and VOC, carbonyls, or some combination of these categories. The following discussion describes in greater detail the monitoring locations, compounds selected for monitoring, sampling schedules, and sampling and analytical methods of the program.

2.1 Monitoring Locations

EPA sponsors the NMOC/SNMOC monitoring program with the intent of helping state and local air pollution control agencies better understand how the composition of air pollution affects the formation and transport of ozone within a given region. Agencies can participate in this program by working cooperatively with EPA to identify suitable monitoring locations, select classes of compounds for monitoring, install ambient air monitoring equipment, and send samples to a designated central laboratory for analysis. The participating agencies also must contribute to the overall monitoring costs.

Figure 2-1 shows the locations of the six 1997 NMOC/SNMOC monitoring stations and lists their alphanumeric codes, which were assigned for purposes of tracking air samples from the field to the laboratory. In addition to an alphanumeric code, each location has a unique 9-digit "AIRS Code" for purposes of logging and indexing site descriptions and monitoring results in EPA's AIRS database. For each monitoring location, Table 2-1 lists the alphanumeric codes, the AIRS codes, and other site information described later in this section.

The six stations participating in the 1997 program were located in three urban areas: the Dallas–Fort Worth metropolitan area, the El Paso–Juarez area, and the Newark–New York City

area. Not surprisingly, chemical concentrations measured during the 1997 NMOC/SNMOC program varied significantly among, and even within, these metropolitan areas. As previous NMOC/SNMOC reports have concluded, the proximity of the monitoring locations to different emissions sources, especially heavily traveled roadways, likely explains the observed spatial variations in ambient air quality.

The maps in Figures 2-2 through 2-7 and the site descriptions in Table 2-2 provide detailed information on the surroundings at the six NMOC/SNMOC monitoring locations. The maps illustrate that some monitors were located in primarily residential neighborhoods (e.g., CAMS5 and CAMS13), while others were located in more industrial areas (e.g., DLTX and NWNJ). For each monitoring location, the text in Table 2-2 describes site characteristics that may not be readily apparent from the maps. Analyses throughout this report refer to the various site descriptions to explain trends and patterns in the NMOC/SNMOC ambient air monitoring data.

At every NMOC/SNMOC monitoring location, the air sampling equipment was installed in a small enclosure—usually a trailer or a shed—with sampling inlet probes protruding through the roof. Using this common setup, every NMOC/SNMOC monitor sampled ambient air at heights approximately 5 to 20 feet above local ground level.

2.2 Compounds Selected for Monitoring

The agencies that sponsor monitoring locations decide whether their respective stations measure total NMOC, SNMOC and VOC, carbonyls, or some combination of these categories. These categories differ from previous monitoring options in one important regard: in previous years, air samples had to be analyzed using two separate methods to characterize levels of SNMOC and VOC. During the 1997 program, however, improved laboratory analytical techniques allowed a single air sample to be concurrently analyzed for both groups of compounds. With this improvement, the program now provides SNMOC and VOC ambient air

monitoring data at a cost only marginally higher than that of collecting SNMOC data alone. Section 2.4 describes the specific improvements to the analytical methods in greater detail.

Table 2-1 indicates the compound groups that sponsoring agencies selected for monitoring at each of the six stations. Every station at least collected samples that were analyzed for either total NMOC or SNMOC—the two categories most commonly used as inputs to ozone forecasting models. Accordingly, most of the interpretations and analyses in this report focus on these two compound categories, with a lesser emphasis placed on evaluating trends and patterns among the VOC and carbonyls air monitoring data. Section 2.3 indicates how frequently the compounds were measured at each site, and Section 2.4 lists the compounds identified by the four different monitoring options.

2.3 Monitoring Schedules

In addition to selecting locations and compounds for monitoring, the agencies that sponsor NMOC/SNMOC monitoring locations also determine sampling schedules. Tables 2-1 and 2-3 summarize the sampling schedules and sampling frequencies implemented at the six participating locations. Although the sampling schedules vary across the different compound categories and monitoring locations, there are some common scheduling trends. For instance, every station conducted at least some daily sampling, and every station that measured carbonyls collected fewer than 10 samples. As Section 3.2 indicates, the sampling frequency is an important consideration for data analyses, mainly because a large number of samples are usually needed to observe statistically significant trends and patterns.

Despite the differences in sampling frequencies, the sampling schedules implemented at all 15 monitoring locations have three features in common:

- On each sampling day, ambient air is continuously sampled for 3 hours, starting at 6:00 a.m., local standard time.
- Sampling is generally performed between June 1 and September 30.

- Roughly 10 percent of all samples were collected in duplicate and analyzed in replicate.

EPA requires stations to adhere to these three features because (1) many ozone transport models require ambient concentrations measured between 6:00 a.m. and 9:00 a.m. as an input; (2) ambient air concentrations of ozone are known to peak during the summer months, when photochemical reactivity also peaks; and (3) duplicate and replicate data are critical for evaluating the precision of ambient air monitoring data.

2.4 Sampling and Analytical Methods

Sampling and analytical methods used in monitoring programs ultimately determine what compounds can be identified in air samples, and at what levels. During the 1997 NMOC/SNMOC program, different sampling and analytical methods were used to measure air concentrations of total NMOC, SNMOC and VOC, and carbonyls. EPA has thoroughly tested each of these methods, and field engineers for this air monitoring program strictly followed the documented monitoring procedures. The final report for the 1996 NMOC/SNMOC program described these sampling and analytical methods in detail (ERG, 1997b), and the following subsections briefly highlight salient features of the four methods. For quick reference, Table 2-4 summarizes the general attributes (detection limits, units of measurement, etc.) of these methods.

2.4.1 Total NMOC

Ambient air concentrations of total nonmethane organic compounds were measured using EPA Compendium Method TO-12 (USEPA, 1988). The TO-12 protocol specifies steps for collecting 3-hour integrated samples of ambient air in passivated stainless steel canisters, which are then analyzed by using cryogenic traps and flame ionization detection (FID). This method cannot distinguish different hydrocarbon species; rather, the analysis measures only the *total* amount of nonmethane hydrocarbons in the air sample, or total NMOC. Concentrations are reported in units of parts per billion on a carbon basis (ppbC) (see sidebar, "The Importance of Units of Measurement") and the detection limit for this method is approximately 5 ppbC.

The Importance of Units of Measurement

Units of measurement express results of scientific analyses in standard formats. The units used in a particular study, however, depend largely on the conventions followed by other researchers within a particular scientific field. In ambient air monitoring efforts, for example, scientists typically report air concentrations using several different units of measurement, such as parts per billion on a volume basis (ppbv) and parts per billion on a carbon basis (ppbC). This report adopts the conventions EPA (USEPA, 1988, 1989) and other air monitoring researchers employ, expressing NMOC and SNMOC monitoring data in units of ppbC and expressing VOC and carbonyl monitoring data in units of ppbv. For a given compound, concentrations can be converted between these different units of measurement according to the following equation:

$$Concentration\ (ppbC) = Concentration\ (ppbv) \times Number\ of\ Carbons$$

As an example, benzene (C_6H_6) has six carbon atoms. Therefore, by definition, a concentration of benzene of 6.0 ppbC also equals a concentration of benzene of 1.0 ppbv. Because failure to consider subtle differences in units of measurement can result in significant misinterpretations of ambient air monitoring results, readers of this report should pay particular attention to the units of measurement, especially when comparing the monitoring results to those of other studies. To avoid any confusion, every table and figure in this report that presents monitoring results clearly indicates the corresponding units of measurement.

2.4.2 SNMOC

Ambient air concentrations of SNMOC were measured according to EPA's research protocol "Determination of C_2 through C_{12} Ambient Air Hydrocarbons in 39 U.S. Cities from 1984 through 1986" (USEPA, 1989). Like the NMOC sampling and analytical method, the SNMOC method requires collecting ambient air in passivated stainless steel canisters. Unlike the NMOC approach, the SNMOC analytical method involves passing the collected samples through a gas chromatography (GC) column that separates individual hydrocarbon species before measuring concentrations with the FID. Because of this additional step, the FID can measure ambient air concentrations of *individual* organic compounds, as well as measuring *total* organic compounds. The GC column used during this program distinguishes 80 different compounds, which are listed, along with their estimated detection limits, in Table 2-5 (see sidebar,

Appreciating Detection Limits

The detection limit of an analytical method plays an important role in interpreting ambient air monitoring data. By definition, detection limits represent the lowest levels at which laboratory equipment can *reliably* quantify concentrations of selected compounds to a specific confidence level. Therefore, when samples contain concentrations of chemicals at levels below those chemicals' detection limits, multiple analyses of the same sample may lead to a wide range of results, including highly variable concentrations and "nondetect" observations. To interpret air monitoring data in the proper context, data analysts should understand that the variability of analytical methods increases as sample concentrations decrease to trace levels. Because some of the SNMOC, VOC, and carbonyl compounds have numerous nondetects, the significance of appreciating detection limits is revisited throughout this report.

For reference, the estimated detection limits for the NMOC, SNMOC, VOC, and carbonyl analytical methods were all determined according to EPA guidance in "Definition and Procedure for the Determination of the Method Detection Limit" (FR, 1984).

"Appreciating Detection Limits"). Like the NMOC concentrations, the SNMOC concentrations are expressed in units of ppbC—a convention typically followed for measurements involving FID.

It should be noted that the GC column used to analyze samples from the 1997 NMOC/SNMOC program was capable of differentiating concentrations of acetylene from concentrations of ethane, and the GC column used previously could not separate these compounds.

2.4.3 VOC

Ambient air concentrations of selected VOC were measured using EPA Compendium Method TO-14 (USEPA, 1984a). Sampling for this method follows the same protocol as the NMOC and SNMOC methods: ambient air is collected in the field in passivated stainless steel canisters. The analytical method for VOC differs from the other methods, as the sampled air passes through a gas chromatography column with mass selective detection and flame ionization detection (GC/MSD-FID). This particular combination of analytical techniques enables measurement of concentrations of 38 different organic compounds, many of which (such as

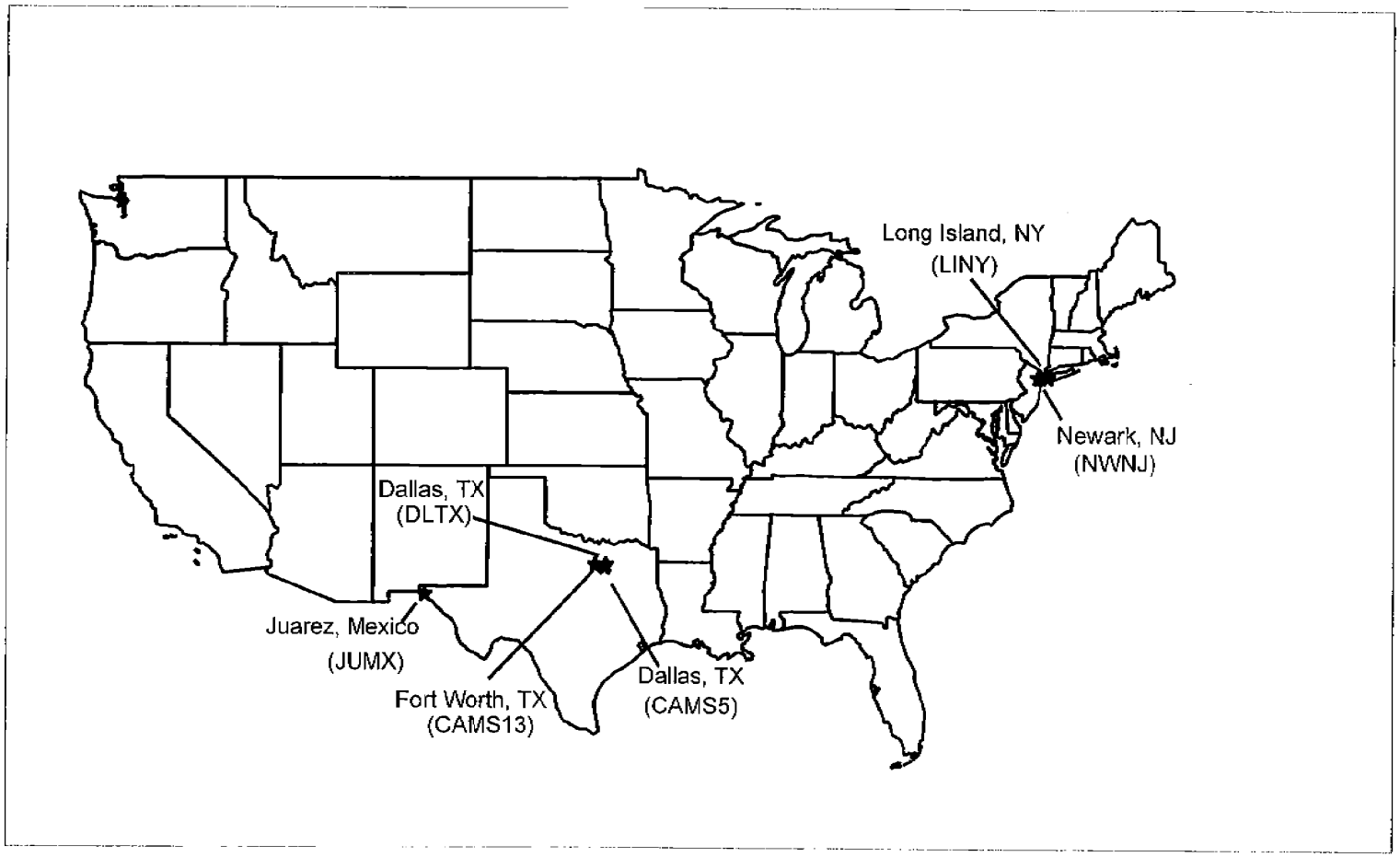
halogenated hydrocarbons) cannot be measured using the other sampling and analytical methods. Table 2-6 lists these 38 compounds along with their respective detection limits. All concentrations of VOC are reported in units of ppbv.

During the 1997 NMOC/SNMOC program, the laboratory analytical equipment for the SNMOC and VOC methods was combined. With this improvement, technicians could simultaneously analyze a single ambient air sample for both the 80 target SNMOC and the 38 target VOC. Therefore, the 1997 NMOC/SNMOC program has essentially three monitoring options—NMOC, SNMOC *and* VOC, and carbonyls.

2.4.4 Carbonyls

Following the specifications of EPA Compendium Method TO-11 (USEPA, 1984b), carbonyl compounds were measured by passing ambient air over silica gel cartridges coated with 2,4-dinitrophenylhydrazine (DNPH), a compound known to react reversibly with many aldehydes and ketones. For chemical analysis, sampling cartridges were eluted with acetonitrile, which liberates hydrazine derivatives of the aldehydes and ketones collected from the ambient air by the DNPH-coated silica gel matrix. Analyzing the acetonitrile solution by high-performance liquid chromatography (HPLC) with ultraviolet (UV) detection then determines the amount of carbonyls present in the original air sample. This procedure currently detects 16 different carbonyl compounds. Table 2-7 lists these compounds and their corresponding detection limits.

Figure 2-1
Locations of the 1997 NMOC/SNMOC Monitoring Stations



Note: The alphanumeric codes shown were used primarily to track samples from the monitoring stations to the analytical laboratory.

Figure 2-2
Dallas, Texas (CAMS5), Monitoring Station

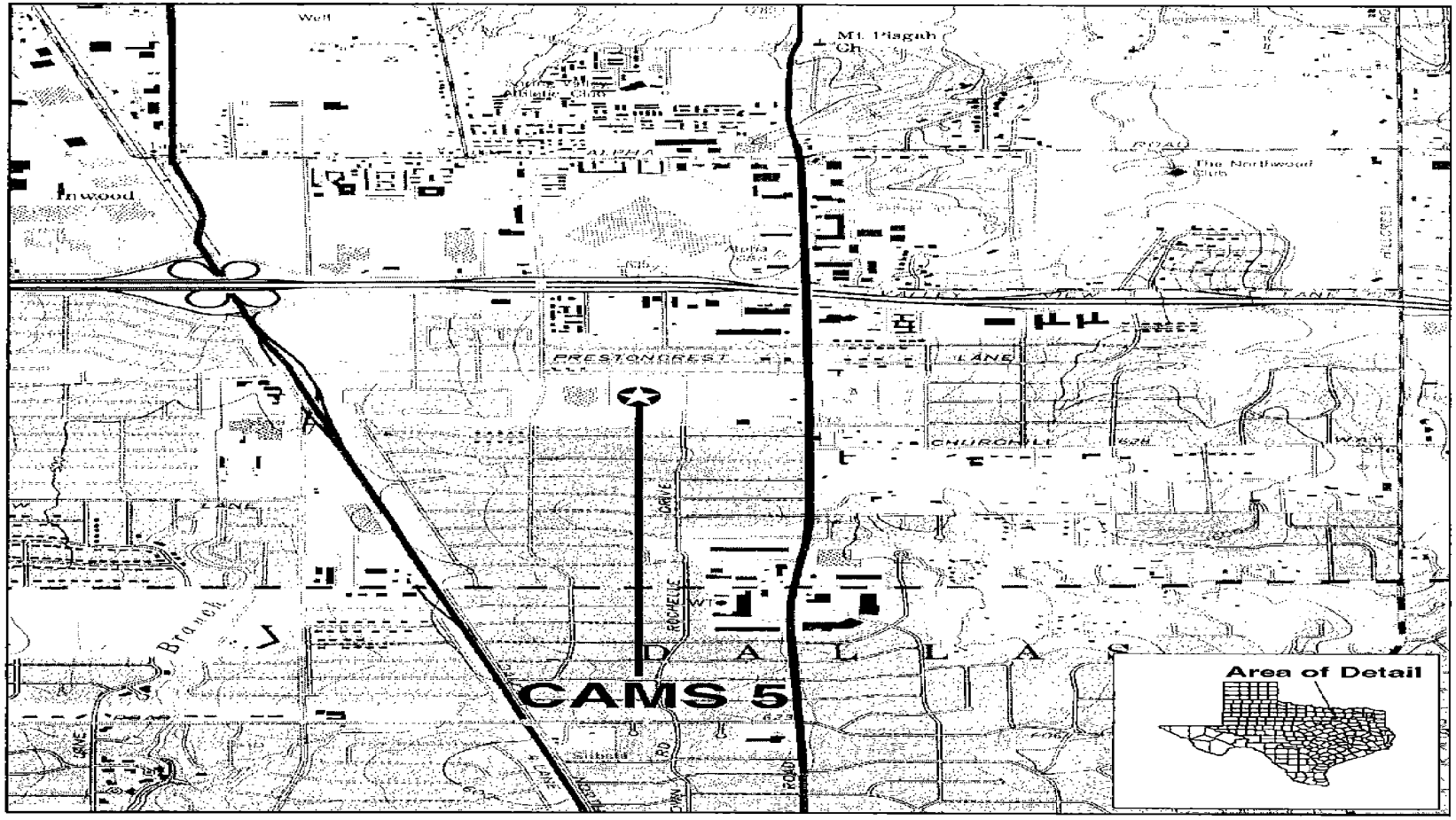


Figure 2-3
Fort Worth, Texas (CAMS13), Monitoring Station

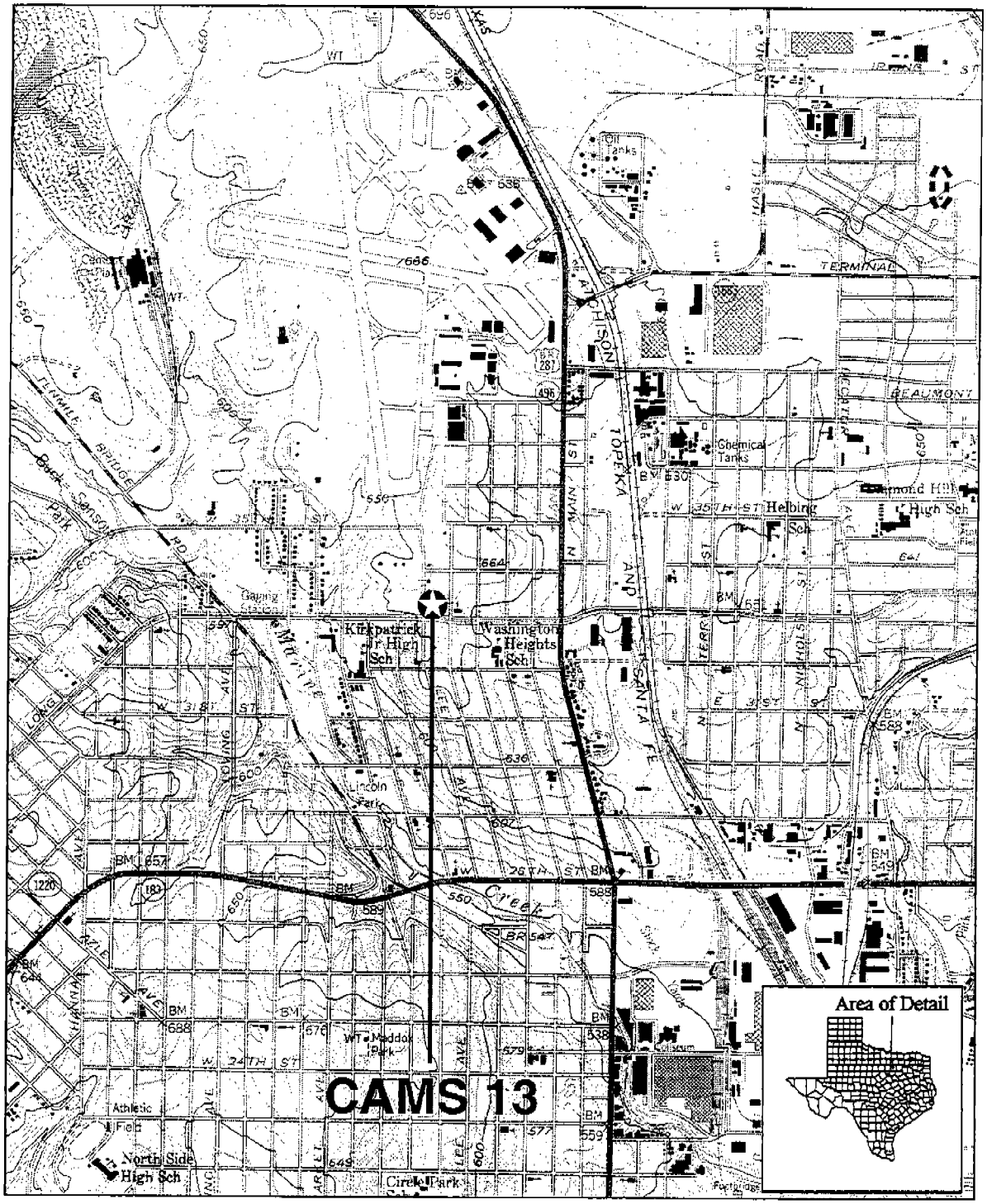


Figure 2-4
Dallas, Texas (DLTX), Monitoring Station

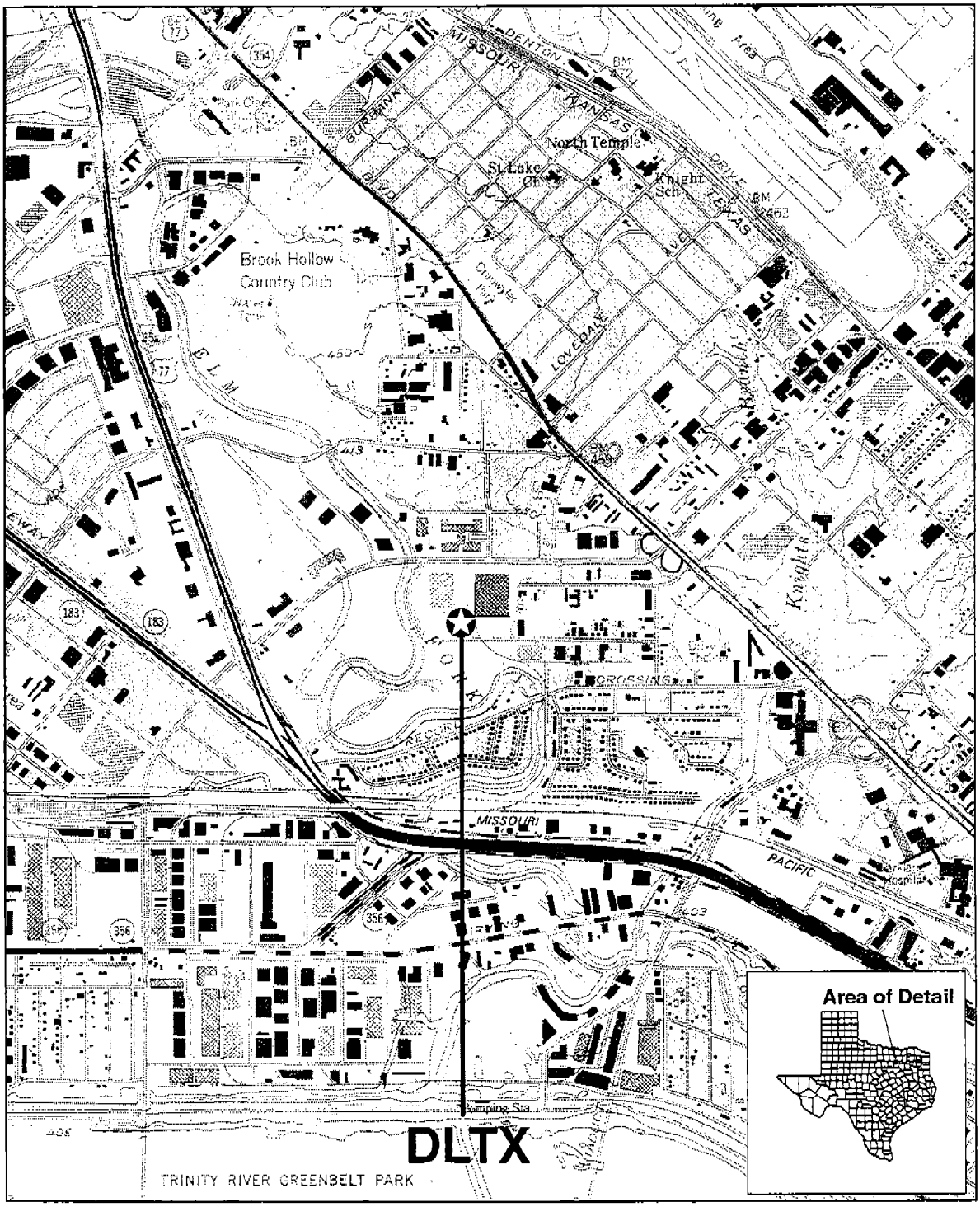


Figure 2-5
Juarez, Mexico (JUMX), Monitoring Station

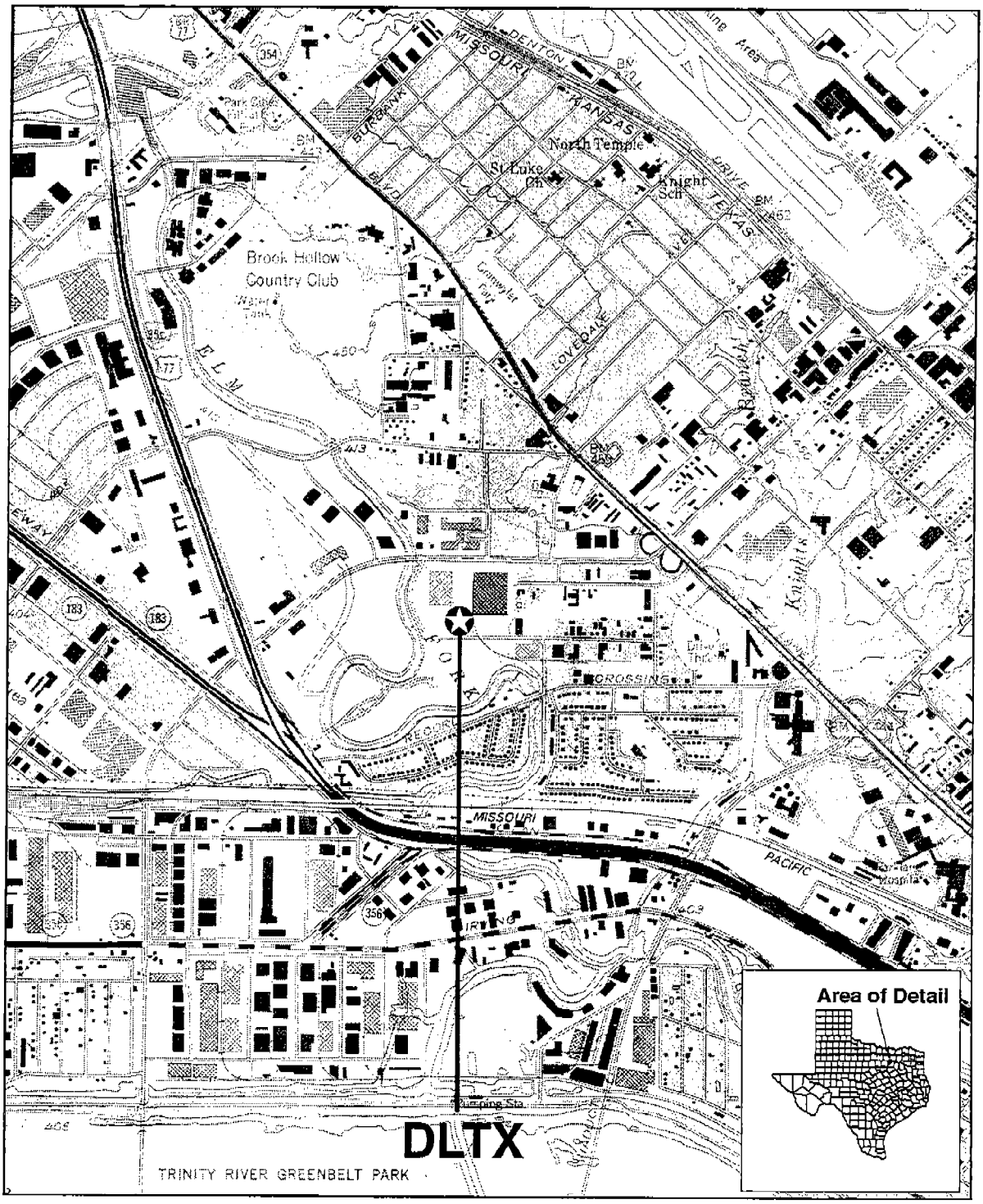


Figure 2-6
Long Island, New York (LINY), Monitoring Station

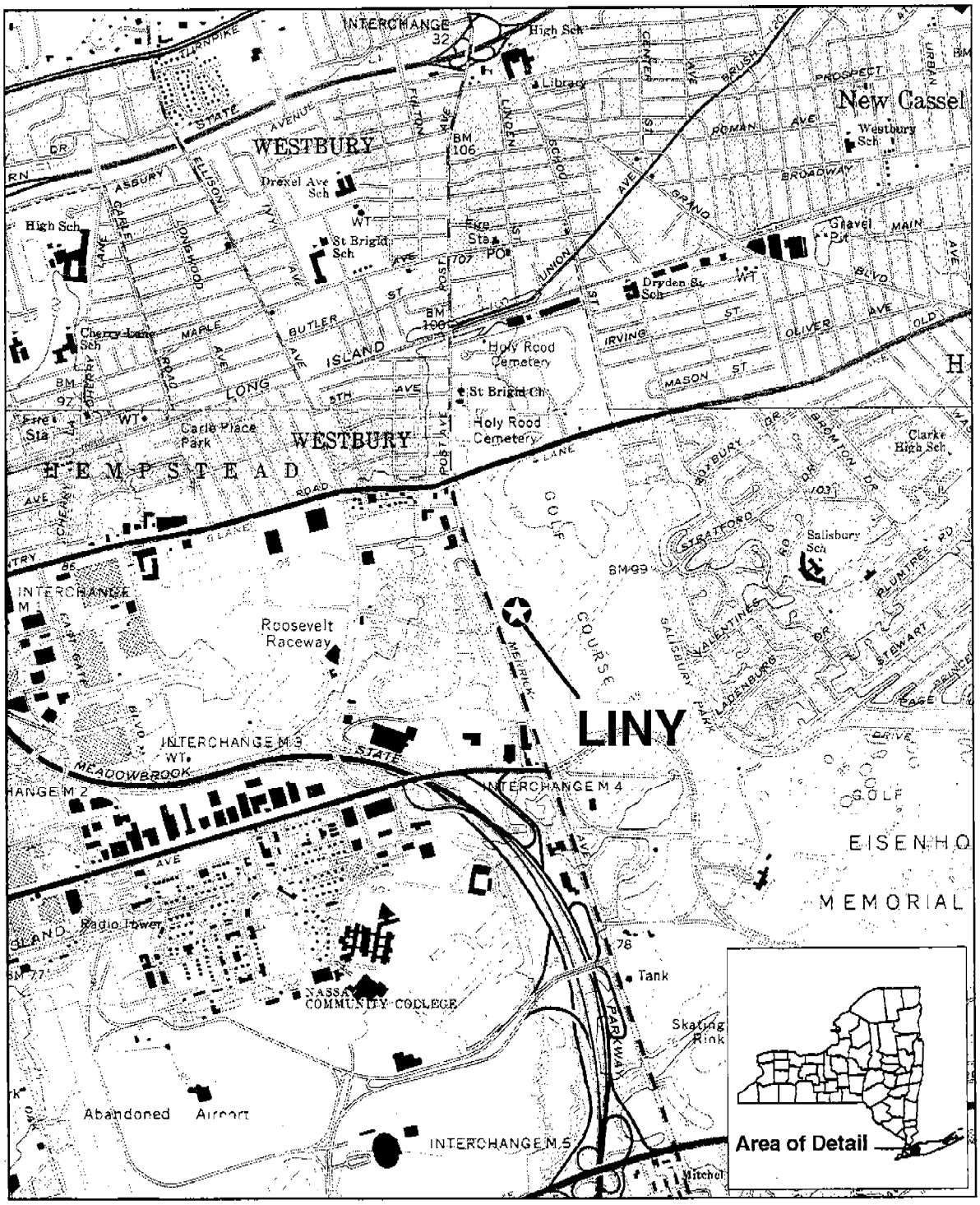


Figure 2-7
Newark, New Jersey (NWNJ), Monitoring Station

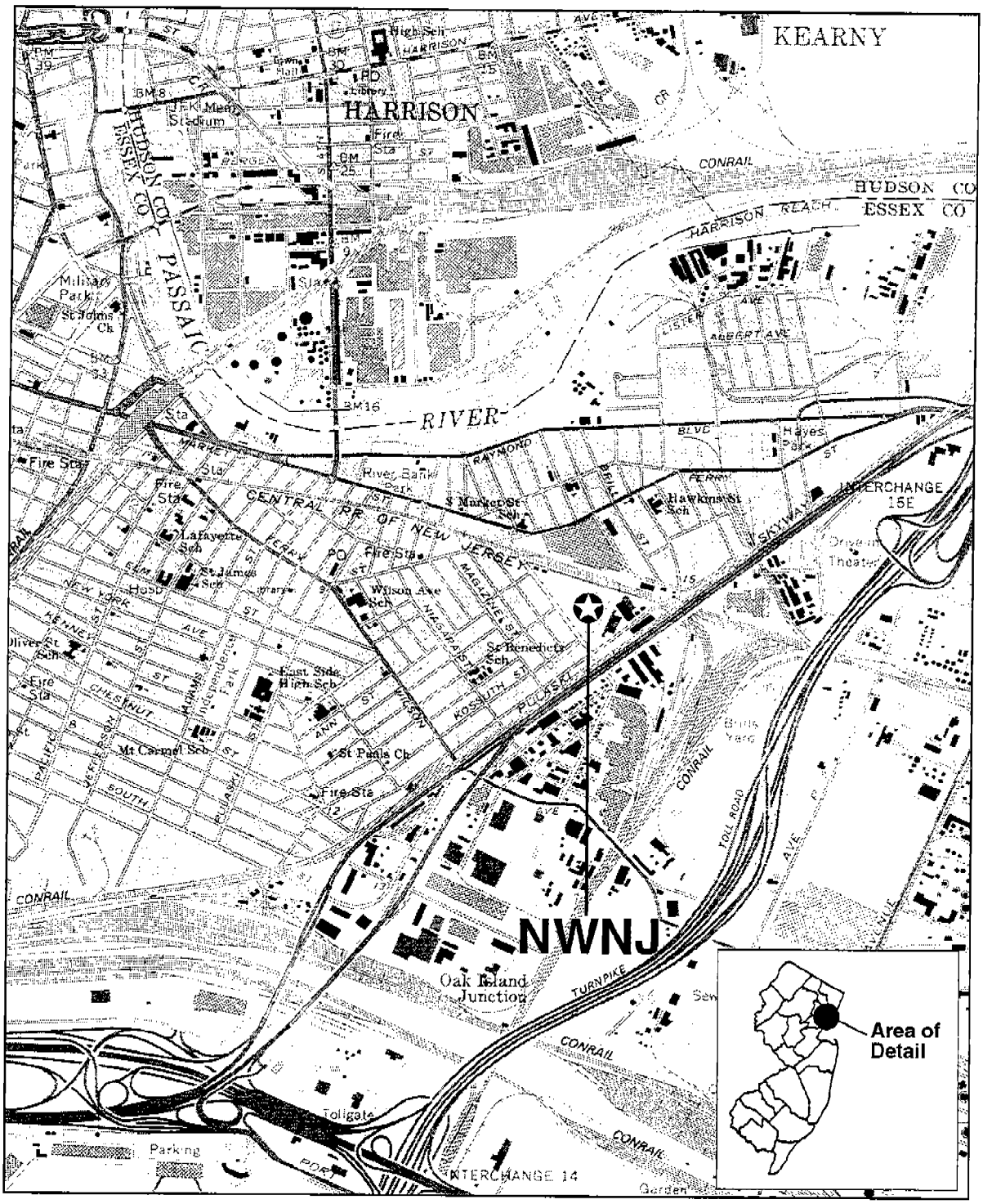


Table 2-1
Background Information for the 1997 NMOC/SNMOC Monitoring Stations

1997 NMOC/ SNMOC Site Code	AIRS Site Code	Location	Sampling Schedule		Monitoring Options Selected		
			Starting Date	Ending Date	NMOC	SNMOC and VOC	Carbonyl
CAMS5	48-113-0045	Dallas, TX (1)	June 3, 1997	September 30, 1997		✓	✓
CAMS13	48-439-1002	Fort Worth, TX	June 3, 1997	September 30, 1997		✓	✓
DLTX	48-113-0069	Dallas, TX (2)	June 2, 1997	September 30, 1997		✓	✓
JUMX	80-006-0001	Juarez, Mexico	July 15, 1997	September 30, 1997		✓	✓
LINY	36-059-0005	Long Island, NY	June 2, 1997	October 1, 1997	✓		
NWNJ	34-013-0011	Newark, NJ	June 2, 1997	September 30, 1997	✓	✓	✓

Note: As Section 2.4 describes, every sample that was analyzed for SNMOC was also analyzed for VOC.
Due to construction activities, sampling at Juarez, Mexico, could not start in June, as was originally planned.

Table 2-2
Descriptions of the 1997 NMOC/SNMOC Monitoring Locations

Monitoring Location	Description of Immediate Surroundings
Dallas, TX (1) (CAMS5)	The CAMS5 monitoring station is located on the property of a school, in a primarily residential neighborhood in north Dallas. Two major freeways—Interstate 635 (the Lyndon B. Johnson Freeway) and the Dallas North Tollway—pass within 1 mile of the monitoring station. In addition to the NMOC measurements at CAMS5, the Texas Natural Resources Conservation Commission (TNRCC) measures levels of ozone and nitrogen oxides at this monitoring station.
Fort Worth, TX (CAMS13)	The CAMS13 monitoring station is located in an open field on the property of Meacham Field, an airport in northwest Fort Worth, Texas. Although the surrounding neighborhoods are primarily residential, several heavily traveled roadways (including Main Street and 28th Street) pass within 1 mile of the monitoring station. TNRCC also measures levels of ozone and nitrogen oxides at this monitoring station.
Dallas, TX (2) (DLTX)	Located in an area of mixed industrial and commercial uses, the DLTX monitoring station is approximately 3 miles northwest of downtown Dallas in a paved parking lot, near several buildings between one and three stories tall. Several roadways with varying traffic flow pass nearby, and the interchange of Interstate 35-E and State Highway 183 is less than 1 mile from the monitoring station. TNRCC also measures levels of ozone and nitrogen oxides at this monitoring station.
Juarez, Mexico (JUMX)	The JUMX monitoring station is on the grounds of a university campus (Instituto Technologico Monterrey) and is approximately 1 mile from the Rio Grande—the river that separates Juarez, Mexico, from El Paso, Texas. Several small industrial facilities are located to the north, west, and southwest of the monitoring station, and open space and farmlands are located to the east and southeast. Some of the nearby open space is currently being developed into a residential neighborhood.

Table 2-2 (Continued)
Descriptions of the 1997 NMOC/SNMOC Monitoring Locations

Monitoring Location	Description of Immediate Surroundings
Long Island, NY (LINY)	Located in a suburb approximately 15 miles east of New York City, the LINY monitoring station is installed on a golf course in the Eisenhower Memorial Park. The buildings closest to the station are mostly single-story. A large shopping mall is located 1 mile west of the station, and Merrick Avenue, which is heavily traveled during commuting hours, passes within 50 feet of the station. Two major roadways—Old County Road and Meadowbrook State Parkway—pass within 1 mile of the station. In addition to the NMOC measurements, the New York State Department of Environmental Conservation (NYSDEC) measures levels of nitrogen oxides at the LINY station.
Newark, NJ (NWNJ)	The NWNJ monitoring station is surrounded by a mix of industrial, commercial, and residential land use. Both U.S. Highway 1 and Interstate 95 (the New Jersey Turnpike) pass within 1 mile of the monitoring station, and the Newark International Airport is approximately 2 miles southeast of the station. In addition to the NMOC measurements, the New Jersey Department of Environmental Protection (NJDEP) also measures levels of ozone at this monitoring station.

Table 2-3
Sampling Schedules Implemented During the 1997 NMOC/SNMOC Program

Monitoring Option	Monitoring Location	Sampling Schedules
NMOC	Long Island, NY Newark, NJ	Both sites sampled NMOC every weekday of the monitoring program, except holidays.
SNMOC	Dallas (1), TX Dallas (2), TX Fort Worth, TX	These sites sampled SNMOC every weekday of the monitoring program, except holidays. All samples were analyzed for both the 80 target SNMOC and the 38 target VOC.
	Juarez, Mexico	This site sampled SNMOC every weekday from July 15 to September 30, 1997. All samples were analyzed for both the target SNMOC and VOC.
	Newark, NJ	This site sampled SNMOC roughly once a week from July 15 to September 12, 1997. Nine samples were collected, all of which were analyzed for both SNMOC and VOC.
Carbonyl	Dallas (1), TX Dallas (2), TX Fort Worth, TX Juarez, Mexico Newark, NJ	These sites collected between seven and nine carbonyl samples over the course of the entire program, according to site-specific schedules.

Note: Unless otherwise noted, "the entire program" refers to June 1 through September 30, 1997.

Table 2-4
Summary of Sampling and Analytical Methods

Parameter	NMOC	SNMOC	VOC	Carbonyl
Sampling apparatus	Stainless steel canisters	Stainless steel canisters	Stainless steel canisters	Silica gel cartridge coated with DNPH
Analytical approach	Cryogenic trap and flame ionization detection	Cryogenic trap at the inlet of a gas chromatography column with flame ionization detection	Cryogenic trap at the inlet of a gas chromatography column with mass selective detection and flame ionization detection	High-performance liquid chromatography with ultraviolet detection
Output of analysis	Concentration of the total amount of nonmethane organic compounds in the sample	Concentrations of 80 different organic hydrocarbons [b]	Concentrations of 38 different volatile organic compounds [c]	Concentrations of 16 different carbonyl compounds [d]
Units of measurement [a]	ppbC	ppbC	ppbv	ppbv
Detection limit [a]	5 ppbC	See Table 2-5	See Table 2-6	See Table 2-7

[a] Refer to the sidebars in Section 2.4 for information on the significance of units of measurement and detection limits.
[b] The SNMOC analytical method actually reports only 78 different concentrations for each sample. The method cannot differentiate isobutene from 1-butene or *m*-xylene from *p*-xylene. Therefore, a single concentration is reported for these pairs.
[c] The VOC analytical method actually reports only 37 different concentrations for each sample. The method cannot differentiate *m*-xylene from *p*-xylene and therefore reports a single concentration for this pair.
[d] The carbonyl analytical method actually reports only 13 different concentrations for each sample. The method cannot differentiate butyraldehyde from isobutyraldehyde and therefore reports a single concentration for this pair. The method also cannot distinguish the three tolualdehyde isomers and therefore reports a single concentration for this trio.

Table 2-5
SNMOC Detection Limits

Compound	Detection Limit (ppbC)	Compound	Detection Limit (ppbC)
Acetylene	0.62	3-Methyl-1-Butene	0.37
Benzene	2.13	Methylcyclohexane	3.72
1,3-Butadiene	0.20	Methylcyclopentane	2.13
n-Butane	0.20	2-Methylheptane	4.73
cis-2-Butene	0.20	3-Methylheptane	4.73
trans-2-Butene	0.20	2-Methylhexane	3.72
Cyclohexane	2.13	3-Methylhexane	3.72
Cyclopentane	0.37	2-Methylpentane	2.13
Cyclopentene	0.37	3-Methylpentane	2.13
n-Decane	4.60	2-Methyl-1-Pentene	2.13
1-Decene	4.60	4-Methyl-1-Pentene	2.13
m-Diethylbenzene	4.60	*n*-Nonane	4.60
p-Diethylbenzene	4.60	1-Nonene	4.60
2,2-Dimethylbutane	2.13	*n*-Octane	4.73
2,3-Dimethylbutane	2.13	1-Octene	4.73
2,3-Dimethylpentane	3.72	*n*-Pentane	0.37
2,4-Dimethylpentane	3.72	1-Pentene	0.37
n-Dodecane	4.60	*cis*-2-Pentene	0.37
1-Dodecene	4.60	*trans*-2-Pentene	0.37
Ethane	0.62	*a*-Pinene	4.60
2-Ethyl-1-Butene	2.13	*b*-Pinene	4.60
Ethylbenzene	4.73	Propane	0.31
Ethylene	0.62	*n*-Propylbenzene	4.60
m-Ethyltoluene	4.60	Propylene	0.31
o-Ethyltoluene	4.60	Propyne	0.31
p-Ethyltoluene	4.60	Styrene	4.73
n-Heptane	3.72	Toluene	3.72
1-Heptene	3.72	*n*-Tridecane	4.60
n-Hexane	2.13	1-Tridecene	4.60
1-Hexene	2.13	1,2,3-Trimethylbenzene	4.60
cis-2-Hexene	2.13	1,2,4-Trimethylbenzene	4.60
trans-2-Hexene	2.13	1,3,5-Trimethylbenzene	4.60
Isobutane	0.20	2,2,3-Trimethylpentane	4.73
Isobutene/1-Butene	0.20	2,2,4-Trimethylpentane	4.73
Isopentane	0.37	2,3,4-Trimethylpentane	4.73
Isoprene	0.37	*n*-Undecane	4.60
Isopropylbenzene	4.60	1-Undecene	4.60
2-Methyl-1-Butene	0.37	*m,p*-Xylene	4.73
2-Methyl-2-Butene	0.37	*o*-Xylene	4.73

Reference: FR, 1984.

Table 2-6
VOC Detection Limits

Compound	Detection Limit (ppbv)
Acetylene	0.10
Benzene	0.07
Bromochloromethane	0.09
Bromodichloromethane	0.05
Bromoform	0.15
Bromomethane	0.14
1,3-Butadiene	0.09
Carbon tetrachloride	0.05
Chlorobenzene	0.07
Chloroethane	0.06
Chloroform	0.06
Chloromethane	0.13
Chloroprene	0.10
Dibromochloromethane	0.05
m-Dichlorobenzene	0.15
o-Dichlorobenzene	0.16
p-Dichlorobenzene	0.13
1,1-Dichloroethane	0.06
1,2-Dichloroethane	0.26
trans-1,2-Dichloroethylene	0.22
1,2-Dichloropropane	0.04
cis-1,3-Dichloropropylene	0.05
trans-1,3-Dichloropropylene	0.08
Ethylbenzene	0.12
Methylene chloride	0.09
n-Octane	0.21
Propylene	0.10
Styrene	0.10
1,1,2,2-Tetrachloroethane	0.16
Tetrachloroethylene	0.22
Toluene	0.21
1,1,1-Trichloroethane	0.33
1,1,2-Trichloroethane	0.05
Trichloroethylene	0.04
Vinyl chloride	0.06
m,p-Xylene	0.11
o-Xylene	0.10

Reference: FR, 1984

Table 2-7
Carbonyl Detection Limits

Compound	Detection Limit (ppbv)
Acetaldehyde	0.008
Acetone	0.005
Acrolein	0.010
Benzaldehyde	0.005
Butyr/Isobutyraldehyde	0.009
Crotonaldehyde	0.008
2,5-Dimethylbenzaldehyde	0.010
Formaldehyde	0.006
Hexanaldehyde	0.008
Isovaleraldehyde	0.020
Propionaldehyde	0.004
Tolualdehydes	0.019
Valeraldehyde	0.013

Note: The carbonyl detection limit varies with the volume of ambient air drawn through the sampling apparatus. The detection limits in this table are based on a sample volume of 1,000 liters of ambient air.

Reference: FR, 1984.

3.0 Data Analysis Methodology

This section presents the methodology used to summarize and interpret the 1997 NMOC/SNMOC ambient air monitoring data for this report, including both data analysis techniques that have been used in previous NMOC/SNMOC reports (e.g., data summary parameters) and techniques that have not been used previously (e.g., comparisons between NMOC/SNMOC measurements and ambient air concentrations of ozone). In general, three categories of analyses have been used to identify notable data trends and patterns:

- *Data summary parameters*, to provide a succinct overview of the monitoring data (see Section 3.1)
- *Analyses and interpretations*, to identify significant spatial variations, temporal variations, and statistical correlations (see Section 3.2)
- *Data quality parameters*, to comment on the validity of the interpretations (see Section 3.3)

The remainder of this section describes these three categories of data analysis methodology. Sections 4 through 7 then use this methodology to thoroughly characterize the NMOC, SNMOC, VOC, and carbonyl monitoring data, respectively.

3.1 Data Summary Parameters

Since previous NMOC/SNMOC reports describe in detail the four parameters that have been used to summarize this program's monitoring data, the following discussion briefly reviews how these parameters efficiently characterize the results of extensive ambient air monitoring studies. The four summary parameters—prevalence, concentration range, central tendency, and variability—are used to provide a complete but succinct overview of the nearly 50,000 ambient air concentrations that were measured during the 1997 NMOC/SNMOC program. Sections 4 through 7 present these summary parameters in a series of tables, one for each monitoring location for each category of compounds. Brief definitions and descriptions of these summary parameters follow:

- *Prevalence* of air monitoring data refers to the frequency with which compounds, or groups of compounds, are detected; it is typically expressed as a percentage (e.g., a compound detected in 15 of 20 samples has a prevalence of 75 percent). Compounds that are never detected have a prevalence of 0 percent, and those that are always detected have a prevalence of 100 percent. Because sampling and analytical methods cannot reliably quantify concentrations of compounds at levels near their detection limits, summary statistics for compounds with low prevalence values should be interpreted with caution. Compounds with a prevalence of zero may still be present in ambient air, but at levels below the sensitivity of the corresponding sampling and analytical methods.

- The *concentration range* of ambient air monitoring data refers to the span of measured concentrations, from lowest to highest. Because the NMOC/SNMOC program only measures 3-hour average concentrations during the summer months, the lowest and highest concentrations may not be comparable to those from monitoring programs with different sampling durations and schedules. Ambient air concentrations of hydrocarbons, VOC, and carbonyls may rise to higher levels during other times of the day and other times of the year.

- The *central tendency* of air monitoring data gives a sense of the long-term average ambient air concentrations. This report uses medians, arithmetic means, and geometric means to characterize the central tendencies of concentration distributions. Previous NMOC/SNMOC reports have explained the differences between these measures of central tendency. The central tendencies in this report are based only on ambient air concentrations sampled during the summer of 1997. Because ambient air concentrations of compounds may increase or decrease during the colder winter months, the central tendencies presented in this report may not be comparable to those calculated from *annual* air monitoring efforts.

- *Variability* in ambient air monitoring data indicates the extent to which concentrations of certain compounds fluctuate with respect to the central tendency. This report characterizes data variability using standard deviations and coefficients of variation. The standard deviation is a commonly used statistical parameter that provides an absolute indicator of variability, and the coefficient of variation (calculated by dividing the standard deviation by the arithmetic mean) offers a relative indicator of variability. The coefficient of variation is better suited for comparing variability across data distributions for different sites and compounds.

All data summary parameters presented in this report were calculated from a database of processed 1997 NMOC/SNMOC ambient air monitoring data. This database was generated by

manipulating the raw monitoring data to assign all nondetect observations a concentration equal to one-half the corresponding detection limit. The results of all duplicate sampling events and replicate laboratory analyses were averaged so that only one concentration was considered for each compound for each sampling date. These data processing steps are identical to those described in the 1996 NMOC/SNMOC final report.

3.2 Analyses and Interpretations

To supplement the trends indicated by the data summary parameters, Sections 4 through 7 also include a series of analyses and interpretations that attempt to explain why measured levels of air pollution vary from one monitoring location to the next and from one month to the next. These spatial and temporal variations may ultimately provide state and local agencies greater insight into the factors that affect ozone formation processes most significantly. The following subsections describe the methods used to identify and interpret the spatial and temporal variations in the 1997 NMOC/SNMOC monitoring results.

3.2.1 Composition of Air Samples

Like the *magnitude* of air pollution, the *composition* varies from one location to the next. The following discussion explains how the composition of air pollution will be used to understand and appreciate the sources that contribute to levels of air pollution:

- *Composition of alkanes, olefins, and aromatics.* This analysis divides the overall SNMOC monitoring results into contributions from alkanes, olefins, and aromatic compounds. Such analyses are useful to understanding ozone formation processes, because current research shows that olefinic and aromatic compounds are significantly more reactive in air than most alkanes (Carter, 1994). Knowing the relative abundances of these three classes of hydrocarbons, state environmental agencies can better focus air pollution prevention policies specifically on compound categories that have the greatest impact on air quality. This data analysis approach is used only in Section 5, because the SNMOC analytical method quantifies concentrations of the most hydrocarbon compounds.

- *Ratios of ambient air concentrations of selected aromatic hydrocarbons.* This analysis compares ratios of concentrations of benzene, toluene, and xylene

isomers to concentrations of ethylbenzene. These aromatic compounds are commonly referred to as BTEX compounds (i.e., benzene, toluene, ethylbenzene, and xylene compounds). Previous ambient air monitoring studies of motor vehicle emissions have reported relatively constant concentration ratios for these compounds (Conner, Lonneman, Seila, 1995). In this report, BTEX ratios are used as an indicator of the extent to which emissions from motor vehicles affect ambient air concentrations at the NMOC/SNMOC monitoring stations. Only Sections 5 and 6 use this data analysis approach, since only the SNMOC and VOC analytical methods can quantify concentrations of individual BTEX compounds.

When evaluating the composition of the SNMOC and VOC samples, it is important to note that "composition" indicates only the relative magnitude of a given compound among the 80 target SNMOC or the 38 target VOC. Because these analytical methods cannot quantify concentrations of many other common air pollutants (e.g., inorganic acids), the "compositions" in these analyses are only expressed relative to the list of target compounds and are not necessarily equivalent to actual compositions of ambient air.

3.2.2 Statistical Analyses

Many of the data analyses in Sections 4 through 6 attempt to quantify the extent to which two parameters are related to each other. For example, Section 4 describes how wind speed and temperature appear to affect concentrations of total NMOC. The following discussion describes how Sections 4 through 6 use Pearson correlation coefficients to measure the degree of correlation between two variables.[1]

By definition, Pearson correlation coefficients always lie between -1 and 1. A correlation coefficient of -1 indicates a perfectly "negative" relationship, and a correlation coefficient of 1 indicates a perfectly "positive" relationship. Negative relationships occur when increases in the magnitude of one variable are associated with proportionate decreases in the magnitude of the other variable, and vice versa. On the other hand, positive relationships occur when the magnitudes of two variables both increase and both decrease proportionately. Data that are

[1] Pearson correlation coefficients are commonly used as a measure of correlation. Details regarding their calculation can be found in most introductory statistics texts.

completely uncorrelated have Pearson correlation coefficients of zero. Therefore, the sign (positive or negative) and the magnitude of Pearson correlation coefficients indicate the direction and strength, respectively, of data correlations.

Pearson correlation coefficients characterize the extent to which variables are related *in a linear fashion*, and the coefficients calculated in this report are only for *pairwise* correlations (i.e., correlations between two variables). As a result, the statistical analyses do not characterize potential nonlinear or multivariate relationships that may be relevant to ozone formation processes. Nonetheless, Sections 4 through 6 use the correlation coefficients to draw qualitative conclusions regarding how different air quality and meteorological parameters relate to each other. Section 7 does not present Pearson correlation coefficients, because too few carbonyl samples were collected to generate statistically significant findings.

3.2.3 Comparison to Selected Meteorological Parameters

Because local meteorological conditions largely determine how rapidly photochemical reactions consume and produce airborne pollutants and how quickly emissions disperse, Sections 4 through 6 analyze how wind speed, wind direction, temperature, relative humidity, and precipitation relate to the NMOC, SNMOC, and VOC air monitoring data. These sections use Pearson correlation coefficients and plot distributions to provide insight into which variables are most closely linked to air quality data. For each monitoring station, meteorological data were obtained from the nearest meteorological station that submits daily summary reports to the National Climatic Data Center. Table 3-1 lists the source of meteorological data for each of the 1997 NMOC/SNMOC ambient air monitoring stations.

This report does not completely characterize how meteorological parameters relate to air quality. More sophisticated analyses, such as detailed atmospheric dispersion modeling for every monitoring location, are beyond the scope of the current work. Further, this report does not address other meteorological parameters (such as mixing heights and upper atmosphere wind patterns) that are known to affect *long-range* transport of ozone or ozone precursors. These

additional parameters were not readily available for every monitoring station at the writing of this report.

3.2.4 Comparison to Concentrations of Ozone and Nitrogen Oxides (NO_x)

EPA and many research scientists have long known that a complex series of photochemical reactions involving airborne hydrocarbons and NO_x form ozone in the stratosphere (i.e., the lowest layer of the atmosphere, or the air that humans breathe) (USEPA, 1998). To provide state environmental agencies greater insight into the relationship between ambient air concentrations of hydrocarbons, ozone, and NO_x, Sections 4 and 5 of this report use two data analysis techniques to assess concentrations of these compounds:

- First, the sections present matrices of Pearson correlation coefficients for the measured NMOC or SNMOC concentrations, daily peak NO_x concentrations, and daily peak ozone concentrations. These calculations were performed to determine whether ambient air concentrations of the different pollutants tend to rise and fall on the same days. Readers should note that Sections 4 and 5 discuss important limitations to these analyses.

- Second, the sections compare peak concentrations of ozone to ratios of NMOC to NO_x concentrations. Previous studies have shown that NMOC:NO_x ratios may correlate better with maximum ozone concentrations than do the concentrations of either NMOC or NO_x (USEPA, 1996). These studies also have used analyses of these ratios, along with several other corroborative analyses, to predict the effectiveness of hydrocarbon controls and NO_x controls at reducing levels of ozone.

Although general conclusions are drawn from the analyses described above, readers should note that ozone formation processes are extremely complex, and much more sophisticated analyses are needed to fully understand photochemical smog in urban areas. Examples of such additional analyses include rigorous regional photochemical modeling efforts, compilation of comprehensive emissions inventories, and evaluations of long-range transport and vertical mixing mechanisms.

Table 3-1 lists the sources of ozone and NO_x monitoring data for the analyses in Sections 4 and 5. For each NMOC/SNMOC monitoring station, this report considers ozone and NO_x monitoring data from the closest ambient air monitoring station that submitted 1997 air quality results to EPA's AIRS database. For some sites (CAMS5, CAMS13, and DLTX), ozone and NO_x monitoring data were collected at exactly the same location as the NMOC/SNMOC data. For the other sites (JUMX, LINY, and NWNJ), ozone or NO_x monitoring data from nearby stations are used in the data analyses, because these pollutants either were not measured at the NMOC/SNMOC monitoring station or their monitoring results are not currently listed in AIRS.

Note: All ozone and NO_x monitoring data considered in this report were collected under programs other than the NMOC/SNMOC Monitoring Program. The precision and accuracy of these ozone and NO_x monitoring data are not known.

3.2.5 Temporal Variations

Because the NMOC/SNMOC monitoring stations sample ambient air only from 6:00 to 9:00 a.m. during the summer months, the monitoring data in this report are insufficient to evaluate diurnal or seasonal changes in air quality. Nonetheless, these data are useful for considering changes in air quality from one summer month to the next. Further, since several of the current monitoring stations participated in previous NMOC/SNMOC monitoring programs, the monitoring data also can be used to evaluate how air quality changes on longer time scales. Sections 4 through 6 focus strictly on monthly variations in measured air concentrations. Section 7 does not consider any temporal variations, however, because stations do not collect enough carbonyl samples to conduct a statistically meaningful analysis of monthly variations.

Although this report will not consider annual variations, readers should note that the final report for the 1998 NMOC/SNMOC monitoring program will focus almost exclusively on analyzing temporal variations—particularly annual variations—for every monitoring location, and the report will place lesser emphasis on evaluating spatial variations. Such analyses should

help participating agencies assess the effectiveness of relevant pollution control strategies on long-term changes in air quality.

3.3 Data Quality Parameters

To characterize the quality of the 1997 NMOC/SNMOC monitoring measurements, Sections 4 through 7 review the completeness, precision, and accuracy of the corresponding sampling and analytical methods. Because the final report for the 1996 program thoroughly describes these data quality parameters, the following paragraphs only define them and briefly discuss their significance.

3.3.1 Completeness

The *completeness* of ambient air monitoring programs refers to the fraction of attempted sampling events that yields valid results (i.e., either quantified concentrations or nondetects). Due to a variety of sampling or analytical errors, not all the samples for the various monitoring options were collected and analyzed as scheduled. Although completeness data do not quantify the precision or accuracy of the monitoring methods, they do indicate how efficiently samples were collected and handled during the program. Coordinators of the SNMOC monitoring program generally strive for program completeness greater than 90 percent. Sections 4 through 6 present completeness data for NMOC, SNMOC, and VOC sampling; Section 7 does not present completeness results because the carbonyl monitoring option involves collecting and analyzing air samples on fewer than 10 sampling dates.

3.3.2 Precision

In the context of ambient air monitoring, *precision* refers to the agreement between independent air sampling measurements performed according to identical protocols and procedures. More specifically, precision measures the variability observed upon duplicate collection or repeated analysis of ambient air samples. This report compares concentrations from replicate analyses to quantify "analytical precision" and concentrations from duplicate samples to quantify "sampling precision." For any pair of duplicate samples or replicate analyses, precision

is quantified by computing a relative percent difference (RPD), which is defined and described in detail in previous NMOC/SNMOC reports. As the earlier reports explain, highly precise ambient air monitoring studies have lower RPDs, while highly imprecise or variable studies have higher RPDs. Analytical methods for most ambient air monitoring methods should have RPDs of 25 percent or less. Sections 4 through 7 present precision data for the four corresponding monitoring methods.

3.3.3 Accuracy

Accuracy of monitoring programs indicates the extent to which measured concentrations represent their corresponding "true" or "actual" values. Highly accurate air sampling and analytical methods generally measure concentrations in very close agreement to actual ambient levels. Because no external audit samples were provided during the 1997 NMOC/SNMOC program, it is impossible to quantify the accuracy of the air monitoring data. However, since all field sampling staff and laboratory analysts strictly followed established quality control and quality assurance guidelines, it is believed that all samples were collected and analyzed according to the specifications of the respective monitoring methods.

Table 3-1
Sources of Meteorological Data, Ozone Data, and NO_x Data for the 1997 NMOC/SNMOC Statistical Analyses

NMOC/SNMOC Monitoring Station	Location of Nearest NCDC Meteorological Station	Location of Nearest Ozone Monitoring Station	Location of Nearest NO_x Monitoring Station
Dallas, TX (1) (CAMS5)	Dallas–Fort Worth (DFW) Regional Airport	TNRCC ozone and NO_x monitors collocated at the CAMS5 station	
Fort Worth, TX (CAMS13)		TNRCC ozone and NO_x monitors collocated at the CAMS13 station	
Dallas, TX (2) (DLTX)		TNRCC ozone and NO_x monitors collocated at the DLTX station	
Juarez, Mexico (JUMX)	El Paso International Airport	TNRCC ozone and NO_x monitors in the Ascarate Park in El Paso, Texas (AIRS monitor code: 48-141-0028)	
Long Island, NY (LINY)	John F. Kennedy International Airport	NYSDEC ozone monitor at the Babylon monitoring station (AIRS monitor code: 36-103-0001)	NYSDEC NO_x monitor collocated at the LINY station
Newark, NJ (NWNJ)	Newark International Airport	NJDEP ozone monitor collocated at the NWNJ station	NJDEP NO_x monitor at the East Orange Fire House (AIRS monitor code: 34-013-1003)

Note: Only ozone and NO_x monitoring stations that report to EPA's AIRS database were considered for this report. Monitors in Mexico and monitors that had not yet reported 1997 data to AIRS were not considered.

4.0 Analysis of Total NMOC Monitoring Results

This section summarizes and interprets the total NMOC monitoring data collected at Long Island and Newark during the 1997 NMOC/SNMOC program. As Section 2.4 explained, the total NMOC sampling and analytical method detects a wide range of organic compounds (e.g., alkanes, olefins, aromatics, oxygenates, halogenated hydrocarbons), thus measuring overall levels of the air pollution that is known to affect ozone formation processes. This method does not characterize *total* levels of air pollution, because the method does not detect common air pollutants such as inorganic acids, particulate matter, and heavier organic compounds. The following discussion uses the data analysis methodology presented in Section 3 to identify noteworthy trends in the NMOC monitoring data. For quick reference, Section 4.4 reviews the most significant findings.

Note: The SNMOC analytical method also measures the concentration of total NMOC. Section 5.1 summarizes the total NMOC concentrations that were measured at the Dallas, Fort Worth, and Juarez monitoring stations by the SNMOC analytical method.

4.1 Data Summary Tables

Using the data summary parameters discussed in Section 3.1, Table 4-1 summarizes the total NMOC monitoring results collected at the Long Island and Newark monitoring stations. The table also presents quartiles of the NMOC concentration distributions measured at these stations. An overview of these summary parameters follows:

- *Prevalence.* Every total NMOC concentration measured during the 1997 program was at least an order of magnitude greater than the estimated method detection limit, 0.005 ppmC (or 5 ppbC). Because measurement variability of air monitoring methods is typically lowest for concentrations significantly greater than their detection limits, the NMOC results are expected to be highly precise. Section 4.3 confirms this hypothesis.

- *Concentration range.* According to Table 4-1, NMOC concentrations at Long Island during the 1997 program ranged from 0.054 ppmC to 0.898 ppmC, and at Newark from 0.086 ppmC to 2.139 ppmC. The quartiles of the concentration

distributions suggest that the entire distribution at Newark was roughly twice as high as that for Long Island (i.e., the 25th, 50th, and 75th percentile concentrations for the two sites all differed by approximately a factor of two). At both sites, the maximum concentration is at least 30 percent higher than the second highest concentration, suggesting that the peak concentrations shown in Table 4-1 probably represent air pollution "episodes," as opposed to regularly occurring events. Only three NMOC concentrations at Newark—2.139 ppmC on August 19, 1.404 ppmC on June 25, and 1.054 on September 17—exceeded the maximum concentration measured at Long Island.

- *Central tendency.* Consistent with findings from previous NMOC/SNMOC reports, the central tendency NMOC concentration measured at Long Island is notably lower than that measured at Newark. Further, NMOC concentrations at Long Island during the 1997 program (geometric mean of 0.219 ppmC) were nearly 25 percent lower than the levels reported during the 1996 program (geometric mean of 0.290 ppmC). Similarly, levels of NMOC at Newark have decreased by 7 percent over the same time frame—from 0.389 ppmC in 1996 to 0.360 ppmC in 1997. As Section 3 noted, the final report for the 1998 NMOC/SNMOC program will include a much more detailed analysis of long-term changes in air quality.

- *Variability.* Consistent with findings from previous NMOC/SNMOC monitoring efforts, the standard deviations of the measured NMOC concentrations at both Long Island and Newark are nearly two thirds of their corresponding arithmetic mean concentrations. Variability of NMOC concentrations at Long Island and Newark is relatively similar, as indicated by the similarity of the coefficients of variation.

4.2 Analyses and Interpretations

To provide greater insight into the trends and patterns among the total NMOC concentrations at Long Island and Newark, the following sections compare the measured levels of NMOC to selected meteorological conditions (Section 4.2.1), to concentrations of ozone and NO_x (Section 4.2.2), and to the month of the monitoring program (Section 4.2.3).

4.2.1 Comparison to Selected Meteorological Conditions

Sections 4.2.1.1 and 4.2.1.2 assess how local humidity, precipitation, temperature, wind direction, and wind speed relate to the NMOC concentrations measured at Long Island and Newark. These sections compare 3-hour average observations of meteorological parameters

measured between 6:00 and 9:00 a.m. to the corresponding air quality measurements. As Table 3-1 notes, meteorological data from the John F. Kennedy International Airport and the Newark International Airport were considered for the Long Island and Newark monitoring stations, respectively. Due to the close proximity of these meteorological stations to the NMOC/SNMOC monitoring stations, the meteorological data are believed to be representative of conditions at the LINY and NWNJ stations.

4.2.1.1 Comparisons for Long Island, NY

Two different graphical techniques were used to compare meteorological conditions to NMOC concentrations: Figure 4-1 presents the average NMOC concentrations that were observed during different meteorological conditions; and Figure 4-2 presents a scatter plot showing the wind direction and NMOC concentration for every valid sampling date. Interpretations of these figures follow:

- *Humidity.* According to Figure 4-1, NMOC concentrations on mornings when the relative humidity was less than 60 percent were, on average, nearly 1.5 times higher than NMOC concentrations on mornings with relative humidity greater than or equal to 60 percent. This finding, which was observed to a certain extent at every monitoring station in the 1997 program, suggests that levels of hydrocarbon air pollution during the morning hours at LINY are relatively lower on more humid days. The reason for this trend is not known, but may be related to the fact that some fraction of airborne organic compounds partition into aerosols, particularly on humid days. These aerosols, along with any dissolved hydrocarbons, may then be removed from ambient air by deposition. Another possible explanation is that photochemical reactivity, which generally consumes airborne hydrocarbons, may be higher on humid days, possibly due to higher concentrations of hydroxyl radicals. Further research is need to confirm the reason (or reasons) why the measured levels of NMOC are lowest on the most humid days.

- *Precipitation.* To evaluate the effects of precipitation, Figure 4-1 compares the average NMOC concentration for samples collected during periods with at least 0.1 inch of rain to the average NMOC concentration collected during periods with no measurable rain. The figure shows that NMOC concentrations measured during precipitation events were roughly three times lower than those measured during periods of no precipitation. This finding is consistent with "wet

deposition" algorithms in EPA-approved dispersion models, which predict that precipitation events remove a portion of airborne gases and particles from ambient air (USEPA, 1995). It should be noted that measurable precipitation occurred during only 4 of the 81 valid sampling events at LINY, which limits the statistical significance of the graph shown in Figure 4-1.

- *Temperature.* Although Figure 4-1 suggests that NMOC concentrations measured on relatively warm mornings tend to be higher than those measured on cooler mornings, the 1996 NMOC/SNMOC final report found NMOC concentrations at LINY to be completely uncorrelated with temperature. Therefore, it is unclear whether concentrations of hydrocarbons at LINY always increase with temperature, as the 1997 NMOC/SNMOC data suggest.

- *Wind Speed.* Figure 4-1 indicates that NMOC concentrations measured during periods with average wind speeds greater than 12 miles per hour (mph) are approximately 1.5 times lower than NMOC concentrations measured during all other times. This observation also is consistent with EPA-approved atmospheric dispersion algorithms, which suggest that pollutants disperse more efficiently as wind speeds increase (USEPA, 1995).

- *Wind Direction.* The scatter plot in Figure 4-2 shows how measured NMOC concentrations varied with wind direction. Results from nine valid sample dates are not displayed in the figure, because winds were variable while these samples were collected. Since relatively high and relatively low NMOC concentrations are observed for most wind directions, it is unclear whether higher levels of airborne hydrocarbons tend to be linked to winds blowing from any single direction. The absence of strong correlations between wind direction and NMOC concentration suggests that many different sources located around the LINY monitoring station, as opposed to one or a few sources, most likely contribute to the measured concentrations. This hypothesis is consistent with a general finding of the 1996 NMOC/SNMOC report: ambient air concentrations of NMOC appear to be linked more closely to emissions from motor vehicles than to emissions from industrial sources.

Although the previous analyses provide some insight into how selected meteorological conditions relate to levels of air pollution, it is important to note that NMOC concentrations are a measure of the overall level of air pollution and, therefore, are affected by numerous factors in addition to those considered above. The analyses presented later in this section attempt to provide a more complete characterization of the NMOC monitoring data collected at LINY.

4.2.1.2 Comparisons for Newark, NJ

Following the same approach as used for the LINY monitoring station, Figures 4-3 and 4-4 compare NMOC concentrations from the NWNJ monitoring station to local meteorological conditions. A summary of the data in these figures follows:

- *Humidity.* Consistent with the findings for Long Island, Figure 4-3 shows that NMOC concentrations measured at Newark tended to be lowest on the most humid days. As noted earlier, the reasons why NMOC concentrations tend to decrease with increasing humidity is not known.

- *Precipitation.* Also consistent with the findings for Long Island, levels of NMOC at Newark were notably lower during rainfall events than during periods of no measurable precipitation. This trend is most likely explained by wet deposition of airborne pollutants. As Section 5.2 describes, this trend was also observed at the four SNMOC air monitoring stations.

- *Temperature.* No trends are apparent from comparing temperature data and NMOC monitoring data at Newark, as shown in Figure 4-3. One notable feature of this figure is the lack of correlation between the two parameters.

- *Wind Speed.* Figure 4-3 clearly indicates that NMOC concentrations in Newark decrease significantly with increasing wind speed. In fact, the average NMOC concentration measured on mornings when wind speeds were greater than 12 mph was roughly 3 times lower than the average NMOC concentration measured when wind speeds were less than or equal to 4 mph. This analysis suggests that higher wind speeds in the Newark area effectively disperse hydrocarbon emissions from local sources.

- *Wind Direction.* According to Figure 4-4, NMOC concentrations ranging from 0.1 ppmC to 0.5 ppmC were detected at the Newark station when winds were blowing from virtually every compass direction. This observation suggests that some sources of NMOC (most likely automobiles) exist all around the NWNJ monitoring station. Figure 4-4 provides some evidence of a relationship between *elevated* concentrations of NMOC and wind direction: almost every NMOC concentration greater than 0.5 ppmC occurred when winds blew either from the north to northeast (i.e., wind directions between 0° and 60°) or from the west to northwest (i.e., wind directions between 270° and 300°). Although this relationship may be explained by certain industrial emissions sources located near the NWNJ monitoring station, comparisons between wind direction and NMOC concentration for previous and future years are needed to confirm that the relationship shown in Figure 4-4 is not anomalous.

4.2.2 Comparison to Concentrations of Ozone and NO_x

Historically, sponsoring agencies have used NMOC monitoring data for a variety of purposes, but typically as inputs to regional ozone forecasting models. Although these models are certainly useful for predicting and characterizing ozone episodes, comparisons of concentrations of NMOC, ozone, and NO_x can also be useful for appreciating the complex interaction between these pollutants. The following discussion reviews selected data correlations (Section 4.2.2.1), compares the highest concentrations of the different pollutants (Section 4.2.2.2), and evaluates the ratios between NMOC and NO_x (Section 4.2.2.3) to offer sponsoring agencies additional insight into air quality within their jurisdictions.

4.2.2.1 Data Correlations

As Section 3.2.2 described, Pearson correlation coefficients characterize the direction and strength of correlations between two sets of data. Table 4-2 lists the coefficients that were calculated to determine the extent to which ambient air concentrations of NMOC, ozone, nitrogen dioxide (NO_2), and NO_x are related. The correlation coefficients suggest that ambient levels of ozone in Newark and Long Island appeared to be most closely related to ambient levels of NO_2 and NO_x, respectively; however, note two important limitations to this finding: (1) None of the correlations was strong enough (i.e., close enough to 1 or -1) to indicate that any single variable was solely responsible for increases and decreases in ozone concentrations—a finding that confirms that many different variables contribute to ozone formation process. (2) The correlation analysis considered only 3-hour average concentrations of NMOC, and maximum daily 1-hour average concentrations of ozone, NO_2, and NO_x. Different correlations may be found by considering different averaging times for these pollutants.

4.2.2.2 Comparison of Highest Concentrations

At the beginning of the 1997 NMOC/SNMOC program, EPA required that maximum hourly concentrations of ozone be lower than the NAAQS of 0.120 ppm. (EPA's standard has since changed to an 8-hour average concentration of ozone of 0.08 ppm.) To determine whether

peak levels of ozone are related to concentrations of any precursor pollutant, Table 4-3 lists, for both Newark and Long Island, the ten dates having the ten highest maximum hourly ozone concentrations, the ten dates having the highest 3-hour average total NMOC concentrations, the ten dates having the highest maximum hourly NO_x concentrations, and the ten dates having the highest maximum hourly NO_2 concentrations. This tabulation was performed to determine whether elevated ozone concentrations tended to occur on dates when other pollutants also peaked[1], and results of this tabulation follow:

- *Long Island.* Of the ten dates with the highest ozone concentrations, three occurred on dates when 3-hour average NMOC concentrations ranked among the top ten, and three also occurred when maximum hourly NO_2 concentrations peaked. None of the dates with highest NO_x concentrations coincided with dates with elevated ozone levels. These observations provide some evidence of a correspondence between peak NMOC and NO_2 concentrations and peak ozone concentrations near the Long Island station. However, neither NMOC or NO_2 peak levels were entirely consistent with the highest ozone concentrations. Thus, NMOC and NO_2 peak concentrations have some similarities to peak ozone concentrations, but neither NMOC nor NO_2 levels *by themselves* indicate when ozone levels will peak.

- *Newark.* As with Long Island, the ten dates with the highest ozone concentrations at Newark did not correspond exactly with dates of relatively high concentrations of NMOC, NO_x, or NO_2. However, peak levels of ozone appeared to be more highly correlated to NO_2 concentrations at Newark than at Long Island. Future data analyses should be conducted to determine the extent to which maximum concentrations of NO_2 at Newark indicate the likelihood of observing a peak ozone concentration.

- *Evidence of regional effects.* Of the ten dates with highest concentrations of ozone at Long Island, eight correspond to dates with highest concentrations at Newark. This correspondence suggests that elevated concentrations of ozone are a regional issue, but these data are insufficient to determine the extent to which ozone transport between the monitoring locations occurs. It should be noted that the dates of peak NMOC, NO_x, and NO_2 concentrations were notably different between the Long Island and Newark monitoring stations.

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[1] This analysis is not redundant with the evaluation of Pearson correlation coefficients, because it is possible for different pollutants to have their peak concentrations highly correlated, without having highly correlated concentrations at lower levels.

Like the analysis of Pearson correlation coefficients, the analysis of peak concentrations of ozone and its precursors offers only a simplified view of a complicated physical and chemical process. Not surprisingly, the analysis of peak concentrations cannot identify patterns among the data that are predictive of ozone concentrations, although this analysis identifies some consistencies between ozone, NMOC, NO_x, and NO_2 monitoring data.

4.2.2.3 Ratios of NMOC to NO_x

Recent EPA studies have reported that the ratio of NMOC concentration to NO_x concentration (hereinafter referred to as NMOC:NO_x) may be a useful indicator of ozone formation potential (USEPA, 1996a; 1996b). More specifically, these studies suggest that airsheds with NMOC:NO_x in the morning less than 5 ppbC/ppb[2] are "hydrocarbon limited," and variations in concentrations of NO_x in these regions are expected to have little effect on ozone formation. On the other hand, airsheds with ratios in the morning greater than 15 ppbC/ppb are "NO_x limited," and changes in levels of hydrocarbons are similarly expected to have little effect on ozone formation (USEPA, 1996a). However, one of the EPA studies lists several limitations to this empirical model and recommends that data analysts not base conclusions and derive ozone control strategies solely on observed levels of NMOC:NO_x (USEPA, 1996b).

To apply this empirical approach to the NMOC monitoring data, NMOC:NO_x was calculated for both Long Island and Newark for every date with valid NMOC and NO_x sampling results. The NO_x concentrations used in this ratio were calculated from hourly NO_x levels (from 6:00 a.m. to 9:00 a.m.) that were reported to AIRS. For Long Island, the average NMOC:NO_x was 4.5 ppbC/ppb, with 75 percent of the daily NMOC:NO_x levels less than 5 ppbC/ppb. For Newark, the average ratio was 6.7 ppbC/ppb, with 50 percent of the daily NMOC:NO_x levels less than 5 ppbC/ppb. These ratios suggest that the airsheds in Long Island and, to a lesser extent, in Newark are both "hydrocarbon limited," implying that these airsheds have excess NO_x and that

[2] Since NO_x concentrations are typically expressed in units of ppb, NMOC:NO_x ratios have units of ppbC/ppb.

the concentration of airborne hydrocarbons is the limiting parameter for the photochemical reactions that form ozone. Despite these empirical predictions, NMOC:NO_x levels at both Long Island and Newark were generally uncorrelated with corresponding maximum ozone concentrations (i.e., peak ozone concentrations were just as likely to occur on days when NMOC:NO_x was relatively high as when the ratio was relatively low).

4.2.3 Temporal Variations

This section evaluates short-term variations in NMOC concentrations. Analyses of such temporal variations can provide insight into seasonal changes in air quality and can verify data trends identified in previous NMOC/SNMOC final reports. As Section 3.2.5 explained, this report does not present long-term temporal variations, because the 1998 NMOC/SNMOC report will focus almost exclusively on this topic.

Figure 4-5 illustrates how the average NMOC concentration measured during the morning hours at both Long Island and Newark varied from one summer month to the next. Although some variations are observed, none of the monthly average concentrations differed from the corresponding arithmetic mean concentration by more than 15 percent. The absence of notable monthly variations contradicts a finding of the 1996 NMOC report: the average NMOC concentration of all samples collected in Long Island in September 1996 was more than twice as high as the average concentration for samples collected in other summer months. The difference in findings probably results from varying meteorological conditions from one year to the next—a hypothesis that can be confirmed by analyzing monthly variations in future NMOC/SNMOC programs.

4.3 Data Quality Parameters

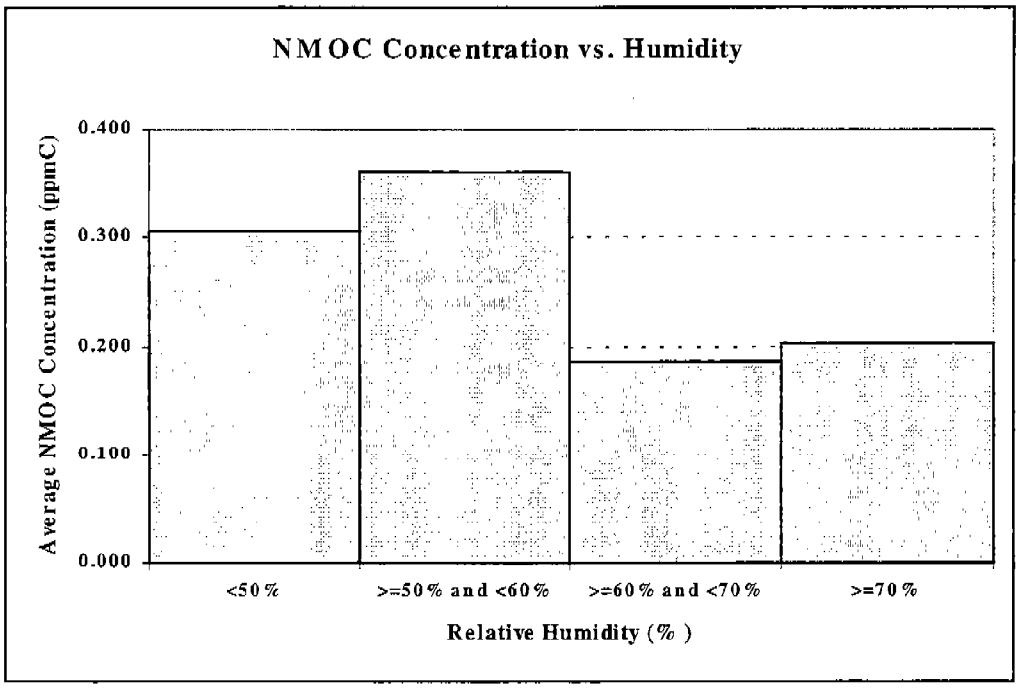
Table 4-4 presents data quality parameters for the 1997 NMOC monitoring data. These data indicate that both stations that collected NMOC samples had completeness fractions greater than 94 percent, with an overall program completeness of 95 percent. These high fractions suggest that efficient management and oversight of the 1997 NMOC monitoring stations helped

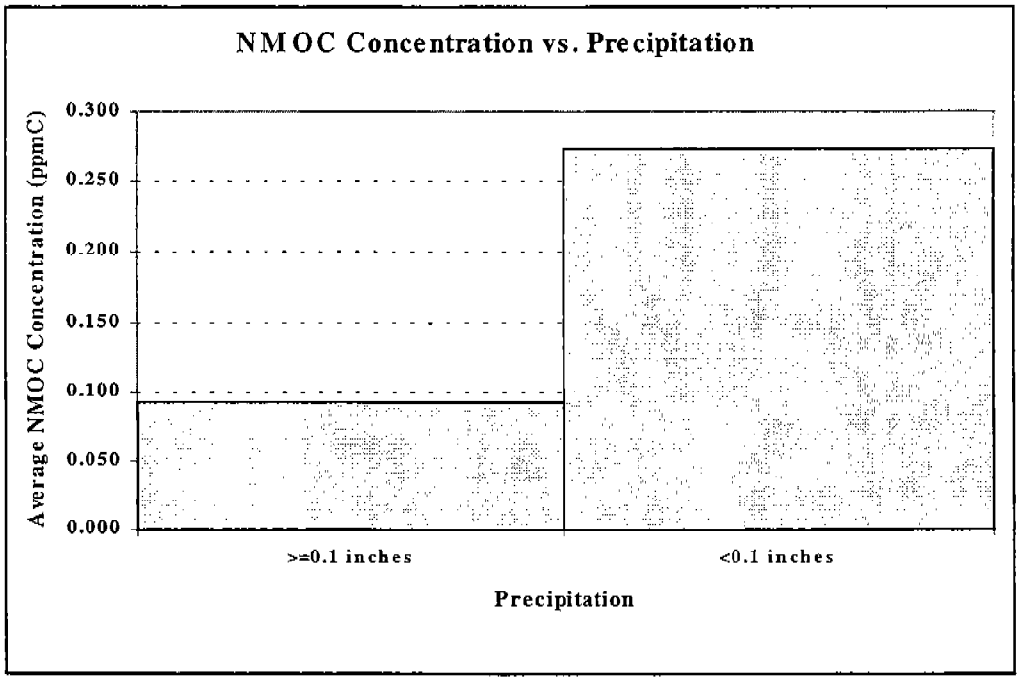
minimize errors in field sampling and laboratory analysis and, therefore, the number of invalid samples. Table 4-4 also shows that NMOC concentrations measured during replicate analyses or from duplicate samples generally did not vary by more than 10 percent, a level indicating that all NMOC samples were collected and analyzed to a high degree of precision. As Section 3 explained, the accuracy of the NMOC measurements cannot be quantified since no audit samples were provided.

4.4 Summary

During the 1997 NMOC/SNMOC program, concentrations of NMOC during the morning hours were consistently lower at the Long Island station (average concentration 0.264 ppmC) than at the Newark station (average concentration 0.430 ppmC), and average NMOC concentrations at both stations decreased from their 1996 levels. At both stations, levels of NMOC tended to be higher on less humid days, during periods of no measurable precipitation, and when wind speeds were relatively low. The reason for the correlation between NMOC concentrations and humidity is not known, and correlations between NMOC concentrations and precipitation and wind speed are consistent with widely accepted atmospheric dispersion modeling algorithms. Low to moderate NMOC concentrations were detected at both Long Island and Newark when winds blew from virtually every compass direction, suggesting that emissions sources throughout the areas—most likely motor vehicles—account for a large fraction of the NMOC that was detected. Although several different analyses were performed to evaluate potential correlations between airborne NMOC, NO_x, NO_2, and ozone, these analyses did not yield consistent results or suggest notable similarities between ambient air concentrations of any pair of these pollutants.

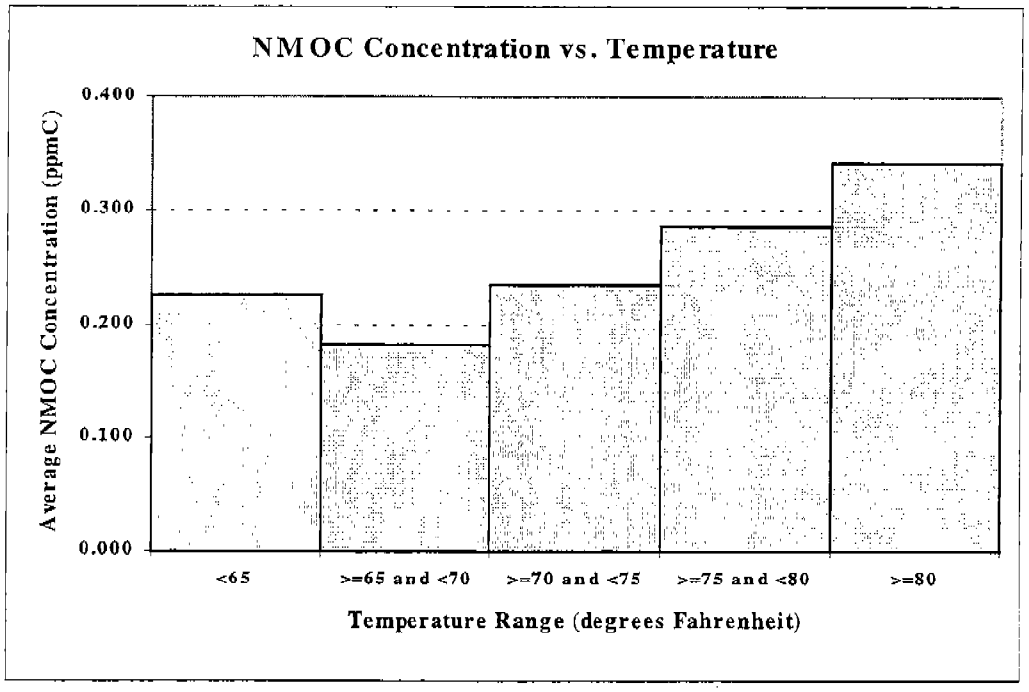
Figure 4-1 (Page 1 of 2)
Comparison of NMOC Concentrations at LINY to Selected Meteorological Parameters

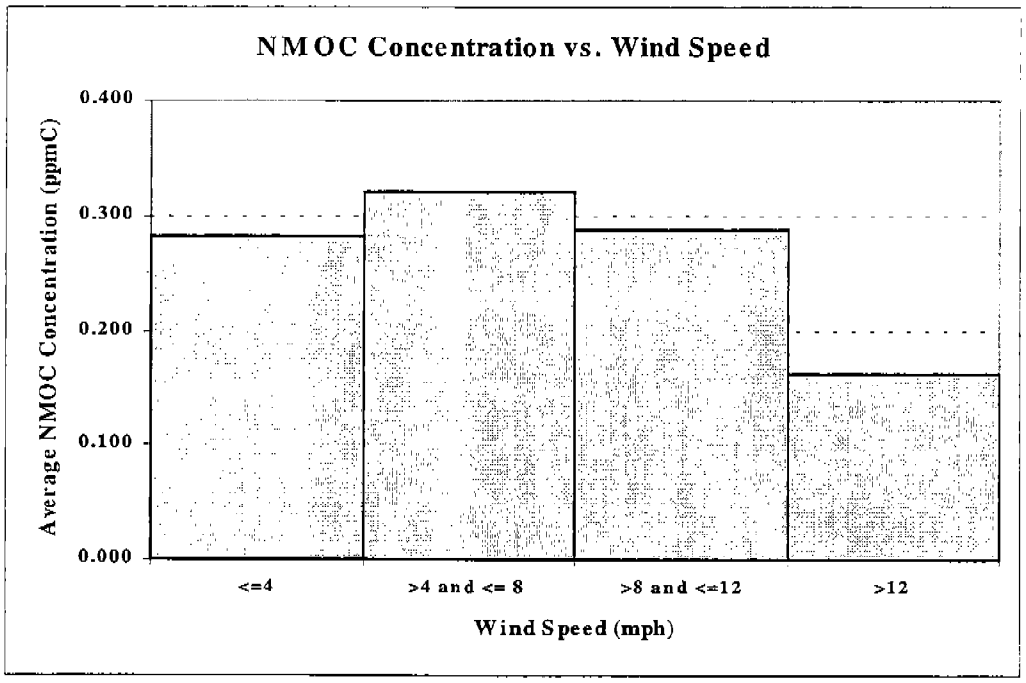




Note: Refer to Section 4.2.1.1 for descriptions and interpretations of these graphs.

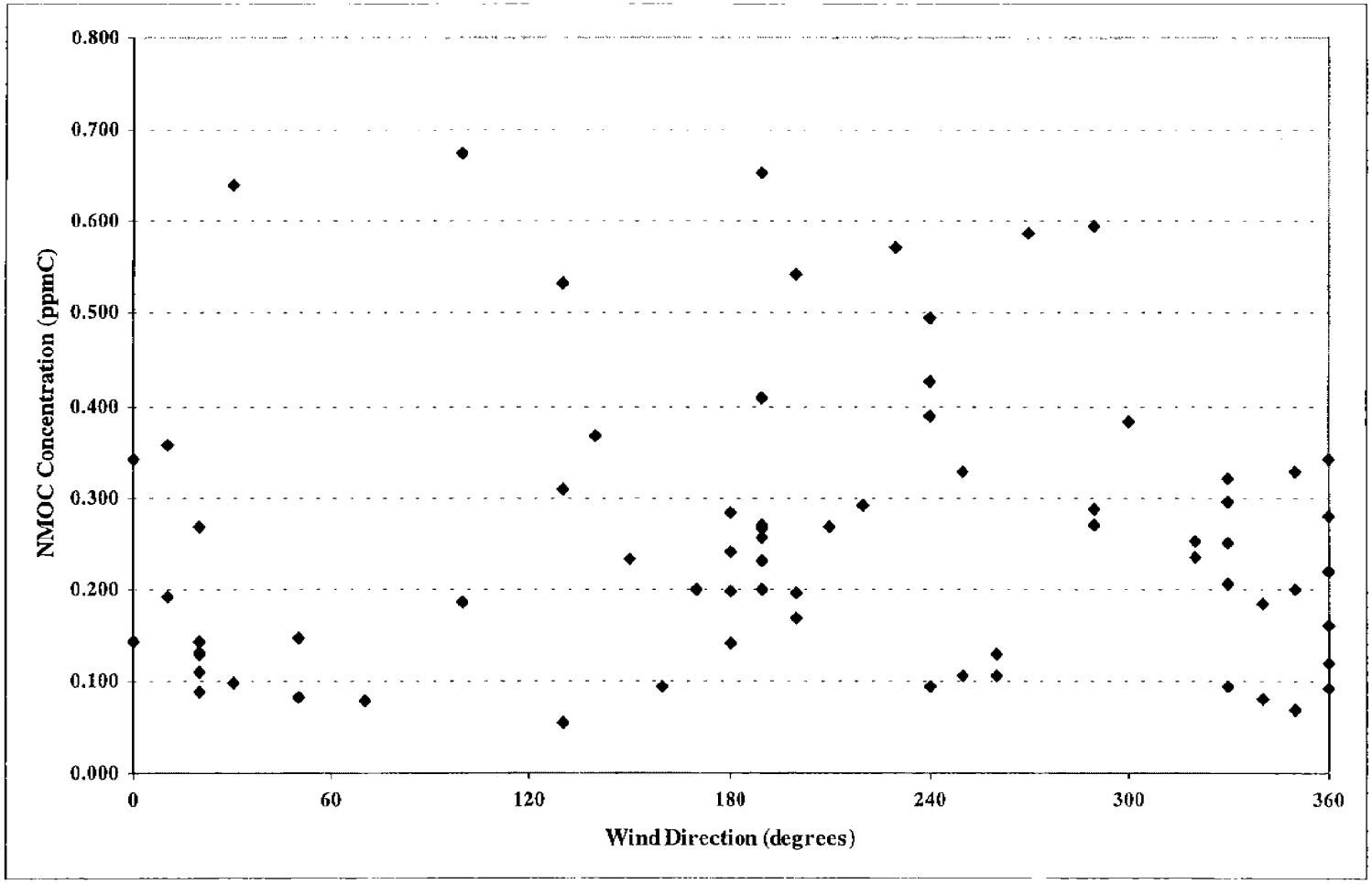
Figure 4-1 (Page 2 of 2)
Comparison of NMOC Concentrations at LINY to Selected Meteorological Parameters





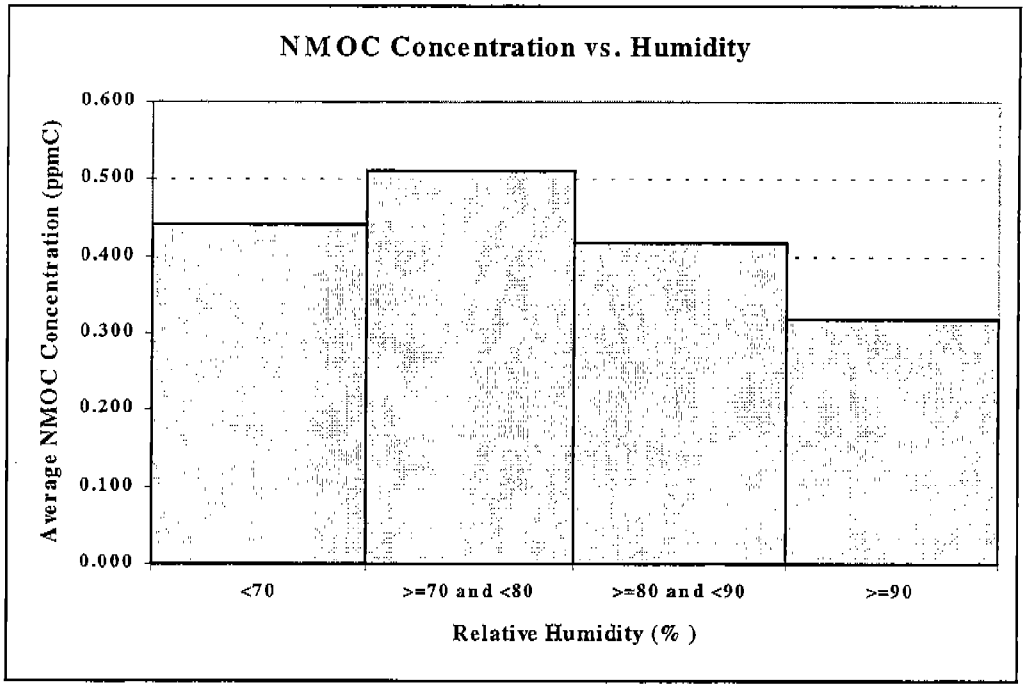
Note: Refer to Section 4.2.1.1 for descriptions and interpretations of these graphs.

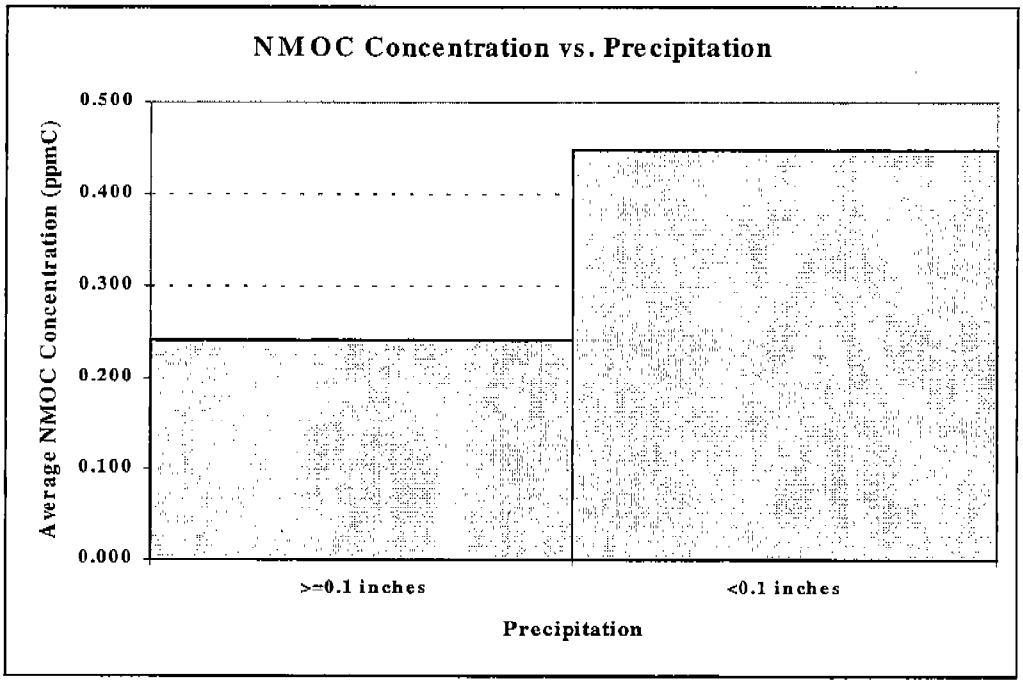
Figure 4-2
Comparison of NMOC Concentration at LINY to Wind Direction



Note: Wind direction is the direction *from which* the wind blows. Refer to Section 4.2.1.1 for descriptions and interpretations of this graph.

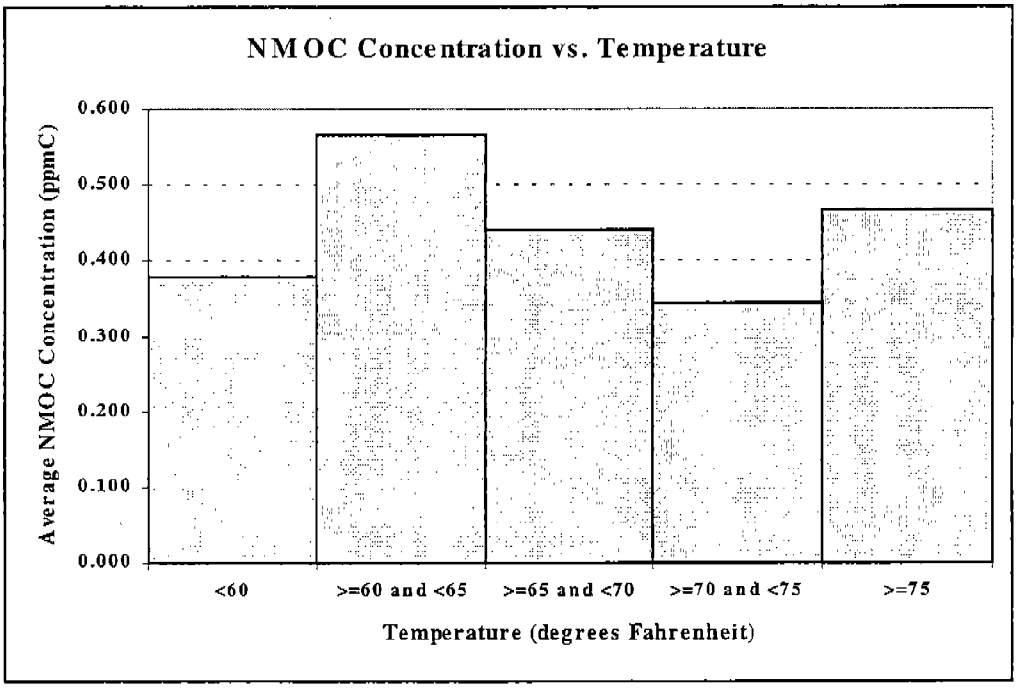
Figure 4-3 (Page 1 of 2)
Comparison of NMOC Concentrations at NWNJ to Selected Meteorological Parameters

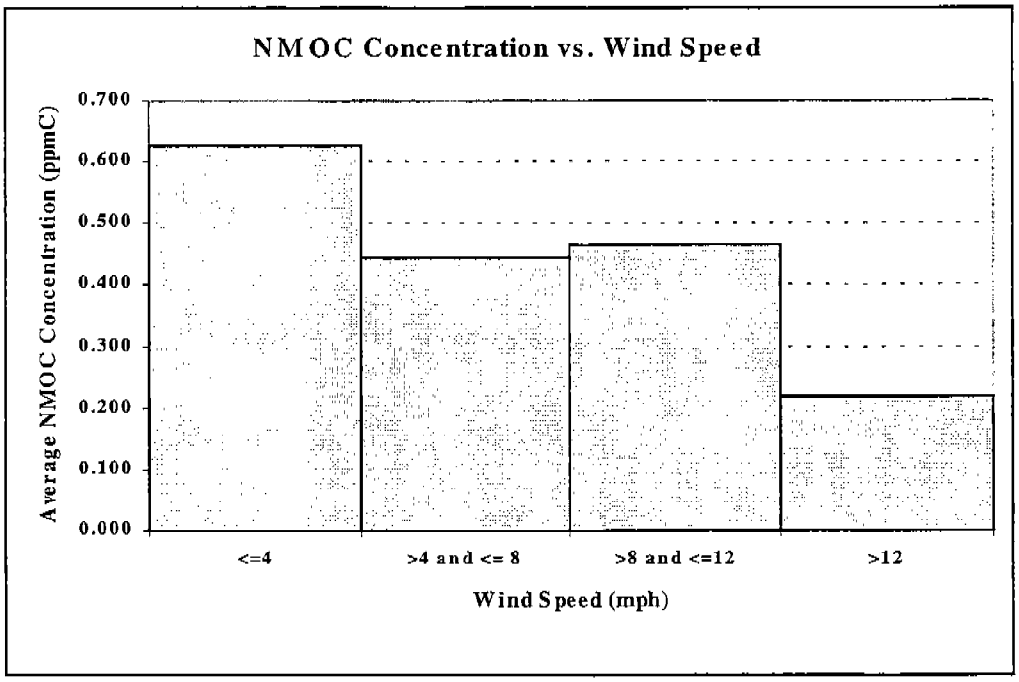




Note: Refer to Section 4.2.1.2 for descriptions and interpretations of these graphs.

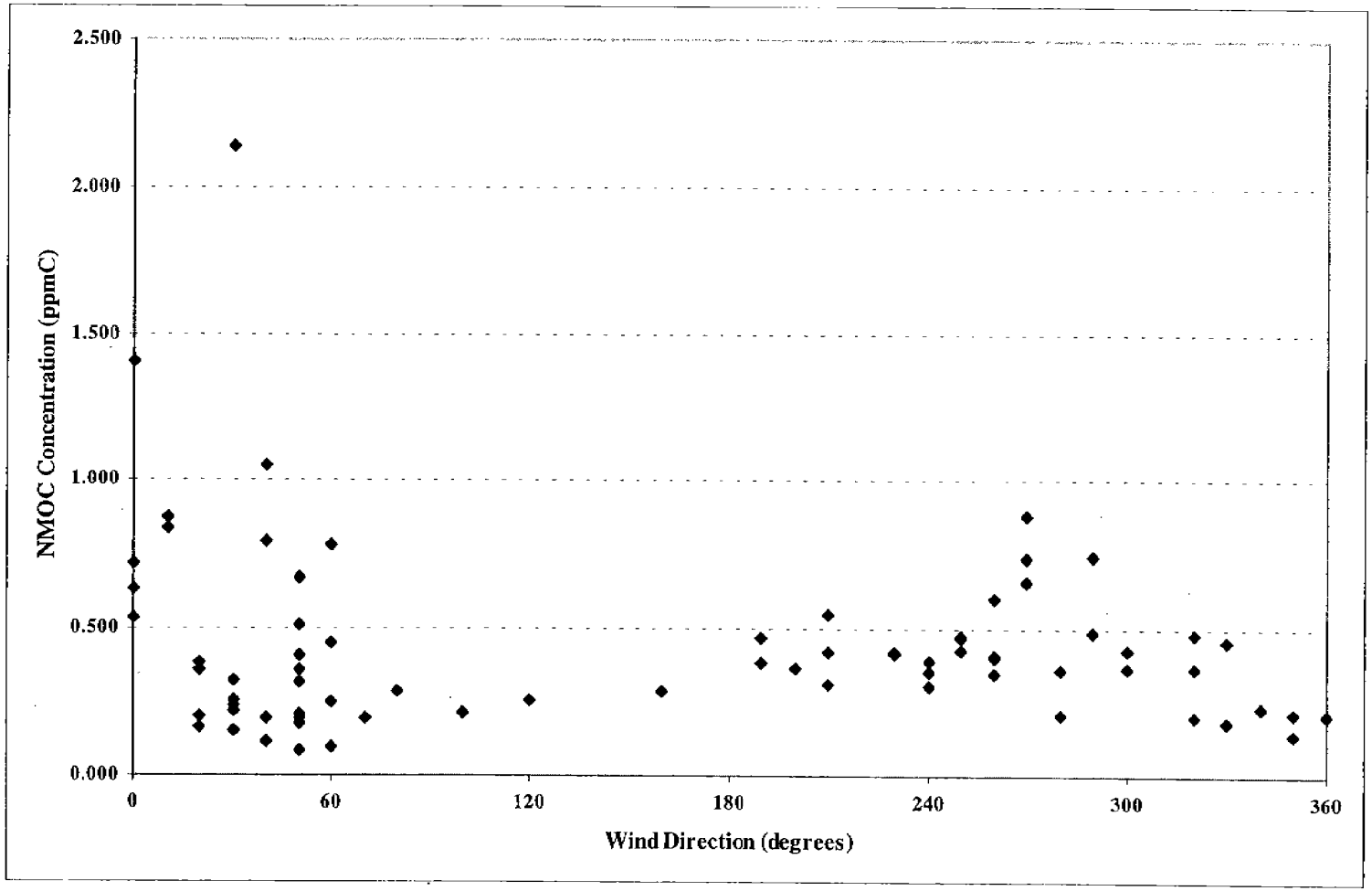
Figure 4-3 (Page 2 of 2)
Comparison of NMOC Concentrations at NWNJ to Selected Meteorological Parameters





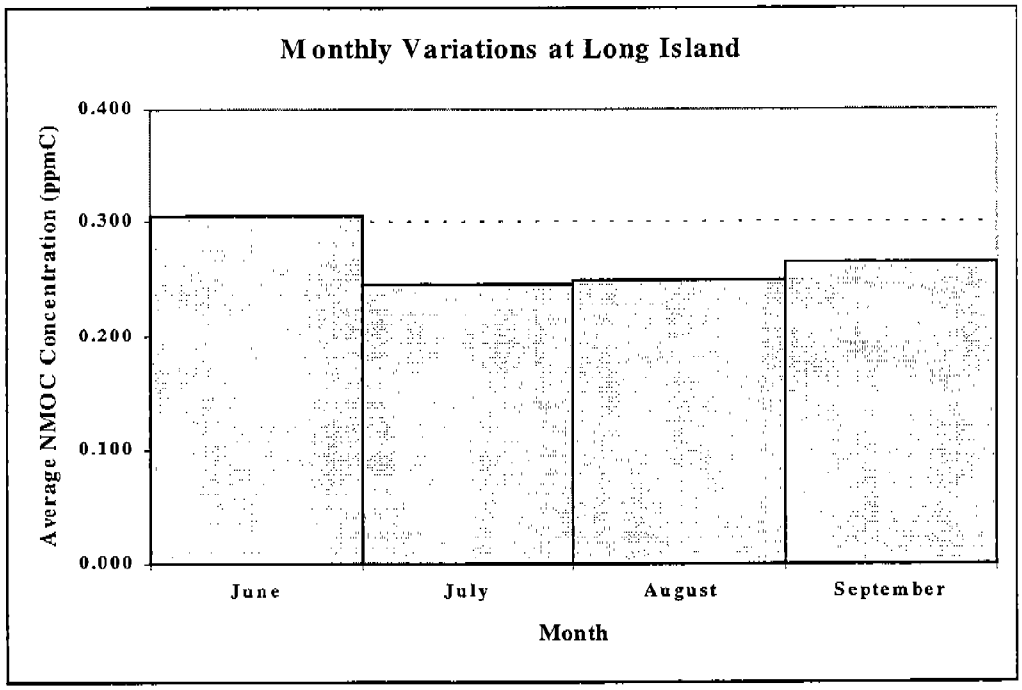
Note: Refer to Section 4.2.1.2 for descriptions and interpretations of these graphs.

Figure 4-4
Comparison of NMOC Concentration at NWNJ to Wind Direction



Note: Wind direction is the direction *from which* the wind blows. Refer to Section 4.2.1.2 for descriptions and interpretations of this graph.

Figure 4-5
Average Monthly NMOC Concentrations Measured from 6:00 a.m. to 9:00 a.m.



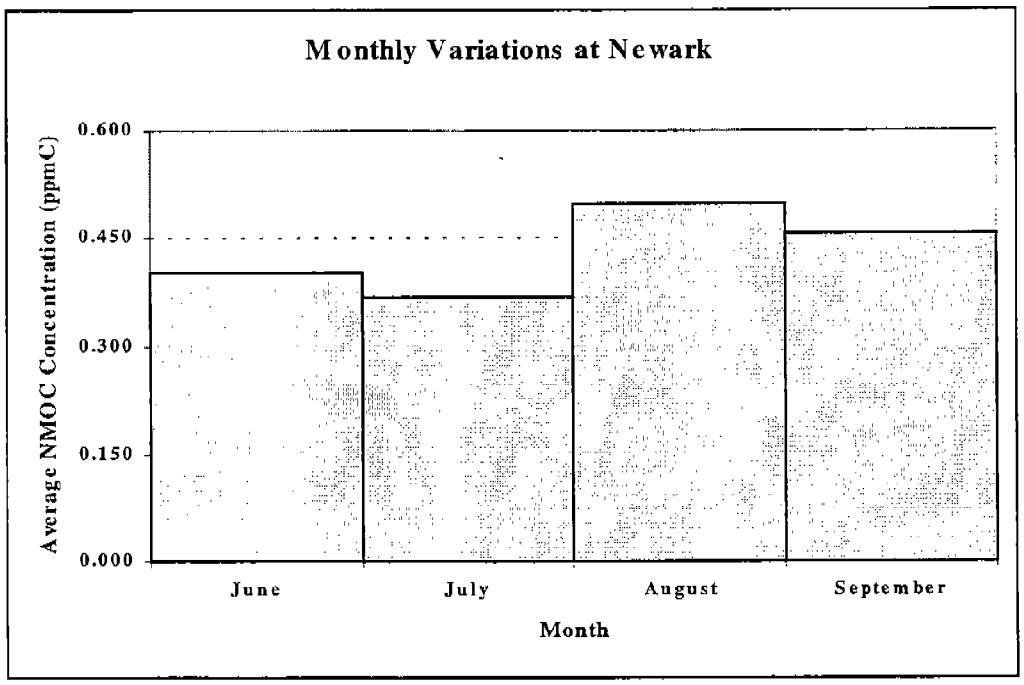


Table 4-1
Summary Statistics for Concentrations of Total NMOC

Category	Parameter	Monitoring Station	
		LINY	NWNJ
Prevalence	Number of valid sampling days	81	81
	Number of nondetects	0	0
	Frequency of detection	100%	100%
Concentration Range	Lowest concentration (ppmC)	0.054	0.086
	25th percentile concentration (ppmC)	0.140	0.230
	50th percentile concentration (ppmC)	0.230	0.369
	75th percentile concentration (ppmC)	0.239	0.485
	Highest concentration (ppmC)	0.898	2.139
Central Tendency	Median concentration (ppmC)	0.230	0.369
	Arithmetic mean concentration (ppmC)	0.264	0.430
	Geometric mean concentration (ppmC)	0.219	0.360
Variability	Standard deviation (ppmC)	0.168	0.302
	Coefficient of variation	0.64	0.70

Table 4-2
Pearson Correlation Coefficients for NMOC Monitoring Data

Parameter #1	Parameter #2	Pearson Correlation Coefficients Calculated for . . .	
		. . . LINY	. . . NWNJ
Maximum daily 1-hour average ozone concentration	3-hour average NMOC concentration	0.38	0.10
Maximum daily 1-hour average ozone concentration	Maximum daily 1-hour average NO_x concentration	0.57	-0.10
Maximum daily 1-hour average ozone concentration	Maximum daily 1-hour average NO_2 concentration	0.37	0.60

Note: The square of the Pearson correlation coefficient (or r^2), which is not shown in this table, indicates the extent to which a change in one parameter can be explained by a change in the other in a linear model. For instance, because the Pearson correlation coefficient between concentrations of ozone and nitrogen dioxide is 0.60, approximately 36% (0.6 times 0.6) of the variation in concentrations of ozone at Newark can be explained by variations in concentrations of nitrogen dioxide. More information on statistical interpretations of the Pearson correlation coefficient can be found in common texts on statistics.

Table 4-3
Dates with Highest Concentrations of Ozone, NMOC, NO_x, and NO_2

Dates of Ten Highest Concentrations Observed at Long Island, New York, by Pollutant:			
Ozone	NMOC	NO_x	NO_2
6/25/97	9/25/97	7/18/97	8/29/97
7/14/97	8/20/97	7/21/97	**6/25/97**
7/15/97	9/19/97	9/25/97	**6/12/97**
7/17/97	6/9/97	9/19/97	**6/11/97**
7/28/97	**7/14/97**	9/5/97	8/8/97
7/16/97	**6/12/97**	7/25/97	8/1/97
6/20/97	**7/15/97**	8/26/97	6/10/97
6/26/97	8/26/97	9/18/97	9/12/97
6/12/97	8/25/97	8/25/97	9/19/97
6/11/97	9/16/97	8/29/97	6/30/97
Dates of Ten Highest Concentrations Observed at Newark, New Jersey, by Pollutant:			
Ozone	NMOC	NO_x	NO_2
7/14/97	8/19/97	9/18/97	**6/25/97**
6/25/97	**6/25/97**	9/25/97	**6/20/97**
7/16/97	9/17/97	9/22/97	**7/15/97**
7/15/97	9/25/97	9/19/97	**7/16/97**
7/17/97	8/22/97	6/10/97	8/8/97
6/11/97	8/25/97	8/20/97	7/8/97
6/12/97	8/26/97	8/25/97	6/24/97
6/20/97	7/8/97	6/17/97	8/26/97
7/18/97	9/16/97	8/8/97	**7/17/97**
7/21/97	6/10/97	8/27/97	9/19/97

Note: For each pollutant, the first date indicates the date of the highest concentration for that pollutant; the second date indicates the date of the second highest concentration; and so on.
For NMOC, NO_x, and NO_2, dates in boldface correspond to dates of the highest concentrations of ozone.
This table only considers concentrations of ozone, NO_x, and NO_2 that were measured on valid NMOC sampling dates. Higher concentrations of ozone, NO_x, and NO_2 may have occurred during the summer of 1997.

Table 4-4
Data Quality Parameters for Total NMOC Measurements

Monitoring Station	Completeness Data			Analytical Precision (RPD)	Sampling Precision (RPD)
	Number of Days on Which Sampling Was Attempted	Number of Days Having Valid Samples	Completeness		
Long Island, NY	86	81	94 %	10.3 %	7.8 %
Newark, NJ	85	81	95 %	4.4 %	4.0 %
Overall Program	171	162	95 %	7.3 %	5.9 %

5.0 Analysis of SNMOC Monitoring Results

This section summarizes the SNMOC ambient air monitoring data collected during the 1997 NMOC/SNMOC program. As discussed earlier, the SNMOC sampling and analytical method currently measures ambient air concentrations of 80 different hydrocarbons as well as total NMOC, thus providing extensive information on the composition and magnitude of selected components of air pollution at the sampling locations. Of the five monitoring stations that measured SNMOC, four (CAMS5, CAMS13, DLTX, and JUMX) collected SNMOC samples daily, and one (NWNJ) collected SNMOC samples on a weekly basis, but only from July 15 to September 15. Due to this limited sample size, results from the Newark monitoring station are not included in many of the statistical analyses that follow. The remainder of this section uses the data analysis methodology to present data summary tables (Section 5.1), selected analyses and interpretations (Section 5.2), and data quality parameters (Section 5.3).

5.1 Data Summary Tables

Using the data summary parameters defined in Section 3.1, Tables 5-1 through 5-5 efficiently summarize the large volume of SNMOC monitoring data for the five stations that collected SNMOC samples. These summary tables reveal several notable trends:

- *Prevalence.* Nearly all of the 80 hydrocarbons identified by the SNMOC sampling and analytical method were detected in more than 75 percent of the total SNMOC samples collected during the 1997 program. Several compounds, however, were detected in fewer than 50 percent of the SNMOC samples at most, if not all, of the monitoring stations. These compounds with low prevalence include 1-decene, 1-dodecene, 2-ethyl-1-butene, 1-octene, propyne, 1-tridecene, and 1-undecene. Summary statistics for these compounds should be interpreted with caution, as they may be significantly biased by a large number of nondetects. On the other hand, summary statistics for the remaining compounds likely characterize the concentration distributions well. The high prevalence for these compounds confirms that air pollution at the five monitoring stations during the summer months contains a complex mixture of numerous hydrocarbons.

- *Concentration range.* As Tables 5-1 through 5-5 indicate, concentration ranges for SNMOC vary widely from one compound to the next, and from one monitoring station to the next. For example, the highest concentrations of seven

compounds exceeded 100 ppbC at the CAMS13 monitoring station; the highest concentrations of every compound were lower than this level at CAMS5 and DLTX—the two other NMOC/SNMOC monitoring stations in the Dallas–Fort Worth metropolitan area. Of particular notice, six of the seven compounds with concentrations exceeding 100 ppbC at CAMS13 were alkanes. Section 5.2.1 revisits this issue.

Readers should note two limitations when interpreting the concentration range data in Tables 5-1 through 5-5. First, because the data summary tables only characterize air concentrations measured between 6:00 a.m. and 9:00 a.m., local time, it is highly likely that ambient levels of many SNMOC rose to higher levels or fell to lower levels than the concentration range data indicate. Second, the concentration range data for Newark probably do not even characterize the actual lowest and highest concentrations between 6:00 a.m. and 9:00 a.m., since this station collected SNMOC samples on only 9 days of the monitoring program.

- *Central tendency.* Not surprisingly, the median, arithmetic mean, and geometric mean concentrations shown in Table 5-1 through 5-5 also vary significantly among the different compounds and monitoring stations. These various measures of central tendency are expected to accurately represent actual central tendency levels, due to the high prevalence of most SNMOC. For compounds detected in fewer than half of the SNMOC samples, the magnitude of the central tendency values may be influenced by nondetects, which were all replaced with concentrations equal to one-half their corresponding detection limits. Several trends were identified to put the large volume of SNMOC central tendency data into perspective:

(1) *Total NMOC.* As discussed previously, the SNMOC analytical method not only measures concentrations of individual compounds, but also measures levels of total NMOC. To provide a sense of overall levels of air pollution, Figure 5-1 shows how total NMOC varied among the sampling locations that collected NMOC samples. The figure shows that concentrations of total NMOC at CAMS13, JUMX, and NWNJ were quite similar (i.e., roughly 400 to 450 ppbC) and approximately twice as high as those at CAMS5 and DLTX.

(2) *Percent of compounds identified.* For additional insight into the nature of airborne organic compounds, Figure 5-1 also illustrates the total concentration of compounds that the SNMOC analytical method can, and cannot, identify. Although the percentage of identified and unidentified compounds varied from one monitoring station to the next, concentrations of the 80 compounds identified by the SNMOC analytical method consistently comprised approximately 80 percent of the measured total

NMOC concentration. In short, the SNMOC analytical method consistently characterizes over three-fourths of the organic compounds found in urban air pollution. Although the identities of the unidentified compounds are obviously unknown, they probably include halogenated hydrocarbons, carbonyls and other oxygenates, and hydrocarbons that the SNMOC analytical equipment cannot yet identify. Accordingly, the analyses and interpretations in Section 6 (VOC) and Section 7 (carbonyls) provide insight into the "unidentified" forms of organic compounds found at the NMOC/SNMOC monitoring stations.

(3) *Compounds with highest geometric mean concentrations.* Table 5-6 lists, in order of decreasing geometric mean concentration, the 12 compounds with the highest geometric means for each monitoring station. To rank compounds for the table, geometric mean concentrations were first converted to units of ppbv. Unlike units of ppbC, which are weighted by the numbers of carbons in compounds (see Section 2.4), units of ppbv are not biased by compound-specific parameters. For every NMOC/SNMOC monitoring station, the 12 compounds with the highest geometric mean concentration accounted for over 60 percent of the total identified SNMOC, on a ppbv basis. Therefore, a relatively small number of compounds comprises a significant portion of the complex mixture of airborne hydrocarbons.

According to Table 5-6, many compounds had relatively high geometric mean concentrations at all five monitoring stations (acetylene, *n*-butane, ethane, ethylene, isopentane, *n*-pentane, propane, and toluene), and other compounds ranked among the highest at only a few stations (benzene, *n*-hexane, isobutane, isobutene/1-butene, 2-methylpentane, 3-methylpentane, propylene, and *m,p*-xylene). Also of note, the six compounds with the highest ranking geometric mean concentrations at CAMS13 were all alkanes, yet the six compounds with the highest concentrations at every other station included at least two olefins. Section 5.2.1, which examines the composition of air pollution at the NMOC/SNMOC monitoring stations, explains the significance of this trend.

(4) *Comparisons of geometric mean concentrations across sites.* To provide greater insight into the spatial variations of individual compounds, Figure 5-2 compares geometric mean concentrations across the five monitoring stations for the 12 compounds with the highest central tendency levels. The diagrams within this figure indicate that the highest geometric mean concentrations for these compounds were observed only at the CAMS13, JUMX, and NWNJ monitoring stations, with levels at CAMS5 and DLTX

usually the lowest. Further, according to these diagrams, concentrations of all olefins (i.e., acetylene, ethylene, and propylene) and aromatic compounds (i.e., toluene and *m,p*-xylene) were highest at NWNJ; while concentrations of alkanes were highest at CAMS13, JUMX, and NWNJ. Concentrations of three alkanes—isopentane, 2-methylpentane, and *n*-pentane—at CAMS13 were at least twice as high as those at the other four SNMOC monitoring stations. Section 5.2.1 revisits this issue.

- *Variability*. According to Tables 5-1 through 5-5, coefficients of variation for most SNMOC compounds were lower than 1.5 at all monitoring stations. The compounds with the highest coefficients of variation were typically those with the most carbon atoms (e.g., isopropylbenzene, *n*-tridecane, *n*-decane, *n*-dodecane, and *n*-undecane). This trend most likely results from the fact that coefficients of variation were calculated from concentrations expressed in units of ppbC, which inherently gives greater weight to concentrations of compounds with more carbon atoms. As a result, compounds with more carbons will appear to have greater variability than compounds with less carbons, even if the concentration distributions are similar.

Although these data summary parameters provide a succinct, yet thorough, account of the SNMOC monitoring data, they do not characterize sources of airborne hydrocarbons, impacts of hydrocarbons on ozone formation, or comparisons of levels of air pollution to meteorological conditions. The following sections address these issues.

5.2 Analyses and Interpretations

To provide greater insight into the trends and patterns among the SNMOC concentrations, the following discussion examines the composition of the SNMOC air samples (Section 5.2.1), presents selected statistical analyses of the SNMOC data (Section 5.2.2), compares SNMOC concentrations to selected meteorological conditions (Section 5.2.3) and to concentrations of ozone and NO_x (Section 5.2.4), and evaluates short-term temporal variations in the SNMOC data (Section 5.2.5).

5.2.1 Composition of Air Samples

As Section 3.2.1 explained, the composition of air samples can be used to characterize the reactivity and sources of pollution within airsheds. For instance, air samples having relatively

high concentrations of reactive compounds (such as olefins) likely characterize "newer" air masses near emissions sources, and those with relatively low concentrations of reactive compounds likely characterize "older" air masses (e.g., those influenced by long-range transport). The following analyses explain how the composition of air samples varied among the stations that collected SNMOC samples:

- *Composition of air samples, by compound group.* Figure 5-3 indicates the extent to which alkanes, olefins, and aromatics constitute total identified SNMOC at each monitoring station. To avoid weighing the compositions by the number of carbons in each compound group, the compositions were calculated from concentrations in units of ppbv. The figure highlights several notable trends among the SNMOC monitoring data. First, aromatic compounds typically accounted for 10–15 percent of the total identified SNMOC, while olefinic compounds accounted for 20–30 percent, and alkanes accounted for 55–70 percent.[1] Second, since olefins and aromatic compounds are generally more reactive in air than alkanes (Carter, 1994), the relative amounts of these compound groups in air samples can be used as a rough indicator of the age of air masses. For instance, of the three monitoring stations in the Dallas–Fort Worth metropolitan area, olefins and aromatic compounds at DLTX consisted of roughly 40 percent of the identified SNMOC compounds, while these groups of compounds consisted of roughly 35 and 30 percent of the identified SNMOC compounds at CAMS5 and CAMS13, respectively. Otherwise stated, the air mass at DLTX contains a higher fraction of more reactive species than the air mass at CAMS5 and CAMS13. This trend provides evidence that the air mass at DLTX is relatively "new," while the air masses at CAMS5 and CAMS13 are relatively "old" and possibly influenced by long-range transport. The fact that the six compounds with highest concentrations at CAMS13 were all alkanes supports this hypothesis.

  The relative amounts of aromatics and olefins at JUMX and NWNJ are roughly the same as that for DLTX. Although the similarity in composition might suggest that the air masses at these monitoring stations are relatively "new," it is possible that the entire Juarez–El Paso and Newark–New York City airsheds contain relatively higher amounts of these reactive compounds. For a better understanding of the age of air masses at JUMX and NWNJ, data from this study

[1] Two alkynes, acetylene and propyne, were identified by the SNMOC analytical method. These compounds were considered in the olefin category for the calculations. Some compounds (e.g., styrene) include both olefinic and aromatic functional groups. Such compounds were considered to be aromatics for the analyses of chemical composition.

must be compared with SNMOC monitoring data from other stations in those airsheds.

- *Ratios of BTEX compounds.* Both Section 3.2.1 and the 1996 NMOC/SNMOC report describe how concentration ratios of individual BTEX compounds can be used to identify emissions sources and comment on the age of air masses. Applying such analyses to the SNMOC monitoring data, Figure 5-4 shows how ratios of the concentrations of BTEX compounds to the concentration of ethylbenzene are very similar in magnitude from one station to the next. Further, the BTEX concentration ratios (shown in Figure 5-4) are very similar to those reported in a recent roadside monitoring study designed to characterize the composition of air pollution believed to be influenced primarily by motor vehicle emissions (Conner, Lonnerman, Seila, 1995). The similarities between these profiles strongly suggest that emissions from motor vehicles contribute significantly to the ambient levels of aromatic hydrocarbons measured during the program.

  BTEX concentration ratios, particularly ratios of benzene to toluene, are frequently used to characterize the age of air masses at monitoring locations. The benzene:toluene ratio gradually changes as air masses move, primarily because toluene is nearly twice as reactive in photochemical smog as benzene (USEPA, 1996a). As a result, the benzene:toluene ratio is expected to increase as an air mass travels from emissions sources to downwind locations. SNMOC monitoring data collected in the Dallas–Fort Worth metropolitan area indicate that benzene:toluene ratios range from 0.36 and 0.37 at CAMS5 and DLTX, respectively, to 0.43 at CAMS13. The notably higher benzene:toluene ratio at CAMS13 supports the hypothesis, raised previously, that the air mass at this monitoring station appears to be affected by long-range transport.

5.2.2 Statistical Analyses

This section examines correlations between ambient air concentrations of different pollutants to provide additional insight into the origin of compounds detected in the SNMOC air samples. As Section 3 explained, the ambient air concentrations of pairs of compounds with highly correlated air monitoring data tend to rise and fall in proportion; this most likely suggests that both compounds originate from similar emission sources. As an example of applying this principle to the SNMOC monitoring data, a matrix of Pearson correlation coefficients was calculated among the 15 compounds with highest geometric mean concentrations at the CAMS13 monitoring station.

This matrix of correlation coefficients showed that all possible pairings of the following subset of compounds had very strong correlations (i.e., Pearson correlation coefficients greater than 0.93): benzene, *n*-hexane, isopentane, 2-methylhexane, 2-methylpentane, 3-methylpentane, *n*-pentane, toluene, and *m,p*-xylene. With few exceptions, data correlations among the other compounds selected for this analysis (acetylene, *n*-butane, ethane, ethylene, isobutane, and propane) exhibited notably weaker correlations with all other compounds. Similar patterns among Pearson correlation coefficients were observed for the other SNMOC monitoring stations.

The notably strong correlations among selected aromatic and 6- and 7-carbon aliphatic compounds indicate that this entire group of compounds probably originates from the same categories of emissions sources in the vicinity of the SNMOC monitoring stations. The highly correlated data, coupled with the similarity of the BTEX concentration profiles to roadside studies, provide compelling evidence that motor vehicle emissions account for much of the airborne aromatic compounds and 6- and 7-carbon aliphatic compounds. The weaker correlations for acetylene, *n*-butane, ethane, ethylene, isobutane, and propane do not necessarily imply that motor vehicle emissions are not the primary source of the compounds; rather, the weaker correlations probably suggest that other factors, most likely photochemical reactions, affect ambient air concentrations of these compounds more significantly than they affect concentrations of aromatic and higher molecular weight aliphatic compounds.

5.2.3 Comparison to Selected Meteorological Conditions

The following analyses compare local observations of humidity, precipitation, temperature, wind direction, and wind speed to the concentrations of total NMOC measured by the SNMOC analytical method. More specifically, Section 5.2.3.1 compares meteorological data from the Dallas–Fort Worth Regional Airport to the CAMS13, CAMS5, and DLTX ambient air monitoring data, and Section 5.2.3.2 compares meteorological data from the El Paso International Airport to the JUMX ambient air monitoring data. Section 4.2.1.2 provided similar comparisons for the NWNJ monitoring station. Although comparisons to concentrations of individual SNMOC may provide insight into specific air quality trends, such extensive analyses

are beyond the scope of this report. The entire database of ambient air monitoring data and meteorological observations can be made available to sponsoring agencies that might be interested in investigating this issue further.

5.2.3.1 Comparisons for the Dallas–Fort Worth Area

Following the data analysis approach used in Section 4.2.1, this section uses two graphical techniques to compare meteorological conditions to total NMOC concentrations: Figure 5-5 shows how NMOC concentrations changed, on average, with different meteorological conditions; and Figure 5-6 presents a scatter plot illustrating the wind direction and total NMOC concentration for every valid sampling date. A description of these figures follows:

- *Humidity.* According to Figure 5-5, NMOC concentrations at the three monitoring stations in the Dallas–Fort Worth area tended to be lowest when the relative humidity during the morning hours was the highest. This trend was particularly pronounced for the CAMS13 monitoring station, where NMOC concentrations on mornings with relative humidity less than 60 percent were, on average, over 5 times greater than NMOC concentrations on morning with relative humidity greater than or equal to 80 percent. As Section 4.2.1.1 noted, the exact reason (or reasons) for this data trend is not known.

- *Precipitation.* As Figure 5-5 illustrates, NMOC concentrations at CAMS5, CAMS13, and DLTX on mornings with at least 0.1 inches of rain were roughly two to three times lower than NMOC concentrations on mornings with no measurable precipitation—a data trend that is consistent with theories of wet deposition (i.e., the scavenging of airborne hydrocarbons by precipitation) (USEPA, 1995). The meteorological station at the Dallas–Fort Worth Regional Airport recorded measurable precipitation between 6:00 a.m. and 9:00 a.m. on only two mornings of the 1997 NMOC/SNMOC program. As a result, analyses of larger volumes of data are needed to confirm whether the trend illustrated in Figure 5-5 is statistically significant.

- *Temperature.* Unlike humidity and precipitation, temperature does not seem closely related to NMOC concentrations. No trends are apparent from comparing temperature data with NMOC monitoring data collected at the three monitoring stations in the Dallas–Fort Worth metropolitan area. The 1996 NMOC/SNMOC final report also noted the absence of strong correlations between temperature and NMOC concentrations at these monitoring stations.

- *Wind Speed.* Consistent with observations reported for the Long Island and Newark monitoring stations, Figure 5-5 indicates that, on average, NMOC concentrations at CAMS5, CAMS13, and DLTX all were lowest when wind speeds were greatest. This effect was most pronounced at the DLTX monitoring station, where the average NMOC concentration during morning hours with high winds (i.e., wind speeds greater than 12 mph) was nearly three times lower than the average NMOC concentration during periods of relatively calm winds (i.e., wind speeds less than or equal to 4 mph). The trend of decreasing NMOC concentrations as wind speeds increase is consistent with local emissions sources affecting these monitoring stations: during periods of calm winds, emissions from local sources do not disperse as effectively, causing ambient air concentrations to be relatively higher than during periods of high wind speeds. This consistency with local emissions sources does not necessarily imply that longer-range transport of hydrocarbons within the Dallas–Fort Worth airshed is insignificant.

- *Wind Direction.* Figure 5-6 illustrates how NMOC concentrations varied with the wind direction observed at the Dallas–Fort Worth Regional Airport. The figure indicates that winds predominantly blew from the south to the southwest (i.e., wind directions between 180° and 230°), and it does not suggest any notable correlations between wind directions and levels of hydrocarbon air pollution. For instance, with the exception of a few outliers, NMOC concentrations ranging from 100 ppbC to 300 ppbC were detected at the CAMS5 monitoring station when winds blew from virtually every compass direction. The lack of correlations between NMOC concentrations and wind direction suggests that emissions sources of hydrocarbons exist throughout the Dallas–Fort Worth metropolitan area, as opposed to hydrocarbon emissions sources being concentrated in any one particular area. This observation supports the hypothesis that emissions from motor vehicles probably account for a significant amount of the hydrocarbons detected in the air at CAMS5, CAMS13, and DLTX.

Although the above analyses indicate some notable trends between meteorological conditions and levels of air pollution in Dallas and Fort Worth, these analyses should certainly not be viewed as comprehensive, particularly because many other factors (e.g., solar radiation, mixing heights, upper-air wind patterns) are known to affect levels of air pollution. Nonetheless, the above analyses offer some insight into how individual meteorological parameters affect, or do not affect, ambient air concentrations of hydrocarbons in the Dallas–Fort Worth metropolitan area.

5.2.3.2 Comparisons for Juarez, Mexico

Following the same approach as used in Section 5.2.3.1, the following analyses and Figures 5-7 and 5-8 examine how meteorological conditions at the El Paso International Airport relate to NMOC concentrations measured at the JUMX monitoring station. These figures indicate several notable trends, most of which are similar to those observed at the other NMOC/SNMOC monitoring stations:

- *Humidity.* Like the NMOC concentrations measured in Dallas, Fort Worth, Long Island, and Newark, those measured in Juarez, Mexico, also tended to be lowest on mornings with highest relative humidity. Further research is needed to determine what mechanisms cause ambient levels of hydrocarbons to decrease under these meteorological conditions.

- *Precipitation.* As Figure 5-7 indicates, ambient air concentrations of NMOC in Juarez tended to be lower on mornings that had measurable precipitation—a trend, once again, that is most likely explained by the effects of wet deposition.

- *Temperature.* According to Figure 5-7, NMOC concentrations measured at JUMX on relatively warm mornings were, on average, higher than those measured on cooler mornings. In fact, of the six NMOC/SNMOC monitoring stations, the temperature dependence of ambient air concentrations of total NMOC appeared to be greatest at JUMX: when the temperature from 6:00 a.m. to 9:00 a.m. was greater than or equal to 75 degrees Fahrenheit, NMOC concentrations at JUMX tended to be roughly twice as high as those measured when temperatures were below 75 degrees. The 1996 NMOC/SNMOC report found a similar trend, suggesting that the positive correlation between temperature and NMOC concentrations at JUMX is most likely not a statistical anomaly. The reason for this positive correlation, however, is not known.

- *Wind Speed.* Consistent with findings for the other NMOC/SNMOC monitoring locations, Figure 5-7 illustrates that, to a certain extent, ambient air concentrations of total NMOC at JUMX decreased with increased wind speeds. As stated previously, the enhanced atmospheric dispersion that occurs on windier days probably explains this trend.

- *Wind Direction.* Figure 5-8 indicates that wind directions in the morning hours at the El Paso International Airport almost always blew from wind directions between 0° and 180°. For these wind directions, most NMOC concentrations ranged from 0 ppbC to 500 ppbC, with some concentrations reaching higher levels. However, there does not appear to be any obvious clustering of elevated

concentrations about a particular wind direction. Therefore, the predominant emissions sources of airborne hydrocarbons at JUMX are most likely located all around the monitoring station—an assumption consistent with the hypothesis that motor vehicles account for a significant fraction of the total NMOC measured at Juarez, Mexico.

5.2.4 Comparison to Concentrations of Ozone and NO_x

Despite the complexity of ozone formation processes, simple statistical and numerical analyses of ambient air monitoring data for NMOC, ozone, and NO_x can provide some insight into the mixture of air pollutants typically found in ozone nonattainment areas. The following discussion presents selected data correlations (Section 5.2.4.1), compares dates on which pollutants reached their highest concentrations (Section 5.2.4.2), and evaluates ratios between concentrations of NMOC and NO_x (Section 5.2.4.3). Although these analyses certainly do not completely characterize ozone formation processes, they highlight some trends that may be worth further investigation. For a more comprehensive understanding of ozone formation and transport in their jurisdictions, sponsoring agencies should supplement the following analyses with other analyses, such as compiling extensive emissions inventories and running regional dispersion models.

5.2.4.1 Data Correlations

To indicate quantitatively the strength of correlations between ambient air concentrations of ozone and concentrations of NMOC, NO_2, and NO_x, Table 5-7 presents selected Pearson correlation coefficients for the four monitoring stations that collected daily SNMOC samples. These coefficients characterize the extent to which maximum 1-hour average concentrations of ozone at the SNMOC monitoring stations varied with (1) 3-hour average concentrations of NMOC, (2) maximum 1-hour average concentrations of NO_x, and (3) maximum 1-hour average concentrations of NO_2. The data in Table 5-7 indicate several trends:

- *Magnitude of Pearson correlation coefficients.* All of the Pearson correlation coefficients in Table 5-7 are less than 0.6. The absence of stronger correlations (i.e., Pearson correlation coefficients closer to -1 or 1) suggests that ambient air concentrations of NMOC, NO_x, or NO_2 alone do not explain variations in ozone

levels at the SNMOC monitoring stations. Some combination of these and other parameters likely correlates better with maximum ozone concentrations.

- *Trends at CAMS5 and DLTX.* According to Table 5-7, the Pearson correlation coefficients between ozone and NMOC, NO_x, and NO_2 were of comparable magnitude at each of the SNMOC monitoring stations in Dallas. This observation suggests that maximum ozone concentrations were just as likely to occur on days with relatively high levels of NMOC concentrations as they were to occur when NO_x and NO_2 concentrations were relatively high. In short, the coefficients do not link levels of ozone at CAMS5 and DLTX to any particular pollutant.

- *Trends at CAMS13 and JUMX.* Unlike the similarities noted for CAMS5 and DLTX, the Pearson correlation coefficients calculated for CAMS13 and JUMX exhibit a different trend: at both stations, correlations between ozone and NMOC were notably lower than correlations between ozone and NO_x and between ozone and NO_2. This trend suggests that ambient air concentrations of ozone at CAMS13 and JUMX appear to be more closely linked to concentrations of NO_x and NO_2 than to concentrations of NMOC. Section 5.2.4.3 revisits this issue.

Although the analyses of Pearson correlation coefficients provide some insight into air quality at the SNMOC monitoring station, there are several limitations associated with using these coefficients to evaluate ozone formation trends, including: (1) Because Pearson correlation coefficients only characterize the extent to which pairs of variables exhibit linear relationships, analyses of Pearson correlation coefficients may overlook noteworthy nonlinear and multivariate trends; (2) The correlation analysis above considered only 3-hour average concentrations of NMOC and maximum daily 1-hour average concentrations of ozone, NO_2, and NO_x from the same day. It is possible that stronger correlations exist among concentrations with different averaging times and that elevated concentrations of ozone may be linked to events that occur over several consecutive days. Despite these limitations, analyses of Pearson correlation coefficients provide a simple account of whether ozone concentrations generally rose and fell in proportion with concentrations of other pollutants.

5.2.4.2 Comparison of Highest Concentrations

As Section 4.2.2.2 explained, EPA's air quality standards for ozone changed during the 1997 NMOC/SNMOC program from a maximum hourly standard of 0.120 ppm to an 8-hour average standard of 0.080 ppm. When evaluating the highest concentrations of ozone, this section considers only maximum hourly concentrations—the averaging period that EPA regulated at the beginning of the 1997 NMOC/SNMOC program. Future NMOC/SNMOC reports will assess how peak concentrations of NMOC relate to 8-hour average concentrations of ozone.

To assess the extent to which peak concentrations of ozone, NMOC, NO_x, and NO_2 are related, Table 5-8 lists, for the four monitoring stations that collected SNMOC samples daily, the 10 dates on which maximum hourly ozone concentrations were highest, the 10 dates on which 3-hour average NMOC concentrations were highest, the 10 dates on which maximum hourly NO_x concentrations were highest, and the 10 dates on which maximum hourly NO_2 concentrations were highest. In generating this table, dates with invalid or incomplete ozone, NMOC, NO_x, or NO_2 measurements were not considered.

Although peak ozone concentrations at the four monitoring stations sometimes occurred on dates when NMOC, NO_x, or NO_2 concentrations also peaked, Table 5-8 indicates that, more often than not, the dates of the highest ozone concentrations of the four pollutants did not coincide. As with the analyses of Pearson correlation coefficients, this simplified analysis of peak ozone concentrations cannot identify patterns among the data that are reasonably predictive of elevated ozone concentrations.

5.2.4.3 Ratios of NMOC to NO_x

As Section 4.2.2.3 explained, the ratio of NMOC concentration to NO_x concentration (or NMOC:NO_x) at a given monitoring station may characterize the predominant ozone formation processes for a given air mass. To a first approximation, airsheds with NMOC:NO_x levels less than 5 ppbC/ppb are "hydrocarbon limited," and airsheds with NMOC:NO_x levels greater than

15 ppbC/ppb are "NO_x limited" (USEPA, 1996a). Reports have suggested that variations in concentrations of NO_x are suspected of having little influence on ozone concentrations in "hydrocarbon limited" areas, and, similarly, variations in concentrations of NMOC are suspected of having little influence on ozone concentrations in "NO_x limited" areas (USEPA, 1996a). As stated previously, because the generic NMOC:NO_x categories provide a simplified account of an extremely complex physical phenomenon, EPA does not recommend that firm conclusions be drawn solely from evaluating NMOC:NO_x levels (USEPA, 1995b).

Based on the NMOC concentrations reported by the SNMOC analytical method and the NO_x concentrations reported by the monitoring stations listed in Table 3-1, NMOC:NO_x levels for the 1997 NMOC/SNMOC monitoring stations are 5.5 ppbC/ppb for CAMS5, 43.8 ppbC/ppb for CAMS13, 5.3 ppbC/ppb for DLTX, and 16.4 ppbC/ppb for JUMX. Applying the guidelines stated previously, the NMOC:NO_x values for CAMS5 and DLTX are slightly higher than the threshold listed for "hydrocarbon limited" air masses, while the values for JUMX and especially CAMS13 meet the empirical criteria for "NO_x limited" air masses. It should be noted that, for the CAMS13 and JUMX stations, the statistical analyses in Section 5.2.4.1 corroborate the predictions of the NMOC:NO_x ratios: The statistical analyses showed that ozone levels at CAMS13 and JUMX correlated better with concentrations of NO_x than with NMOC, as is expected for "NO_x limited" air masses. Despite the consistent findings from different statistical and numerical analyses, sponsoring agencies should supplement the predictions of the NMOC:NO_x ratios with other photochemical assessment techniques, such as conducting modeling simulations.

5.2.5 Temporal Variations

The following discussion evaluates monthly variations in the composition and magnitude of SNMOC concentrations measured at the four stations that collected daily samples. Monthly variations provide additional context for interpreting ambient air monitoring data, especially because photochemical reactivity generally decreases in August and September, when the number of daylight hours gradually decreases. As noted previously, the 1998 NMOC/SNMOC

report will focus almost exclusively on presenting and interpreting annual variations in SNMOC monitoring data.

Figure 5-9 presents four graphs that illustrate, for each monitoring station, how the composition and magnitude of total identified SNMOC compounds varied from one summer month to the next. The graphs indicate the total concentration of identified compounds in units of ppbv, as well as relative contributions of alkanes, olefins, and aromatic compounds. In this analysis, converting concentrations to units of ppbv was necessary to avoid biasing the composition data in favor of compounds with more carbon atoms. The graphs in Figure 5-9 indicate several notable trends:

- *CAMS5.* According to Figure 5-9, the concentrations of total identified SNMOC gradually decreased through the summer, with the monthly average concentration in September approximately 20 percent lower than in June. The composition of the air samples did not indicate as a dramatic a change. However, the relative amounts of olefins and aromatic compounds did increase, particularly in August and September, and the relative amounts of alkanes decreased. The increase in the most reactive compounds (i.e., olefins and aromatics) most likely results from decreases in photochemical reactivity in the late summer.

- *CAMS13.* Figure 5-9 clearly indicates that the monthly average concentrations of total identified SNMOC at CAMS5 increased dramatically during the 1997 program. In fact, the monthly average concentration in August was roughly 2.5 times higher than the June and July monthly average concentrations, and the monthly average concentration in September was almost 4 times higher than levels in June and July. Unless motor vehicle traffic patterns in the Fort Worth area exhibit similar monthly variations, the significantly higher SNMOC concentrations in August and September cannot be explained entirely by local motor vehicle sources. A likely alternate explanation is that air quality at CAMS13 may also be affected by long-range transport of hydrocarbons.

  Of particular notice, none of the dates with the ten highest ozone concentrations at CAMS13 were in September (see Table 5-8). Therefore, air concentrations of ozone at CAMS13 did not appear to be affected significantly by the notable increase in ambient air concentrations of hydrocarbons. This trend also supports the hypothesis that the air mass at CAMS13 is "NO_x limited."

Not apparent in the figure is the fact that the composition of SNMOC samples at CAMS13 also changed significantly throughout the summer months. For instance, olefins accounted for 25 percent of total identified SNMOC in June, but accounted for only 11 percent of the total in September. This decrease was almost entirely compensated by relative increases in the composition of alkanes. Thus, contrary to the trend observed at CAMS5, the relative concentrations of the most reactive compounds actually *decreased* during the months when photochemical reactivity gradually diminishes. This trend is consistent with the hypothesis that long-range transport of hydrocarbons may affect air quality at CAMS13, since one would expect to see relatively lower amounts of reactive compounds if an air mass had transported over longer distances. Further research is needed, however, to confirm this explanation.

- *DLTX.* The pattern of monthly variations in SNMOC concentrations at DLTX is quite similar to that of CAMS5: the magnitude of monthly average concentrations of total identified compounds gradually decreased, with the monthly average concentration in September roughly 20 percent lower than that in June. Further, the composition of olefins in the air mass gradually increased, while the relative amounts of alkanes decreased. As with at CAMS5, the steadily increasing composition of the most reactive compounds might have resulted from decreases in photochemical reactivity.

- *JUMX.* Unlike the monthly average concentrations for the other monitoring stations, those for JUMX were nearly uniform, with average concentrations of total identified compounds changing less than 10 percent from one month to the next. The composition of pollution at Juarez, however, varied significantly. Most notably, the relative composition of olefins increased from 21 percent in July to 28 percent in September, with a much less pronounced increase in the composition of aromatic compounds, while a decrease in concentrations of alkanes offset these increases. The changes in composition at JUMX are similar to those observed at both CAMS5 and DLTX: relative concentrations of the most reactive species in ambient air gradually increase from July to August to September.

Although the above discussion offers several hypotheses to explain the temporal variations observed during the 1997 NMOC/SNMOC program, the monthly variations described in this report may not necessarily be representative of monthly variations in other years. Analyses of temporal variations in the 1998 NMOC/SNMOC report will examine how monthly variations have changed from one year to the next.

5.3 Data Quality Parameters

Tables 5-9 and 5-10 characterize the quality of the SNMOC monitoring data by presenting completeness and precision results, respectively, for the 1997 program. According to Table 5-9, the air monitoring network and laboratory generated valid sampling results for 94 percent of the days with scheduled sampling events. Moreover, every station that collected daily SNMOC samples achieved completeness figures of 89 percent or higher. These high completeness figures suggest that the 1997 program was effectively managed both in the field and in the laboratory to minimize the number of invalidated sampling events.

To provide another indicator of data quality, 37 duplicate SNMOC samples were collected in the field, then analyzed in replicate. Table 5-10 presents a summary of analytical precision and sampling and analytical precision for the 1997 program. As Section 3.3.2 describes, analytical precision characterizes measurement variability among replicate analyses, and sampling and analytical precision characterizes measurement variability among duplicate samples. According to the SNMOC method documentation, typical bounds for analytical precision for compounds with concentrations greater than 2 ppbC should have a relative percent difference (RPD) less than 30 percent and compounds measured at lower levels should have an RPD less than 95 percent (USEPA, 1989). Typical bounds for sampling and analytical precision are not reported. Of the 80 compounds listed in Table 5-10, none have an RPD greater than 95 percent, and only 9 have RPDs greater than 30 percent. Of these 9 compounds, only ethane was consistently detected at levels greater than 2 ppbC. Therefore, with the possible exception of measurements of ethane, analysis of SNMOC samples was performed within the precision guidelines of the analytical method.

5.4 Summary

The 1997 SNMOC ambient air monitoring data, which were found to be highly precise, extensively characterize levels of air pollution at specific locations in the Dallas–Fort Worth, Juarez–El Paso, and Newark–New York City airsheds. During the summer of 1997, geometric means of NMOC concentrations during the morning hours varied significantly among the

monitoring locations: levels at CAMS13, JUMX, and NWNJ ranged from 400 to 450 ppbC, while levels at CAMS5 and DLTX ranged from 150 to 250 ppbC. With the exception of CAMS13, NMOC concentrations at the NMOC/SNMOC monitoring stations did not vary significantly from one month to the next. At CAMS13, however, NMOC concentrations in September were nearly 4 times greater than they were in June and July. Although the composition of hydrocarbons also varied among the monitoring locations and with time, aromatic compounds typically accounted for 10–15 percent of the total identified compounds on a volume basis, olefins for 20–30 percent, and alkanes for 55–70 percent. At every monitoring station, the 12 compounds with the highest geometric mean concentrations accounted for over 60 percent of the concentration of the total identified compounds. Several compounds had relatively high geometric mean concentrations at all five monitoring stations. These compounds include acetylene, *n*-butane, ethane, ethylene, isopentane, *n*-pentane, propane, and toluene, and, to a lesser extent, benzene, *n*-hexane, isobutane, isobutene, 1-butene, 2-methylpentane, 3-methylpentane, propylene, and the xylene isomers. Consistent with findings from previous NMOC/SNMOC reports, the concentration profiles for BTEX compounds suggest that motor vehicle emissions account for a large fraction of the hydrocarbons in the air near the SNMOC monitoring stations.

Despite the complex interactions between local meteorology and ambient air quality, several correlations between selected meteorological conditions and SNMOC concentrations were observed among the 1997 data. First, ambient air concentrations of total NMOC were consistently lower on the most humid days, during periods of measurable precipitation, and on the windiest days. Although the exact reason (or reasons) why airborne hydrocarbons are lowest on humid days is unknown, the link between NMOC concentrations and precipitation is best explained by the theory of wet deposition, and the link between NMOC concentrations and wind speed is most likely due to the enhanced dispersion that occurs as wind speeds increase. No consistent relationships were apparent between NMOC concentrations and temperature or wind direction.

Several statistical and numerical analyses were performed to identify relationships between concentrations of ozone, NMOC, NO_x, and NO_2, but none found consistent data trends across all monitoring stations. Nonetheless, there was some evidence that the air mass measured at the CAMS13 monitoring station in Fort Worth differed significantly from that measured at the CAMS5 and DLTX monitoring stations in Dallas. For instance, based on the relatively higher ratios of benzene concentrations to toluene concentrations and the relatively lower composition of olefins (i.e., the most reactive compounds), the air mass at CAMS13 appears to be "older" than that at both CAMS5 and DLTX. Further, the air at CAMS13 exhibited unique monthly variations and notably different NMOC:NO_x levels. Possible interpretations of these data patterns were provided throughout this section.

Finally, as noted throughout this report, even though the 1997 SNMOC monitoring data extensively characterize air quality, they do not provide a comprehensive account of the many different factors that affect levels of air pollution. Accordingly, sponsoring agencies are encouraged to conduct additional analyses to gain further insight into the nature and magnitude of air pollution within their jurisdictions.

Figure 5-1
Geometric Mean NMOC Concentrations, as Measured by the SNMOC Analytical Method

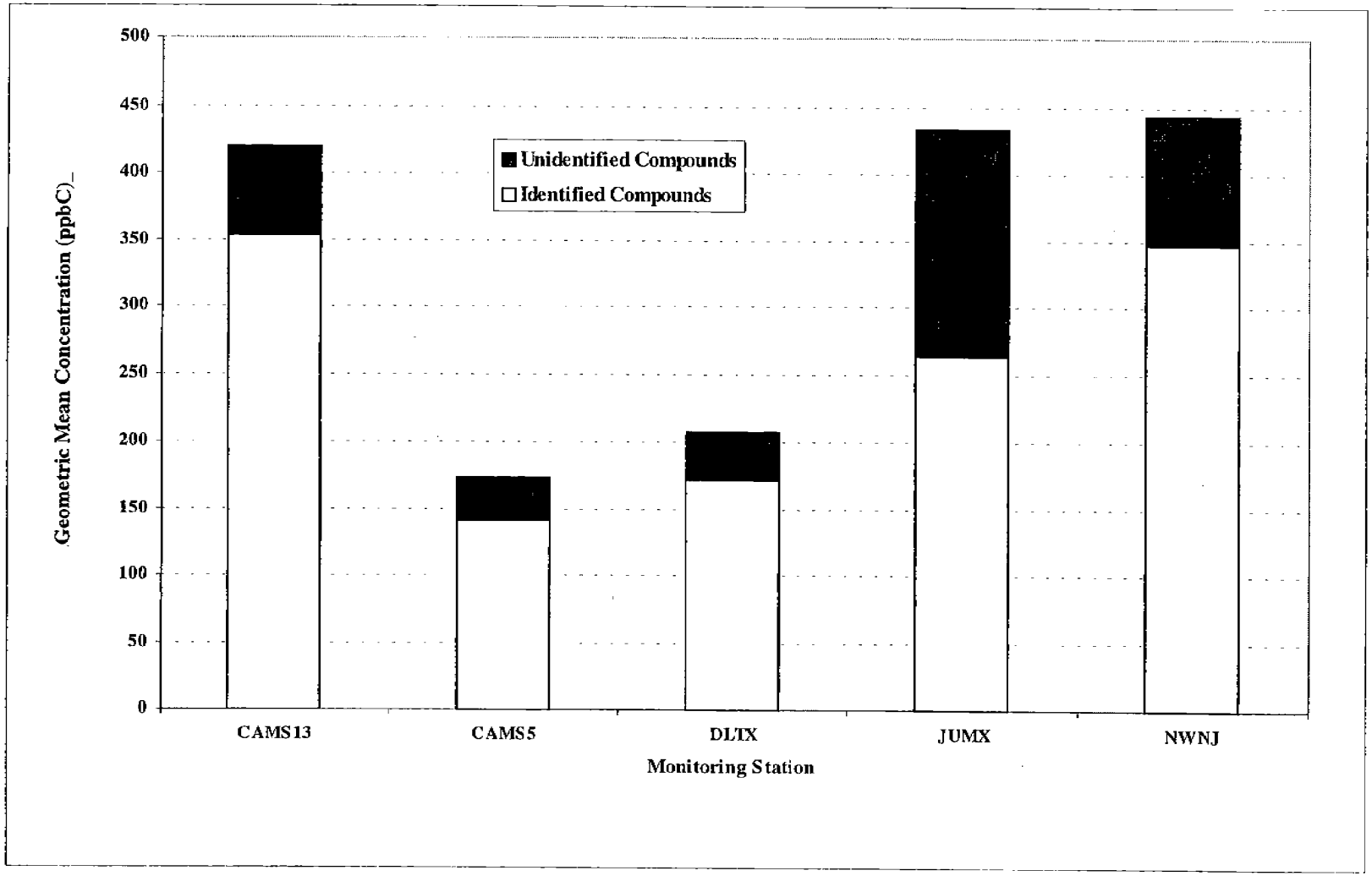
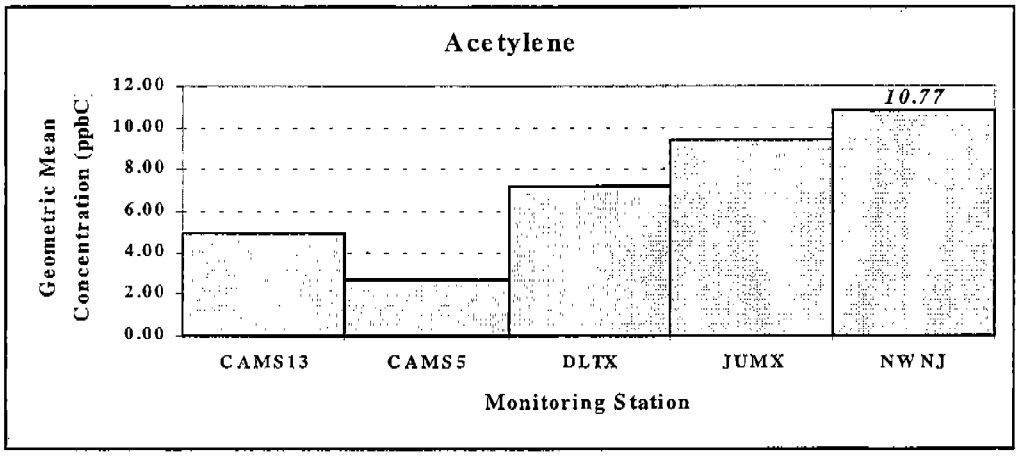
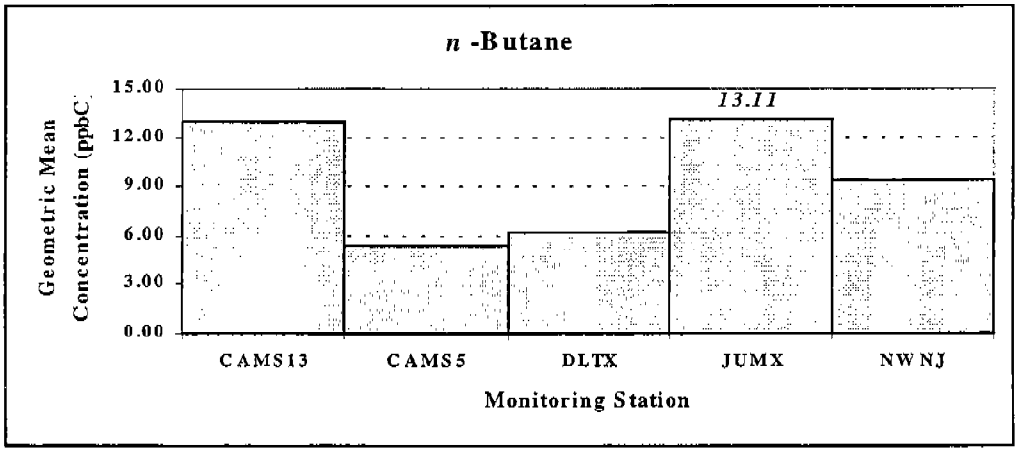
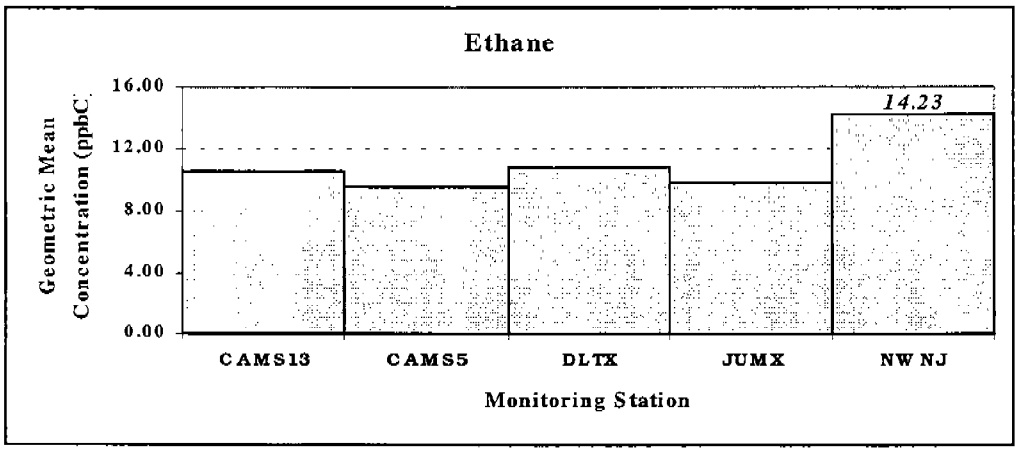


Figure 5-2 (Page 1 of 4)
Geometric Mean Concentrations of the Most Prevalent SNMOC

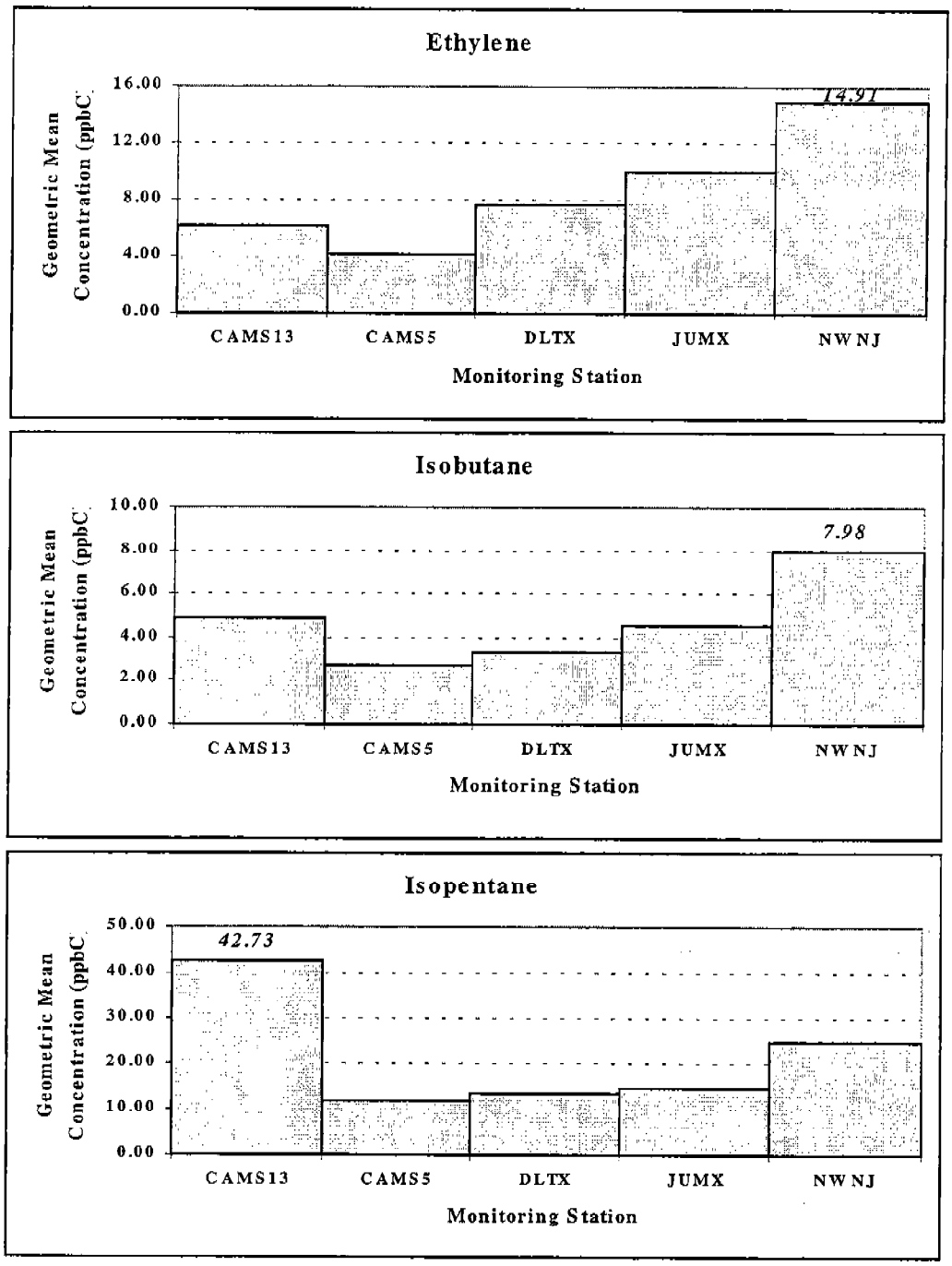






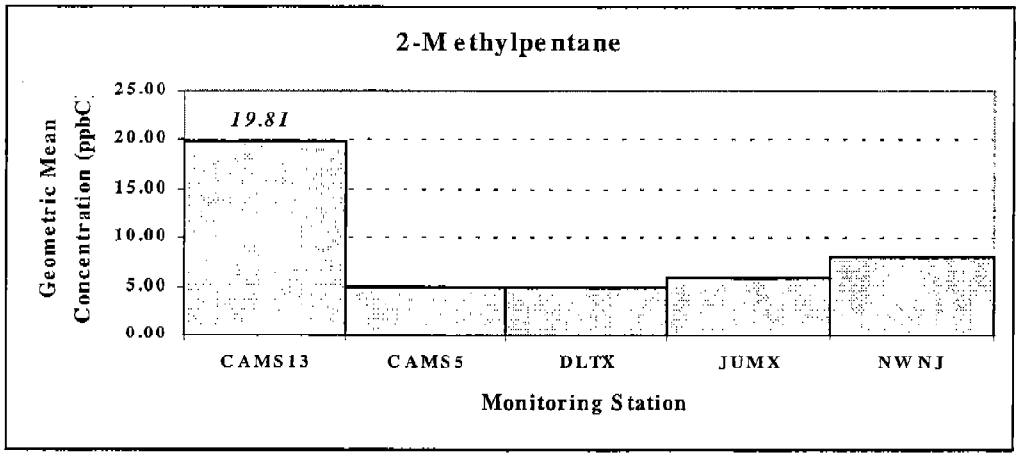
Note: Every plot has a different scale.

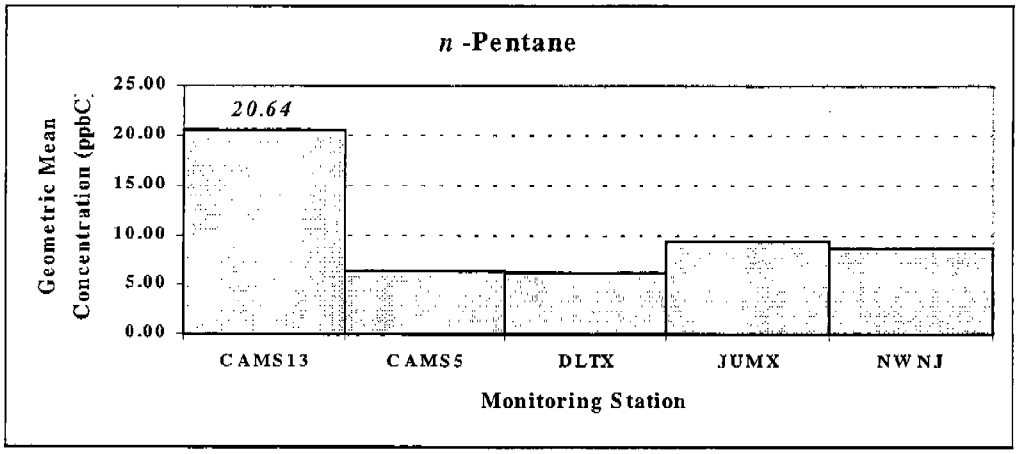
Figure 5-2 (Page 2 of 4)
Geometric Mean Concentrations of the Most Prevalent SNMOC

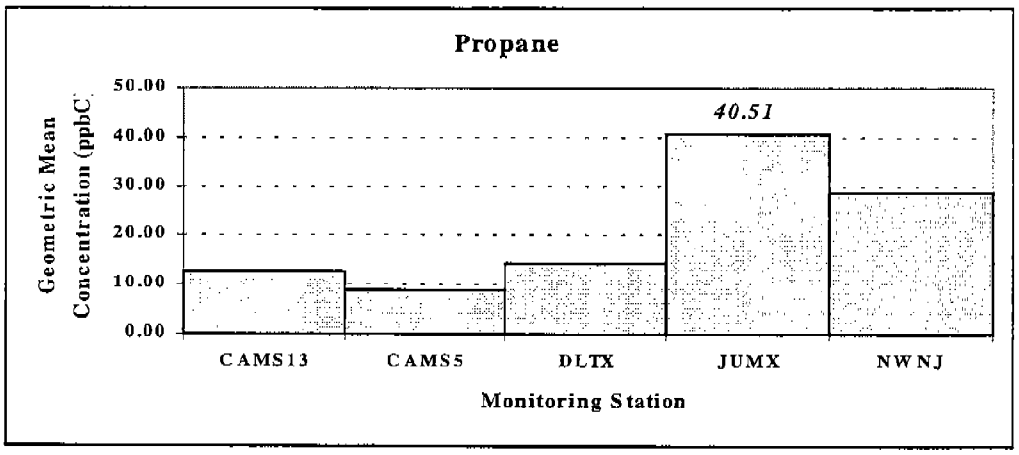


Note: Every plot has a different scale.

Figure 5-2 (Page 3 of 4)
Geometric Mean Concentrations of the Most Prevalent SNMOC

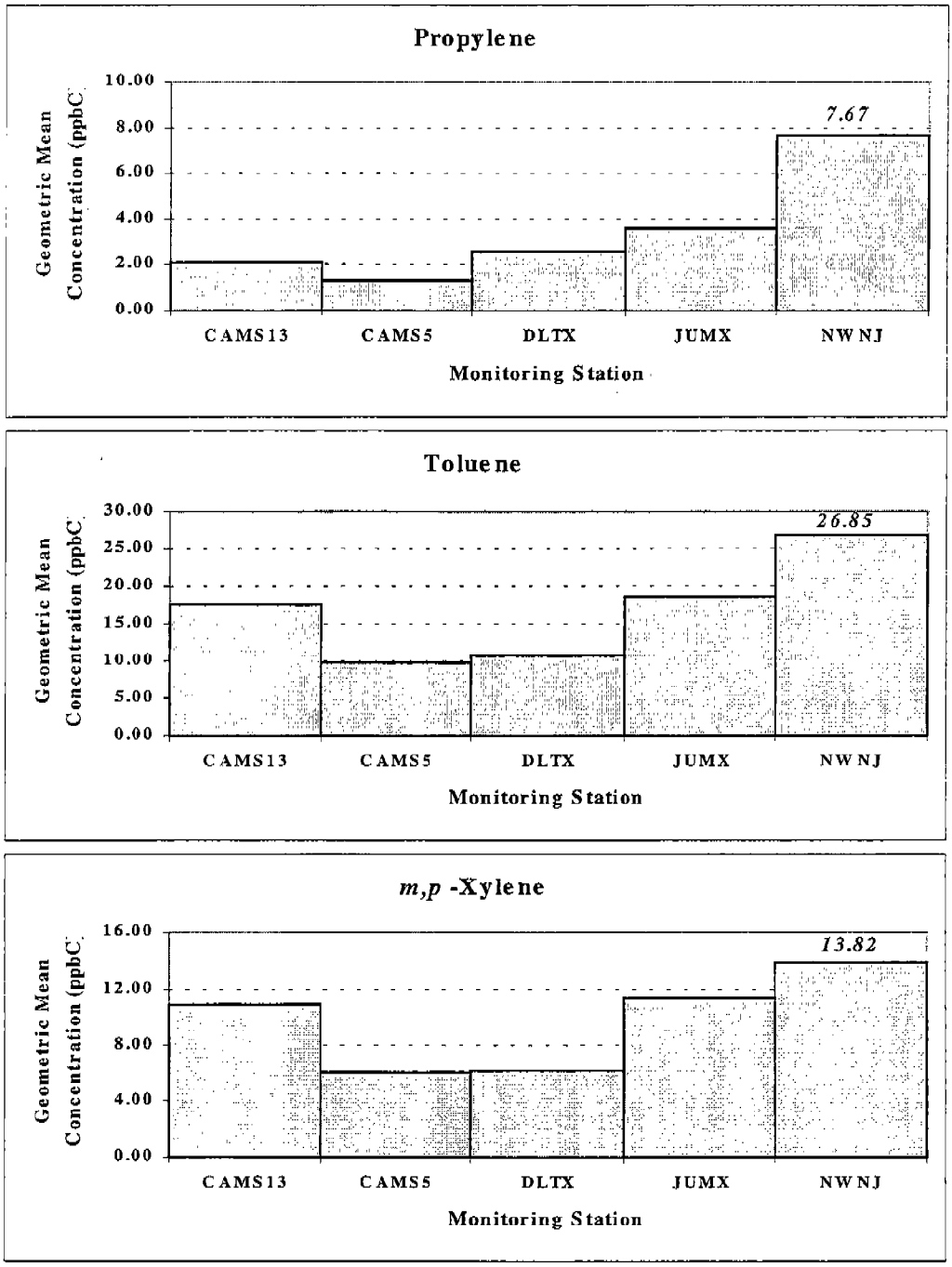






Note: Every plot has a different scale.

Figure 5-2 (Page 4 of 4)
Geometric Mean Concentrations of the Most Prevalent SNMOC



Note: Every plot has a different scale.

Figure 5-3
Breakdown of Total Identified SNMOC by Alkanes, Olefins, and Aromatics

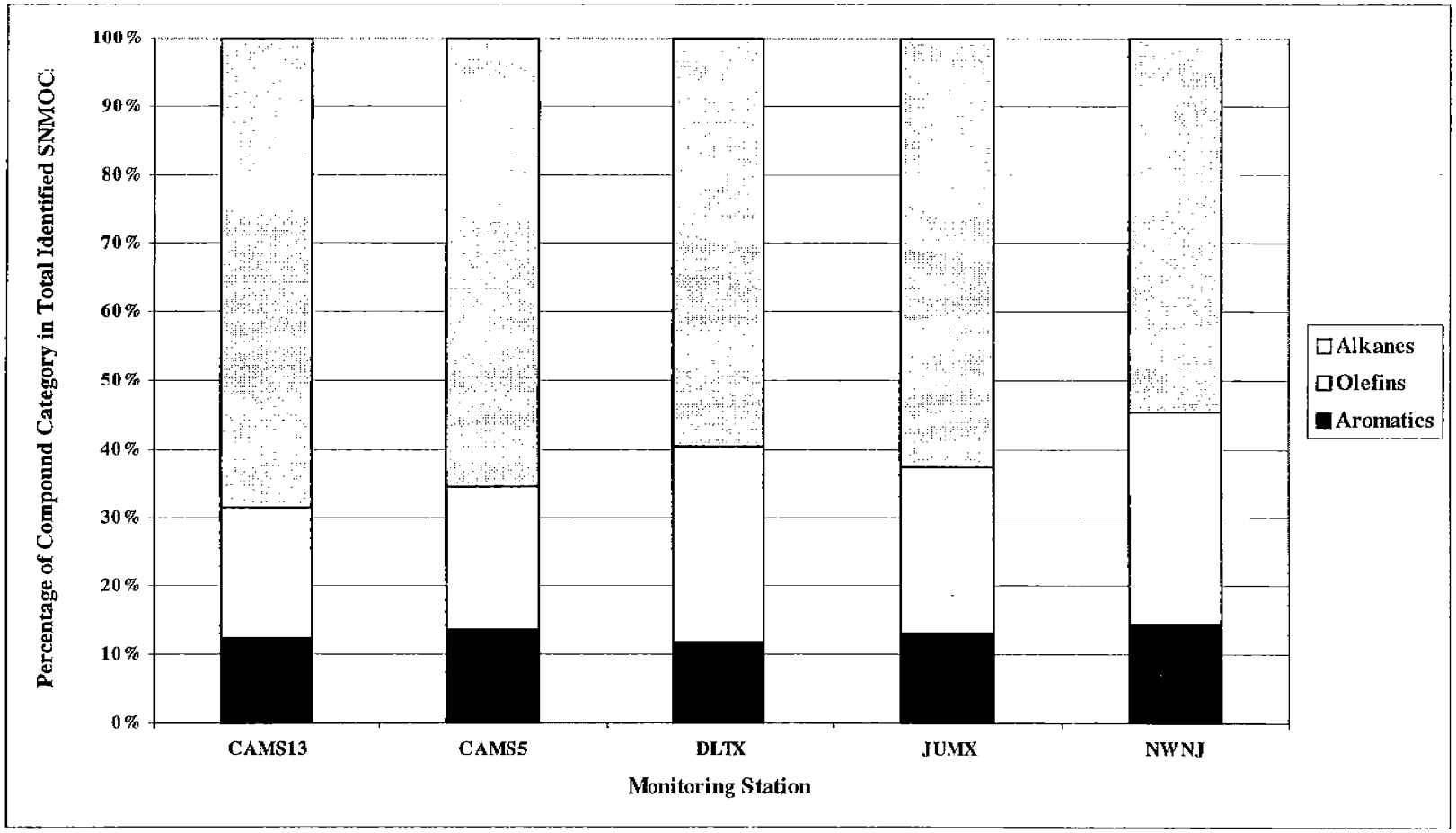


Figure 5-4
BTEX Concentration Ratios Calculated from the SNMOC Monitoring Data

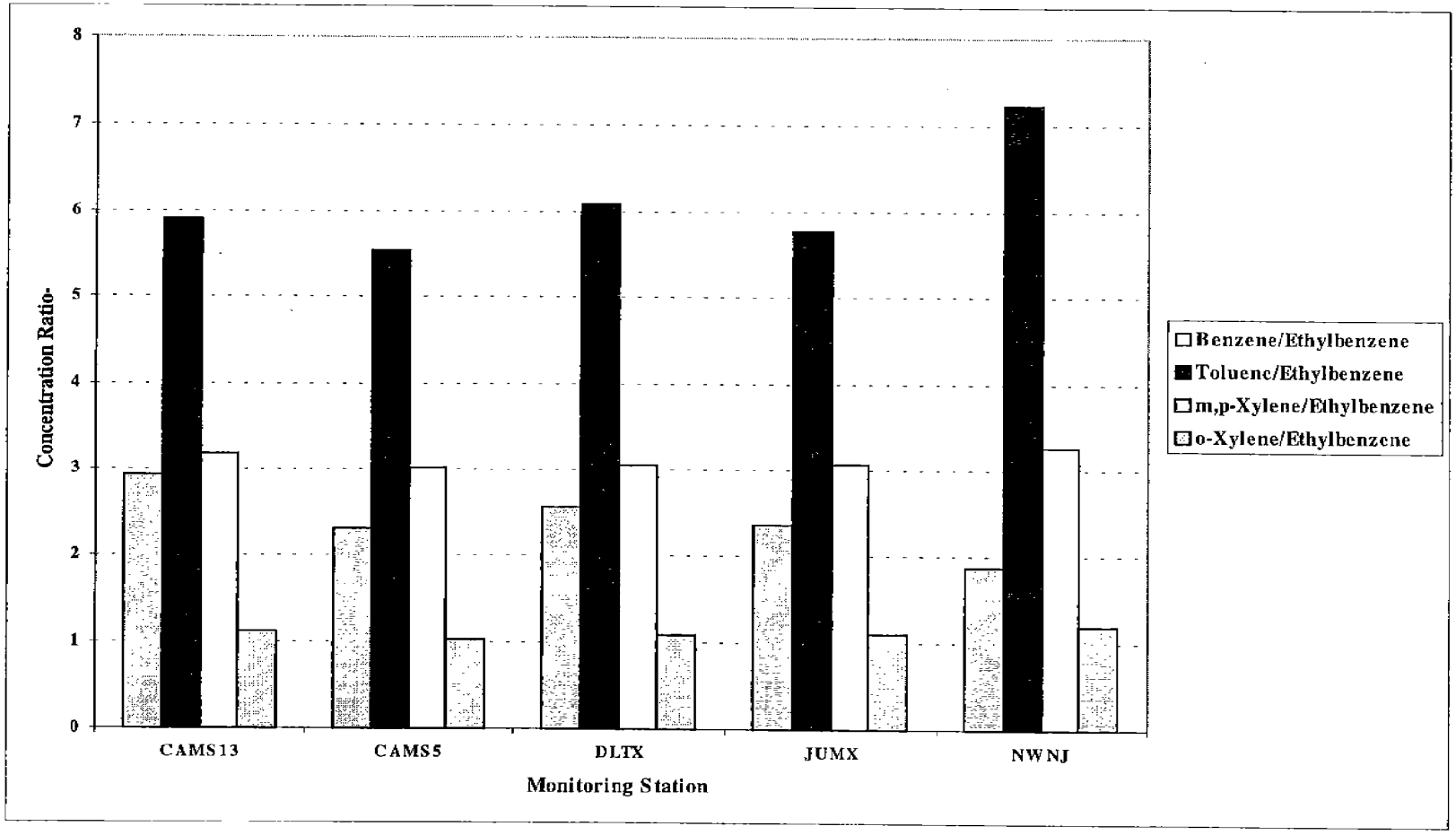
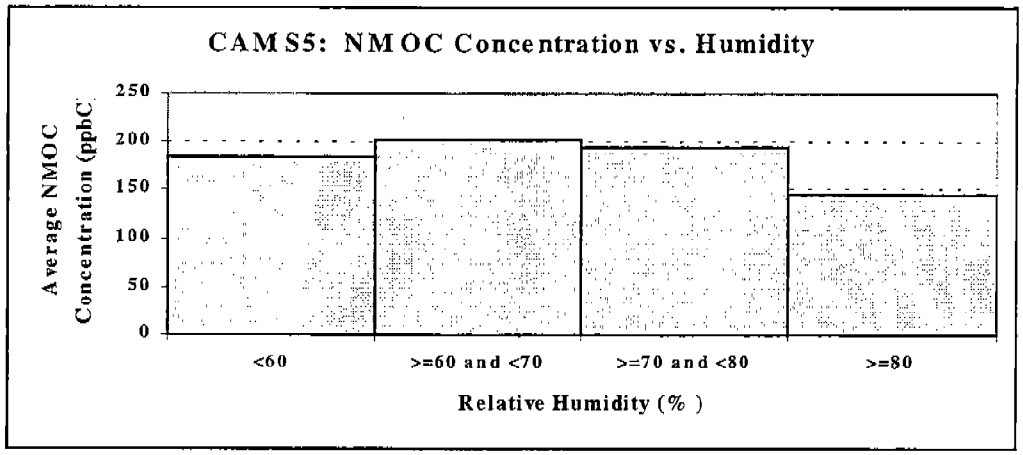
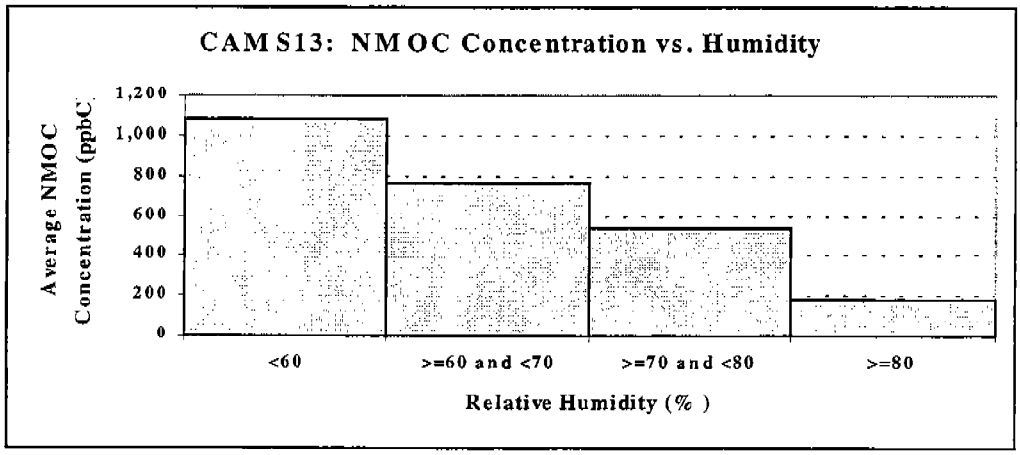
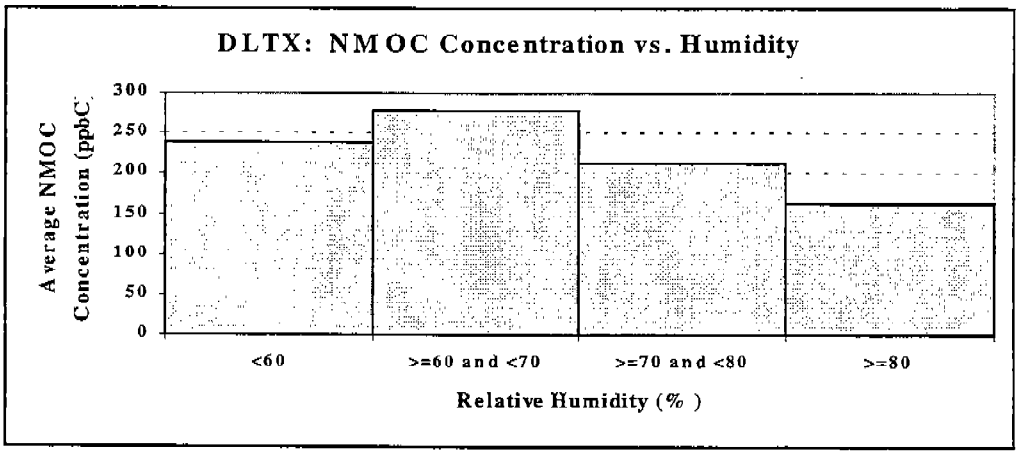


Figure 5-5 (Page 1 of 4)
Comparison of NMOC Concentrations at CAMS5, CAMS13, and DLTX to Selected Meteorological Parameters

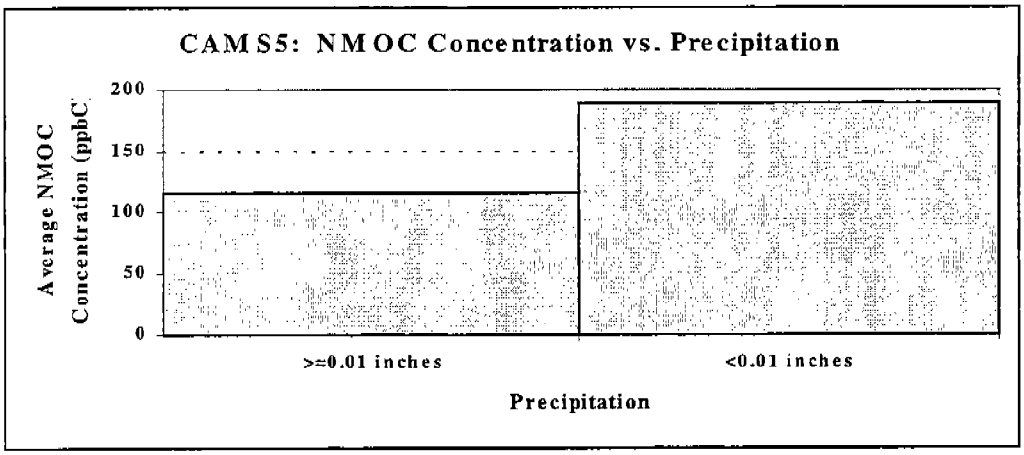


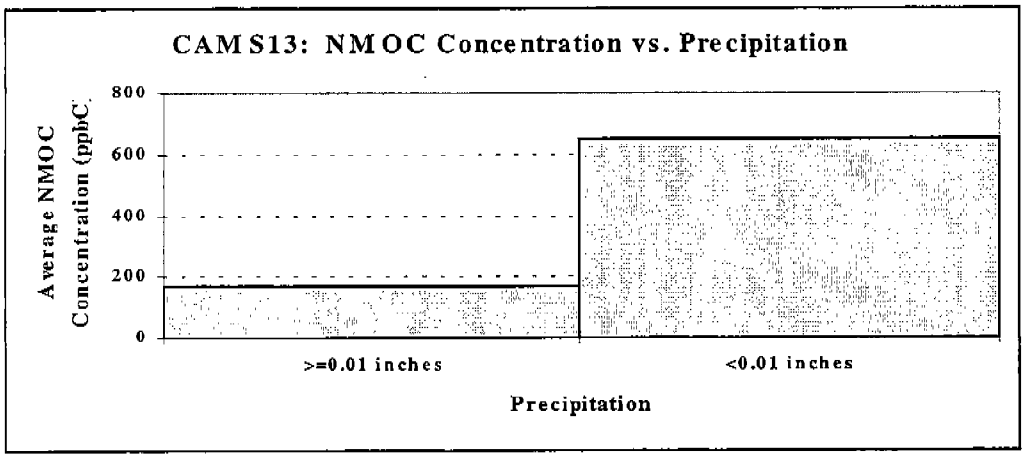


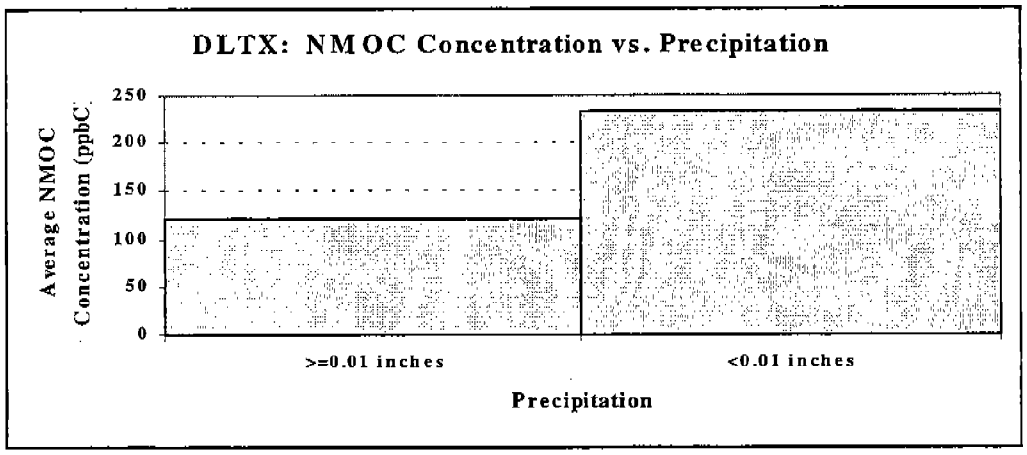


Note: Every plot has a different scale for average NMOC concentrations.

Figure 5-5 (Page 2 of 4)
Comparison of NMOC Concentrations at CAMS5, CAMS13, and DLTX to Selected Meteorological Parameters

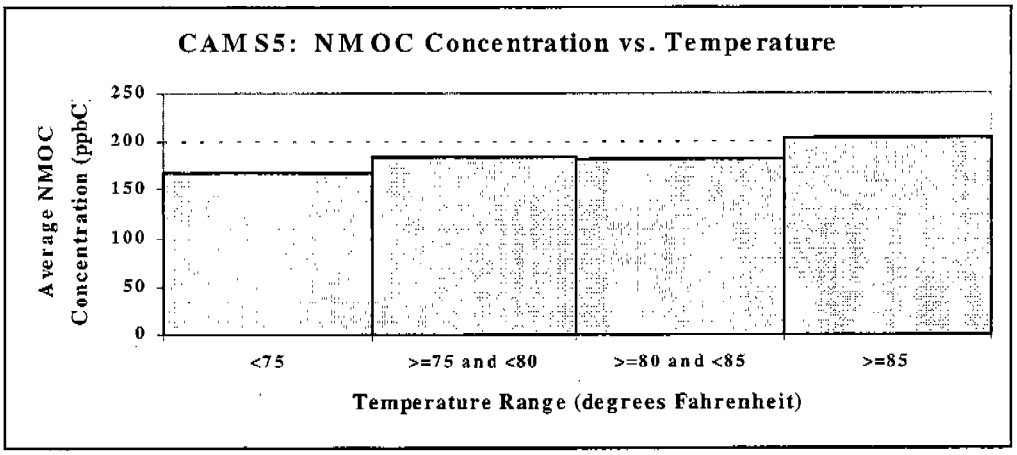


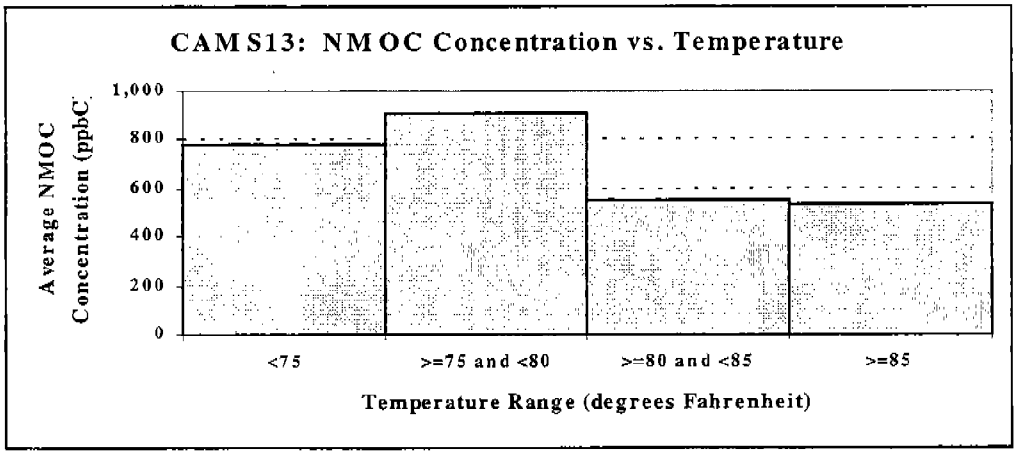


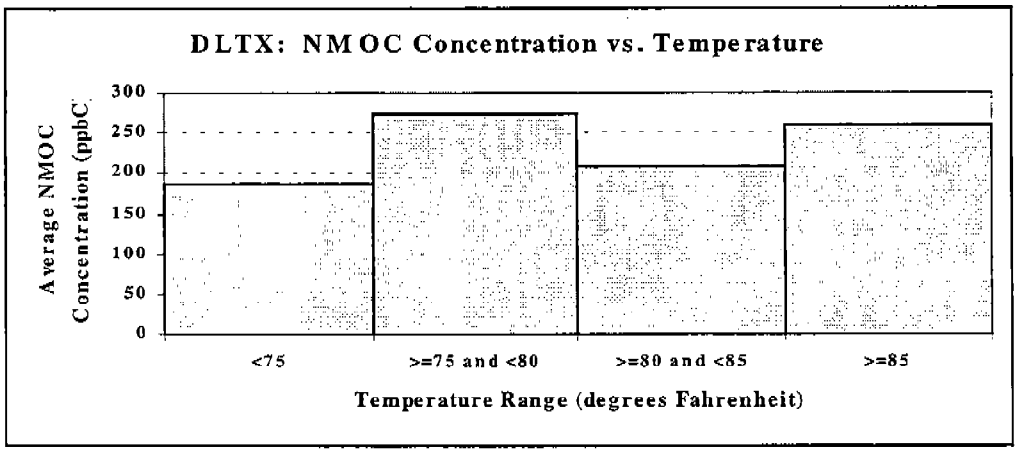


Note: Every plot has a different scale for average NMOC concentrations.

Figure 5-5 (Page 3 of 4)
Comparison of NMOC Concentrations at CAMS5, CAMS13, and DLTX to Selected Meteorological Parameters

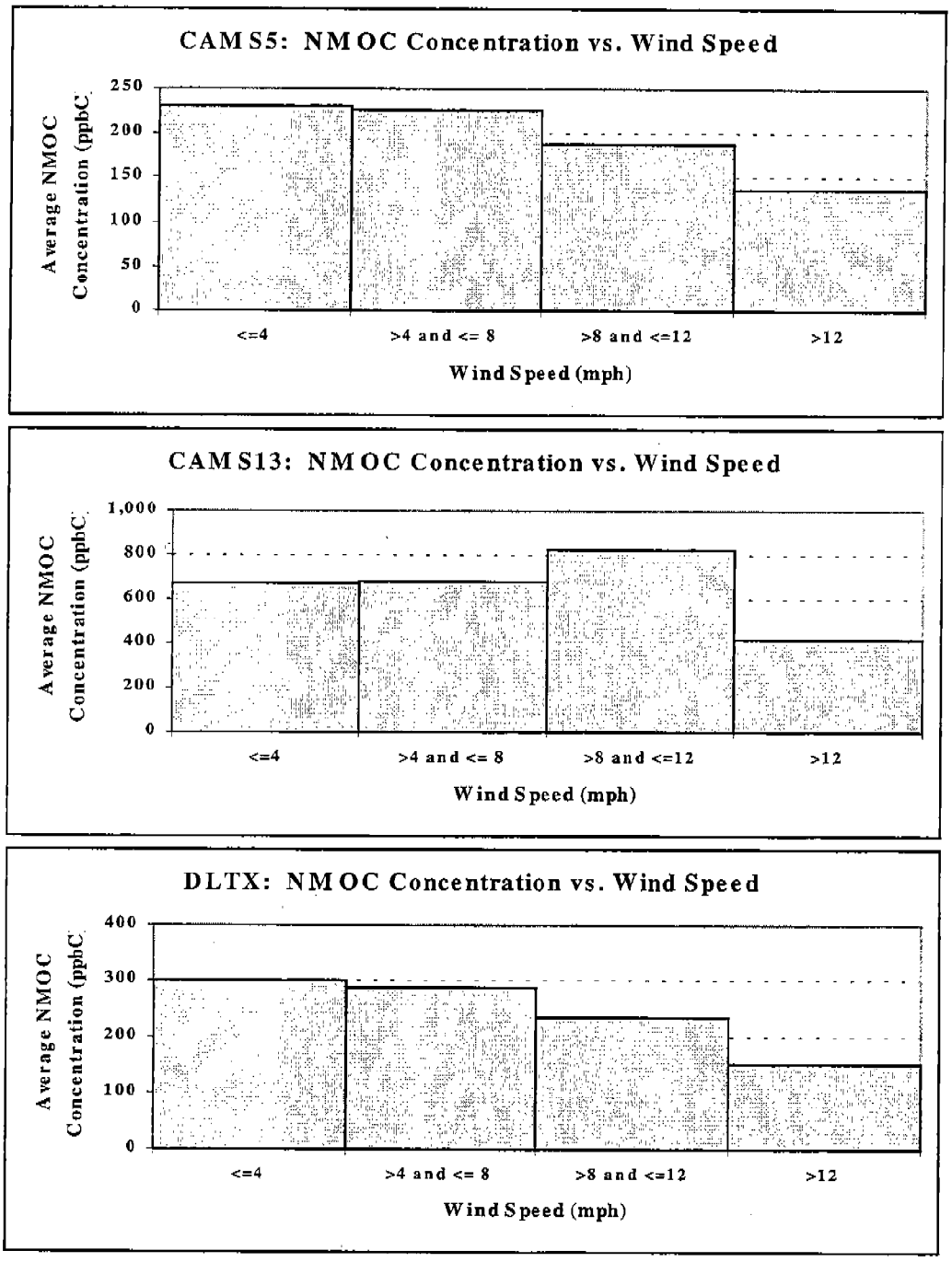






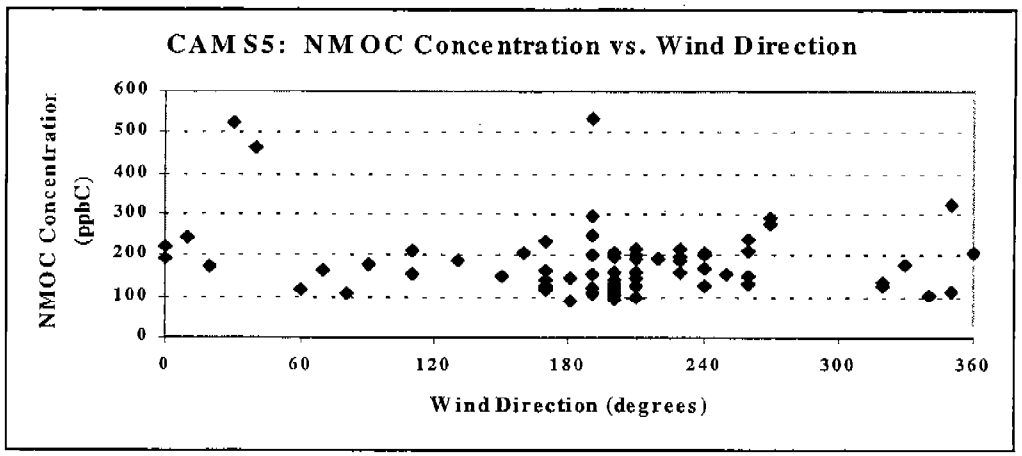
Note: Every plot has a different scale for average NMOC concentrations.

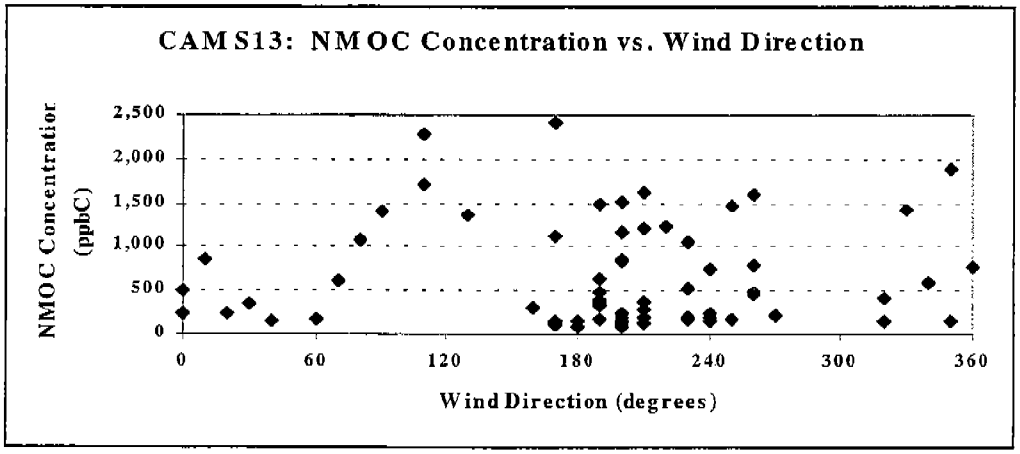
Figure 5-5 (Page 4 of 4)
Comparison of NMOC Concentrations at CAMS5, CAMS13, and DLTX to Selected Meteorological Parameters

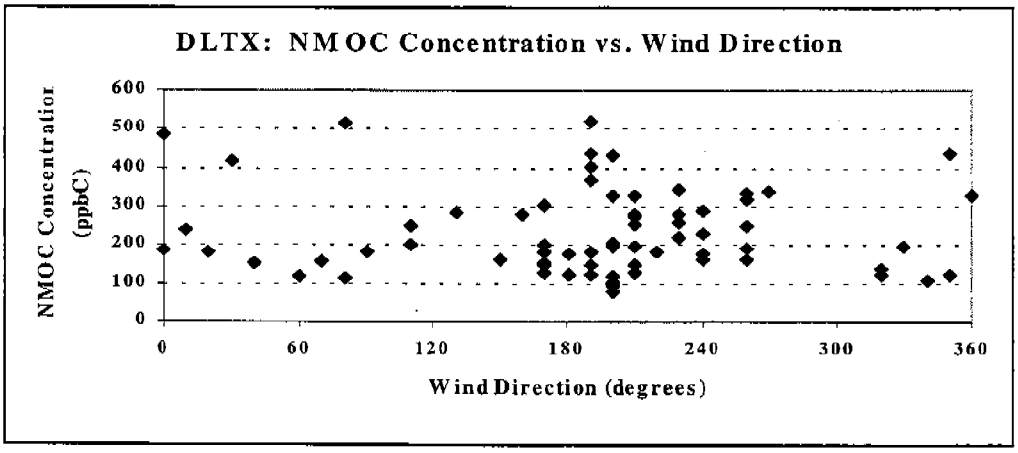


Note: Every plot has a different scale for average NMOC concentrations.

Figure 5-6
Comparison of NMOC Concentrations at CAMS5, CAMS13, and DLTX to Wind Direction

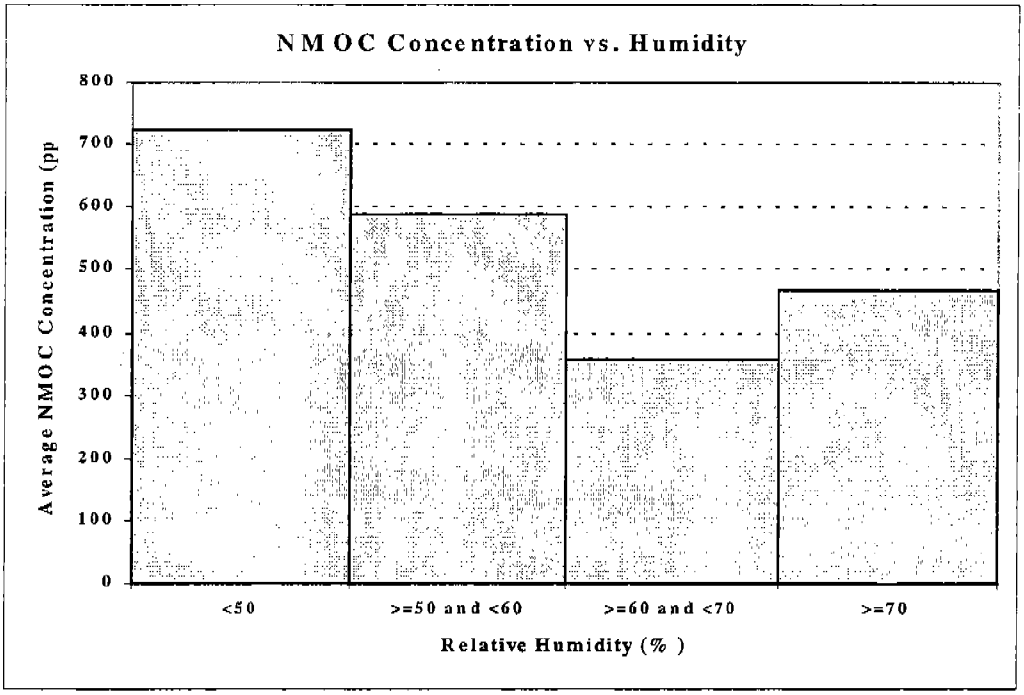






Note: Every plot has a different scale. Wind direction in this plot is the direction *from which* wind blows.

Figure 5-7 (Page 1 of 2)
Comparison of NMOC Concentrations at JUMX to Selected Meteorological Parameters



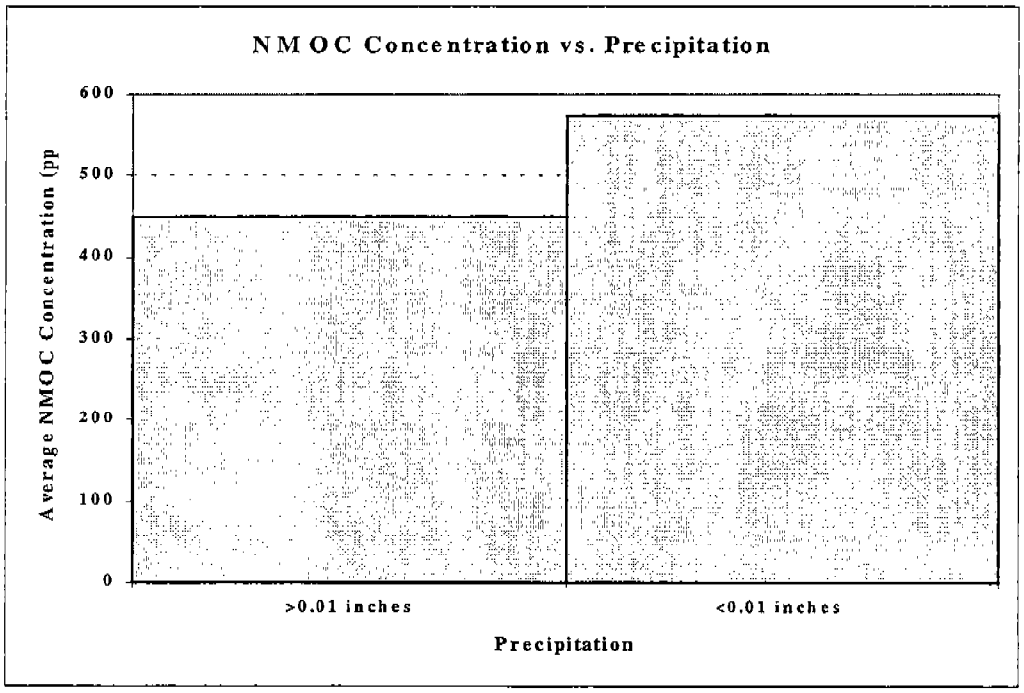
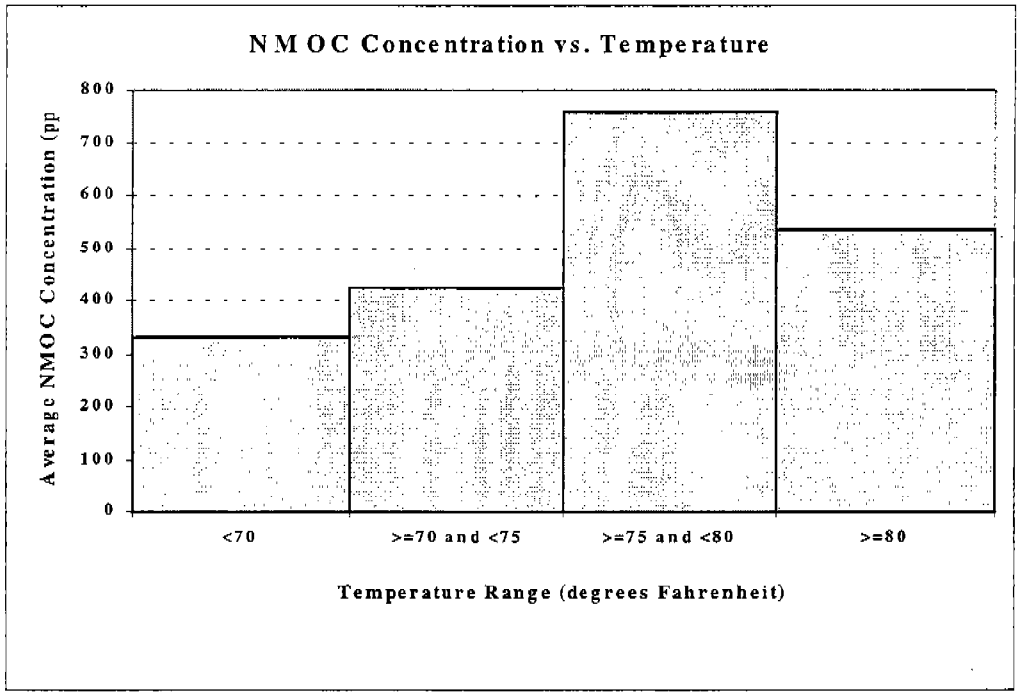


Figure 5-7 (Page 2 of 2)
Comparison of NMOC Concentrations at JUMX to Selected Meteorological Parameters



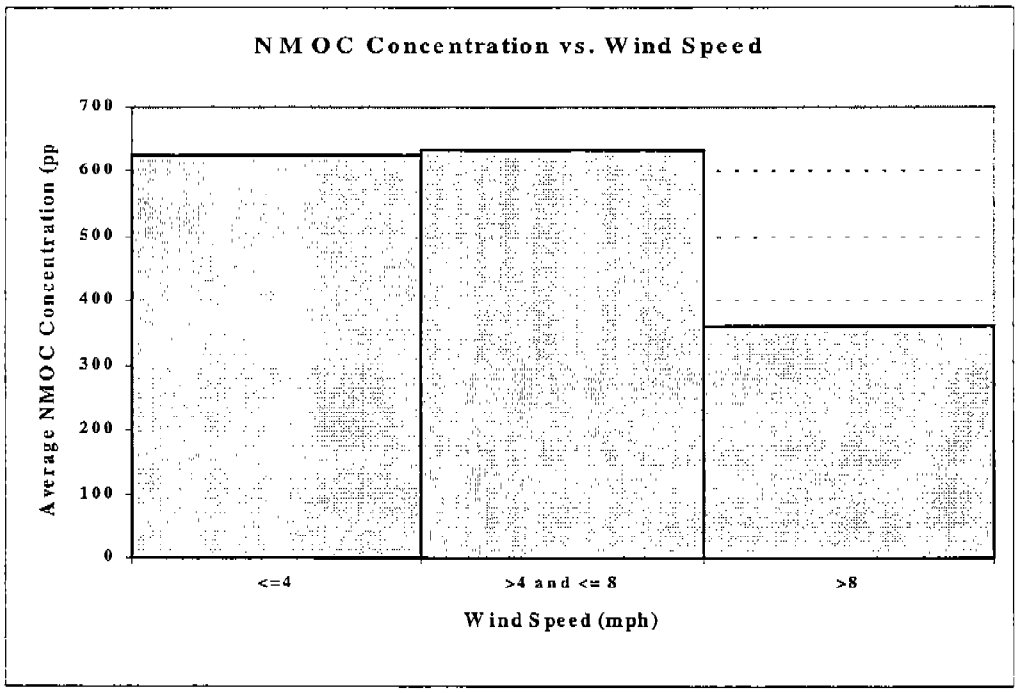
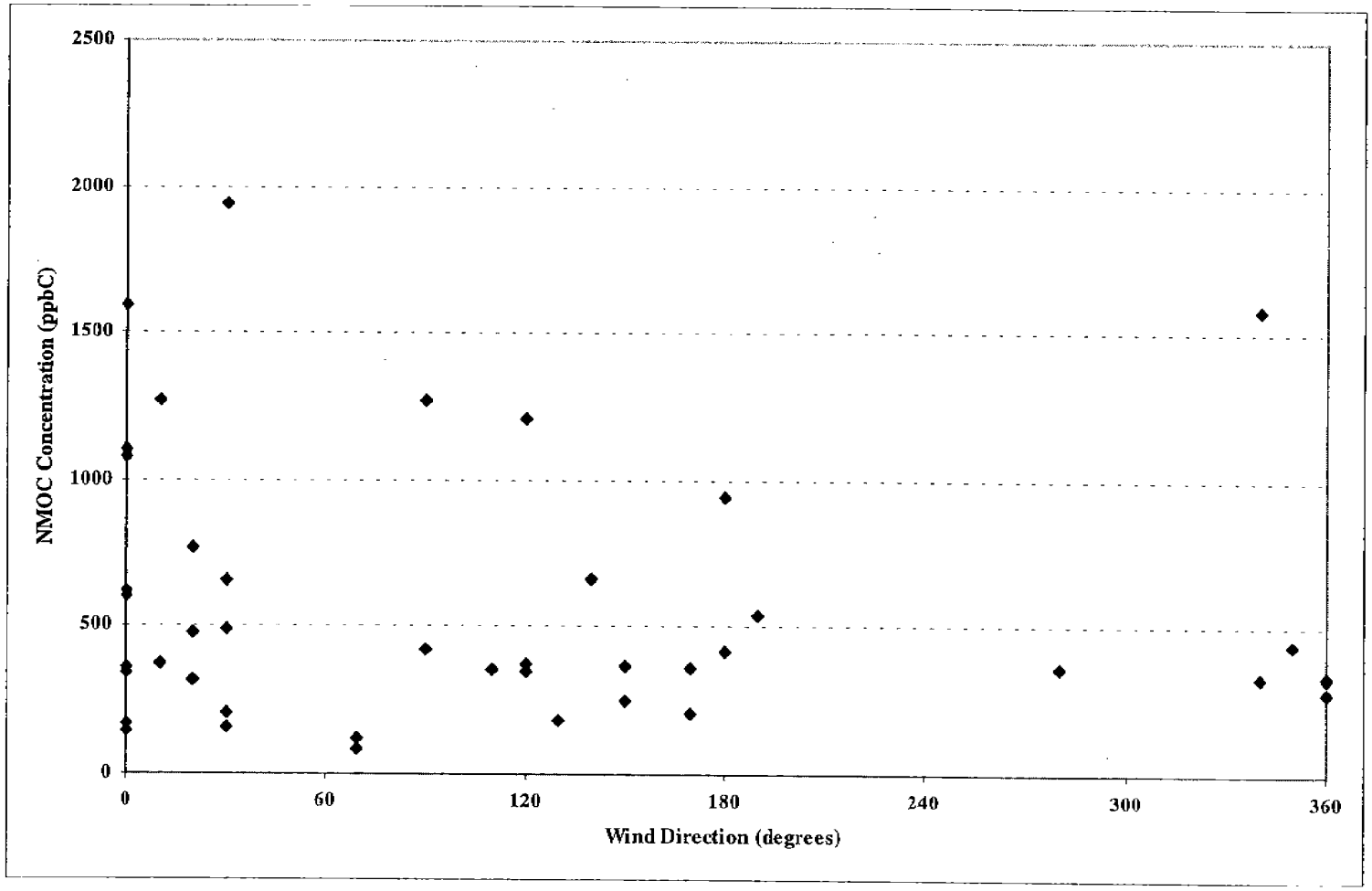


Figure 5-8
Comparison of NMOC Concentrations at JUMX to Wind Direction



Note: Wind direction in this plot is the direction *from which* wind blows.

Figure 5-9 (Page 1 of 4)
Temporal Variations of Total Identified Compounds, by Alkanes, Olefins, and Aromatics

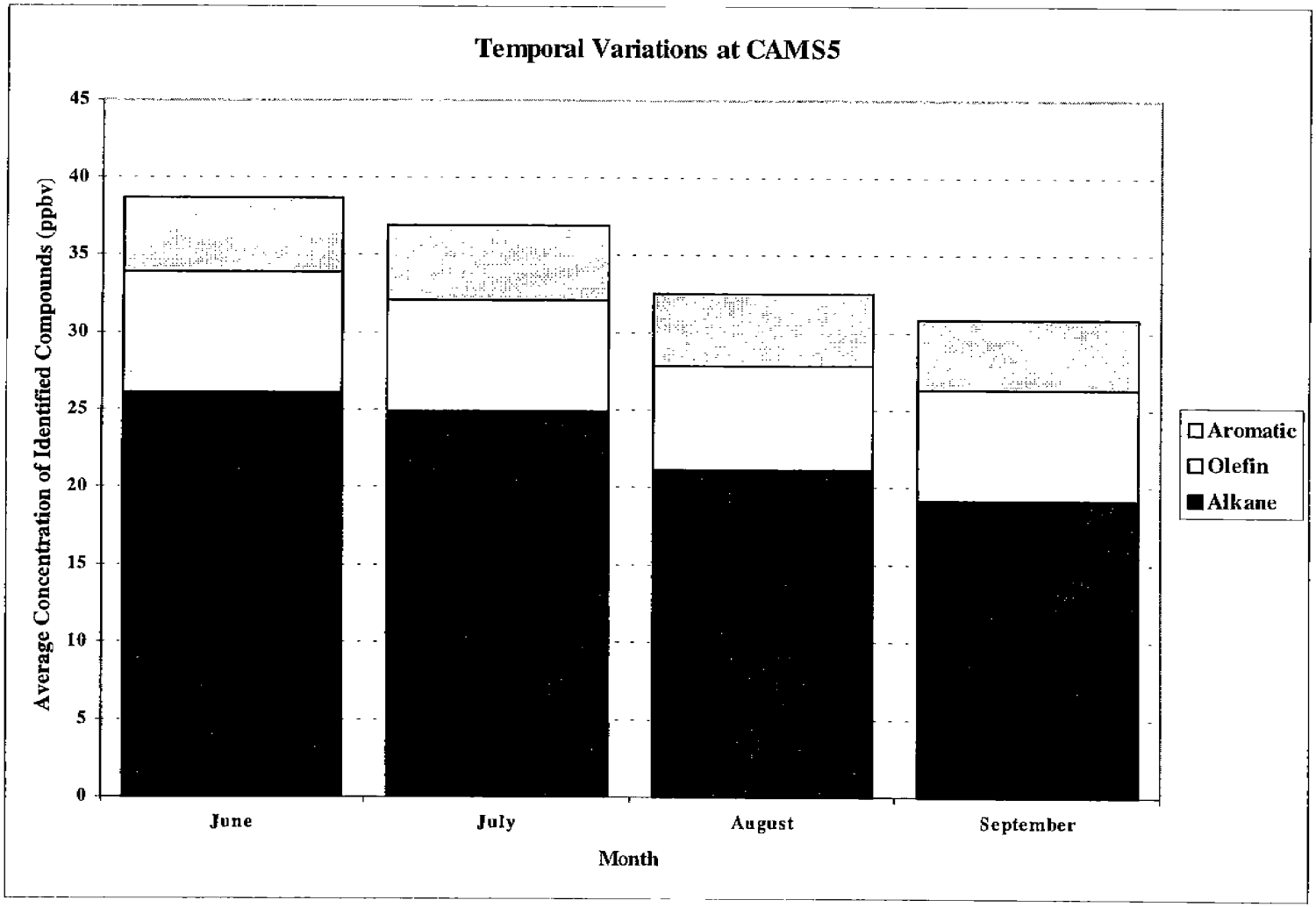


Figure 5-9 (Page 2 of 4)
Temporal Variations of Total Identified Compounds, by Alkanes, Olefins, and Aromatics

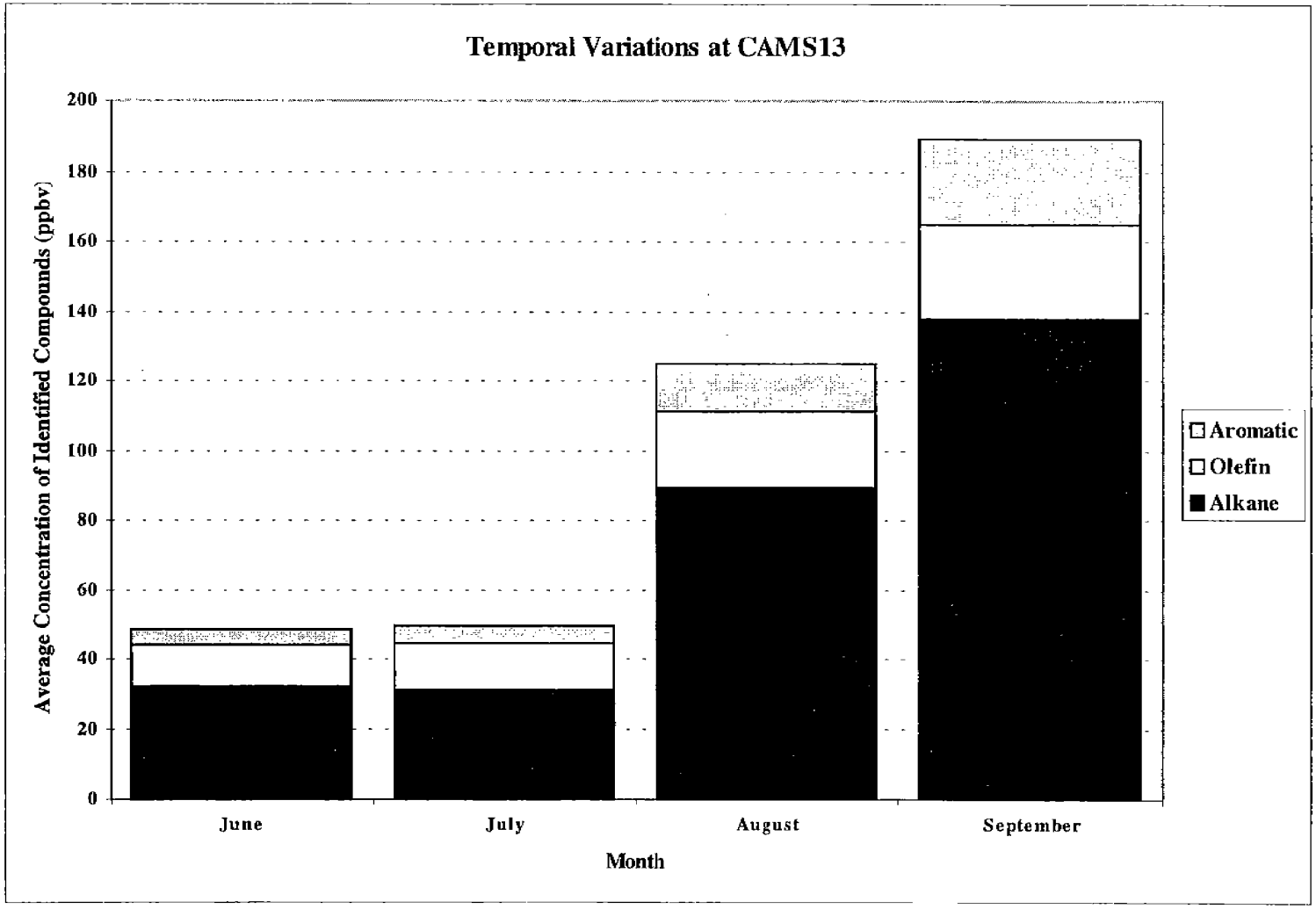


Figure 5-9 (Page 3 of 4)
Temporal Variations of Total Identified Compounds, by Alkanes, Olefins, and Aromatics

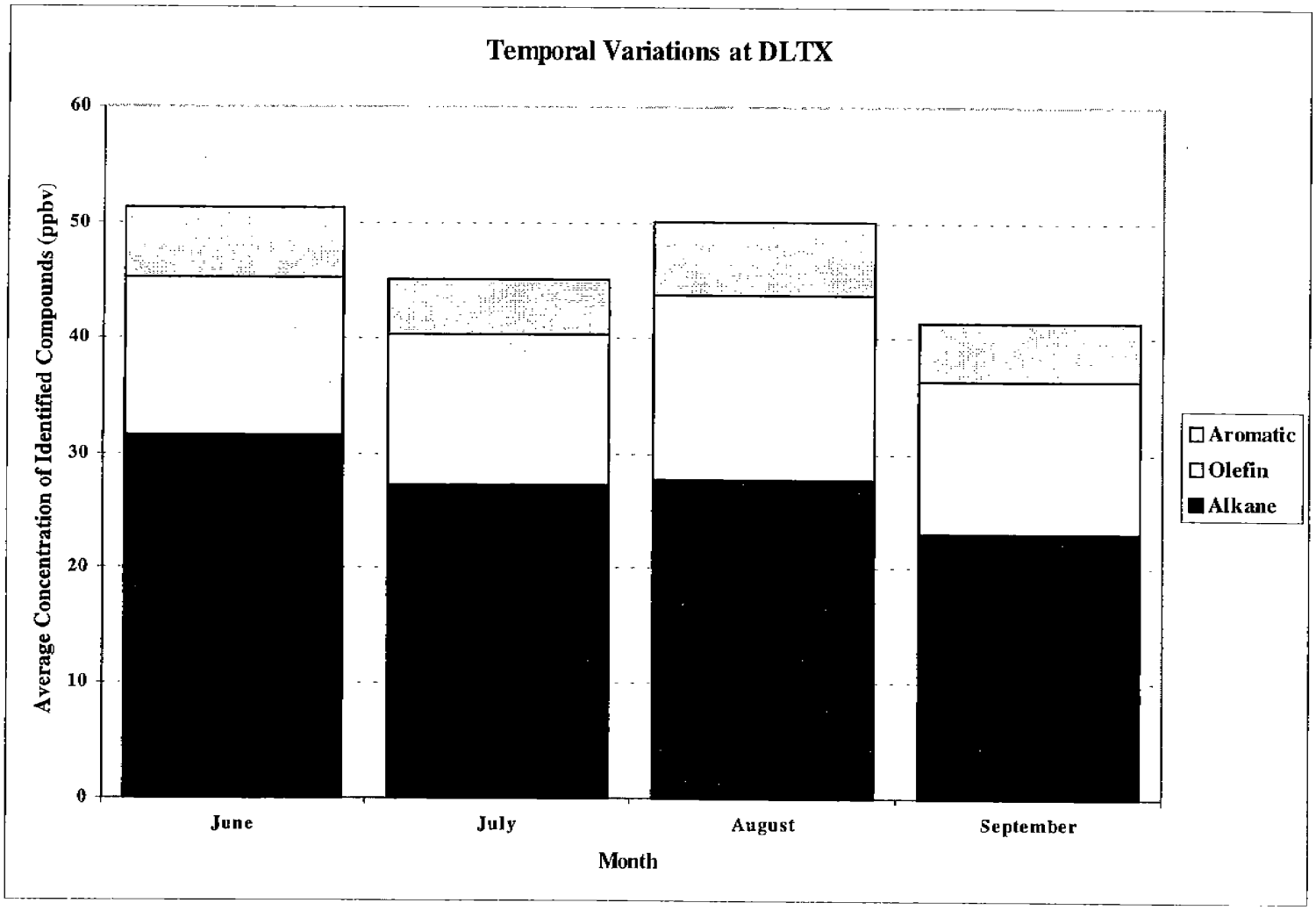
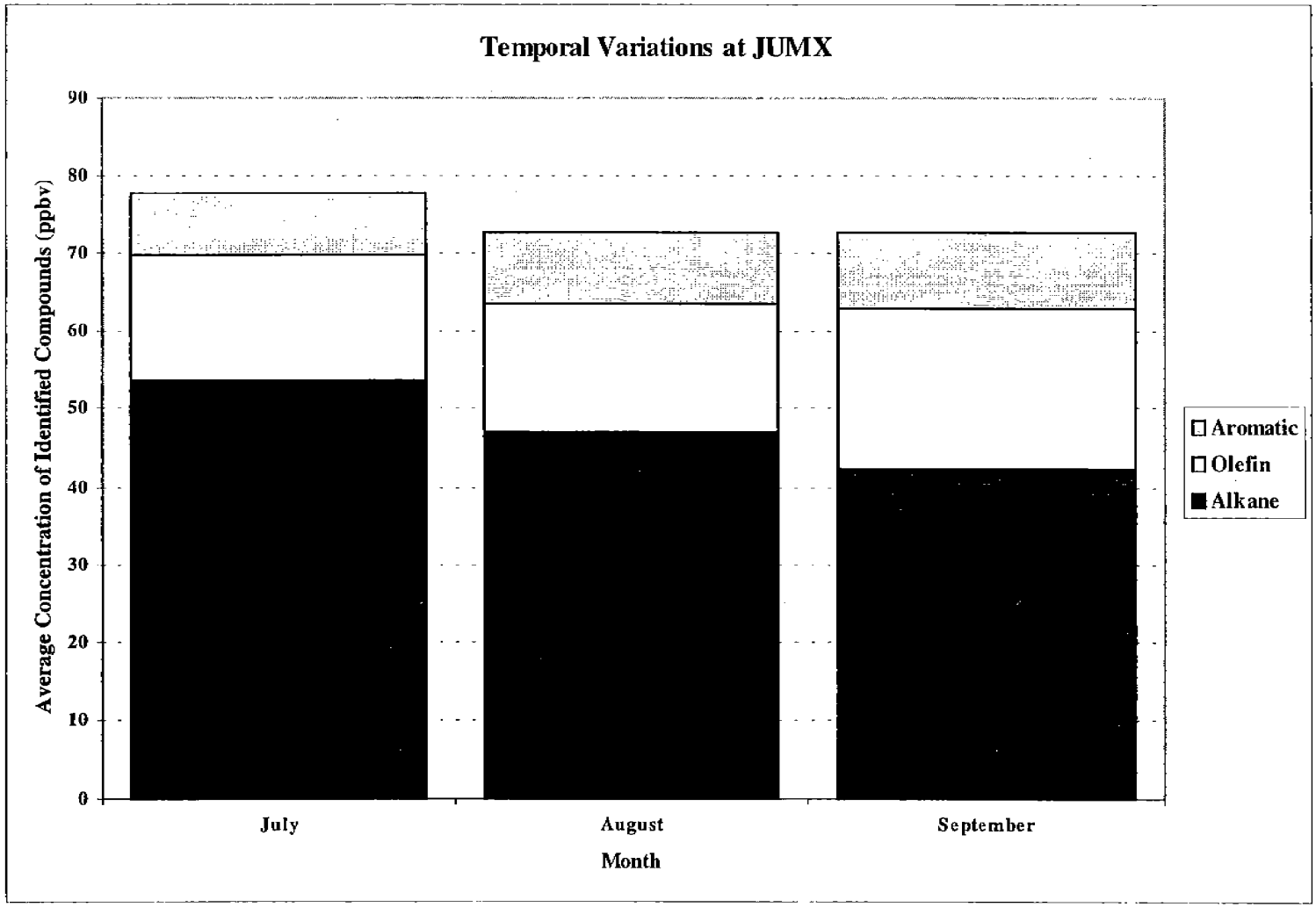


Figure 5-9 (Page 4 of 4)
Temporal Variations of Total Identified Compounds, by Alkanes, Olefins, and Aromatics



Note: A monthly-average concentration could not be calculated for June, because monitoring at JUMX did not start until July 15.

Table 5-1
Summary Statistics for SNMOC Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 79 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Acetylene	0	100%	1.06	16.16	4.90	5.85	4.90	3.52	0.60
Benzene	0	100%	0.87	51.68	7.71	11.91	7.50	11.46	0.96
1,3-Butadiene	5	94%	ND	1.55	0.28	0.36	0.24	0.32	0.89
n-Butane	0	100%	1.88	140.71	13.87	20.98	13.02	23.11	1.10
cis-2-Butene	0	100%	0.11	9.30	0.82	1.42	0.85	1.55	1.09
trans-2-Butene	0	100%	0.11	8.28	0.80	1.20	0.70	1.33	1.11
Cyclohexane	0	100%	0.47	15.19	1.94	3.77	2.25	3.92	1.04
Cyclopentane	0	100%	0.63	17.99	2.35	4.30	2.69	4.22	0.98
Cyclopentene	0	100%	0.04	6.76	0.57	1.34	0.63	1.53	1.14
n-Decane	0	100%	0.11	6.66	0.68	0.89	0.64	1.03	1.16
1-Decene	63	20%	ND	2.30	2.30	1.86	0.99	0.90	0.48
m-Diethylbenzene	9	89%	ND	2.30	0.28	0.57	0.28	0.69	1.22
p-Diethylbenzene	9	89%	ND	2.30	0.31	0.65	0.36	0.69	1.07
2,2-Dimethylbutane	0	100%	0.72	29.13	3.22	5.22	3.75	4.83	0.92
2,3-Dimethylbutane	0	100%	0.59	204.94	4.23	16.52	4.84	40.92	2.48
2,3-Dimethylpentane	0	100%	0.97	12.84	2.98	4.30	3.32	3.18	0.74
2,4-Dimethylpentane	1	99%	ND	11.75	1.91	3.01	1.91	2.89	0.96
n-Dodecane	2	97%	ND	15.31	0.65	1.41	0.74	2.51	1.78

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-1 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 79 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
1-Dodecene	38	52%	ND	2.30	0.57	1.25	0.63	1.03	0.83
Ethane	0	100%	0.55	38.74	12.05	13.74	10.49	8.86	0.64
2-Ethyl-1-butene	79	0%	ND	1.07	1.07	1.07	1.07	0.00	0.00
Ethylbenzene	0	100%	0.40	19.38	3.35	5.18	3.42	4.66	0.90
Ethylene	0	100%	1.10	21.35	6.08	7.28	6.07	4.45	0.61
m-Ethyltoluene	0	100%	0.35	16.53	2.76	4.54	2.81	4.37	0.96
o-Ethyltoluene	0	100%	0.22	6.18	1.23	1.89	1.28	1.63	0.86
p-Ethyltoluene	0	100%	0.20	9.67	1.64	2.70	1.64	2.60	0.97
n-Heptane	1	99%	ND	32.09	3.58	7.44	4.02	8.16	1.10
1-Heptene	3	96%	ND	7.13	0.87	1.72	0.97	1.80	1.04
n-Hexane	0	100%	1.33	109.60	11.65	23.85	12.21	26.66	1.12
1-Hexene	0	100%	0.06	4.31	0.45	0.94	0.51	1.03	1.10
cis-2-Hexene	0	100%	0.02	4.59	0.41	0.92	0.40	1.10	1.19
trans-2-Hexene	0	100%	0.03	7.34	0.62	1.52	0.65	1.81	1.19
Isobutane	0	100%	1.27	25.21	5.29	6.09	4.84	4.59	0.75
Isobutene/1-Butene	0	100%	1.61	11.44	4.61	4.90	4.46	2.17	0.44
Isopentane	0	100%	4.73	385.09	40.19	87.29	42.73	95.84	1.10
Isoprene	0	100%	0.16	3.53	1.05	1.11	0.94	0.62	0.56

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-1 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 79 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Isopropylbenzene	0	100%	0.07	1.94	0.30	0.45	0.32	0.40	0.89
2-Methyl-1-butene	0	100%	0.18	29.10	2.57	6.15	2.74	6.96	1.13
2-Methyl-2-butene	0	100%	0.14	48.80	3.37	9.58	3.88	11.42	1.19
3-Methyl-1-butene	0	100%	0.04	7.92	0.72	1.75	0.77	1.97	1.13
Methylcyclohexane	0	100%	0.44	14.18	2.13	3.64	2.36	3.53	0.97
Methylcyclopentane	0	100%	1.09	51.33	5.76	11.84	6.58	12.68	1.07
2-Methylheptane	0	100%	0.24	6.83	1.04	1.81	1.16	1.76	0.97
3-Methylheptane	0	100%	0.28	6.51	1.10	1.81	1.21	1.69	0.94
2-Methylhexane	0	100%	2.86	35.05	7.06	10.33	7.95	8.07	0.78
3-Methylhexane	0	100%	0.83	40.10	7.43	11.03	6.58	10.41	0.94
2-Methylpentane	0	100%	1.87	179.53	15.32	45.02	19.81	47.96	1.07
3-Methylpentane	0	100%	1.41	95.76	11.07	22.47	12.88	23.20	1.03
2-Methyl-1-pentene	0	100%	0.05	7.93	0.67	1.63	0.74	1.92	1.18
4-Methyl-1-pentene	0	100%	0.09	2.78	0.34	0.66	0.43	0.64	0.97
n-Nonane	0	100%	0.15	3.32	0.72	0.88	0.70	0.62	0.71
1-Nonene	4	95%	ND	2.30	0.12	0.26	0.13	0.49	1.91
n-Octane	0	100%	0.27	6.59	1.09	1.77	1.17	1.68	0.95
1-Octene	49	38%	ND	2.37	2.37	1.50	0.61	1.11	0.74

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-1 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 79 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
n-Pentane	0	100%	2.13	182.15	19.99	40.51	20.64	43.54	1.07
1-Pentene	0	100%	0.16	18.23	1.32	3.66	1.67	4.26	1.16
cis-2-Pentene	0	100%	0.11	18.76	1.54	3.96	1.77	4.58	1.16
trans-2-Pentene	0	100%	0.15	39.45	2.79	8.03	3.15	9.59	1.19
a-Pinene	0	100%	0.20	11.37	0.73	1.38	0.88	1.86	1.35
b-Pinene	1	99%	ND	9.06	0.50	0.94	0.53	1.34	1.42
Propane	0	100%	2.96	76.95	13.68	16.11	12.86	11.90	0.74
n-Propylbenzene	0	100%	0.06	4.94	0.75	1.32	0.75	1.36	1.03
Propylene	0	100%	0.33	8.40	2.19	2.59	2.12	1.70	0.66
Propyne	78	1%	ND	0.16	0.16	0.15	0.15	0.02	0.11
Styrene	0	100%	0.05	1.71	0.41	0.48	0.37	0.34	0.71
Toluene	0	100%	2.19	122.00	17.55	27.64	17.71	26.14	0.95
n-Tridecane	27	66%	ND	3.75	0.60	1.11	0.59	1.01	0.91
1-Tridecene	71	10%	ND	2.30	2.30	2.08	1.66	0.66	0.32
1,2,3-Trimethylbenzene	5	94%	ND	6.25	1.09	1.73	0.98	1.70	0.98
1,2,4-Trimethylbenzene	0	100%	0.38	25.33	3.58	6.66	3.73	6.90	1.04
1,3,5-Trimethylbenzene	0	100%	0.24	8.71	1.48	2.45	1.59	2.25	0.92
2,2,3-Trimethylpentane	0	100%	0.14	6.45	1.09	1.74	1.10	1.65	0.95

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-1 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 79 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
2,2,4-Trimethylpentane	0	100%	0.68	22.93	5.74	7.47	5.46	5.78	0.77
2,3,4-Trimethylpentane	0	100%	0.27	10.33	2.32	2.98	2.15	2.42	0.81
n-Undecane	0	100%	0.14	22.76	0.81	1.69	0.88	3.67	2.17
1-Undecene	41	48%	ND	3.48	2.30	1.44	0.83	1.01	0.70
m,p-Xylene	0	100%	1.22	67.93	10.69	17.69	10.86	17.24	0.98
o-Xylene	0	100%	0.43	22.58	3.69	6.10	3.83	5.82	0.95
TNMOC (w/ unknowns)	0	100%	79.04	2,419.70	385.91	636.65	420.01	580.38	0.91
TNMOC (speciated)	0	100%	63.19	2,190.12	332.53	540.75	352.57	502.97	0.93

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-2
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 81 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Acetylene	0	100%	0.79	7.86	2.75	2.95	2.66	1.34	0.46
Benzene	0	100%	1.64	11.50	3.31	3.69	3.44	1.58	0.43
1,3-Butadiene	9	89%	ND	0.35	0.09	0.11	0.08	0.08	0.73
n-Butane	0	100%	1.65	22.95	5.67	6.08	5.40	3.16	0.52
cis-2-Butene	0	100%	0.09	1.45	0.24	0.29	0.26	0.18	0.62
trans-2-Butene	3	96%	ND	1.09	0.14	0.18	0.16	0.14	0.75
Cyclohexane	0	100%	0.43	2.17	0.78	0.86	0.81	0.32	0.37
Cyclopentane	0	100%	0.60	2.79	1.00	1.05	1.00	0.40	0.38
Cyclopentene	0	100%	0.12	1.29	0.20	0.24	0.22	0.17	0.71
n-Decane	0	100%	0.11	23.83	0.57	0.95	0.60	2.62	2.76
1-Decene	59	27%	ND	2.30	2.30	1.71	0.80	0.99	0.58
m-Diethylbenzene	2	98%	ND	2.30	0.17	0.22	0.14	0.37	1.63
p-Diethylbenzene	3	96%	ND	2.30	0.20	0.30	0.21	0.42	1.42
2,2-Dimethylbutane	0	100%	0.38	1.81	0.73	0.75	0.70	0.31	0.41
2,3-Dimethylbutane	0	100%	0.78	5.10	1.39	1.61	1.47	0.82	0.51
2,3-Dimethylpentane	1	99%	ND	4.10	1.55	1.69	1.61	0.57	0.34
2,4-Dimethylpentane	0	100%	0.47	2.38	0.75	0.82	0.77	0.34	0.42
n-Dodecane	1	99%	ND	46.63	0.48	1.36	0.52	5.31	3.91

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-2 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 81 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
1-Dodecene	28	65%	ND	2.30	0.31	0.98	0.45	0.99	1.01
Ethane	0	100%	0.62	32.64	10.28	12.60	9.58	8.25	0.66
2-Ethyl-1-butene	81	0%	ND	ND	1.07	1.07	1.07	0.00	0.00
Ethylbenzene	0	100%	0.50	8.13	1.93	2.26	1.99	1.38	0.61
Ethylene	0	100%	1.92	9.32	4.17	4.47	4.17	1.75	0.39
m-Ethyltoluene	0	100%	0.34	4.11	1.28	1.44	1.31	0.64	0.45
o-Ethyltoluene	0	100%	0.16	1.49	0.62	0.63	0.58	0.27	0.42
p-Ethyltoluene	0	100%	0.18	2.43	0.83	0.89	0.81	0.39	0.44
n-Heptane	0	100%	0.88	7.41	1.64	1.87	1.71	1.04	0.56
1-Heptene	1	99%	ND	1.86	0.34	0.38	0.34	0.24	0.62
n-Hexane	0	100%	2.20	18.63	4.09	4.71	4.32	2.53	0.54
1-Hexene	0	100%	0.13	1.35	0.27	0.31	0.28	0.18	0.59
cis-2-Hexene	0	100%	0.09	1.18	0.17	0.20	0.18	0.15	0.74
trans-2-Hexene	0	100%	0.14	2.45	0.26	0.33	0.28	0.30	0.90
Isobutane	0	100%	0.75	6.87	2.91	3.05	2.66	1.50	0.49
Isobutene/1-Butene	0	100%	0.75	4.16	1.42	1.66	1.54	0.71	0.43
Isopentane	0	100%	5.91	61.67	12.43	13.60	12.11	8.42	0.62
Isoprene	0	100%	0.15	4.16	1.00	1.27	0.98	0.90	0.72

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-2 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 81 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Isopropylbenzene	0	100%	0.04	2.20	0.16	0.25	0.17	0.39	1.56
2-Methyl-1-butene	0	100%	0.34	3.84	0.64	0.79	0.69	0.60	0.75
2-Methyl-2-butene	0	100%	0.58	7.44	1.03	1.29	1.10	1.12	0.87
3-Methyl-1-butene	0	100%	0.07	1.14	0.16	0.20	0.17	0.15	0.77
Methylcyclohexane	1	99%	ND	3.60	1.12	1.20	1.13	0.52	0.43
Methylcyclopentane	0	100%	1.12	7.70	1.98	2.23	2.08	1.06	0.48
2-Methylheptane	0	100%	0.34	6.63	0.58	0.78	0.64	0.87	1.12
3-Methylheptane	0	100%	0.33	3.99	0.58	0.70	0.61	0.56	0.80
2-Methylhexane	0	100%	3.18	9.83	4.16	4.31	4.22	1.08	0.25
3-Methylhexane	0	100%	0.76	9.89	2.13	2.47	2.21	1.45	0.59
2-Methylpentane	0	100%	2.57	30.24	4.66	5.48	4.82	4.20	0.77
3-Methylpentane	0	100%	1.89	14.88	4.16	4.64	4.26	2.21	0.48
2-Methyl-1-pentene	0	100%	0.13	1.50	0.25	0.29	0.26	0.20	0.70
4-Methyl-1-pentene	0	100%	0.01	0.85	0.18	0.23	0.17	0.18	0.79
n-Nonane	0	100%	0.10	1.96	0.48	0.53	0.47	0.29	0.55
1-Nonene	5	94%	ND	2.30	0.10	0.26	0.11	0.55	2.13
n-Octane	0	100%	0.34	7.34	0.65	0.89	0.72	1.00	1.13
1-Octene	41	49%	ND	2.37	2.37	1.26	0.46	1.13	0.89

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-2 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 81 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
n-Pentane	0	100%	3.03	24.00	6.32	6.95	6.33	3.69	0.53
1-Pentene	0	100%	0.06	3.90	0.53	0.70	0.54	0.70	1.00
cis-2-Pentene	0	100%	0.34	3.33	0.56	0.68	0.61	0.47	0.69
trans-2-Pentene	0	100%	0.55	6.08	0.88	1.12	0.96	0.96	0.86
a-Pinene	1	99%	ND	4.49	0.40	0.60	0.41	0.65	1.09
b-Pinene	15	81%	ND	2.30	0.25	0.65	0.29	0.83	1.28
Propane	0	100%	2.82	22.28	9.06	10.01	8.87	4.73	0.47
n-Propylbenzene	0	100%	0.08	1.15	0.41	0.41	0.37	0.18	0.44
Propylene	0	100%	0.55	3.06	1.22	1.45	1.33	0.63	0.44
Propyne	81	0%	ND	ND	0.16	0.16	0.16	0.00	0.00
Styrene	3	96%	ND	2.37	0.28	0.44	0.29	0.48	1.10
Toluene	0	100%	4.63	60.36	9.45	11.08	9.66	8.60	0.78
n-Tridecane	35	57%	ND	19.60	0.83	1.45	0.65	2.31	1.59
1-Tridecene	75	7%	ND	2.30	2.30	2.15	1.89	0.53	0.25
1,2,3-Trimethylbenzene	1	99%	ND	2.30	0.40	0.47	0.40	0.31	0.65
1,2,4-Trimethylbenzene	1	99%	ND	5.30	1.88	2.14	1.93	0.93	0.43
1,3,5-Trimethylbenzene	0	100%	0.17	2.37	0.79	0.85	0.77	0.40	0.47
2,2,3-Trimethylpentane	1	99%	ND	2.37	0.44	0.55	0.48	0.38	0.68

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-2 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 81 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
2,2,4-Trimethylpentane	0	100%	1.39	8.30	2.52	2.88	2.62	1.42	0.49
2,3,4-Trimethylpentane	0	100%	0.60	4.04	1.02	1.20	1.09	0.62	0.51
n-Undecane	0	100%	0.20	76.43	0.98	2.29	1.03	8.79	3.83
1-Undecene	42	48%	ND	2.30	2.30	1.35	0.68	1.04	0.77
m,p-Xylene	0	100%	1.62	26.81	5.86	6.92	5.99	4.68	0.68
o-Xylene	0	100%	0.56	8.62	2.00	2.31	2.06	1.36	0.59
TNMOC (w/ unknowns)	0	100%	90.37	535.93	166.94	186.85	173.12	84.64	0.45
TNMOC (speciated)	0	100%	73.97	482.69	138.03	152.91	140.64	73.76	0.48

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-3
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (DLTX)
(Based on 82 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Acetylene	0	100%	1.44	76.94	6.38	10.22	7.17	10.72	1.05
Benzene	0	100%	1.58	11.55	3.73	4.31	3.86	2.09	0.48
1,3-Butadiene	3	96%	ND	1.47	0.31	0.39	0.31	0.28	0.72
n-Butane	0	100%	1.60	17.46	6.65	7.11	6.27	3.41	0.48
cis-2-Butene	1	99%	ND	0.97	0.36	0.38	0.34	0.18	0.46
trans-2-Butene	0	100%	0.08	1.35	0.28	0.35	0.30	0.23	0.65
Cyclohexane	0	100%	0.41	2.91	1.06	1.14	1.09	0.38	0.33
Cyclopentane	0	100%	0.45	3.18	0.96	1.10	1.01	0.50	0.46
Cyclopentene	2	98%	ND	0.62	0.19	0.21	0.18	0.12	0.58
n-Decane	0	100%	0.14	5.93	0.76	1.04	0.78	0.90	0.87
1-Decene	57	30%	ND	2.30	2.30	1.63	0.72	1.02	0.63
m-Diethylbenzene	3	96%	ND	2.30	0.17	0.25	0.14	0.43	1.72
p-Diethylbenzene	5	94%	ND	2.30	0.20	0.36	0.21	0.55	1.53
2,2-Dimethylbutane	0	100%	0.11	2.73	0.90	1.04	0.91	0.54	0.52
2,3-Dimethylbutane	0	100%	0.68	4.69	1.49	1.75	1.57	0.90	0.51
2,3-Dimethylpentane	0	100%	0.85	4.68	1.84	2.03	1.89	0.81	0.40
2,4-Dimethylpentane	0	100%	0.38	2.47	0.79	0.90	0.82	0.42	0.47
n-Dodecane	0	100%	0.11	9.23	0.69	1.37	0.81	1.79	1.31

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-3 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (DLTX)
(Based on 82 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
1-Dodecene	35	57%	ND	2.30	0.59	1.16	0.61	1.01	0.87
Ethane	0	100%	0.51	31.39	11.71	13.59	10.85	7.79	0.57
2-Ethyl-1-butene	82	0%	ND	ND	1.07	1.07	1.07	0.00	0.00
Ethylbenzene	0	100%	0.32	7.99	1.97	2.49	2.02	1.63	0.66
Ethylene	0	100%	2.56	20.83	7.40	8.61	7.64	4.23	0.49
m-Ethyltoluene	0	100%	0.37	8.84	1.80	1.99	1.67	1.27	0.64
o-Ethyltoluene	0	100%	0.16	3.93	0.76	0.89	0.77	0.54	0.60
p-Ethyltoluene	0	100%	0.20	5.49	1.06	1.24	1.02	0.84	0.67
n-Heptane	0	100%	0.64	11.58	1.99	2.52	2.05	1.92	0.76
1-Heptene	9	89%	ND	1.86	0.37	0.56	0.42	0.50	0.89
n-Hexane	0	100%	1.28	11.37	3.96	4.47	3.96	2.22	0.50
1-Hexene	1	99%	ND	1.07	0.20	0.24	0.20	0.16	0.66
cis-2-Hexene	3	96%	ND	1.07	0.11	0.17	0.12	0.19	1.15
trans-2-Hexene	0	100%	0.03	1.50	0.17	0.26	0.19	0.26	1.02
Isobutane	0	100%	1.02	11.93	3.57	3.82	3.29	2.10	0.55
Isobutene/1-Butene	0	100%	0.86	10.13	3.28	3.67	3.31	1.71	0.47
Isopentane	0	100%	4.33	41.46	12.81	15.12	13.39	7.78	0.51
Isoprene	0	100%	0.10	3.54	1.16	1.36	1.10	0.81	0.59

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-3 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (DLTX)
(Based on 82 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Isopropylbenzene	1	99%	ND	2.30	0.21	0.26	0.21	0.27	1.03
2-Methyl-1-butene	0	100%	0.12	2.65	0.71	0.82	0.69	0.52	0.63
2-Methyl-2-butene	0	100%	0.07	3.67	0.95	1.14	0.93	0.74	0.65
3-Methyl-1-butene	0	100%	0.07	0.76	0.19	0.23	0.20	0.15	0.62
Methylcyclohexane	0	100%	0.33	4.80	1.34	1.46	1.32	0.70	0.48
Methylcyclopentane	0	100%	0.79	6.13	2.06	2.31	2.09	1.07	0.47
2-Methylheptane	0	100%	0.29	2.82	0.66	0.77	0.68	0.42	0.55
3-Methylheptane	0	100%	0.30	2.31	0.68	0.77	0.68	0.40	0.52
2-Methylhexane	0	100%	2.77	9.01	4.55	4.89	4.70	1.43	0.29
3-Methylhexane	0	100%	0.88	10.82	2.98	3.43	2.93	2.01	0.59
2-Methylpentane	0	100%	1.70	33.74	4.62	5.85	4.90	4.60	0.79
3-Methylpentane	0	100%	1.32	12.68	4.90	5.47	4.89	2.55	0.47
2-Methyl-1-pentene	1	99%	ND	1.07	0.19	0.25	0.21	0.16	0.65
4-Methyl-1-pentene	3	96%	ND	1.07	0.16	0.22	0.16	0.21	0.94
n-Nonane	0	100%	0.15	4.26	0.65	0.85	0.66	0.71	0.84
1-Nonene	8	90%	ND	2.30	0.13	0.39	0.15	0.67	1.73
n-Octane	0	100%	0.30	6.07	0.87	0.97	0.83	0.74	0.76
1-Octene	60	27%	ND	2.37	2.37	1.78	0.99	0.98	0.55

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-3 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (DLTX)
(Based on 82 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
n-Pentane	0	100%	1.96	18.09	5.89	6.84	6.06	3.47	0.51
1-Pentene	0	100%	0.04	1.91	0.47	0.54	0.45	0.34	0.62
cis-2-Pentene	0	100%	0.15	1.49	0.48	0.55	0.49	0.28	0.51
trans-2-Pentene	0	100%	0.22	3.68	0.81	1.05	0.85	0.75	0.71
a-Pinene	0	100%	0.13	4.56	0.90	1.19	0.91	0.90	0.76
b-Pinene	5	94%	ND	2.50	0.34	0.63	0.38	0.66	1.06
Propane	0	100%	3.97	61.60	14.46	17.00	14.42	10.16	0.60
n-Propylbenzene	1	99%	ND	2.74	0.55	0.62	0.50	0.44	0.70
Propylene	0	100%	0.82	8.31	2.47	2.96	2.57	1.60	0.54
Propyne	82	0%	ND	ND	0.16	0.16	0.16	0.00	0.00
Styrene	1	99%	ND	4.28	0.47	0.70	0.49	0.70	0.99
Toluene	0	100%	3.40	42.51	10.36	12.58	10.76	7.56	0.60
n-Tridecane	24	71%	ND	3.28	0.51	1.03	0.59	0.95	0.92
1-Tridecene	73	11%	ND	2.30	2.30	2.10	1.79	0.61	0.29
1,2,3-Trimethylbenzene	1	99%	ND	3.45	0.52	0.67	0.51	0.55	0.83
1,2,4-Trimethylbenzene	0	100%	0.36	13.46	2.38	2.82	2.28	1.97	0.70
1,3,5-Trimethylbenzene	0	100%	0.17	5.85	1.11	1.27	1.03	0.93	0.73
2,2,3-Trimethylpentane	0	100%	0.14	2.17	0.54	0.67	0.57	0.40	0.60

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-3 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Dallas, Texas (DLTX)
(Based on 82 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
2,2,4-Trimethylpentane	0	100%	1.38	11.85	2.87	3.50	3.05	2.04	0.58
2,3,4-Trimethylpentane	0	100%	0.51	4.14	1.16	1.39	1.23	0.75	0.54
n-Undecane	0	100%	0.24	12.35	0.99	1.65	1.12	2.07	1.25
1-Undecene	44	46%	ND	2.30	2.30	1.31	0.58	1.08	0.82
m,p-Xylene	0	100%	0.87	33.53	6.15	7.86	6.15	5.81	0.74
o-Xylene	0	100%	0.34	8.71	2.15	2.69	2.19	1.78	0.66
TNMOC (w/ unknowns)	0	100%	80.98	522.40	198.39	230.66	207.69	109.00	0.47
TNMOC (speciated)	0	100%	62.81	472.19	162.68	191.83	171.95	93.10	0.49

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-4
Summary Statistics for SNMOC Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 50 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Acetylene	0	100%	2.06	26.14	11.16	10.97	9.45	5.42	0.49
Benzene	0	100%	1.44	14.15	7.80	7.62	6.52	3.75	0.49
1,3-Butadiene	1	98%	ND	1.32	0.52	0.54	0.38	0.36	0.68
n-Butane	0	100%	2.96	61.39	13.69	15.93	13.11	10.81	0.68
cis-2-Butene	0	100%	0.08	1.26	0.38	0.40	0.35	0.21	0.52
trans-2-Butene	1	98%	ND	1.57	0.31	0.38	0.30	0.27	0.71
Cyclohexane	0	100%	0.67	5.82	2.15	2.34	2.08	1.10	0.47
Cyclopentane	0	100%	0.36	3.11	1.25	1.35	1.24	0.55	0.41
Cyclopentene	5	90%	ND	0.96	0.22	0.27	0.21	0.17	0.66
n-Decane	0	100%	0.08	5.83	0.83	1.12	0.83	1.05	0.94
1-Decene	46	8%	ND	2.30	2.30	2.14	1.84	0.55	0.26
m-Diethylbenzene	2	96%	ND	2.30	0.24	0.30	0.20	0.43	1.42
p-Diethylbenzene	2	96%	ND	2.30	0.25	0.35	0.25	0.43	1.23
2,2-Dimethylbutane	0	100%	0.23	2.07	0.89	0.96	0.82	0.49	0.51
2,3-Dimethylbutane	0	100%	0.58	6.87	2.43	2.47	2.19	1.17	0.47
2,3-Dimethylpentane	0	100%	1.08	9.68	4.87	4.90	4.42	2.05	0.42
2,4-Dimethylpentane	0	100%	0.38	8.14	2.40	2.49	2.09	1.42	0.57
n-Dodecane	0	100%	0.04	76.23	0.68	2.86	0.72	10.88	3.81

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-4 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 50 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
1-Dodecene	27	46%	ND	108.56	2.30	3.59	0.96	15.18	4.23
Ethane	0	100%	0.60	29.78	10.06	12.09	9.77	7.35	0.61
2-Ethyl-1-butene	50	0%	ND	ND	1.07	1.07	1.07	0.00	0.00
Ethylbenzene	0	100%	0.59	9.78	4.21	4.38	3.67	2.34	0.53
Ethylene	0	100%	1.69	26.15	11.50	11.77	10.05	5.75	0.49
m-Ethyltoluene	0	100%	0.50	5.82	2.19	2.41	2.01	1.41	0.58
o-Ethyltoluene	0	100%	0.30	2.46	1.01	1.07	0.94	0.54	0.50
p-Ethyltoluene	0	100%	0.37	2.94	1.41	1.42	1.21	0.73	0.52
n-Heptane	0	100%	0.55	6.54	2.35	2.58	2.22	1.36	0.53
1-Heptene	2	96%	ND	1.86	0.81	0.82	0.70	0.42	0.51
n-Hexane	2	96%	ND	11.21	5.98	5.92	5.03	2.92	0.49
1-Hexene	0	100%	0.07	0.84	0.32	0.34	0.29	0.18	0.54
cis-2-Hexene	2	96%	ND	1.07	0.20	0.25	0.19	0.21	0.84
trans-2-Hexene	0	100%	0.04	1.49	0.29	0.38	0.28	0.32	0.85
Isobutane	0	100%	1.11	43.43	4.37	6.12	4.54	6.66	1.09
Isobutene/1-Butene	0	100%	0.77	17.69	2.92	3.20	2.74	2.40	0.75
Isopentane	0	100%	3.06	58.96	16.69	17.82	14.73	11.07	0.62
Isoprene	0	100%	0.13	1.56	0.67	0.66	0.58	0.30	0.46

ND = nondetect
Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-4 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 50 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Isopropylbenzene	0	100%	0.08	4.94	0.22	0.32	0.22	0.68	2.10
2-Methyl-1-butene	0	100%	0.10	2.87	0.92	1.00	0.77	0.65	0.65
2-Methyl-2-butene	0	100%	0.05	3.40	0.97	1.16	0.79	0.87	0.75
3-Methyl-1-butene	1	98%	ND	0.80	0.27	0.29	0.24	0.18	0.62
Methylcyclohexane	0	100%	0.47	4.33	1.57	1.72	1.53	0.81	0.47
Methylcyclopentane	0	100%	0.89	10.52	3.85	3.97	3.42	2.02	0.51
2-Methylheptane	0	100%	0.21	1.61	0.83	0.84	0.74	0.37	0.45
3-Methylheptane	0	100%	0.24	2.21	0.88	0.89	0.79	0.42	0.47
2-Methylhexane	1	98%	ND	8.32	5.00	5.02	4.80	1.42	0.28
3-Methylhexane	0	100%	0.57	7.66	3.17	3.41	2.86	1.83	0.54
2-Methylpentane	0	100%	1.39	17.32	6.70	6.89	5.93	3.47	0.50
3-Methylpentane	0	100%	1.10	12.25	6.13	6.16	5.44	2.76	0.45
2-Methyl-1-pentene	0	100%	0.05	0.83	0.30	0.34	0.29	0.19	0.55
4-Methyl-1-pentene	4	92%	ND	1.07	0.14	0.22	0.15	0.27	1.21
n-Nonane	0	100%	0.13	1.52	0.67	0.73	0.64	0.35	0.48
1-Nonene	1	98%	ND	2.30	0.40	0.51	0.38	0.40	0.79
n-Octane	0	100%	0.33	2.23	0.85	0.95	0.84	0.48	0.51
1-Octene	32	36%	ND	2.37	2.37	1.63	0.97	1.01	0.62

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-4 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 50 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
n-Pentane	0	100%	1.99	36.96	10.88	11.24	9.39	6.75	0.60
1-Pentene	0	100%	0.09	2.62	0.56	0.71	0.55	0.51	0.72
cis-2-Pentene	0	100%	0.15	1.88	0.62	0.67	0.57	0.37	0.55
trans-2-Pentene	0	100%	0.18	4.80	1.26	1.44	1.07	1.08	0.75
a-Pinene	0	100%	0.24	9.61	0.84	1.35	0.90	1.69	1.25
b-Pinene	7	86%	ND	2.30	0.35	0.75	0.36	0.82	1.09
Propane	0	100%	8.49	263.33	35.20	56.41	40.51	51.53	0.91
n-Propylbenzene	0	100%	0.16	2.17	0.71	0.74	0.63	0.41	0.56
Propylene	0	100%	0.55	9.65	4.01	4.22	3.59	2.11	0.50
Propyne	50	0%	ND	ND	0.16	0.16	0.16	0.00	0.00
Styrene	0	100%	0.14	8.86	0.55	1.16	0.65	1.70	1.46
Toluene	0	100%	3.52	49.53	20.07	22.24	18.62	11.75	0.53
n-Tridecane	10	80%	ND	467.20	0.36	10.22	0.54	65.95	6.46
1-Tridecene	39	22%	ND	706.16	2.30	16.09	1.50	99.59	6.19
1,2,3-Trimethylbenzene	2	96%	ND	2.68	0.88	0.95	0.73	0.66	0.69
1,2,4-Trimethylbenzene	0	100%	0.83	10.51	3.44	3.58	2.94	2.20	0.61
1,3,5-Trimethylbenzene	0	100%	0.34	2.97	1.40	1.45	1.23	0.76	0.52
2,2,3-Trimethylpentane	0	100%	0.08	1.95	0.94	0.95	0.78	0.51	0.53

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-4 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 50 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
2,2,4-Trimethylpentane	0	100%	0.72	12.16	5.30	5.24	4.48	2.63	0.50
2,3,4-Trimethylpentane	0	100%	0.34	3.98	2.19	2.10	1.81	1.00	0.48
n-Undecane	0	100%	0.39	19.49	1.10	2.27	1.30	3.87	1.70
1-Undecene	41	18%	ND	2.30	2.30	1.92	1.37	0.83	0.43
m,p-Xylene	0	100%	1.82	33.57	12.42	13.98	11.28	8.06	0.58
o-Xylene	0	100%	0.68	12.23	4.68	4.90	4.06	2.71	0.55
TNMOC (w/ unknowns)	0	100%	87.90	1,942.94	372.91	564.41	433.81	439.18	0.78
TNMOC (speciated)	0	100%	70.32	1,817.42	289.14	322.62	263.07	262.74	0.81

ND = nondetect

Note: Data for compounds detected in less than 50 percent of the samples should be interpreted with caution, since their summary statistics may be influenced by low prevalence (see Section 3.1).

Table 5-5
Summary Statistics for SNMOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Acetylene	0	100%	5.68	13.69	11.88	11.13	10.77	2.72	0.24
Benzene	0	100%	3.45	7.93	6.62	6.13	5.95	1.48	0.24
1,3-Butadiene	0	100%	0.29	1.09	0.65	0.69	0.63	0.28	0.41
n-Butane	0	100%	6.20	14.25	9.53	9.73	9.34	2.94	0.30
cis-2-Butene	0	100%	0.71	1.51	0.80	1.03	0.98	0.34	0.33
trans-2-Butene	0	100%	0.67	1.74	0.79	1.09	1.01	0.44	0.40
Cyclohexane	0	100%	0.73	3.87	1.21	1.47	1.32	0.93	0.63
Cyclopentane	0	100%	0.87	2.13	1.47	1.44	1.38	0.44	0.30
Cyclopentene	0	100%	0.25	0.55	0.31	0.37	0.35	0.13	0.35
n-Decane	0	100%	0.47	93.82	1.95	12.14	2.57	30.65	2.52
1-Decene	9	0%	ND	ND	2.30	2.30	2.30	0.00	0.00
m-Diethylbenzene	1	89%	ND	2.30	0.42	0.56	0.34	0.68	1.22
p-Diethylbenzene	0	100%	0.22	1.80	0.40	0.56	0.46	0.48	0.85
2,2-Dimethylbutane	0	100%	1.06	2.89	2.12	1.92	1.83	0.63	0.33
2,3-Dimethylbutane	0	100%	1.47	4.09	2.51	2.63	2.52	0.80	0.30
2,3-Dimethylpentane	0	100%	1.77	3.73	3.28	3.05	2.95	0.76	0.25
2,4-Dimethylpentane	0	100%	0.94	2.10	1.45	1.57	1.53	0.39	0.25
n-Dodecane	0	100%	0.36	375.05	1.48	42.84	2.05	124.58	2.91

ND = nondetect
Note: Due to the limited sample size, data for all compounds should be interpreted with caution, since they may not be representative of SNMOC concentrations in the morning hours throughout the summer.

Table 5-5 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
1-Dodecene	6	33%	ND	2.30	2.30	1.70	1.37	0.90	0.53
Ethane	0	100%	1.41	43.05	20.81	19.47	14.23	12.66	0.65
2-Ethyl-1-butene	9	0%	ND	ND	1.07	1.07	1.07	0.00	0.00
Ethylbenzene	0	100%	1.82	16.73	4.41	5.23	4.23	4.48	0.86
Ethylene	0	100%	7.80	23.37	13.87	15.92	14.91	5.90	0.37
m-Ethyltoluene	0	100%	1.72	11.63	3.07	3.95	3.24	3.11	0.79
o-Ethyltoluene	0	100%	0.79	4.47	1.37	1.71	1.47	1.15	0.67
p-Ethyltoluene	0	100%	1.13	6.86	2.01	2.39	2.01	1.79	0.75
n-Heptane	0	100%	1.17	5.00	2.21	2.53	2.34	1.11	0.44
1-Heptene	2	78%	ND	1.86	0.55	0.80	0.66	0.61	0.76
n-Hexane	1	89%	ND	32.98	4.33	7.16	4.46	9.83	1.37
1-Hexene	0	100%	0.25	0.51	0.38	0.39	0.37	0.10	0.27
cis-2-Hexene	0	100%	0.15	0.50	0.19	0.23	0.22	0.11	0.47
trans-2-Hexene	0	100%	0.22	1.66	0.74	0.75	0.60	0.49	0.66
Isobutane	0	100%	3.14	12.47	7.81	8.64	7.98	3.27	0.38
Isobutene/1-Butene	0	100%	4.86	13.10	7.34	7.59	7.24	2.60	0.34
Isopentane	0	100%	16.44	48.32	23.30	26.02	24.71	9.69	0.37
Isoprene	0	100%	0.41	5.68	1.60	1.91	1.52	1.51	0.79

ND = nondetect

Note: Due to the limited sample size, data for all compounds should be interpreted with caution, since they may not be representative of SNMOC concentrations in the morning hours throughout the summer.

Table 5-5 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
Isopropylbenzene	0	100%	0.17	0.87	0.33	0.41	0.35	0.25	0.62
2-Methyl-1-butene	0	100%	0.96	2.23	1.19	1.40	1.35	0.44	0.31
2-Methyl-2-butene	0	100%	1.21	5.57	1.71	2.25	1.97	1.41	0.63
3-Methyl-1-butene	0	100%	0.26	0.49	0.38	0.37	0.36	0.08	0.22
Methylcyclohexane	0	100%	1.00	36.66	1.66	5.45	2.15	11.71	2.15
Methylcyclopentane	0	100%	1.79	7.77	2.90	3.37	3.09	1.75	0.52
2-Methylheptane	0	100%	0.74	2.28	1.16	1.30	1.23	0.47	0.36
3-Methylheptane	0	100%	0.73	2.00	1.20	1.27	1.21	0.40	0.32
2-Methylhexane	0	100%	3.55	6.69	5.24	4.97	4.87	1.02	0.20
3-Methylhexane	0	100%	1.67	7.96	3.37	3.80	3.47	1.84	0.48
2-Methylpentane	0	100%	4.00	20.08	6.25	9.45	8.02	5.98	0.63
3-Methylpentane	0	100%	3.83	8.77	6.36	6.20	6.01	1.59	0.26
2-Methyl-1-pentene	0	100%	0.20	0.69	0.27	0.35	0.32	0.16	0.46
4-Methyl-1-pentene	0	100%	0.11	2.99	0.19	0.50	0.24	0.94	1.88
n-Nonane	1	89%	ND	3.67	1.51	1.75	1.54	0.93	0.53
1-Nonene	1	89%	ND	2.30	0.24	0.49	0.30	0.69	1.41
n-Octane	0	100%	1.01	3.07	1.91	1.90	1.76	0.76	0.40
1-Octene	9	0%	ND	ND	2.37	2.37	2.37	0.00	0.00

ND = nondetect
Note: Due to the limited sample size, data for all compounds should be interpreted with caution, since they may not be representative of SNMOC concentrations in the morning hours throughout the summer.

Table 5-5 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
n-Pentane	0	100%	4.99	20.16	8.62	9.48	8.70	4.59	0.48
1-Pentene	0	100%	0.44	1.72	0.73	0.90	0.83	0.39	0.43
cis-2-Pentene	0	100%	0.67	1.76	0.79	0.96	0.90	0.37	0.38
trans-2-Pentene	0	100%	1.06	3.53	2.06	2.22	2.06	0.86	0.39
a-Pinene	0	100%	0.29	13.80	1.34	2.79	1.51	4.21	1.51
b-Pinene	1	89%	ND	5.39	0.39	1.18	0.52	1.73	1.47
Propane	0	100%	13.27	100.42	24.48	34.59	28.62	26.74	0.77
n-Propylbenzene	0	100%	0.49	3.36	0.92	1.21	1.01	0.89	0.73
Propylene	0	100%	3.01	13.87	7.68	8.45	7.67	3.67	0.43
Propyne	9	0%	ND	ND	0.16	0.16	0.16	0.00	0.00
Styrene	0	100%	0.30	10.40	0.82	1.83	0.96	3.22	1.76
Toluene	0	100%	8.81	215.22	23.44	43.49	26.85	64.76	1.49
n-Tridecane	0	100%	0.13	76.43	0.47	8.79	0.53	25.36	2.88
1-Tridecene	7	22%	ND	2.30	2.30	1.82	1.17	0.96	0.53
1,2,3-Trimethylbenzene	0	100%	0.28	4.62	1.51	1.58	1.15	1.33	0.84
1,2,4-Trimethylbenzene	0	100%	1.08	19.21	3.05	5.91	4.27	5.59	0.94
1,3,5-Trimethylbenzene	0	100%	1.15	6.55	2.17	2.48	2.13	1.68	0.68
2,2,3-Trimethylpentane	0	100%	0.48	1.35	1.04	1.01	0.97	0.28	0.28

ND = nondetect

Note: Due to the limited sample size, data for all compounds should be interpreted with caution, since they may not be representative of SNMOC concentrations in the morning hours throughout the summer.

Table 5-5 (Continued)
Summary Statistics for SNMOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbC)	Highest (ppbC)	Median (ppbC)	Arithmetic Mean (ppbC)	Geometric Mean (ppbC)	Standard Deviation (ppbC)	Coefficient of Variation
2,2,4-Trimethylpentane	0	100%	2.61	8.01	5.25	5.45	5.22	1.57	0.29
2,3,4-Trimethylpentane	0	100%	1.15	2.90	2.09	2.06	1.99	0.53	0.26
n-Undecane	0	100%	1.00	389.20	1.84	45.19	3.43	129.01	2.86
1-Undecene	5	44%	ND	2.30	2.30	1.42	0.91	1.05	0.74
m,p-Xylene	0	100%	6.32	60.78	12.84	17.49	13.82	16.64	0.95
o-Xylene	0	100%	2.22	24.23	4.33	6.59	5.04	6.77	1.03
TNMOC (w/ unknowns)	0	100%	204.02	2,042.83	370.27	561.79	442.75	561.83	1.00
TNMOC (speciated)	0	100%	151.02	1,689.51	295.52	449.72	346.63	470.60	1.05

ND = nondetect

Note: Due to the limited sample size, data for all compounds should be interpreted with caution, since they may not be representative of SNMOC concentrations in the morning hours throughout the summer.

Table 5-6
SNMOC with Highest Geometric Mean Concentrations (in ppbv)

Rank	Compounds with Highest Geometric Mean Concentrations, by Monitoring Station				
	CAMS13	CAMS5	DLTX	JUMX	NWNJ
1	Isopentane	Ethane	Ethane	Propane	Propane
2	Ethane	Propane	Propane	Ethylene	Ethylene
3	Propane	Isopentane	Ethylene	Ethane	Ethane
4	*n*-Pentane	Ethylene	Acetylene	Acetylene	Acetylene
5	2-Methylpentane	Toluene	Isopentane	*n*-Butane	Isopentane
6	*n*-Butane	*n*-Butane	*n*-Butane	Isopentane	Toluene
7	Ethylene	Acetylene	Toluene	Toluene	Propylene
8	Toluene	*n*-Pentane	*n*-Pentane	*n*-Pentane	*n*-Butane
9	Acetylene	2-Methylpentane	Propylene	*m,p*-Xylene	Isobutane
10	3-Methylpentane	*m,p*-Xylene	Isobutene/1-butene	Propylene	Isobutene/1-butene
11	*n*-Hexane	*n*-Hexane	Isobutane	Isobutane	*n*-Pentane
12	*m,p*-Xylene	3-Methylpentane	2-Methylpentane	Benzene	*m,p*-Xylene

Table 5-7
Pearson Correlation Coefficients for SNMOC Monitoring Data

Parameter #1	Parameter #2	Pearson Correlation Coefficients Calculated for . . .			
		. . . CAMS5	. . . CAMS13	. . . DLTX	. . . JUMX
Maximum daily 1-hour average ozone concentration	3-hour average NMOC concentration	0.43	0.24	0.56	0.06
Maximum daily 1-hour average ozone concentration	Maximum daily 1-hour average NO_x concentration	0.54	0.45	0.56	0.38
Maximum daily 1-hour average ozone concentration	Maximum daily 1-hour average NO_2 concentration	0.50	0.56	0.58	0.35

Note: The square of the Pearson correlation coefficient (or r^2), which is not shown in this table, indicates the extent to which a change in one parameter can be explained by a change in the other in a linear model. For instance, because the Pearson correlation coefficient between concentrations of ozone and nitrogen dioxide at DLTX is roughly 0.60, approximately 36% (0.6 times 0.6) of the variation in concentrations of ozone at DLTX can be explained by variations in concentrations of nitrogen dioxide. More information on statistical interpretations of the Pearson correlation coefficient can be found in common texts on statistics.

Table 5-8 (Page 1 of 2)
Dates with Highest Concentrations of Ozone, NMOC, NO_x, and NO_2

Dates of 10 Highest Concentrations Observed at CAMS5, by Pollutant:			
Ozone	NMOC	NO_x	NO_2
7/14/97	6/25/97	9/26/97	9/29/97
7/17/97	8/5/97	8/25/97	9/26/97
6/18/97	9/26/97	6/25/97	6/17/97
7/16/97	9/3/97	7/23/97	8/5/97
8/27/97	**7/16/97**	6/11/97	6/3/97
8/26/97	**6/18/97**	9/29/97	**8/4/97**
8/6/97	**7/28/97**	8/21/97	6/11/97
7/15/97	6/9/97	6/17/97	**6/18/97**
7/28/97	**7/15/97**	**6/18/97**	**7/15/97**
8/4/97	6/11/97	**7/15/97**	6/4/97
Dates of 10 Highest Concentrations Observed at CAMS13, by Pollutant:			
Ozone	NMOC	NO_x	NO_2
7/31/97	8/25/97	9/29/97	**8/4/97**
8/21/97	9/5/97	9/8/97	9/26/97
7/29/97	9/11/97	8/28/97	6/6/97
8/1/97	9/3/97	7/18/97	9/11/97
8/4/97	9/22/97	6/3/97	8/7/97
6/9/97	8/26/97	**6/4/97**	9/30/97
7/17/97	9/23/97	7/30/97	**8/5/97**
8/5/97	8/29/97	9/30/97	7/23/97
8/27/97	8/28/97	7/23/97	8/8/97
6/4/97	9/1/97	**8/4/97**	9/8/97

Note: For each pollutant, the first date in the list indicates the date of the highest concentration for that pollutant; the second date indicates the date of the second highest concentration; and so on.
For NMOC, NO_x, and NO_2, dates in boldface indicate when dates correspond to a date with one of the ten highest concentrations of ozone.
This table only considers concentrations of ozone, NO_x, and NO_2 that were measured on valid NMOC sampling dates. Higher concentrations of ozone, NO_x, and NO_2 may have occurred during the summer of 1997 (e.g., on weekends, holidays, or other days when SNMOC samples were not collected).

Table 5-8 (Page 2 of 2)
Dates with Highest Concentrations of Ozone, NMOC, NO_x, and NO_2

Dates of 10 Highest Concentrations Observed at DLTX, by Pollutant:			
Ozone	NMOC	NO_x	NO_2
7/29/97	6/11/97	9/26/97	**9/29/97**
8/4/97	6/2/97	6/2/97	9/26/97
8/21/97	**8/21/97**	8/25/97	**8/4/97**
8/27/97	6/9/97	6/11/97	9/8/97
8/1/97	9/3/97	6/25/97	6/17/97
7/17/97	8/28/97	9/3/97	**8/27/97**
8/6/97	8/29/97	8/5/97	9/30/97
9/29/97	8/5/97	8/29/97	6/2/97
8/26/97	6/25/97	7/15/97	6/11/97
9/3/97	7/15/97	**8/4/97**	8/5/97
Dates of 10 Highest Concentrations Observed at JUMX, by Pollutant:			
Ozone	NMOC	NO_x	NO_2
9/30/97	9/8/97	8/28/97	8/28/97
9/26/97	8/26/97	**8/27/97**	**8/27/97**
8/27/97	8/14/97	**9/26/97**	9/18/97
7/28/97	9/2/97	9/18/97	8/19/97
9/12/97	**8/27/97**	8/19/97	**9/30/97**
9/29/97	**9/30/97**	**9/30/97**	9/19/97
7/31/97	8/21/97	9/19/97	**9/26/97**
8/12/97	9/18/97	**7/17/97**	7/17/97
7/17/97	8/28/97	8/21/97	8/21/97
9/11/97	**7/31/97**	**9/29/97**	9/9/97

Note: For each pollutant, the first date in the list indicates the date of the highest concentration for that pollutant; the second date indicates the date of the second highest concentration; and so on.
For NMOC, NO_x, and NO_2, dates in boldface indicate when dates correspond to a date with one of the ten highest concentrations of ozone.
This table only considers concentrations of ozone, NO_x, and NO_2 that were measured on valid NMOC sampling dates. Higher concentrations of ozone, NO_x, and NO_2 may have occurred during the summer of 1997 (e.g., on weekends, holidays, or other days when SNMOC samples were not collected).

Table 5-9
Completeness of SNMOC Monitoring

Monitoring Station		Number of Days When Sampling Was Attempted	Number of Days with Valid Samples	Completeness
Code	Location			
CAMS13	Fort Worth, TX	84	79	94 %
CAMS5	Dallas, TX	84	81	96 %
DLTX	Dallas, TX	85	82	96 %
JUMX	Juarez, Mexico	56	50	89 %
	Totals	309	292	94 %

Note: The Newark monitoring station collected fewer than 10 SNMOC samples according to a site-specific schedule. Sampling results for this station are not included in this review of completeness.

Table 5-10
Data Quality Parameters for SNMOC Measurements

Compound	Analytical Precision		Sampling and Analytical Precision	
	RPD (%)	Number of Observations	RPD (%)	Number of Observations
Acetylene	2%	74	3%	37
Benzene	5%	74	6%	37
1,3-Butadiene	18%	70	21%	35
n-Butane	3%	74	4%	37
cis-2-Butene	11%	74	12%	37
trans-2-Butene	17%	74	11%	37
Cyclohexane	8%	74	7%	37
Cyclopentane	11%	74	9%	37
Cyclopentene	10%	72	15%	36
n-Decane	15%	74	23%	37
1-Decene	64%	8	47%	3
m-Diethylbenzene	35%	71	22%	35
p-Diethylbenzene	25%	71	20%	35
2,2-Dimethylbutane	12%	74	12%	37
2,3-Dimethylbutane	9%	74	8%	37
2,3-Dimethylpentane	12%	74	8%	37
2,4-Dimethylpentane	7%	74	8%	37
n-Dodecane	25%	73	42%	36
1-Dodecene	44%	44	30%	21
Ethane	38%	74	4%	37
2-Ethyl-1-butene	NA	0	NA	0
Ethylbenzene	13%	74	8%	37
Ethylene	3%	74	4%	37
m-Ethyltoluene	9%	74	10%	37
o-Ethyltoluene	16%	74	14%	37
p-Ethyltoluene	13%	74	13%	37
n-Heptane	8%	74	6%	37
1-Heptene	26%	74	18%	37
n-Hexane	4%	74	5%	37
1-Hexene	10%	72	14%	36
cis-2-Hexene	10%	72	11%	36
trans-2-Hexene	14%	72	14%	36

Note: The number of observations for analytical precision indicates the number of replicates in which the compound was detected in both analyses; the number of observations for sampling precision indicates the number of duplicates in which the compound was detected in the four analyses of the duplicate samples. By definition, analytical precision and sampling precision cannot be evaluated for compounds with zero observations, hence compounds with no observations show an RPD of "NA."

Table 5-10 (Continued)
Data Quality Parameters for SNMOC Measurements

Compound	Analytical Precision		Sampling and Analytical Precision	
	RPD (%)	Number of Observations	RPD (%)	Number of Observations
Isobutane	3%	74	4%	37
Isobutene/1-Butene	6%	74	8%	37
Isopentane	3%	74	5%	37
Isoprene	14%	74	14%	37
Isopropylbenzene	26%	74	13%	37
2-Methyl-1-butene	4%	74	9%	37
2-Methyl-2-butene	5%	74	9%	37
3-Methyl-1-butene	9%	72	8%	36
Methylcyclohexane	10%	74	7%	37
Methylcyclopentane	3%	74	4%	37
2-Methylheptane	8%	74	6%	37
3-Methylheptane	6%	74	6%	37
2-Methylhexane	5%	74	4%	37
3-Methylhexane	11%	74	10%	37
2-Methylpentane	8%	74	9%	37
3-Methylpentane	5%	74	7%	37
2-Methyl-1-pentene	14%	72	12%	36
4-Methyl-1-pentene	27%	72	25%	36
n-Nonane	14%	74	13%	37
1-Nonene	37%	69	30%	32
n-Octane	9%	74	8%	37
1-Octene	44%	13	51%	4
n-Pentane	2%	74	5%	37
1-Pentene	20%	74	20%	37
cis-2-Pentene	6%	74	7%	37
trans-2-Pentene	14%	74	13%	37
a-Pinene	14%	73	18%	36
b-Pinene	27%	65	31%	31
Propane	6%	74	5%	37
n-Propylbenzene	18%	74	11%	37
Propylene	4%	74	5%	37
Propyne	NA	0	NA	0

Note: The number of observations for analytical precision indicates the number of replicates in which the compound was detected in both analyses; the number of observations for sampling precision indicates the number of duplicates in which the compound was detected in the four analyses of the duplicate samples. By definition, analytical precision and sampling precision cannot be evaluated for compounds with zero observations, hence compounds with no observations show an RPD of "NA."

Table 5-10 (Continued)
Data Quality Parameters for SNMOC Measurements

Compound	Analytical Precision		Sampling and Analytical Precision	
	RPD (%)	Number of Observations	RPD (%)	Number of Observations
Styrene	21%	73	24%	36
Toluene	6%	74	6%	37
n-Tridecane	40%	39	59%	17
1-Tridecene	47%	9	74%	4
1,2,3-Trimethylbenzene	26%	73	23%	36
1,2,4-Trimethylbenzene	16%	74	13%	37
1,3,5-Trimethylbenzene	14%	74	13%	37
2,2,3-Trimethylpentane	11%	74	9%	37
2,2,4-Trimethylpentane	5%	74	5%	37
2,3,4-Trimethylpentane	4%	74	4%	37
n-Undecane	15%	74	37%	37
1-Undecene	63%	25	46%	12
m,p-Xylene	9%	74	8%	37
o-Xylene	10%	74	8%	37

Note: The number of observations for analytical precision indicates the number of replicates in which the compound was detected in both analyses; the number of observations for sampling precision indicates the number of duplicates in which the compound was detected in the four analyses of the duplicate samples. By definition, analytical precision and sampling precision cannot be evaluated for compounds with zero observations, hence compounds with no observations show an RPD of "NA."

6.0 Analysis of VOC Monitoring Results

This section summarizes the VOC ambient air monitoring data collected during the 1997 NMOC/SNMOC program. The VOC data are useful for characterizing ambient levels of a subset of organic compounds, particularly halogenated hydrocarbons, that the SNMOC analytical methods cannot identify. As Section 5 noted, unidentified organic compounds accounted for approximately 20 percent of the NMOC concentrations at the stations that collected SNMOC samples. Of the five NMOC/SNMOC monitoring stations that measured VOC, four (CAMS5, CAMS13, DLTX, and JUMX) collected VOC samples daily, and one (NWNJ) collected VOC samples on a weekly basis, but only for July 15 through September 15. The remainder of this section presents a data summary (Section 6.1), analyses and interpretations (Section 6.2), and data quality parameters (Section 6.3) for all five stations. However, due to limited sample size, results from the Newark station are not included in some of the analyses. Section 6.4 summarizes the main findings drawn from the VOC monitoring data.

Note: The VOC and SNMOC analytical methods identify many of the same compounds (e.g., benzene, toluene, and ethylbenzene). Future NMOC/SNMOC reports will compare levels measured for these compounds by the two different methods.

6.1 Data Summary Tables

Using the data summary parameters discussed in Section 3.1, Tables 6-1 through 6-5 summarize the monitoring results for the seven stations that measured VOC. Readers should note that these tables, along with the VOC samples, only characterize air quality from 6:00 a.m. to 9:00 a.m. standard time. It is possible that daily average concentrations of some VOC may be notably higher or lower than the data summary tabes suggest. Nonetheless, the tables reveal several noteworthy trends:

- *Prevalence.* According to the data summary tables, 13 compounds were detected in over 50 percent of the samples collected at every NMOC/SNMOC monitoring station. Due to their high prevalence, the summary statistics for these compounds

are least affected by nondetect observations. Accordingly, most of the analyses in this section focus on these most prevalent compounds:

Acetylene	Methylene chloride	Toluene
Benzene	*n*-Octane	1,1,1-Trichloroethane
Carbon tetrachloride	Propylene	*m,p*-Xylene
Chloromethane	Styrene	*o*-Xylene
Ethylbenzene		

Despite the emphasis this section places on the most prevalent compounds, trends and patterns among some of the least prevalent compounds can also provide insight into the complex mixture of air pollutants that form ozone. For example, Section 6.2 evaluates spatial variations in concentrations of 1,3-butadiene to comment on the age of the air mass at the NMOC/SNMOC monitoring locations.

- *Concentration range.* The data summary tables also indicate that only acetylene, benzene, propylene, toluene, and *m,p*-xylene have concentrations exceeding 5 ppbv at one or more monitoring stations. Because sampling occurred only during the morning hours, it is very likely that the concentration ranges cited in the summary tables do not represent the concentration range over the course of a day. Further, due to the limited sampling schedule at Newark, the concentration ranges shown in Table 6-5 probably do not even represent the actual distribution of concentrations for 6:00 a.m. to 9:00 a.m. As a result, these concentration ranges should be viewed only as qualitative estimates of the span of ambient air concentrations at the NMOC/SNMOC monitoring stations.

- *Central tendency.* Table 6-1 through 6-5 present central tendency data for the five stations that measured VOC. Only those compounds shown in boldface were detected in more than 50 percent of the VOC samples at the corresponding monitoring station. Central tendency values for all other compounds should be interpreted with caution, since the higher frequency of nondetects for these compounds probably biased the central tendency calculation.

To illustrate how central tendency concentrations varied from one location to the next, Figure 6-1 compares geometric mean concentrations of the 13 most prevalent VOC across the five monitoring stations. With few exceptions, geometric mean concentrations of the most prevalent compounds were highest at NWNJ (Newark) and lowest at CAMS5 (Dallas), with concentrations at the other monitoring stations taking intermediate values. Geometric mean concentrations of acetylene and toluene were greater than 1.0 ppbv at every monitoring station, and geometric mean concentrations of benzene, propylene, and *m,p*-xylene were greater than 1.0 ppbv at two or more stations. The analyses and interpretations in

Section 6.2 refer to Figure 4-1 to characterize the sources of VOC pollution and to relate the VOC ambient air monitoring data to ozone formation processes.

- *Variability.* According to Tables 6-1 through 6-5, the coefficients of variation for most compounds were less than 1.0 at every monitoring station, suggesting that ambient air concentrations of these VOC have comparable variability. As exceptions, the coefficients of variation for methylene chloride, styrene, tetrachloroethylene, and trichloroethylene were often greater than 1.0. The greater variability for these compounds suggests that the magnitude of their concentrations changes significantly from one morning to the next. This observation is consistent with these compounds originating from sources found at discrete locations (e.g., industrial emissions sources), as opposed to those found throughout urban areas (e.g., motor vehicle sources). Section 6.2 revisits this issue.

To elaborate on trends and patterns indicated by the VOC summary tables, the following sections analyze spatial variations and data quality parameters in the VOC monitoring data. These analyses provide additional context for understanding the summary statistics shown in Tables 6-1 through 6-5.

6.2 Analyses and Interpretations

To put the VOC monitoring data into perspective, this section evaluates the composition of VOC samples (Section 6.2.1), compares VOC concentrations to selected meteorological parameters (Section 6.2.2), and presents miscellaneous interpretations of the VOC air monitoring data. Because Section 5 thoroughly characterized trends and patterns for ambient air concentrations of hydrocarbons, the following analyses focus primarily on trends and patterns for halogenated hydrocarbons, which cannot be identified by the SNMOC analytical method.

6.2.1 Composition of Air Samples

To evaluate the composition of VOC samples, two analyses were performed—one focusing on relative concentrations of hydrocarbons and halogenated hydrocarbons, the other examining the composition of BTEX compounds. Further analyses on the composition of VOC samples are likely to be biased by large numbers of nondetects, primarily because more than half of the VOC were detected in fewer than 25 percent of the samples.

As an indicator of the relative quantities of hydrocarbons and halogenated hydrocarbons at the SNMOC monitoring stations, Figure 6-2 presents the total concentration of the 14 most prevalent VOC, broken down by contribution from hydrocarbons and halogenated hydrocarbons. The figure illustrates that, on average, hydrocarbons account for more than 90 percent of the concentrations of the most prevalent VOC, with halogenated hydrocarbons accounting for less than 10 percent. Because the VOC analytical method does not identify all airborne compounds (leaving out, for example, most of the hydrocarbons identified by the SNMOC method), Figure 6-2 probably does not indicate the actual composition of the two compound groups in ambient air. Nonetheless, the figure shows that concentrations of the most prevalent hydrocarbons at the NMOC/SNMOC monitoring locations far outweighed the total concentration of the most prevalent halogenated hydrocarbons.[1] Despite the relatively minor contributions of halogenated hydrocarbons to total levels of air pollution, however, this compound group continues to be of interest to regulatory agencies due to the toxicity of its individual components and the reactivity of selected compounds in upper layers of the atmosphere.

To characterize VOC samples further, Figure 6-3 illustrates how the magnitude and composition of BTEX compounds changed with time at the CAMS13 monitoring station. (These compounds accounted for over 60 percent of the overall levels of the most prevalent VOC.) The figure highlights two notable trends: (1) On average, the composition of BTEX compounds in the air sampled at CAMS13 changed little during the summer of 1997, even though the magnitude of the concentration for these compounds changed significantly. The relatively constant ratios—a trend observed at every SNMOC monitoring station—suggest that the same emissions source, or group of sources, probably contributed to ambient levels of BTEX compounds throughout the summer. (2) The magnitudes of the BTEX ratios calculated from the VOC sampling data are nearly identical to those calculated from the SNMOC sampling data (see Figure 5-4), providing evidence that both the SNMOC and VOC analytical methods measure

[1] In fact, ambient air concentrations of many individual hydrocarbons (e.g., acetylene and toluene) were, on average, greater than the sum of the most prevalent halogenated compounds.

concentrations of these compounds accurately. Future NMOC/SNMOC reports will include more quantitative comparisons between monitoring results from the different methods.

6.2.2 Comparison to Selected Meteorological Parameters

The analyses presented in Section 5.2.3 found that ambient air concentrations of hydrocarbons tended to be independent of wind direction at every NMOC/SNMOC monitoring station. To supplement these analyses, 3-hour average observations of wind direction were compared to corresponding 3-hour average concentrations of the most prevalent VOC at the four monitoring stations that collected daily samples. Although concentrations of many VOC, especially those emitted primarily by motor vehicles, were weakly correlated or completely uncorrelated with wind direction, ambient levels of some VOC exhibited the opposite trend. Examples of these exceptions include:

- *CAMS5.* As Figure 6-4 shows, ambient air concentrations of styrene at CAMS5 were notably higher when winds blew from the south and the southwest (i.e., wind directions between 180° and 225°) than when winds blew from any other compass direction. This observation suggests that, during the morning hours, styrene at CAMS5 probably originates from emissions sources located south to southwest of the monitoring station, rather than from motor vehicles or other emissions sources typically found all around the monitoring location. No other compound exhibited as strong a dependence on wind direction at this station.

- *CAMS13.* Of the 13 most prevalent compounds at CAMS13, tetrachloroethylene had the strongest correlation between its ambient air concentration and wind direction during the morning hours. According to Figure 6-5, tetrachloroethylene was detected at levels ranging from 0.5 ppbv to 5.0 ppbv when winds blew from the north, the northeast, the east, and the southeast (i.e., wind directions between 0° and 135°), but was either not detected or detected at trace levels when winds blew from other directions. This trend suggests that the predominant sources of tetrachloroethylene near CAMS13 are probably located in the sector between the north and the southeast of the monitoring station. With only eight observations at levels greater than 0.5 ppbv, further research is needed to determine whether the apparent link between wind direction and concentrations of tetrachloroethylene consistently occurs.

- *DLTX.* Like the results shown in Figure 6-4 for CAMS5, Figure 6-6 indicates that elevated concentrations of styrene at DLTX also occurred most frequently when

winds blew from the south and the southwest (i.e., wind directions between 180° and 225°). When winds blew from other directions, styrene was usually at trace or undetectable levels, except for two peak concentrations observed with winds blowing from the north. Thus, the 1997 monitoring data indicate that styrene at DLTX primarily originates from emissions sources located south to southwest of the monitoring station.

- *JUMX.* Unlike the trends highlighted in Figures 6-4 to 6-6, ambient air concentrations of almost all VOC measured at JUMX did not exhibit notable correlations with wind direction. For example, Figure 6-7 shows how no obvious data trend is apparent between levels of methylene chloride at Juarez and wind direction. The lack of correlations probably results from several factors, such as the possibility of many different pollution sources in all directions from the monitoring station or the possibility that prevailing wind patterns at the El Paso International Airport may differ significantly from those at the Juarez monitoring station.

Although Figures 6-4 through 6-7 present data trends for only three pollutants, the comparisons between wind direction and ambient air concentrations in Sections 4.2.1, 5.2.3, and in the preceding paragraphs illustrate the utility of an important data analysis tool: correlations between wind patterns and air quality observations can help distinguish pollutants that appear to be emitted from sources in discrete directions (e.g., styrene at DLTX and CAMS5) from pollutants that appear to be emitted from sources throughout an airshed (e.g., NMOC at LINY and NWNJ).

6.2.3 Miscellaneous Interpretations

For additional information on interpreting ambient air monitoring data for halogenated hydrocarbons, the following discussion comments on some air quality trends observed only for the five most prevalent compounds:

- *Carbon Tetrachloride.* Regardless of location and time of year, recent ambient air monitoring efforts throughout the United States consistently detect concentrations of carbon tetrachloride at levels ranging from 0.06 ppbv to 0.10 ppbv (ERG, 1998). As Figure 6-1 shows, VOC monitoring data from the 1997 monitoring program are consistent with this trend. The relatively constant levels of carbon tetrachloride are believed to result primarily from the compound's resistance to

photochemical breakdown: estimates of the half-life of carbon tetrachloride in the troposphere range from tens to hundreds of years (ATSDR, 1994). Thus, once emitted to the atmosphere, carbon tetrachloride appears to gradually diffuse to regions of lower concentration, rather than decompose or react with other pollutants. The absence of notable spatial variations also results from the fact that most uses of carbon tetrachloride have been discontinued due in part to an international agreement to phase out ozone-depleting chemicals (ATSDR, 1994).

- *Chloromethane.* Like concentrations of carbon tetrachloride, levels of chloromethane varied little among the NMOC/SNMOC monitoring stations (see Figure 6-1). On the other hand, previous year-round studies have observed significant spatial variations in ambient air concentrations of chloromethane, particularly during the colder winter months (ERG, 1998). The fact that sampling for this monitoring program only occurs in the summer most likely explains the inconsistency between the current VOC data and selected other studies. It should be noted that some studies have estimated that over 90 percent of global releases of chloromethane are from natural sources, such as biogenic production by marine phytoplankton (ATSDR, 1997a).

- *Methylene Chloride.* Though frequently detected, geometric mean ambient air concentrations of methylene chloride at CAMS5, DLTX, and JUMX were either lower or marginally higher than the compound's detection limit (0.09 ppbv). At CAMS13 and NWNJ, however, geometric mean concentrations were 0.30 ppbv and 0.62 ppbv, respectively. These spatial variations are best explained by similar spatial variations in industrial emissions sources of methylene chloride. In support of this hypothesis, the 1995 Toxic Release Inventory (TRI) indicates that over 50,000 pounds of methylene chloride were released to the air by facilities within 5 miles of both the CAMS13 and NWNJ monitors, while less than 25,000 pounds were released by facilities near the CAMS5 and DLTX monitors.[2] The proximity of the individual sources, as well as other sources that are not required to report to TRI, likely accounts for the spatial variations of methylene chloride shown in Figure 6-1.

- *Tetrachloroethylene.* During the 1997 program, both the prevalence and highest concentrations of tetrachloroethylene exhibited consistent spatial variations: (1) though detected in roughly 75 percent of the samples collected in the Dallas–Fort Worth area, tetrachloroethylene was detected in less than 25 percent of the samples at Juarez; and (2) the highest concentrations of tetrachloroethylene at the monitors in Dallas and Fort Worth were all over 5 times greater than the highest level recorded at Juarez. The difference in concentrations between these

[2] Emissions data for the JUMX monitoring station are not provided because the TRI database does not account for emissions sources in Mexico.

metropolitan areas probably results from differing emissions levels from industrial sources, primarily dry cleaners. (Dry cleaners are suspected to account for a significant portion of overall releases of tetrachloroethylene to the air in the United States [ATSDR, 1997b]). The relatively low concentrations at JUMX may result from the monitoring station being located far from dry cleaners and other sources of tetrachloroethylene or the possibility that dry cleaners in Mexico use solvents other than tetrachloroethylene.

- *1,1,1-Trichloroethane.* According to Figure 6-1, geometric mean concentrations of 1,1,1-trichloroethane were fairly similar from one station to the next, with marginally higher concentrations observed at Newark—the station in the area with the most industrial emissions sources (ERG, 1997b). Although monitoring stations located nearer industrial facilities that emit 1,1,1-trichloroethane probably have marginally higher geometric mean concentrations, the difference in concentrations is too small to conclude exactly which factors most strongly affect ambient levels of this compound. Therefore, perhaps the most notable trend in levels of 1,1,1-trichloroethane is the absence of significant spatial variations: geometric mean concentrations at the five stations that measured VOC ranged only from 0.10 ppbv to 0.18 ppbv.

6.3 Data Quality Parameters

To characterize the quality of the VOC air monitoring data, Tables 6-6 and 6-7 present completeness and precision data, respectively, for the 1997 program. According to Table 6-6, 294 of the 309 scheduled sampling events were successfully completed, yielding an overall completeness figure of 95 percent. Although some sites had higher completeness figures than others, every NMOC/SNMOC monitoring station had 89 percent completeness or better. Readers may note that the completeness data for VOC sampling (Table 6-7) is nearly identical to that for SNMOC sampling (Table 5-9). The similarity results from the fact that, for each sampling event, concentrations of VOC and concentrations of SNMOC were measured from the same stainless steel canister sample; the slight differences in the completeness figures results from the fact that two samples had valid VOC data, but invalid SNMOC data (due to an error in laboratory analysis).

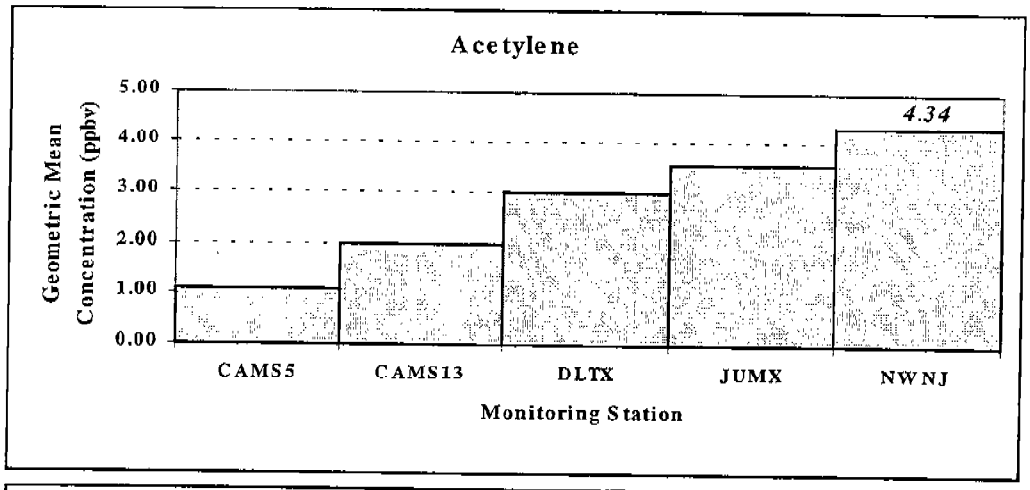
Based on the approach outlined in Section 3.3.2, Table 6-7 presents precision data for the VOC monitoring. On average, the most prevalent VOC were measured with a precision ranging

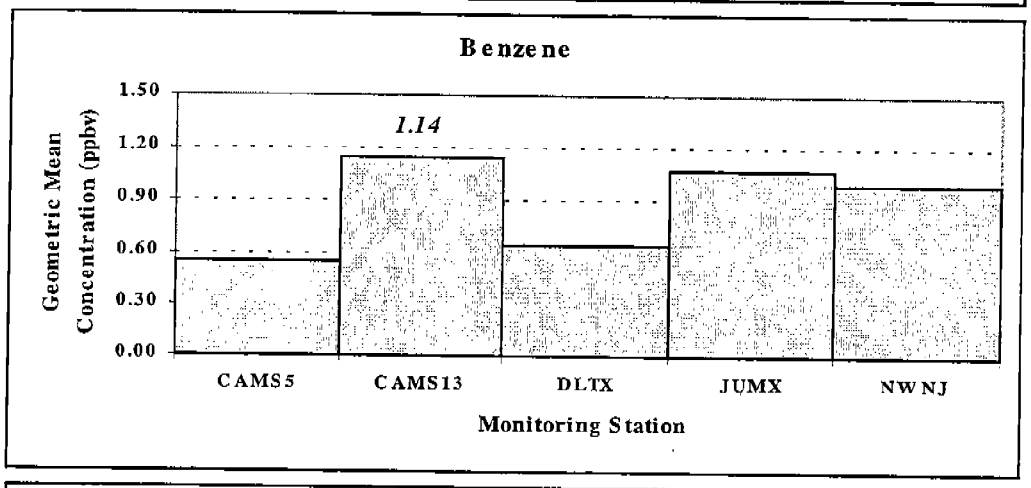
from 6 percent (for toluene) to 20 percent (for acetylene), and the least prevalent compounds had analytical precision ranging from 9 percent (for *p*-dichlorobenzene and tetrachloroethylene) to 29 percent (for 1,3-butadiene). These precision data fall well within data quality objectives for the analytical method. Overall, the low measurement variability, coupled with the high completeness figures, suggests that field sampling teams and laboratory analysts strictly followed method specifications to minimize influences of random sampling or analytical errors. Accordingly, the VOC monitoring data are believed to be of very high quality.

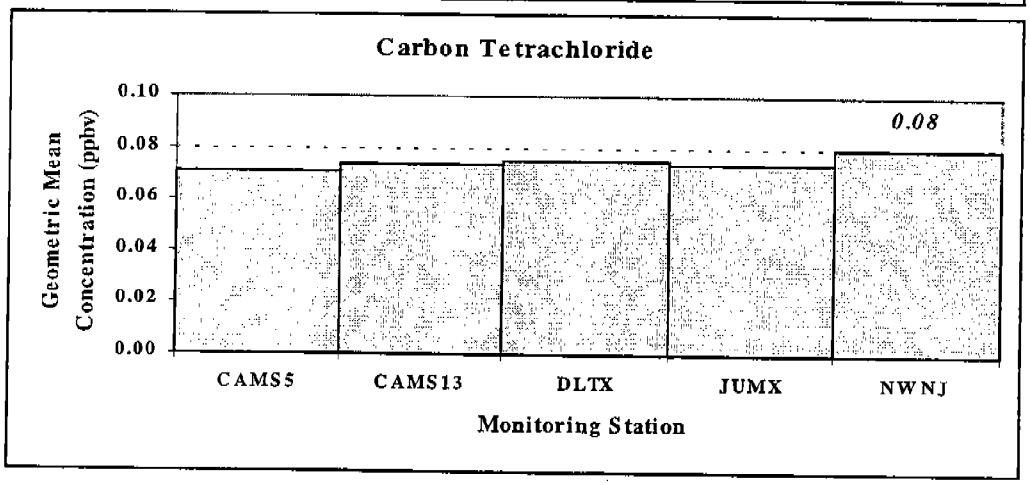
6.4 Summary

The VOC air monitoring data supplement the extensive SNMOC air monitoring data in two important ways. First, trends among the VOC concentrations corroborate several important findings of Section 5, such as the consistent profiles of the BTEX compounds, the significant increases in hydrocarbon concentrations at CAMS13, and the similar concentration values for compounds identified by both analytical methods. Second, the VOC air monitoring data characterize concentrations of halogenated hydrocarbons—a group of compounds that the SNMOC analytical method cannot identify. Five halogenated hydrocarbons (carbon tetrachloride, chloromethane, methylene chloride, tetrachloroethylene, and 1,1,1-trichloroethane) were detected in over half of the VOC samples collected during the 1997 program, but their combined concentration accounted for a much smaller fraction of total levels of air pollution than the combined concentration of the most prevalent hydrocarbons. Nonetheless, trends and patterns among the halogenated hydrocarbons were shown to be consistent with findings from previous air monitoring studies and predictions based on industrial emissions data.

Figure 6-1 (Page 1 of 5)
Geometric Mean Concentrations of the Most Prevalent VOC

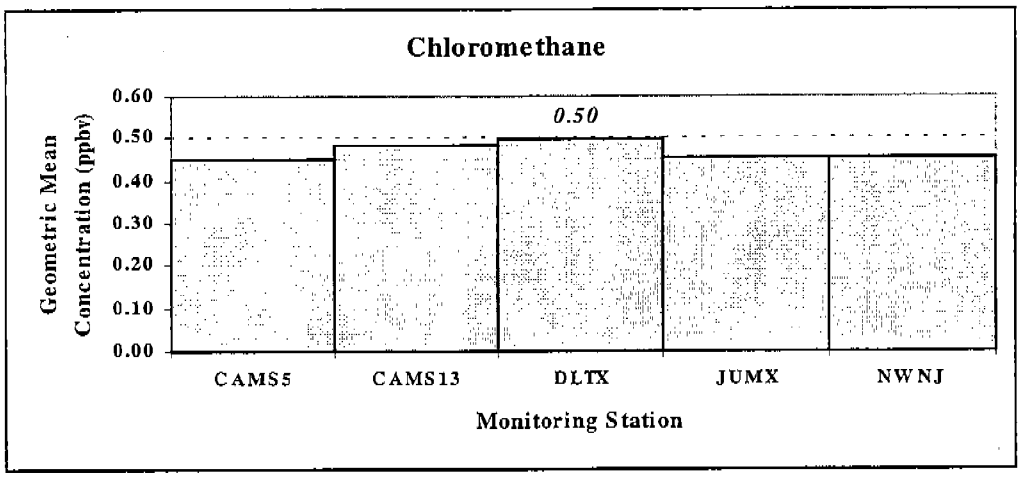


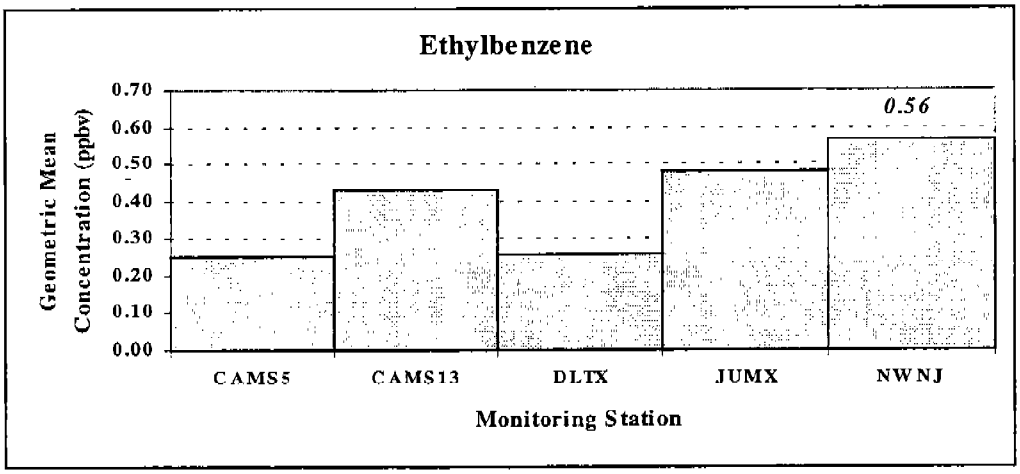


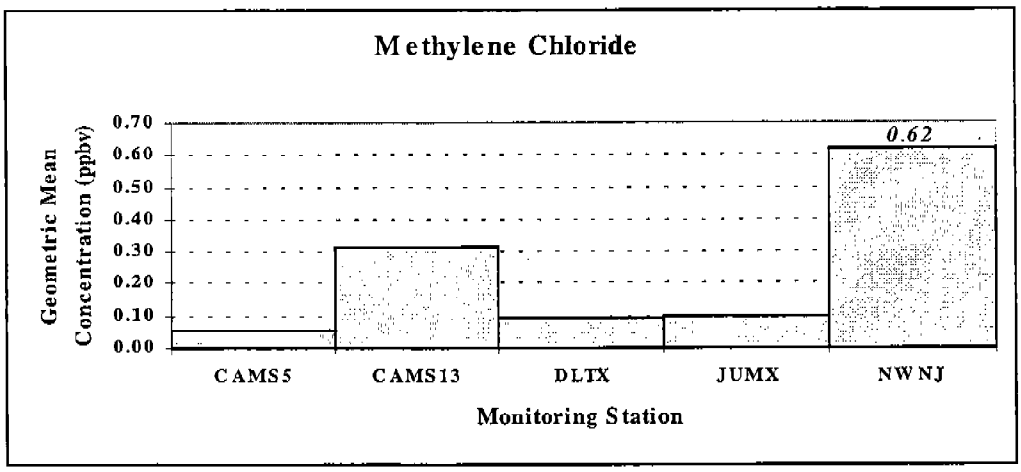


Note: Every plot has a different scale.

Figure 6-1 (Page 2 of 5)
Geometric Mean Concentrations of the Most Prevalent VOC

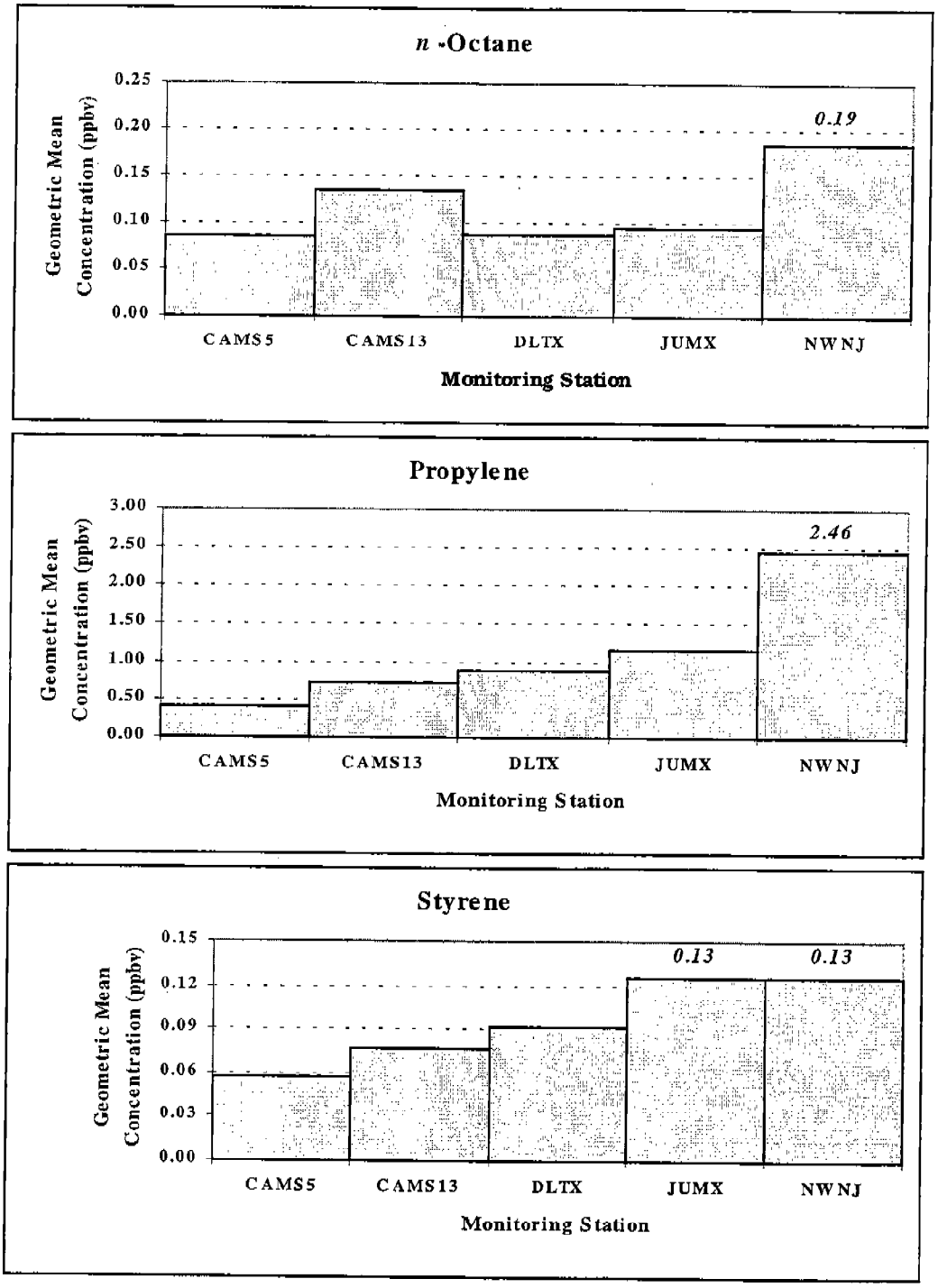






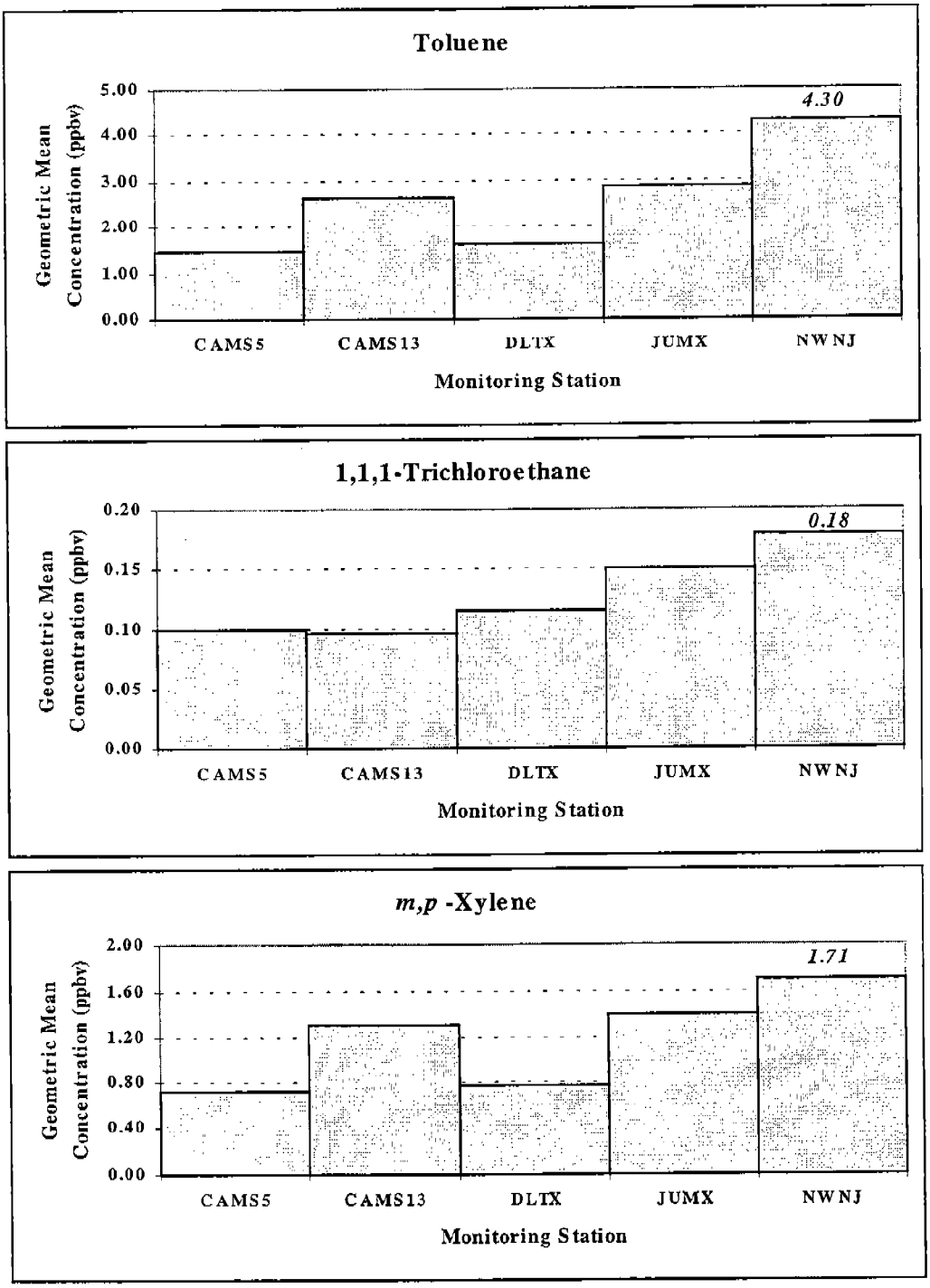
Note: Every plot has a different scale.

Figure 6-1 (Page 3 of 5)
Geometric Mean Concentrations of the Most Prevalent VOC



Note: Every plot has a different scale.

Figure 6-1 (Page 4 of 5)
Geometric Mean Concentrations of the Most Prevalent VOC



Note: Every plot has a different scale.

Figure 6-1 (Page 5 of 5)
Geometric Mean Concentrations of the Most Prevalent VOC

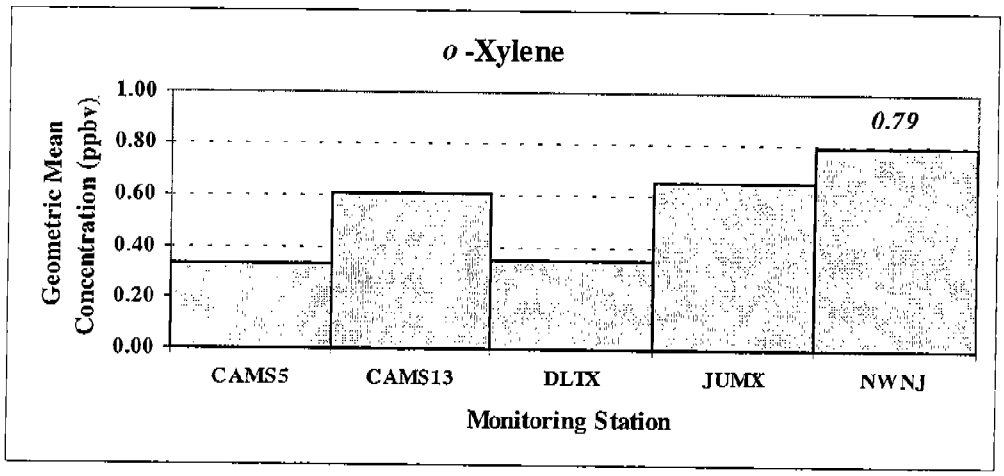


Figure 6-2
Total Concentration of the Most Prevalent VOC, by Compound Group

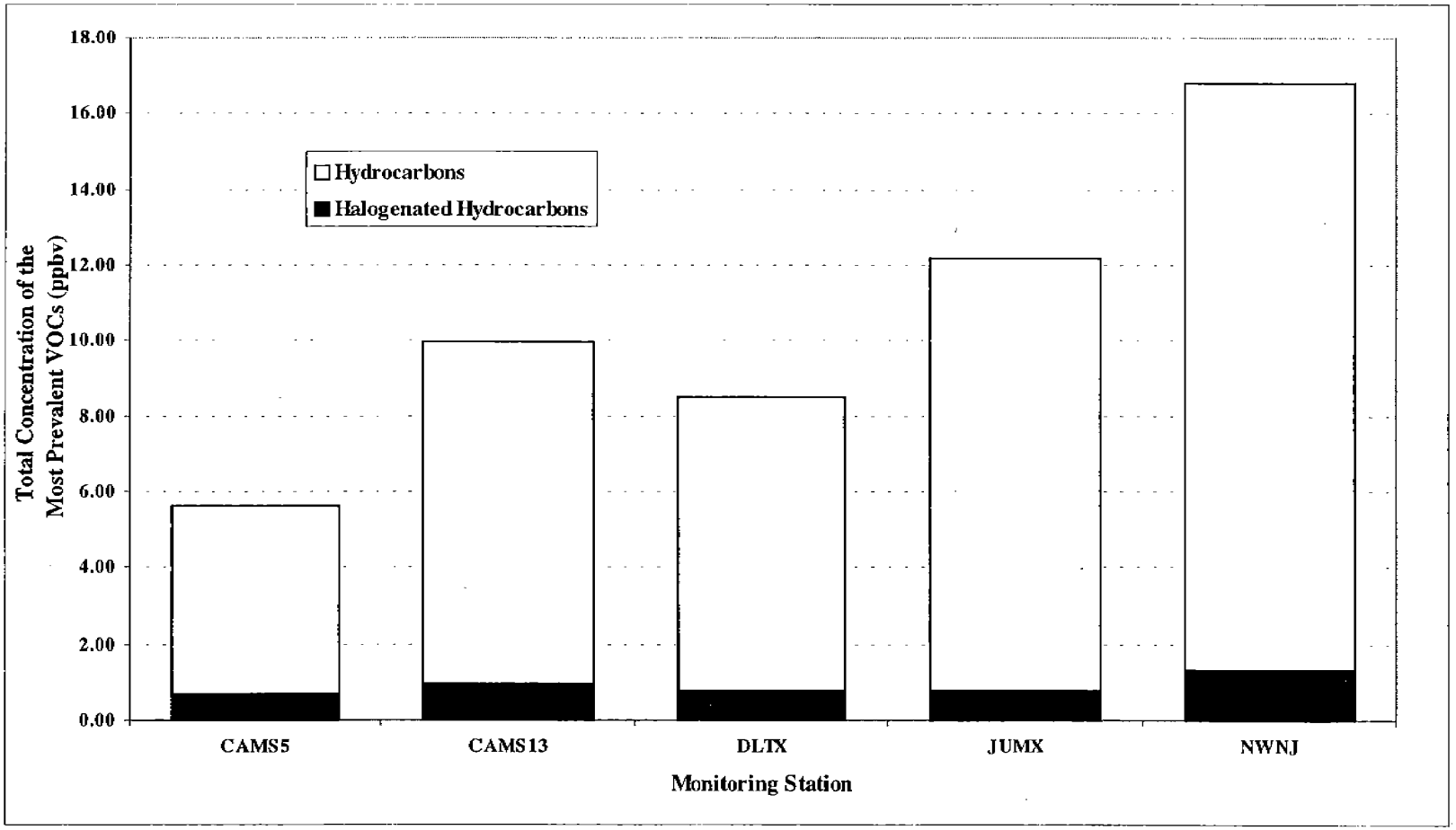
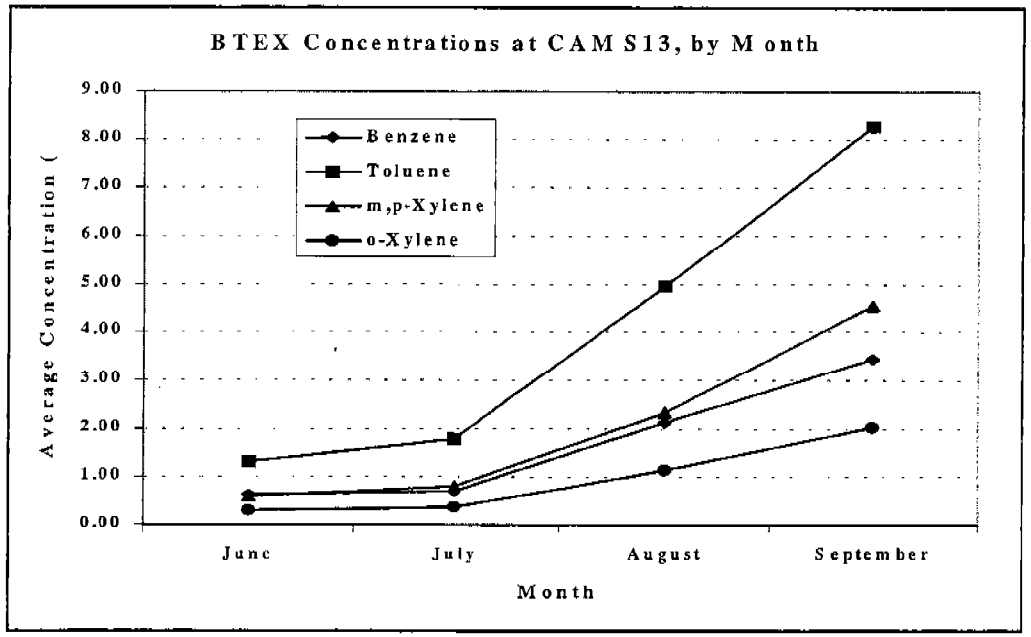


Figure 6-3
Composition and Magnitude of BTEX Concentrations at CAMS13, by Month



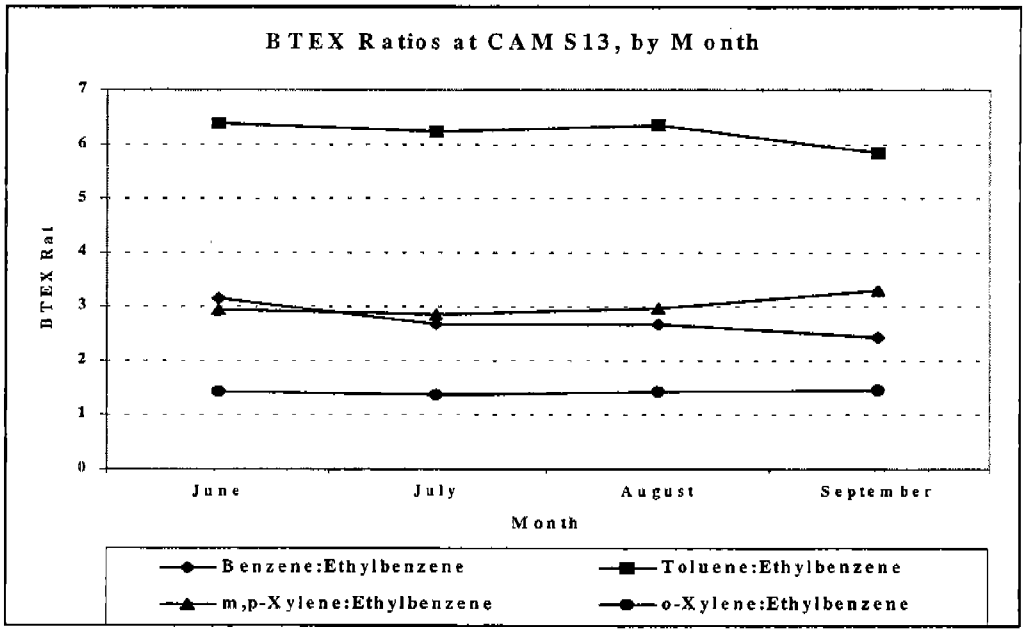
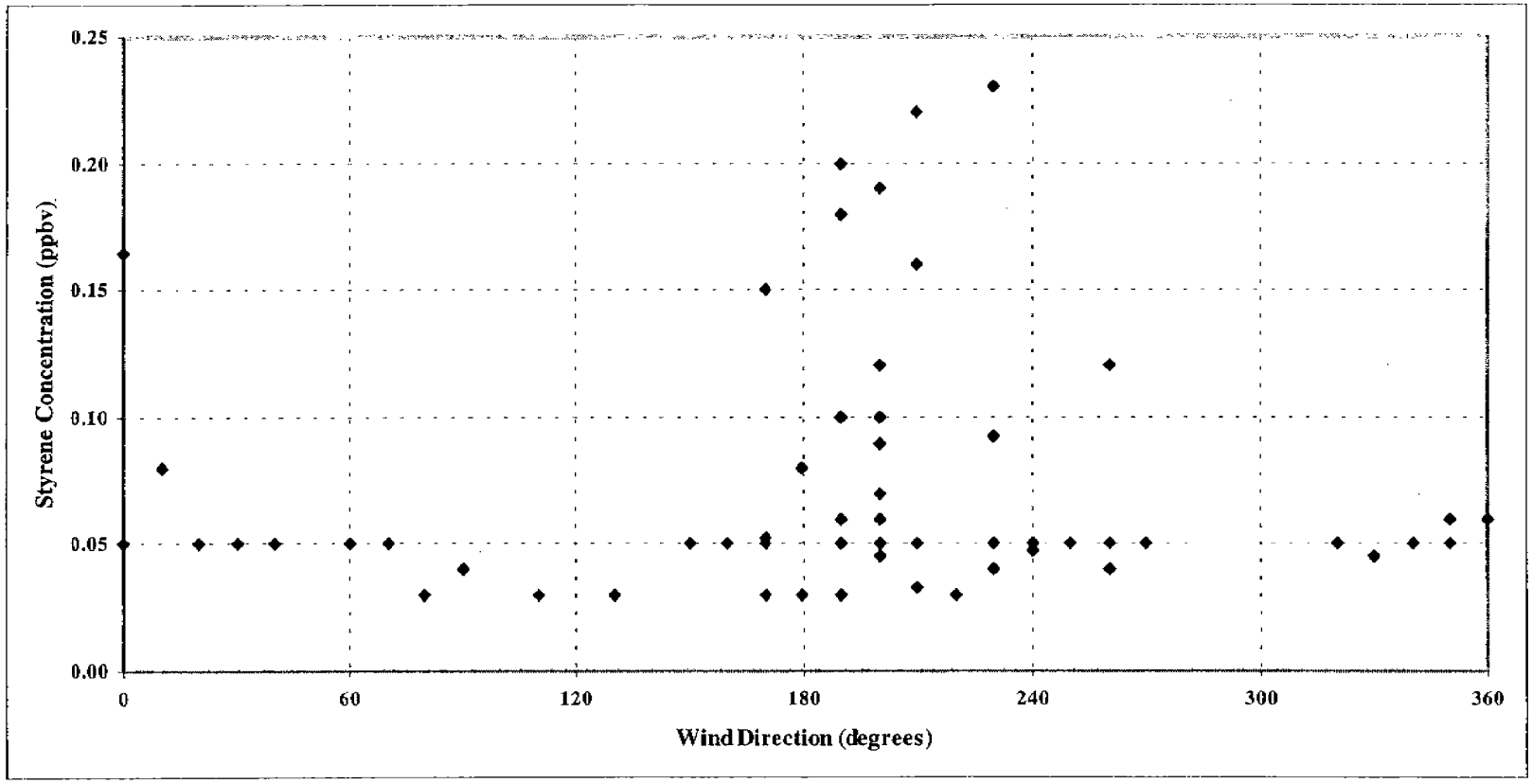
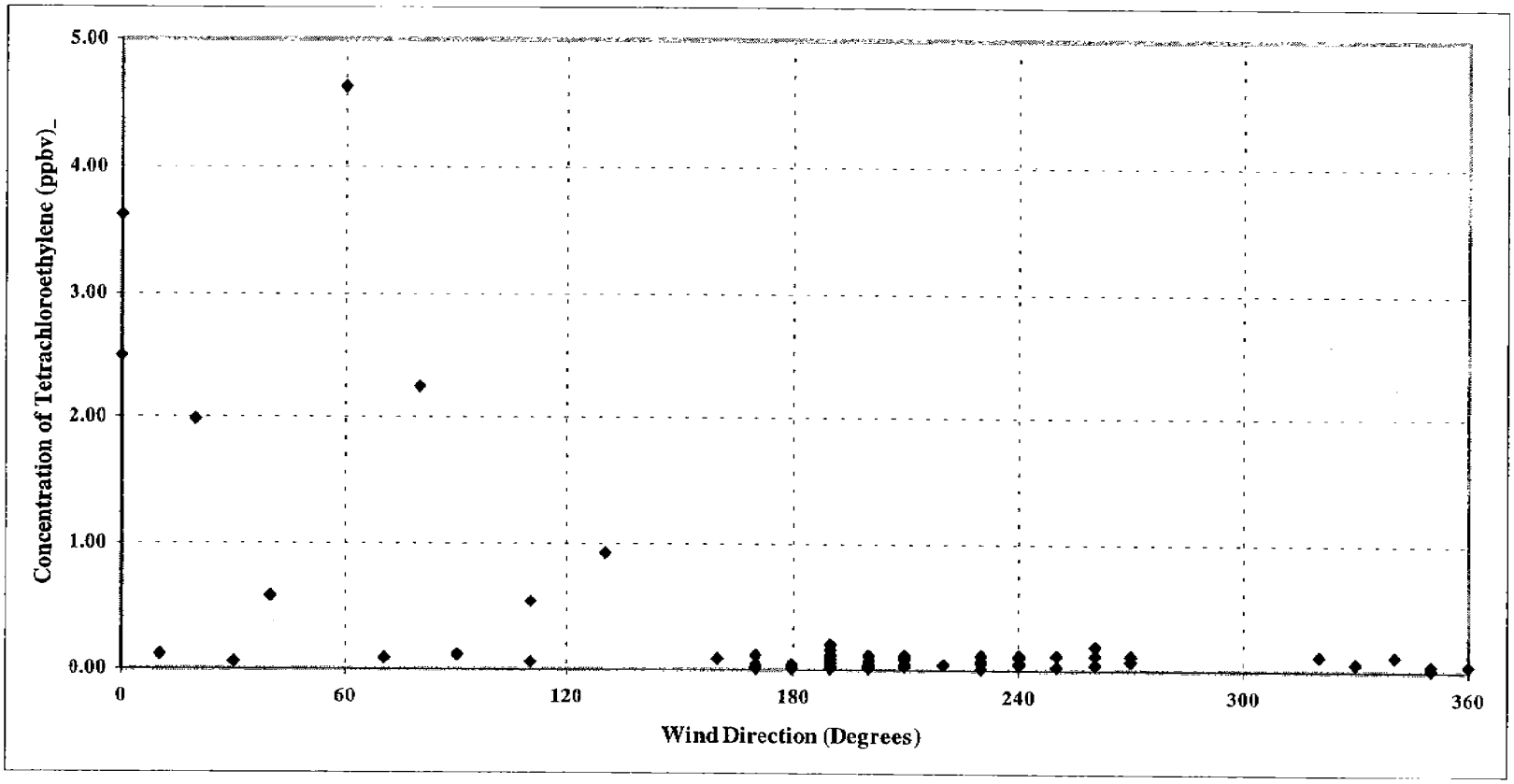


Figure 6-4
CAMS5: Concentrations of Styrene as a Function of Wind Direction



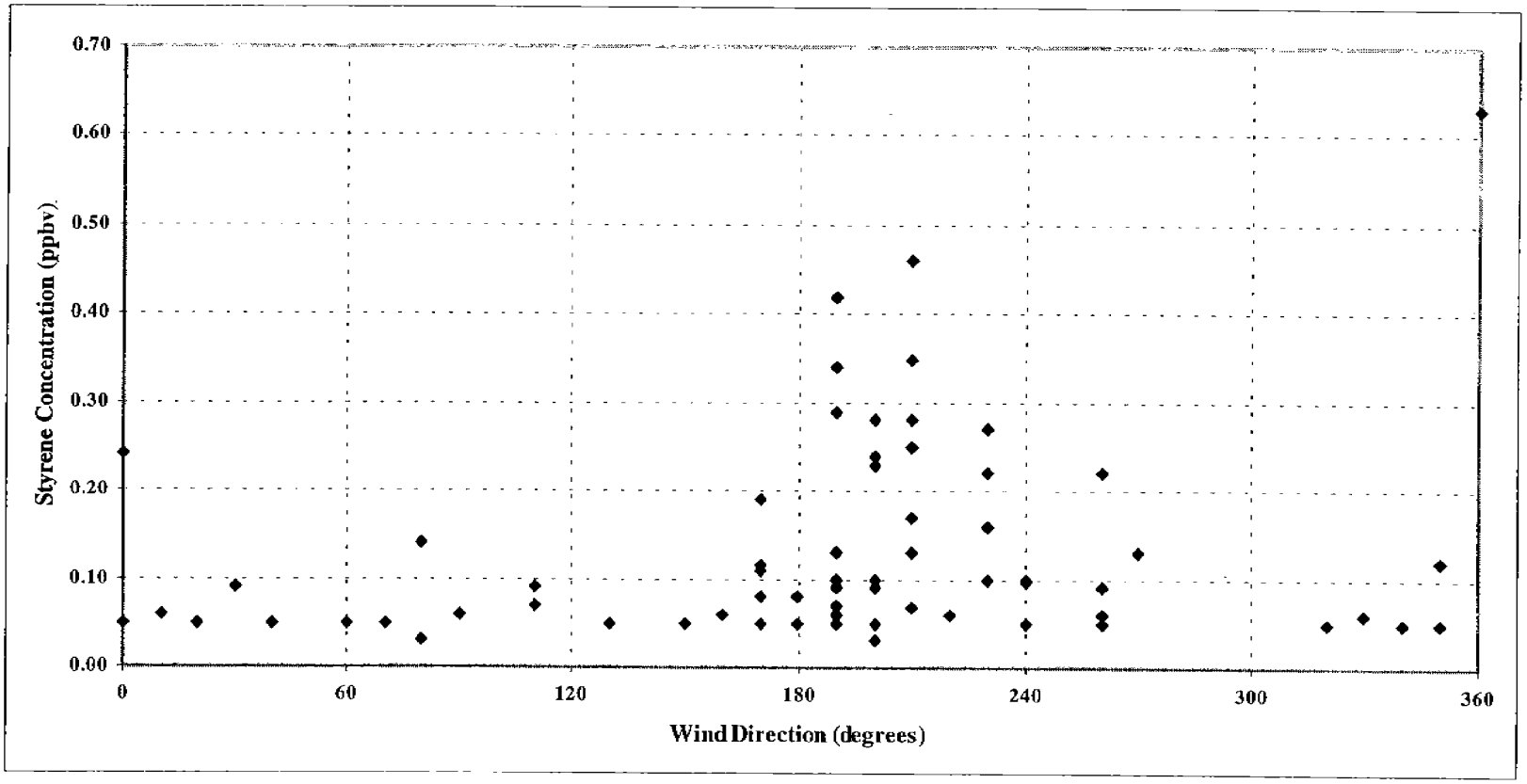
Note: The graph does not show ambient air concentrations that were measured during periods of calm winds.

Figure 6-5
CAMS13: Concentrations of Tetrachloroethylene as a Function of Wind Direction



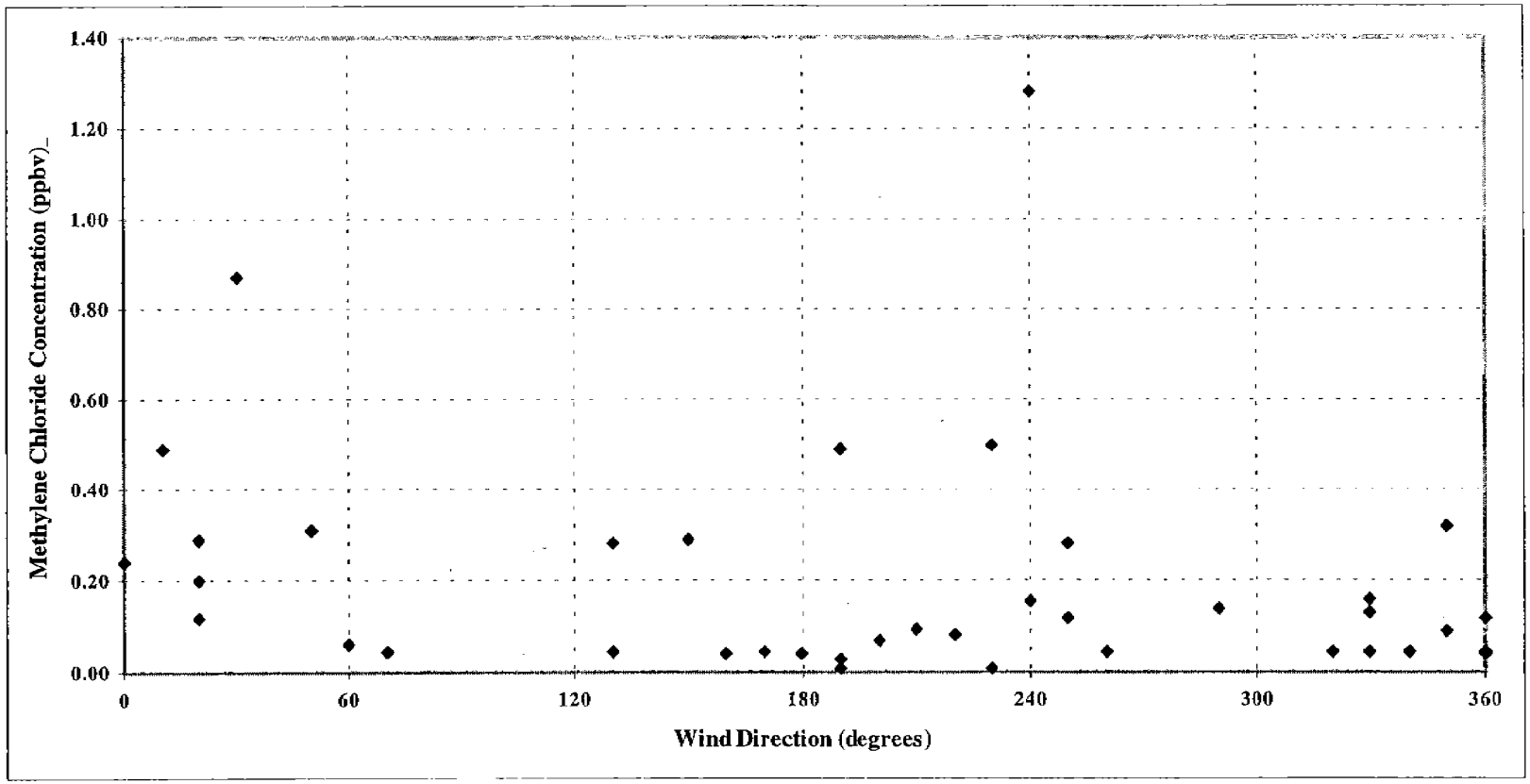
Note: The graph does not show ambient air concentrations that were measured during periods of calm winds.

Figure 6-6
DLTX: Concentrations of Styrene as a Function of Wind Direction



Note: The graph does not show ambient air concentrations that were measured during periods of calm winds.

Figure 6-7
JUMX: Concentrations of Methylene Chloride as a Function of Wind Direction



Note: The graph does not show ambient air concentrations that were measured during periods of calm winds.

Table 6-1
Summary Statistics for VOC Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 82 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	**0**	**100%**	**0.16**	**3.28**	**1.12**	**1.23**	**1.06**	**0.63**	**0.52**
Benzene	**0**	**100%**	**0.30**	**1.51**	**0.58**	**0.59**	**0.56**	**0.23**	**0.38**
Bromochloromethane	82	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromodichloromethane	82	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Bromoform	82	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Bromomethane	82	0%	ND	ND	0.07	0.07	0.07	0.00	0.00
1,3-Butadiene	73	11%	ND	0.08	0.05	0.05	0.05	0.01	0.14
Carbon Tetrachloride	**2**	**98%**	**ND**	**0.10**	**0.07**	**0.07**	**0.07**	**0.01**	**0.18**
Chlorobenzene	82	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Chloroethane	82	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroform	61	26%	ND	0.12	0.03	0.04	0.04	0.03	0.62
Chloromethane	**1**	**99%**	**ND**	**0.96**	**0.50**	**0.48**	**0.45**	**0.15**	**0.31**
Chloroprene	82	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Dibromochloromethane	82	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	81	1%	ND	0.14	0.08	0.08	0.08	0.01	0.10
o-Dichlorobenzene	82	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
p-Dichlorobenzene	74	10%	ND	0.17	0.07	0.06	0.06	0.01	0.22
1,1-Dichloroethane	82	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	82	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-1 (Continued)
Summary Statistics for VOC Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 82 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
trans-1,2-Dichloroethylene	82	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	82	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	82	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	82	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.13**	**1.13**	**0.24**	**0.28**	**0.25**	**0.17**	**0.61**
Methylene chloride	**33**	**60%**	**ND**	**1.34**	**0.05**	**0.09**	**0.06**	**0.16**	**1.85**
***n*-Octane**	**5**	**94%**	**ND**	**0.97**	**0.08**	**0.11**	**0.09**	**0.14**	**1.26**
Propylene	**1**	**99%**	**ND**	**1.12**	**0.41**	**0.47**	**0.41**	**0.23**	**0.50**
Styrene	**41**	**50%**	**ND**	**0.23**	**0.05**	**0.07**	**0.06**	**0.04**	**0.67**
1,1,2,2-Tetrachloroethane	82	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**18**	**78%**	**ND**	**0.68**	**0.11**	**0.15**	**0.11**	**0.15**	**0.96**
Toluene	**0**	**100%**	**0.68**	**10.77**	**1.40**	**1.73**	**1.47**	**1.58**	**0.92**
1,1,1-Trichloroethane	**0**	**100%**	**0.05**	**0.30**	**0.09**	**0.11**	**0.10**	**0.04**	**0.39**
1,1,2-Trichloroethane	82	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	78	5%	ND	0.13	0.02	0.02	0.02	0.01	0.60
Vinyl chloride	81	1%	ND	0.61	0.03	0.04	0.03	0.06	1.73
***m,p*-Xylene**	**1**	**99%**	**ND**	**3.15**	**0.69**	**0.83**	**0.73**	**0.53**	**0.63**
***o*-Xylene**	**1**	**99%**	**ND**	**1.46**	**0.32**	**0.37**	**0.33**	**0.21**	**0.58**

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-2
Summary Statistics for VOC Concentrations Measured at Dallas, Texas (DLTX)
(Based on 83 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	**0**	**100%**	**0.69**	**25.70**	**2.86**	**4.22**	**3.01**	**4.03**	**0.95**
Benzene	**0**	**100%**	**0.31**	**1.70**	**0.63**	**0.72**	**0.65**	**0.32**	**0.45**
Bromochloromethane	83	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromodichloromethane	83	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Bromoform	83	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Bromomethane	82	1%	ND	0.08	0.07	0.07	0.07	0.00	0.02
1,3-Butadiene	**32**	**61%**	**ND**	**0.42**	**0.05**	**0.08**	**0.06**	**0.07**	**0.87**
Carbon Tetrachloride	**0**	**100%**	**0.06**	**0.27**	**0.07**	**0.08**	**0.08**	**0.02**	**0.31**
Chlorobenzene	83	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Chloroethane	83	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroform	78	6%	ND	0.09	0.03	0.03	0.03	0.01	0.23
Chloromethane	**0**	**100%**	**0.18**	**1.43**	**0.54**	**0.52**	**0.50**	**0.18**	**0.34**
Chloroprene	83	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Dibromochloromethane	82	1%	ND	0.04	0.03	0.03	0.03	0.00	0.07
m-Dichlorobenzene	83	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
o-Dichlorobenzene	83	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
p-Dichlorobenzene	69	17%	ND	0.08	0.07	0.06	0.06	0.01	0.21
1,1-Dichloroethane	83	0%	ND	ND	0.03	0.03	0.03	0.00	0.00

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-2 (Continued)
Summary Statistics for VOC Concentrations Measured at Dallas, Texas (DLTX)
(Based on 83 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
1,2-Dichloroethane	83	0%	ND	ND	0.13	0.13	0.13	0.00	0.00
trans-1,2-Dichloroethylene	83	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	83	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	83	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	83	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.08**	**1.03**	**0.25**	**0.31**	**0.26**	**0.20**	**0.64**
Methylene chloride	**14**	**83%**	**ND**	**1.92**	**0.09**	**0.16**	**0.09**	**0.27**	**1.62**
***n*-Octane**	**3**	**96%**	**ND**	**0.69**	**0.09**	**0.11**	**0.09**	**0.09**	**0.82**
Propylene	**0**	**100%**	**0.18**	**2.69**	**0.86**	**1.00**	**0.88**	**0.52**	**0.52**
Styrene	**27**	**67%**	**ND**	**0.63**	**0.08**	**0.12**	**0.09**	**0.11**	**0.90**
1,1,2,2-Tetrachloroethane	83	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**20**	**76%**	**ND**	**0.58**	**0.08**	**0.09**	**0.08**	**0.07**	**0.79**
Toluene	**0**	**100%**	**0.48**	**6.78**	**1.56**	**1.87**	**1.60**	**1.15**	**0.62**
1,1,1-Trichloroethane	**0**	**100%**	**0.06**	**0.72**	**0.11**	**0.13**	**0.11**	**0.11**	**0.83**
1,1,2-Trichloroethane	83	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	60	28%	ND	0.61	0.02	0.05	0.03	0.10	1.80
Vinyl chloride	83	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.22**	**4.12**	**0.74**	**0.94**	**0.77**	**0.66**	**0.70**
***o*-Xylene**	**1**	**99%**	**ND**	**1.36**	**0.34**	**0.42**	**0.35**	**0.27**	**0.64**

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-3
Summary Statistics for VOC Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 79 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	**0**	**100%**	**0.54**	**7.55**	**2.00**	**2.39**	**1.98**	**1.54**	**0.65**
Benzene	**0**	**100%**	**0.15**	**7.82**	**1.08**	**1.79**	**1.14**	**1.74**	**0.97**
Bromochloromethane	79	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromodichloromethane	79	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Bromoform	79	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Bromomethane	78	1%	ND	0.07	0.07	0.07	0.07	0.00	0.02
1,3-Butadiene	43	46%	ND	0.38	0.05	0.09	0.07	0.08	0.89
Carbon Tetrachloride	**0**	**100%**	**0.05**	**0.11**	**0.07**	**0.07**	**0.07**	**0.01**	**0.13**
Chlorobenzene	79	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Chloroethane	79	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroform	79	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloromethane	**0**	**100%**	**0.19**	**0.93**	**0.51**	**0.50**	**0.48**	**0.13**	**0.27**
Chloroprene	79	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Dibromochloromethane	78	1%	ND	0.22	0.03	0.03	0.03	0.02	0.80
m-Dichlorobenzene	79	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
o-Dichlorobenzene	79	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
p-Dichlorobenzene	58	27%	ND	0.10	0.07	0.06	0.06	0.02	0.26
1,1-Dichloroethane	79	0%	ND	ND	0.03	0.03	0.03	0.00	0.00

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-3 (Continued)
Summary Statistics for VOC Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 79 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
1,2-Dichloroethane	79	0%	ND	ND	0.13	0.13	0.13	0.00	0.00
trans-1,2-Dichloroethylene	79	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	79	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	79	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	79	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.05**	**2.79**	**0.45**	**0.68**	**0.43**	**0.66**	**0.97**
Methylene chloride	**7**	**91%**	**ND**	**2.83**	**0.40**	**0.64**	**0.31**	**0.66**	**1.03**
***n*-Octane**	**4**	**95%**	**ND**	**0.91**	**0.13**	**0.21**	**0.13**	**0.22**	**1.02**
Propylene	**0**	**100%**	**0.11**	**2.83**	**0.73**	**0.87**	**0.71**	**0.57**	**0.66**
Styrene	**29**	**63%**	**ND**	**0.40**	**0.08**	**0.09**	**0.08**	**0.06**	**0.71**
1,1,2,2-Tetrachloroethane	79	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**21**	**73%**	**ND**	**5.28**	**0.09**	**0.38**	**0.10**	**0.95**	**2.53**
Toluene	**0**	**100%**	**0.35**	**20.29**	**2.64**	**4.24**	**2.62**	**4.20**	**0.99**
1,1,1-Trichloroethane	**0**	**100%**	**0.01**	**0.61**	**0.10**	**0.11**	**0.10**	**0.07**	**0.62**
1,1,2-Trichloroethane	79	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	72	9%	ND	0.29	0.02	0.03	0.02	0.04	1.41
Vinyl chloride	79	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.14**	**8.79**	**1.30**	**2.17**	**1.30**	**2.19**	**1.01**
***o*-Xylene**	**0**	**100%**	**0.07**	**4.15**	**0.62**	**0.99**	**0.61**	**0.98**	**0.99**

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-4
Summary Statistics for VOC Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 50 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	**0**	**100%**	**0.37**	**10.89**	**4.34**	**4.33**	**3.59**	**2.35**	**0.54**
Benzene	**0**	**100%**	**0.14**	**2.51**	**1.33**	**1.27**	**1.07**	**0.63**	**0.50**
Bromochloromethane	50	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromodichloromethane	50	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Bromoform	50	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Bromomethane	50	0%	ND	ND	0.07	0.07	0.07	0.00	0.00
1,3-Butadiene	**13**	**74%**	**ND**	**0.42**	**0.11**	**0.15**	**0.11**	**0.11**	**0.75**
Carbon Tetrachloride	**0**	**100%**	**0.05**	**0.11**	**0.07**	**0.07**	**0.07**	**0.01**	**0.15**
Chlorobenzene	50	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Chloroethane	50	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroform	46	8%	ND	0.15	0.03	0.03	0.03	0.02	0.53
Chloromethane	**0**	**100%**	**0.19**	**0.76**	**0.50**	**0.48**	**0.45**	**0.13**	**0.28**
Chloroprene	50	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Dibromochloromethane	50	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	50	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
o-Dichlorobenzene	50	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
***p*-Dichlorobenzene**	**10**	**80%**	**ND**	**0.44**	**0.08**	**0.12**	**0.10**	**0.09**	**0.74**
1,1-Dichloroethane	50	0%	ND	ND	0.03	0.03	0.03	0.00	0.00

ND = Nondetect
Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-4 (Continued)
Summary Statistics for VOC Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 50 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
1,2-Dichloroethane	50	0%	ND	ND	0.13	0.13	0.13	0.00	0.00
trans-1,2-Dichloroethylene	50	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	50	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	50	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	50	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.08**	**1.51**	**0.56**	**0.59**	**0.48**	**0.34**	**0.57**
Methylene chloride	**12**	**76%**	**ND**	**1.28**	**0.09**	**0.18**	**0.10**	**0.23**	**1.31**
***n*-Octane**	**2**	**96%**	**ND**	**0.24**	**0.10**	**0.10**	**0.09**	**0.05**	**0.46**
Propylene	**0**	**100%**	**0.16**	**3.21**	**1.38**	**1.39**	**1.16**	**0.74**	**0.53**
Styrene	**9**	**82%**	**ND**	**1.40**	**0.10**	**0.22**	**0.13**	**0.29**	**1.32**
1,1,2,2-Tetrachloroethane	50	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	38	24%	ND	0.11	0.11	0.09	0.08	0.03	0.33
Toluene	**0**	**100%**	**0.51**	**8.67**	**3.28**	**3.41**	**2.86**	**1.81**	**0.53**
1,1,1-Trichloroethane	**0**	**100%**	**0.06**	**1.11**	**0.16**	**0.20**	**0.15**	**0.19**	**0.96**
1,1,2-Trichloroethane	50	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	**24**	**52%**	**ND**	**0.48**	**0.04**	**0.10**	**0.06**	**0.11**	**1.12**
Vinyl chloride	50	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.22**	**4.75**	**1.55**	**1.74**	**1.40**	**1.03**	**0.59**
***o*-Xylene**	**0**	**100%**	**0.10**	**1.88**	**0.77**	**0.80**	**0.65**	**0.45**	**0.57**

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced by low prevalence (see Section 3.1).

Table 6-5
Summary Statistics for VOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	**0**	**100%**	**2.63**	**7.25**	**4.66**	**4.55**	**4.34**	**1.48**	**0.32**
Benzene	**0**	**100%**	**0.58**	**1.46**	**0.98**	**1.03**	**1.00**	**0.26**	**0.25**
Bromochloromethane	9	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromodichloromethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Bromoform	9	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Bromomethane	9	0%	ND	ND	0.07	0.07	0.07	0.00	0.00
1,3-Butadiene	**0**	**100%**	**0.08**	**0.32**	**0.14**	**0.18**	**0.16**	**0.08**	**0.46**
Carbon Tetrachloride	**0**	**100%**	**0.06**	**0.12**	**0.08**	**0.08**	**0.08**	**0.02**	**0.26**
Chlorobenzene	9	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Chloroethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroform	8	11%	ND	0.04	0.03	0.03	0.03	0.00	0.11
Chloromethane	**0**	**100%**	**0.37**	**0.58**	**0.46**	**0.46**	**0.46**	**0.06**	**0.13**
Chloroprene	9	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Dibromochloromethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	9	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
o-Dichlorobenzene	9	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
***p*-Dichlorobenzene**	**1**	**89%**	**ND**	**0.64**	**0.09**	**0.15**	**0.09**	**0.19**	**1.28**
1,1-Dichloroethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00

ND = Nondetect
Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced not only be limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1).

Table 6-5 (Continued)
Summary Statistics for VOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
1,2-Dichloroethane	9	0%	ND	ND	0.13	0.13	0.13	0.00	0.00
trans-1,2-Dichloroethylene	9	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	9	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	9	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.24**	**2.18**	**0.48**	**0.69**	**0.56**	**0.58**	**0.84**
Methylene chloride	**0**	**100%**	**0.11**	**1.38**	**0.76**	**0.77**	**0.62**	**0.41**	**0.54**
***n*-Octane**	**0**	**100%**	**0.13**	**0.34**	**0.18**	**0.20**	**0.19**	**0.08**	**0.39**
Propylene	**0**	**100%**	**1.12**	**5.31**	**2.36**	**2.77**	**2.46**	**1.44**	**0.52**
Styrene	**2**	**78%**	**ND**	**1.88**	**0.11**	**0.30**	**0.13**	**0.59**	**1.97**
1,1,2,2-Tetrachloroethane	9	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**0**	**100%**	**0.04**	**0.52**	**0.18**	**0.23**	**0.16**	**0.19**	**0.81**
Toluene	**0**	**100%**	**1.41**	**33.35**	**3.92**	**6.86**	**4.30**	**9.99**	**1.46**
1,1,1-Trichloroethane	**0**	**100%**	**0.08**	**0.58**	**0.17**	**0.21**	**0.18**	**0.15**	**0.71**
1,1,2-Trichloroethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	**4**	**56%**	**ND**	**0.17**	**0.05**	**0.06**	**0.05**	**0.05**	**0.82**
Vinyl chloride	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.76**	**7.55**	**1.46**	**2.17**	**1.71**	**2.07**	**0.96**
***o*-Xylene**	**0**	**100%**	**0.36**	**3.82**	**0.65**	**1.03**	**0.79**	**1.07**	**1.03**

ND = Nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution, since they may be influenced not only be limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1).

Table 6-6
Completeness of VOC Monitoring

Monitoring Station		Number of Days When Sampling Was Attempted	Number of Days with Valid Samples	Completeness
Code	Location			
CAMS13	Fort Worth, TX	84	79	94 %
CAMS5	Dallas, TX	84	82	98 %
DLTX	Dallas, TX	85	83	98 %
JUMX	Juarez, Mexico	56	50	89 %
	Totals	309	294	95 %

Note: The Newark monitoring station collected fewer than 10 VOC samples according to a site-specific schedule. Sampling results for this station are not included in this review of completeness.
The Juarez monitoring station has notably fewer samples, because it did not start collecting samples until July 15, 1997.

Table 6-7
Data Quality Parameters for VOC Measurements

Compound	Analytical Precision		Sampling and Analytical Precision	
	Relative Percent Difference	Number of Observations	Relative Percent Difference	Number of Observations
Acetylene	20%	73	8%	36
Benzene	8%	73	6%	36
Bromochloromethane	NA	0	NA	0
Bromodichloromethane	NA	0	NA	0
Bromoform	NA	0	NA	0
Bromomethane	NA	0	NA	0
1,3-Butadiene	29%	43	20%	20
Carbon tetrachloride	16%	72	12%	35
Chlorobenzene	NA	0	NA	0
Chloroethane	NA	0	NA	0
Chloroform	11%	2	0%	1
Chloromethane	13%	73	6%	36
Chloroprene	NA	0	NA	0
Dibromochloromethane	NA	0	NA	0
m-Dichlorobenzene	NA	0	NA	0
o-Dichlorobenzene	NA	0	NA	0
p-Dichlorobenzene	9%	20	3%	7
1,1-Dichloroethane	NA	0	NA	0
1,2-Dichloroethane	NA	0	NA	0
trans-1,2-Dichloroethylene	NA	0	NA	0
1,2-Dichloropropane	NA	0	NA	0
cis-1,3-Dichloropropylene	NA	0	NA	0
trans-1,3-Dichloropropylene	NA	0	NA	0
Ethylbenzene	8%	73	7%	36
Methylene chloride	15%	57	15%	28
n-Octane	16%	66	13%	32
Propylene	14%	73	8%	36
Styrene	14%	51	22%	24
1,1,2,2-Tetrachloroethane	NA	0	NA	0
Tetrachloroethylene	9%	47	7%	23
Toluene	6%	72	8%	35
1,1,1-Trichloroethane	15%	73	10%	36
1,1,2-Trichloroethane	NA	0	NA	0
Trichloroethylene	25%	10	12%	5
Vinyl chloride	NA	0	NA	0
m,p-Xylene	8%	73	7%	36
o-Xylene	8%	72	7%	35

Note: The number of observations for analytical precision indicates the number of replicates in which the compound was detected in both analyses; the number of observations for sampling and analytical precision indicates the number of duplicates in which the compound was detected in the four analyses of the duplicate samples. By definition, analytical precision and sampling precision cannot be evaluated for compounds with zero observations, hence compounds with no observations show an RPD of "NA."

7.0 Analysis of Carbonyl Monitoring Results

This section summarizes the carbonyl ambient air monitoring data collected during the 1997 NMOC/SNMOC program. Like the VOC data, the carbonyl data are useful for evaluating ambient air concentrations for a subset of organic compounds that the SNMOC analytical method does not identify. Ambient air concentrations of carbonyls are of interest because carbonyls are known to participate in the complex series of photochemical reactions that produce ozone.

During the 1997 program, five NMOC/SNMOC monitoring stations collected carbonyl samples roughly once a week, but no station collected valid samples on more than nine different days. As a result, the carbonyl monitoring data are extremely limited in comparison to the large volumes of NMOC, SNMOC, and VOC monitoring data. The limited number of samples prevents a statistically significant analysis of many data trends and patterns used earlier in this report (e.g., correlation analysis, monthly variations, comparisons to selected meteorological conditions). Therefore, the remainder of this section presents and interprets basic summary statistics for the carbonyl monitoring results (Section 7.1), comments on likely sources and sinks of carbonyls in ambient air (Section 7.2), and assesses the quality of the monitoring data (Section 7.3). The section concludes with a brief summary of the carbonyl data (Section 7.4).

7.1 Data Summary Tables

Using the data summary parameters discussed in Section 3.1, Tables 7-1 through 7-5 summarize the monitoring results for the five stations that measured carbonyls. Several data trends are apparent upon careful review of the summary tables:

- *Prevalence.* Of the 16 compounds identified by the carbonyl analytical method, six—acetaldehyde, acetone, butyr/isobutyraldehyde, formaldehyde, and propionaldehyde—were detected in more than 75 percent of the samples collected at every monitoring station. Summary statistics for these compounds are expected to accurately represent the actual distribution of concentrations, since few data points were replaced with surrogate concentrations of one-half the detection limit. According to the data summary tables, prevalence of carbonyls for the Juarez monitoring station was notably lower than that for all other monitoring stations. The summary of central tendency data discusses this trend further.

- *Concentration range.* During the entire 1997 program, acetaldehyde, acetone, and formaldehyde were the only carbonyl compounds detected at levels greater than 1.0 ppbv. Concentrations of all other carbonyls were never measured above this level. Because monitors generally sampled carbonyls once a week or less, ambient air concentrations of carbonyls between 6:00 a.m. and 9:00 a.m. likely reached higher levels (and lower levels) than the highest (and lowest) concentrations in the data summary tables indicate. Therefore, the concentration ranges in these tables should be interpreted with caution.

  Ambient air concentrations of many carbonyl compounds are known to reach their highest levels during the early afternoon hours (Brimblecombe, 1996), not during the scheduled sampling times for the NMOC/SNMOC program. Thus, though they characterize air samples collected during the morning hours, the summary statistics in Tables 7-1 through 7-5 probably do not account for the highest concentrations of carbonyls, which often occur later in the day.

- *Central tendency.* To illustrate spatial variations in the carbonyl monitoring data, Figure 7-1 compares geometric mean concentrations of the most prevalent carbonyls. The diagrams in this figure indicate several data trends; most notably, ambient air concentrations of every compound at JUMX were significantly lower than those at the other four monitoring stations. The exact reason for this trend is not known, but carbonyl levels may be lower because motor vehicles in Juarez may use fuels of a different composition than those used in the United States. Recent studies have suggested that vehicles using oxygenated fuels, as EPA now requires in several parts of the country, probably emit greater quantities of aldehydes (a type of carbonyl) than vehicles using fuels with little or no oxygenated additives (Sterrett, 1995). Further research into the composition of fuels used in Juarez and additional air monitoring efforts in the area are needed to understand why, and to confirm if, ambient air concentrations of carbonyls at JUMX are relatively low.

  Figure 7-1 indicates three other trends: (1) At every monitoring station, the geometric mean concentrations of three compounds—acetaldehyde, acetone, and formaldehyde—account for over 90 percent of the total carbonyls detected in the air samples. (2) The relative magnitude of these three compounds was nearly uniform across the Dallas–Fort Worth monitors: concentrations of acetone were roughly twice as high as acetaldehyde levels, and concentrations of formaldehyde were roughly three times as high. (3) At the monitors in Dallas, Fort Worth, and Newark, the overall concentration of the most prevalent carbonyls ranges from approximately 8 to 12 ppbv (or 14 to 23 ppbC). These levels account for a significant fraction of the concentration unidentified by the SNMOC method, which, on average, ranged from 33 to 112 ppbC.

- *Variability.* As Tables 7-1 through 7-5 show, coefficients of variation of the most prevalent carbonyls were almost always lower than 1.0 and were never higher than 1.15 (valeraldehyde, CAMS5). The relatively low coefficients of variation suggest that the most prevalent carbonyls are consistently found in ambient air, regardless of changing wind directions. This trend is inconsistent with carbonyls originating from a single emissions source. Rather, the relatively low coefficients of variation suggest that carbonyls are emitted from sources, or formed in the ambient air, in all directions surrounding the monitoring stations.

To supplement these general observations, the following sections present general analyses and interpretations of carbonyl monitoring data and use data quality parameters to characterize how precisely the concentrations were measured.

7.2 Analyses and Interpretations

Although too few carbonyl samples were collected during the 1997 NMOC/SNMOC monitoring program to allow detailed statistical analyses like those in Sections 4.2, 5.2, and 6.2, conclusions from previous extensive ambient air monitoring programs and research efforts may help put the current data into context. Previous studies have reported several different factors that affect ambient air concentrations of carbonyls, but most notably: (1) motor vehicles, combustion sources, and various industrial processes that emit carbonyls directly to the atmosphere; (2) selected photochemical reactions that *form* carbonyls in the air, typically from airborne hydrocarbons; and (3) selected photochemical reactions that *consume* carbonyls in the air, generally by photolysis or by reaction with hydroxyl ions (Seinfeld, 1986). The combined influences of these factors probably explain the data quality trends shown in Figure 7-1, but the current monitoring data are insufficient for determining which factors influence ambient levels of carbonyls most significantly. Further monitoring, including sampling during the winter months (when photochemical reactivity is at its lowest), are needed to better understand air quality trends for carbonyls at the NMOC/SNMOC monitoring stations.

7.3 Data Quality Parameters

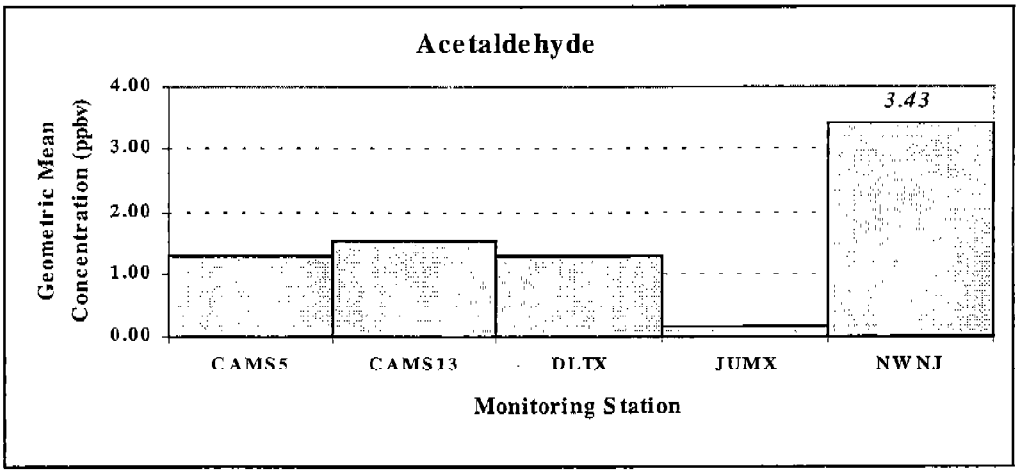
Following the project schedule for the 1997 NMOC/SNMOC program, 40 carbonyl sampling events were successfully completed. Four events involved duplicate sampling, and all

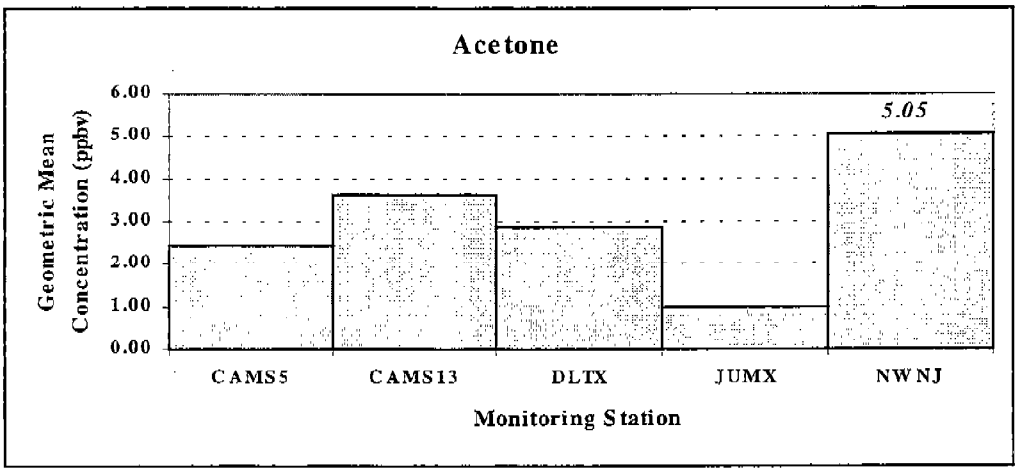
duplicate samples were analyzed in replicate. As a result, eight observations are available for estimating analytical precision for carbonyls, and four observations for estimating sampling and analytical precision. Table 7-6 summarizes these precision data and indicates that analytical precision for the most prevalent carbonyls (2 to 13 percent) was better than for the least prevalent compounds (14 to 52 percent). The precision observed for the most prevalent compounds is lower than ±20 percent (the measurement guideline of specified in EPA's Compendium Method), but the precision for the least prevalent compounds is slightly higher than this guideline. This result is not surprising, because it has been widely recognized that most environmental monitoring methods become increasingly imprecise (and measurements more variable) when detecting concentrations at levels near limits of detection.

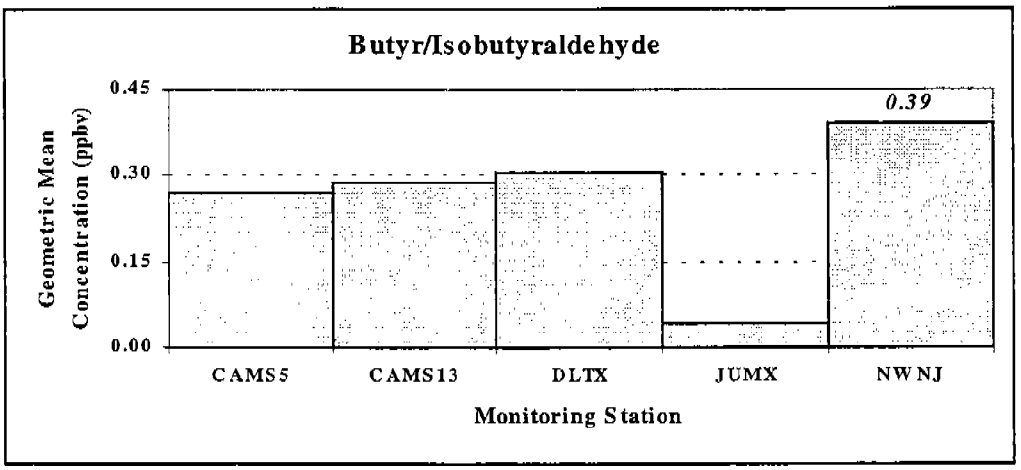
7.4 Summary

As Figure 7-1 shows, ambient air concentrations of carbonyls varied significantly among the NMOC/SNMOC monitoring stations: ambient levels were notably lower at JUMX than at the other stations, levels at the three stations in the Dallas–Fort Worth area were generally similar, and average concentrations at Newark were highest for several carbonyls but relatively low for others. Despite these differences from one site to the next, acetaldehyde, acetone, and formaldehyde consistently accounted for over 90 percent of the total concentration of carbonyls detected at every monitoring station. The relatively low coefficients of variation for these compounds suggests that they are not primarily emitted by a few discrete sources, but further research is needed to identify the primary sources and sinks of airborne carbonyls at the 1997 NMOC/SNMOC monitoring stations. Like the NMOC, SNMOC, and VOC data collected in this program, the carbonyl air monitoring data were shown to be very precise, particularly for the most prevalent compounds.

Figure 7-1 (Page 1 of 2)
Geometric Mean Concentrations of the Most Prevalent Carbonyls

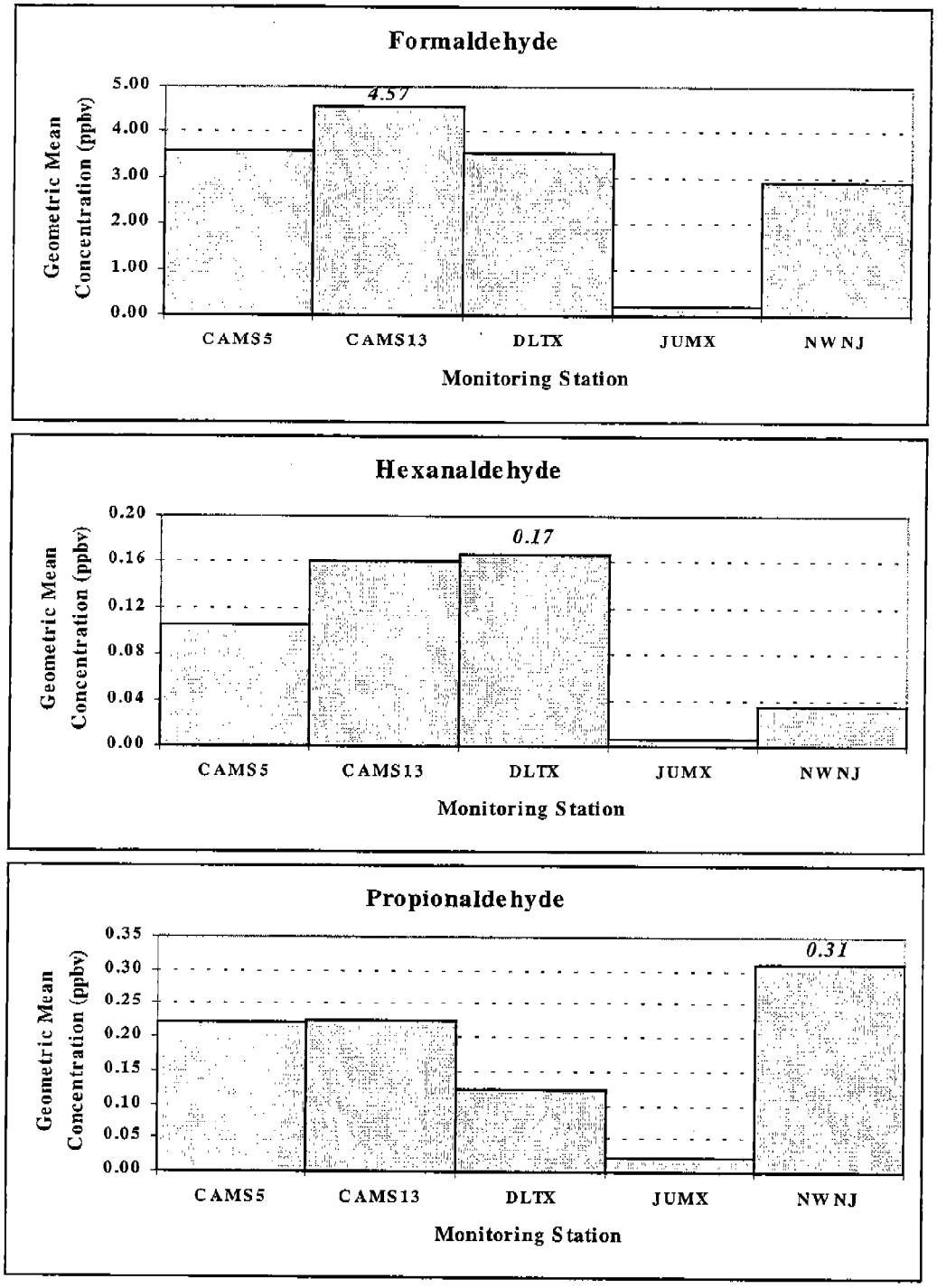






Note: Every plot has a different scale.

Figure 7-1 (Page 2 of 2)
Geometric Mean Concentrations of the Most Prevalent Carbonyls



Note: Every plot has a different scale.

Table 7-1
Summary Statistics for Carbonyl Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 8 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetaldehyde	**0**	**100%**	**0.61**	**2.55**	**1.12**	**1.43**	**1.28**	**0.72**	**0.50**
Acetone	**0**	**100%**	**0.87**	**5.34**	**2.57**	**2.85**	**2.44**	**1.58**	**0.55**
Acrolein	**0**	**100%**	**0.02**	**0.37**	**0.14**	**0.16**	**0.11**	**0.12**	**0.75**
Benzaldehyde	**1**	**88%**	**ND**	**0.15**	0.02	**0.06**	**0.02**	**0.06**	**1.13**
Butyr/Isobutyraldehyde	**0**	**100%**	**0.13**	**0.51**	0.23	**0.30**	**0.27**	**0.14**	**0.48**
Crotonaldehyde	8	0%	ND	ND	0.00	0.00	0.00	0.00	0.00
2,5-Dimethylbenzaldehyde	8	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Formaldehyde	**0**	**100%**	**1.74**	**6.10**	**3.37**	**3.85**	**3.56**	**1.56**	**0.41**
Hexanaldehyde	**0**	**100%**	**0.04**	**0.24**	**0.12**	**0.12**	**0.11**	**0.07**	**0.55**
Isovaleraldehyde	8	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Propionaldehyde	**0**	**100%**	**0.14**	**0.46**	**0.21**	**0.24**	**0.22**	**0.12**	**0.47**
Tolualdehydes	4	50%	ND	0.04	0.02	0.02	0.02	0.02	0.66
Valeraldehyde	**2**	**75%**	**ND**	**0.15**	**0.03**	**0.05**	**0.03**	**0.06**	**1.15**

ND = nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution since they may be influenced not only by limited sample size (see Section 7.0), but also by low prevalence (see Section 3.1).

Table 7-2
Summary Statistics for Carbonyl Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetaldehyde	**0**	**100%**	**0.59**	**3.38**	**1.22**	**1.75**	**1.53**	**0.97**	**0.55**
Acetone	**0**	**100%**	**2.31**	**6.38**	**3.40**	**3.91**	**3.60**	**1.73**	**0.44**
Acrolein	**0**	**100%**	**0.03**	**0.14**	**0.09**	**0.08**	**0.08**	**0.04**	**0.41**
Benzaldehyde	**1**	**89%**	**ND**	**0.20**	0.09	**0.09**	**0.06**	**0.06**	**0.67**
Butyr/Isobutyraldehyde	**0**	**100%**	**0.08**	**0.64**	0.34	**0.35**	**0.29**	**0.19**	**0.56**
Crotonaldehyde	9	0%	ND	ND	0.00	0.00	0.00	0.00	0.00
2,5-Dimethylbenzaldehyde	9	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Formaldehyde	**0**	**100%**	**1.72**	**8.17**	**4.82**	**4.99**	**4.57**	**2.10**	**0.42**
Hexanaldehyde	**0**	**100%**	**0.10**	**0.23**	**0.16**	**0.17**	**0.16**	**0.04**	**0.26**
Isovaleraldehyde	8	11%	ND	0.01	0.01	0.01	0.01	0.00	0.12
Propionaldehyde	**0**	**100%**	**0.09**	**0.44**	**0.22**	**0.25**	**0.22**	**0.12**	**0.48**
Tolualdehydes	**4**	**56%**	**ND**	**0.06**	**0.03**	**0.03**	**0.02**	**0.02**	**0.72**
Valeraldehyde	**0**	**100%**	**0.02**	**0.12**	**0.07**	**0.07**	**0.06**	**0.04**	**0.56**

ND = nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution since they may be influenced not only by limited sample size (see Section 7.0), but also by low prevalence (see Section 3.1).

Table 7-3
Summary Statistics for Carbonyl Concentrations Measured at Dallas, Texas (DLTX)
(Based on 9 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetaldehyde	**0**	**100%**	**0.28**	**2.88**	**1.44**	**1.54**	**1.28**	**0.85**	**0.55**
Acetone	**0**	**100%**	**0.78**	**5.46**	**2.90**	**3.26**	**2.85**	**1.53**	**0.47**
Acrolein	**1**	**89%**	**ND**	**0.80**	**0.37**	**0.32**	**0.19**	**0.24**	**0.75**
Benzaldehyde	**1**	**89%**	**ND**	**0.27**	0.07	**0.12**	**0.07**	**0.09**	**0.76**
Butyr/Isobutyraldehyde	**0**	**100%**	**0.06**	**0.57**	0.36	**0.36**	**0.30**	**0.17**	**0.48**
Crotonaldehyde	9	0%	ND	ND	0.00	0.00	0.00	0.00	0.00
2,5-Dimethylbenzaldehyde	9	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Formaldehyde	**0**	**100%**	**0.36**	**9.30**	**4.00**	**4.62**	**3.55**	**2.68**	**0.58**
Hexanaldehyde	**1**	**89%**	**ND**	**0.37**	**0.28**	**0.25**	**0.17**	**0.12**	**0.48**
Isovaleraldehyde	9	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Propionaldehyde	**1**	**89%**	**ND**	**0.40**	**0.20**	**0.20**	**0.12**	**0.13**	**0.62**
Tolualdehydes	**4**	**56%**	**ND**	**0.16**	**0.08**	**0.08**	**0.04**	**0.07**	**0.89**
Valeraldehyde	**1**	**89%**	**ND**	**0.25**	**0.12**	**0.13**	**0.09**	**0.08**	**0.60**

ND = nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution since they may be influenced not only by limited sample size (see Section 7.0), but also by low prevalence (see Section 3.1).

Table 7-4
Summary Statistics for Carbonyl Concentrations Measured at Juarez, Mexico (JUMX)
(Based on 7 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetaldehyde	**0**	**100%**	**0.11**	**0.34**	**0.14**	**0.19**	**0.17**	**0.10**	**0.53**
Acetone	**0**	**100%**	**0.68**	**2.23**	**0.91**	**1.07**	**0.99**	**0.53**	**0.50**
Acrolein	7	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Benzaldehyde	7	0%	ND	ND	0.00	0.00	0.00	0.00	0.00
Butyr/Isobutyraldehyde	**1**	**86%**	**ND**	**0.20**	0.07	**0.07**	**0.04**	**0.07**	**0.95**
Crotonaldehyde	7	0%	ND	ND	0.00	0.00	0.00	0.00	0.00
2,5-Dimethylbenzaldehyde	6	14%	ND	0.01	0.01	0.01	0.01	0.00	0.33
Formaldehyde	**0**	**100%**	**0.12**	**0.28**	**0.17**	**0.19**	**0.18**	**0.06**	**0.30**
Hexanaldehyde	4	43%	ND	0.02	0.00	0.01	0.01	0.01	0.75
Isovaleraldehyde	7	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Propionaldehyde	**2**	**71%**	**ND**	**0.08**	**0.05**	**0.04**	**0.02**	**0.03**	**0.72**
Tolualdehydes	7	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Valeraldehyde	6	14%	ND	0.01	0.01	0.01	0.01	0.00	0.19

ND = nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution since they may be influenced not only by limited sample size (see Section 7.0), but also by low prevalence (see Section 3.1).

Table 7-5
Summary Statistics for Carbonyl Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 7 Days with Valid Samples)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Non-detects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetaldehyde	**0**	**100%**	**0.84**	**6.27**	**4.28**	**3.92**	**3.43**	**1.65**	**0.42**
Acetone	**0**	**100%**	**2.13**	**7.22**	**5.83**	**5.37**	**5.05**	**1.71**	**0.32**
Acrolein	**0**	**100%**	**0.08**	**0.42**	**0.12**	**0.19**	**0.16**	**0.13**	**0.67**
Benzaldehyde	**2**	**71%**	**ND**	**0.20**	0.04	**0.08**	**0.03**	**0.08**	**1.03**
Butyr/Isobutyraldehyde	**0**	**100%**	**0.16**	**0.69**	0.42	**0.43**	**0.39**	**0.19**	**0.44**
Crotonaldehyde	7	0%	ND	ND	0.00	0.00	0.00	0.00	0.00
2,5-Dimethylbenzaldehyde	7	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Formaldehyde	**0**	**100%**	**0.80**	**5.51**	**3.69**	**3.33**	**2.92**	**1.50**	**0.45**
Hexanaldehyde	**2**	**71%**	**ND**	**0.20**	**0.04**	**0.08**	**0.03**	**0.09**	**1.07**
Isovaleraldehyde	7	0%	ND	ND	0.01	0.01	0.01	0.00	0.00
Propionaldehyde	**0**	**100%**	**0.10**	**0.68**	**0.32**	**0.35**	**0.31**	**0.18**	**0.52**
Tolualdehydes	5	29%	ND	0.24	0.01	0.07	0.02	0.11	1.48
Valeraldehyde	**2**	**71%**	**ND**	**0.14**	**0.04**	**0.05**	**0.03**	**0.05**	**1.09**

ND = nondetect

Note: Data for compounds detected in more than 50 percent of the samples are presented in boldface. Data for the other compounds should be interpreted with caution since they may be influenced not only by limited sample size (see Section 7.0), but also by low prevalence (see Section 3.1).

Table 7-6
Data Quality Parameters for Carbonyl Measurements

Compound	Analytical Precision		Sampling Precision	
	RPD	Number of Observations	RPD	Number of Observations
Acetaldehyde	**3%**	**8**	**10%**	**4**
Acetone	**4%**	**8**	**6%**	**4**
Acrolein	49%	6	52%	3
Benzaldehyde	42%	6	60%	3
Butyr/Isobutyraldehyde	**7%**	**8**	**20%**	**4**
Crotonaldehyde	NA	0	NA	0
2,5-Dimethylbenzaldehyde	NA	0	NA	0
Formaldehyde	**2%**	**8**	**7%**	**4**
Hexanaldehyde	14%	5	23%	2
Isovaleraldehyde	NA	0	NA	0
Propionaldehyde	**13%**	**6**	**4%**	**3**
Tolualdehydes	43%	5	42%	2
Valeraldehyde	52%	6	25%	3

RPD = relative percent difference (see Section 3.3.2)

Notes: The number of observations for analytical precision indicates the number of replicate analyses in which the compound was detected; the number of observations for sampling precision indicates the number of duplicate samples in which the compound was detected. By definition, analytical precision and sampling precision cannot be evaluated for compounds with zero observations; these compounds have an RPD of "NA."

The five most prevalent compounds are shown in boldface.

8.0 Conclusions and Recommendations

As indicated throughout this report, data from the NMOC/SNMOC monitoring program offer a wealth of information for evaluating several factors known to affect ozone formation processes. The following discussion reviews the main conclusions of this report and presents recommendations for ongoing NMOC/SNMOC monitoring efforts.

8.1 Conclusions

Although the NMOC/SNMOC monitoring data alone cannot possibly characterize all factors that contribute to ozone formation, they suggest the following air quality trends that may have direct relevance to air pollution control strategies:

- *NMOC monitoring data (Section 4).* Ambient air monitoring stations in Newark, New Jersey, and Long Island, New York, collected NMOC samples from 6:00 a.m. to 9:00 a.m. every weekday during the summer of 1997. The monitoring data, which were shown to be highly precise, indicated that NMOC concentrations at Newark (geometric mean, 0.360 ppmC; highest, 2.139 ppmC) were consistently higher than those at Long Island (geometric mean, 0.219 ppmC; highest, 0.898 ppmC). Despite these differing magnitudes, NMOC concentrations at both stations had similar correlations to selected meteorological conditions: ambient levels were generally lower on the most humid mornings, during periods of measurable precipitation, and on windy days. Consistent correlations between NMOC concentration and temperature and between NMOC concentration and wind direction were not observed. The absence of strong correlations between NMOC concentrations and wind direction suggested that many different sources located around the monitoring stations (most likely motor vehicles), as opposed to one or a few sources, most likely contributed to the detected pollutants. Though several different numerical and statistical techniques were used to find patterns relating NMOC, NO_x, and ozone monitoring data, no consistent results or data patterns were observed. On average, NMOC concentrations at both Newark and Long Island varied little from one summer month to the next.

- *SNMOC monitoring data (Section 5).* During the 1997 program, a monitoring station in Juarez, Mexico, and three monitoring stations in the Dallas–Fort Worth metropolitan area collected SNMOC samples every weekday morning, and a monitoring station in Newark collected nine SNMOC samples (one each week for nine weeks). Laboratory analysis of these samples, which were shown to be highly precise, determined concentrations of total NMOC as well as of 80 hydrocarbons. On average, NMOC concentrations at the CAMS13, JUMX, and

NWNJ monitoring stations were quite similar (i.e., between 400 ppbC and 450 ppbC) and approximately twice as high as those at the CAMS5 and DLTX monitoring stations. The 80 compounds identified by the SNMOC analytical method consistently comprised about 80 percent of the measured total NMOC concentrations, suggesting that the 80 hydrocarbons account for over three-fourths of airborne organic compounds at the five monitoring stations.

Not surprisingly, the composition of air samples differed among the five NMOC/SNMOC monitoring stations. However, many compounds (acetylene, *n*-butane, ethane, ethylene, isopentane, *n*-pentane, propane, and toluene) had relatively high geometric mean concentrations at all five monitoring stations; and aromatic compounds typically accounted for 10–15 percent of the total identified SNMOC, while olefinic compounds accounted for 20–30 percent, and alkanes accounted for 55–70 percent. Consistent with a finding from the 1996 NMOC/SNMOC report, ratios of BTEX compounds suggested that emissions from motor vehicles probably contributed significantly to the concentrations of hydrocarbons detected in the 1997 program. The BTEX ratios also provided evidence that the air mass at CAMS13 was "older" and possibly had a greater influence by long-range transport than did the other monitoring stations in the Dallas–Fort Worth area. Though the relatively greater composition of alkanes at CAMS13 supports this hypothesis, further research is needed to confirm the extent to which long-range transport affects air quality at the NMOC/SNMOC monitoring stations.

Consistent with findings for the NMOC monitoring data, total NMOC concentrations measured by the SNMOC analytical method were lowest on the most humid mornings, during periods of measurable precipitation, and on the windiest days. The exact reason (or reasons) for the correlation with humidity is not known, but the correlation with precipitation is consistent with theories of wet deposition and the correlation with wind speed is consistent with the enhanced atmospheric dispersion that is known to occur as wind speeds increase. With one exception, NMOC concentrations appeared to be weakly correlated, if not completely uncorrelated, with observations of temperature and wind direction. At the JUMX monitoring station, however, ambient air concentrations of NMOC on warmer mornings (i.e., temperatures greater than or equal to 75 degrees Fahrenheit) were nearly twice as high as those on cooler mornings. Statistical analyses of additional monitoring data are needed to confirm that the relationship between temperature and NMOC concentration at JUMX is not a statistical anomaly.

Several statistical analyses and numerical analyses could not identify consistent data trends between concentrations of ozone, NMOC, and NO_x across all monitoring stations. Nonetheless, these analyses provided some evidence that air

masses at CAMS13 and, to a lesser extent, at JUMX may be "NO_x limited," but more sophisticated analyses of the air monitoring data and meteorological conditions are recommended to confirm this finding.

Ambient air concentrations of hydrocarbons at most of the NMOC/SNMOC monitoring stations varied little from one month to the next, but levels at the CAMS13 increased dramatically during the 1997 program: the monthly average concentration at CAMS13 in August was roughly 2.5 times higher than the June and July levels, and the monthly average concentration in September was almost 4 times higher than the June and July levels. Given the relative decrease in olefins—the most reactive subset of hydrocarbons—as concentrations at CAMS13 increased, the data suggest that long-range transport of hydrocarbons probably contributed to the observed monthly variations. However, the exact reason (or reasons) for this notable increase is not known; further research should attempt to determine if changes in existing emissions sources or the presence of new emissions sources may account for the unique monthly variations at CAMS13.

- *VOC monitoring data (Section 6).* To make best use of the whole air samples, every canister collected during the 1997 NMOC/SNMOC program was analyzed for both the 80 target SNMOC compounds and the 38 target VOC. This improved analytical technique, which had not been adopted in previous NMOC/SNMOC monitoring efforts, provided extensive air monitoring data for halogenated hydrocarbons—a group of organic compounds that the SNMOC analytical method cannot identify. Although the most prevalent halogenated hydrocarbons (carbon tetrachloride, chloromethane, methylene chloride, and 1,1,1-trichloroethane) identified by the VOC analytical method were shown to account for a small portion of the total NMOC, air quality trends for some of these compounds were quite consistent with those reported in the scientific literature. At some monitoring stations, elevated ambient air concentrations of a few VOC, particularly styrene, tended to occur only when winds blew from certain directions. These correlations suggested that some compounds probably originated from one or a few upwind emissions sources, not from a fleet of motor vehicles.

- *Carbonyl monitoring data (Section 7).* Five NMOC/SNMOC monitoring stations collected carbonyl samples roughly once a week, but no station collected valid samples on more than nine different days. Despite the limited data, the carbonyl sampling results characterize ambient levels of selected aldehydes and one ketone (acetone)—a group of compounds that the SNMOC analytical method cannot identify. Of the 16 compounds identified by the carbonyl analytical method, three (acetaldehyde, acetone, and formaldehyde) accounted for over 90 percent of the total carbonyls detected in the air samples. In general, ambient air concentrations of carbonyls were notably lower at the Juarez monitoring station than at the other

four stations that collected carbonyl samples, but the reason for this spatial variation is not known. Further monitoring and data analyses are needed to determine the factors that best explain air quality trends for carbonyls at the NMOC/SNMOC monitoring stations.

8.2 Recommendations

Based on lessons learned from analyzing the 1997 NMOC/SNMOC monitoring data, a number of improvements are recommended for future national ambient air monitoring efforts:

- *Enhance the VOC analytical method to measure ambient air concentrations of oxygenated compounds.* Knowing that emissions from motor vehicles account for a large fraction of airborne hydrocarbons in urban areas, future NMOC/SNMOC monitoring efforts should attempt to characterize a wider range of compounds typically found in motor vehicle exhaust. With EPA and more states requiring the use of reformulated gasoline, which typically contains oxygenated compounds (such as methyl tertiary-butyl ether and ethanol), there has been growing concern regarding the extent to which the oxygenated compounds are found in the environment. To help address these concerns, the analytical method should be modified to enable measurement of selected oxygenated compounds. This improvement is expected to be implemented during the 1998 NMOC/SNMOC program.

- *Investigate the feasibility of offering continuous monitoring or revised sampling schedules as a program option.* Though the NMOC/SNMOC monitoring program currently characterizes air quality extensively for sponsoring agencies, sampling schedules could be modified to offer even greater insight into the complex nature of air pollution. For instance, scheduling options for weekend sampling, sampling during different hours of the day (in addition to sampling from 6:00 a.m. to 9:00 a.m.), or even continuous sampling would almost certainly reveal notable air quality trends that cannot be characterized with the current sampling schedules. Future NMOC/SNMOC programs should investigate the feasibility and cost of providing these alternate sampling options.

- *Recommend additional analyses of the NMOC/SNMOC monitoring data.* Though extensive, the analyses in this report do not provide a comprehensive account of air quality near the NMOC/SNMOC monitoring stations. As a result, sponsoring agencies are encouraged to supplement the analyses in this report with additional analyses of factors that affect ozone formation processes, such as comparing air quality trends to changes in emissions inventories, using regional dispersion models to predict ozone concentrations, and examining how levels of air pollution

vary with a wider range of meteorological conditions (e.g., mixing heights, solar radiation, and upper-air wind patterns).

- *Encourage continued participation in the NMOC/SNMOC program.* Although NMOC and SNMOC monitoring data thoroughly characterize ambient air quality during the summer months, state and local agencies can assess long-term trends in levels of air pollution only through continued participation in similar ambient air monitoring efforts. Because long-term trends can indicate the effectiveness of pollution control strategies and suggest whether air quality is improving or degrading, sponsoring agencies are encouraged to develop thorough monitoring programs or to continue participating in NMOC/SNMOC monitoring efforts. For insight into these long-term trends, the 1998 NMOC/SNMOC report will focus almost exclusively on how levels of air pollution changed from one year to the next.

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Long Island, New York, 1997 NMOC Results

SITE CODE	SAMPLE ID	COLLECTION DATE	AVERAGE CONC.
LINY	9432	6/2/97	0.147
LINY	9437	6/4/97	0.143
LINY	9449	6/5/97	0.343
LINY	9460	6/6/97	0.199
LINY	9461	6/9/97	0.639
LINY	9488	6/10/97	0.383
LINY	9492	6/11/97	0.288
LINY	9534	6/12/97	0.586
LINY	9527	6/13/97	0.198
LINY	9539	6/16/97	0.309
LINY	9548	6/17/97	0.367
LINY	9565	6/19/97	0.358
LINY	9573	6/20/97	0.189
LINY	9588	6/23/97	0.251
LINY	9592	6/24/97	0.196
LINY	9640	6/25/97	0.409
LINY	9676	6/26/97	0.234
LINY	9681	6/27/97	0.280
LINY	9690	6/30/97	0.270
LINY	9695	7/1/97	0.169
LINY	9719	7/2/97	0.171
LINY	9822	7/3/97	0.140
LINY	9824	7/7/97	0.241
LINY	9899	7/9/97	0.230
LINY	9910	7/10/97	0.110
LINY	9954	7/11/97	0.205
LINY	9955	7/11/97	0.194
LINY	9954	7/11/97	0.172
LINY	9955	7/11/97	0.176
LINY	9975	7/14/97	0.594
LINY	10027	7/15/97	0.571
LINY	10038	7/16/97	0.205
LINY	10056	7/17/97	0.429
LINY	10057	7/17/97	0.451
LINY	10056	7/17/97	0.419
LINY	10057	7/17/97	0.405
LINY	10044	7/18/97	0.390
LINY	10066	7/21/97	0.284
LINY	10204	7/23/97	0.222
LINY	10205	7/23/97	0.200
LINY	10204	7/23/97	0.258
LINY	10205	7/23/97	0.248
LINY	10252	7/24/97	0.083
LINY	10292	7/25/97	0.069
LINY	10304	7/28/97	0.253
LINY	10313	7/29/97	0.118
LINY	10314	7/29/97	0.128
LINY	10313	7/29/97	0.097
LINY	10314	7/29/97	0.133
LINY	10425	7/30/97	0.107
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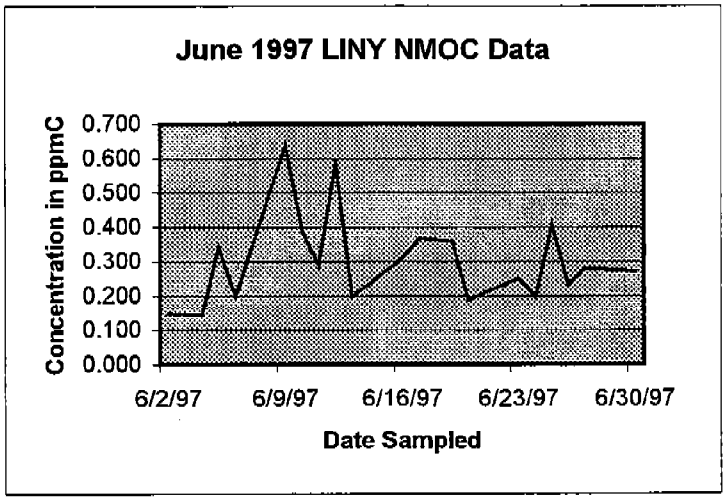

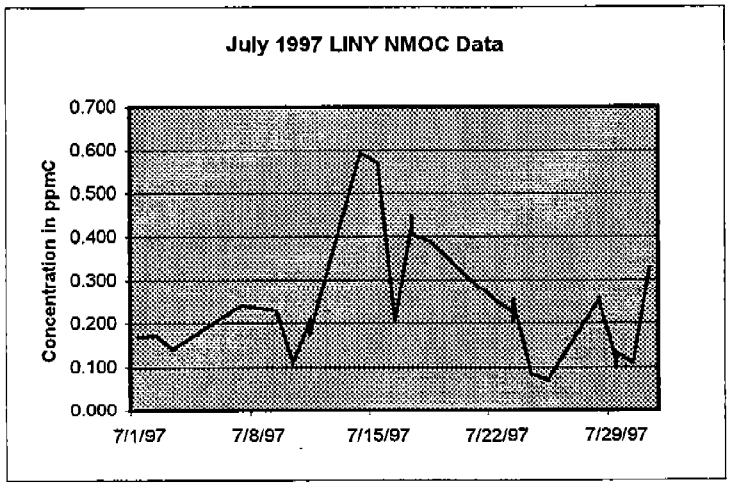

Long Island, New York, 1997 NMOC Results

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LINY	10518	8/5/97	0.092
LINY	10517	8/6/97	0.131
LINY	10564	8/7/97	0.472
LINY	10565	8/8/97	0.343
LINY	10598	8/11/97	0.266
LINY	10654	8/12/97	0.098
LINY	10599	8/13/97	0.094
LINY	10679	8/14/97	0.192
LINY	10680	8/15/97	0.197
LINY	10681	8/15/97	0.196
LINY	10680	8/15/97	0.185
LINY	10681	8/15/97	0.220
LINY	10693	8/18/97	0.088
LINY	10696	8/19/97	0.160
LINY	10702	8/20/97	0.675
LINY	10864	8/21/97	0.078
LINY	10865	8/21/97	0.108
LINY	10864	8/21/97	0.085
LINY	10865	8/21/97	0.101
LINY	10860	8/22/97	0.177
LINY	10873	8/25/97	0.533
LINY	10907	8/26/97	0.542
LINY	10959	8/27/97	0.275
LINY	10960	8/27/97	0.271
LINY	10959	8/27/97	0.263
LINY	10960	8/27/97	0.259
LINY	10965	8/28/97	0.143
LINY	11020	8/29/97	0.218
LINY	11031	9/2/97	0.291
LINY	11046	9/3/97	0.199
LINY	11117	9/4/97	0.095
LINY	11124	9/5/97	0.270
LINY	11188	9/8/97	0.129
LINY	11217	9/10/97	0.078
LINY	11255	9/11/97	0.054
LINY	11288	9/12/97	0.256
LINY	11293	9/15/97	0.339
LINY	11294	9/15/97	0.336
LINY	11293	9/15/97	0.304
LINY	11294	9/15/97	0.307
LINY	11311	9/16/97	0.494
LINY	11322	9/17/97	0.186
LINY	11351	9/18/97	0.269
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LINY	11383	9/23/97	0.130
LINY	11386	9/24/97	0.079
LINY	11425	9/25/97	0.898
LINY	11433	9/26/97	0.295
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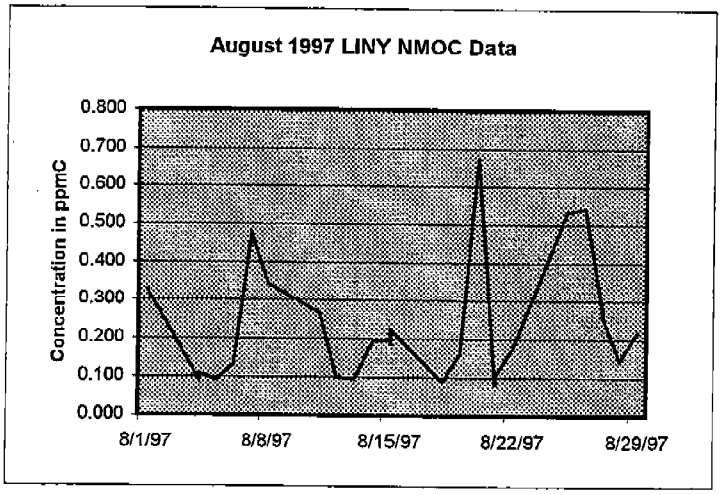

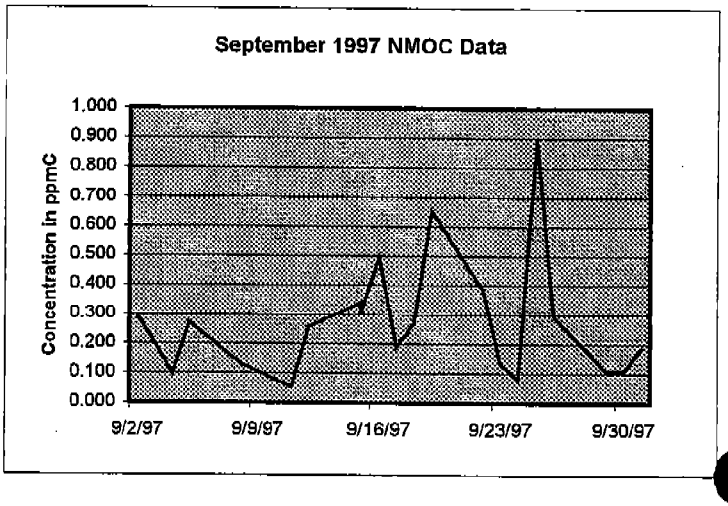

Newark, New Jersey, 1997 NMOC Results

SITE CODE	SAMPLE ID	COLLECTION DATE	AVERAGE CONC.
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NWNJ	9445	6/4/97	0.098
NWNJ	9464	6/6/97	0.388
NWNJ	9487	6/9/97	0.401
NWNJ	9503	6/10/97	0.738
NWNJ	9504	6/11/97	0.230
NWNJ	9530	6/12/97	0.408
NWNJ	9538	6/13/97	0.357
NWNJ	9566	6/16/97	0.468
NWNJ	9560	6/17/97	0.423
NWNJ	9563	6/18/97	0.260
NWNJ	9574	6/19/97	0.487
NWNJ	9589	6/20/97	0.317
NWNJ	9591	6/23/97	0.200
NWNJ	9679	6/24/97	0.361
NWNJ	9678	6/25/97	1.404
NWNJ	9694	6/26/97	0.425
NWNJ	9709	6/27/97	0.182
NWNJ	9705	6/30/97	0.475
NWNJ	9720	7/1/97	0.426
NWNJ	9818	7/2/97	0.365
NWNJ	9817	7/3/97	0.548
NWNJ	9838	7/7/97	0.427
NWNJ	9911	7/8/97	0.781
NWNJ	9912	7/9/97	0.415
NWNJ	9956	7/10/97	0.165
NWNJ	10039	7/11/97	0.390
NWNJ	10040	7/11/97	0.376
NWNJ	10039	7/11/97	0.399
NWNJ	10040	7/11/97	0.363
NWNJ	10042	7/14/97	0.474
NWNJ	10024	7/15/97	0.412
NWNJ	10065	7/16/97	0.176
NWNJ	10058	7/17/97	0.701
NWNJ	10059	7/17/97	0.741
NWNJ	10058	7/17/97	0.699
NWNJ	10059	7/17/97	0.746
NWNJ	10178	7/18/97	0.350
NWNJ	10176	7/21/97	0.390
NWNJ	10184	7/22/97	0.194
NWNJ	10290	7/24/97	0.213
NWNJ	10375	7/25/97	0.154
NWNJ	10372	7/28/97	0.369
NWNJ	10370	7/29/97	0.245
NWNJ	10371	7/29/97	0.204
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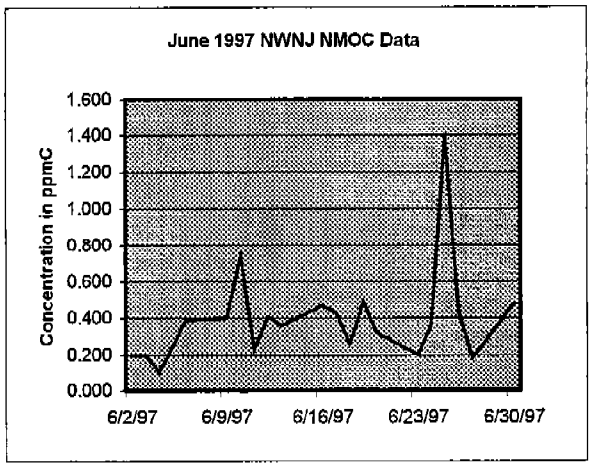

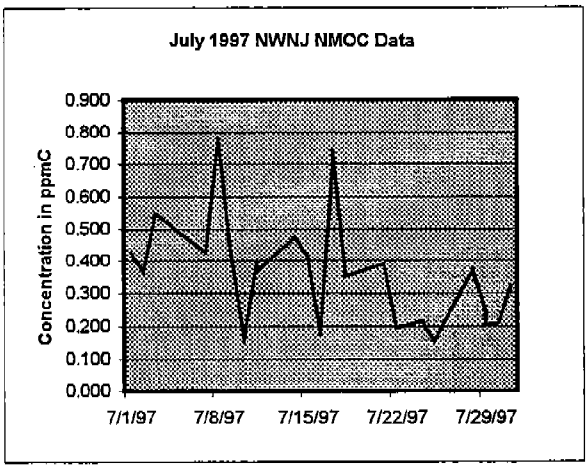

Newark, New Jersey, 1997 NMOC Results

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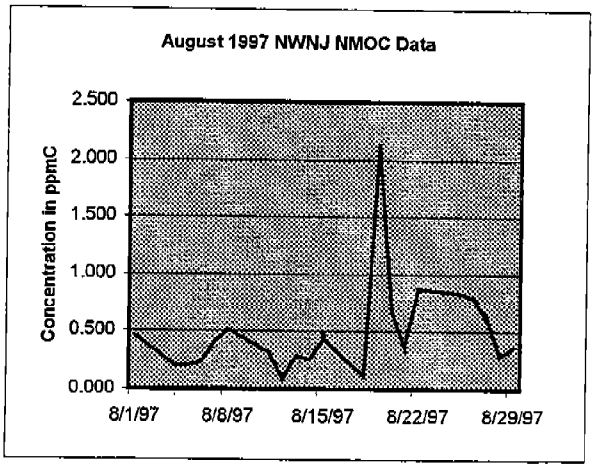
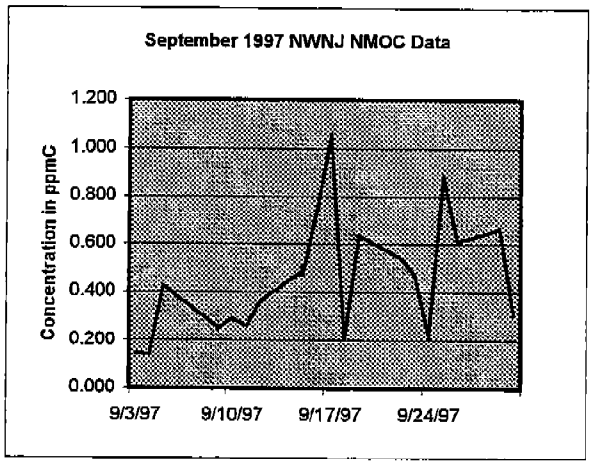
NWNJ	10519	8/5/97	0.203
NWNJ	10556	8/6/97	0.237
NWNJ	10557	8/7/97	0.407
NWNJ	11133	8/8/97	0.515
NWNJ	11132	8/11/97	0.312
NWNJ	10650	8/12/97	0.086
NWNJ	10668	8/13/97	0.288
NWNJ	10689	8/14/97	0.259
NWNJ	10690	8/15/97	0.429
NWNJ	10691	8/15/97	0.466
NWNJ	10690	8/15/97	0.492
NWNJ	10691	8/15/97	0.428
NWNJ	10701	8/18/97	0.117
NWNJ	10703	8/19/97	2.139
NWNJ	10872	8/20/97	0.673
NWNJ	10866	8/21/97	0.355
NWNJ	10867	8/21/97	0.359
NWNJ	10866	8/21/97	0.385
NWNJ	10867	8/21/97	0.377
NWNJ	10956	8/22/97	0.871
NWNJ	10957	8/25/97	0.834
NWNJ	10954	8/26/97	0.793
NWNJ	11013	8/27/97	0.600
NWNJ	11014	8/27/97	0.599
NWNJ	11013	8/27/97	0.584
NWNJ	11014	8/27/97	0.620
NWNJ	11015	8/28/97	0.282
NWNJ	11048	8/29/97	0.359
NWNJ	11120	9/3/97	0.143
NWNJ	11126	9/4/97	0.138
NWNJ	11215	9/5/97	0.425
NWNJ	11233	9/9/97	0.253
NWNJ	11234	9/9/97	0.249
NWNJ	11233	9/9/97	0.254
NWNJ	11234	9/9/97	0.249
NWNJ	11282	9/10/97	0.290
NWNJ	11280	9/11/97	0.259
NWNJ	11309	9/12/97	0.363
NWNJ	11326	9/15/97	0.487
NWNJ	11327	9/15/97	0.510
NWNJ	11326	9/15/97	0.477
NWNJ	11327	9/15/97	0.467
NWNJ	11324	9/16/97	0.745
NWNJ	11362	9/17/97	1.054
NWNJ	11361	9/18/97	0.205
NWNJ	11368	9/19/97	0.633
NWNJ	11399	9/22/97	0.540
NWNJ	11400	9/23/97	0.469
NWNJ	11434	9/24/97	0.214
NWNJ	11439	9/25/97	0.879
NWNJ	11448	9/26/97	0.605
NWNJ	11447	9/29/97	0.660
NWNJ	11466	9/30/97	0.305





SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09448	09443	09458	09462	09473	09531
Sampling Date:	6/3/97	6/4/97	6/5/97	6/6/97	6/9/97	6/10/97
Analysis Date:	7/21/97	7/21/97	7/21/97	7/21/97	7/22/97	7/21/97
Ethylene	8.23	7.41	5.31	6.01	7.03	4.72
Acetylene	5.22	5.09	3.96	3.05	4.64	4.66
Ethane	12.78	11.67	10.76	21.24	24.70	5.62
Propylene	3.06	2.61	1.73	2.30	2.21	2.19
Propane	9.41	7.70	7.17	14.77	15.00	7.10
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.33	1.60	1.60	4.55	4.55	2.39
Isobutene/1-Butene	3.53	3.14	2.57	1.81	2.29	2.73
1,3-Butadiene	0.35	0.22	0.23	0.10	0.15	0.15
n-Butane	4.62	3.87	5.28	7.32	7.09	4.77
trans-2-Butene	0.32	0.39	0.59	0.08	0.19	0.19
cis-2-Butene	0.39	0.40	0.75	0.24	0.58	0.38
3-Methyl-1-butene	0.24	0.23	0.41	0.19	0.28	0.26
Isopentane	13.61	13.13	18.24	14.63	17.41	13.89
1-Pentene	0.63	0.45	0.98	0.43	0.66	0.51
2-Methyl-1-butene	0.93	0.89	1.38	0.79	1.13	1.02
n-Pentane	6.55	5.95	7.62	7.46	9.41	7.38
Isoprene	1.54	1.18	1.16	1.00	1.14	0.61
trans-2-Pentene	0.97	1.09	1.44	1.01	1.43	1.21
cis-2-Pentene	0.71	0.71	0.89	0.67	0.94	0.80
2-Methyl-2-butene	1.34	1.27	2.20	1.07	1.83	1.49
2,2-Dimethylbutane	0.76	0.97	0.74	0.67	1.19	0.76
Cyclopentene	0.25	0.32	0.26	0.25	0.37	0.27
4-Methyl-1-pentene	0.79	0.22	0.22	0.02	0.25	0.33
Cyclopentane	1.09	1.09	1.02	1.07	1.51	1.15
2,3-Dimethylbutane	1.92	1.81	1.67	1.48	2.38	1.99
2-Methylpentane	5.46	5.18	5.55	5.69	7.37	6.03
3-Methylpentane	5.17	5.43	4.71	5.57	7.52	4.83
2-Methyl-1-pentene	0.25	0.32	0.33	0.28	0.39	0.35
1-Hexene	0.28	0.31	0.31	0.32	0.47	0.33
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.22	4.92	4.20	5.04	6.83	5.19
trans-2-Hexene	0.28	0.36	0.33	0.26	0.39	0.36
cis-2-Hexene	0.21	0.19	0.21	0.21	0.27	0.22
Methylcyclopentane	2.15	2.06	2.11	2.22	3.16	2.55
2,4-Dimethylpentane	0.98	1.08	0.90	1.13	1.10	0.88
Benzene	5.01	5.03	4.14	4.47	5.67	5.11
Cyclohexane	0.73	0.61	0.65	0.87	0.96	0.76
2-Methylhexane	4.55	3.93	4.24	4.28	5.15	4.65
2,3-Dimethylpentane	2.61	1.23	1.76	1.27	1.92	1.86

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09448	09443	09458	09462	09473	09531
Sampling Date:	6/3/97	6/4/97	6/5/97	6/6/97	6/9/97	6/10/97
Analysis Date:	7/21/97	7/21/97	7/21/97	7/21/97	7/22/97	7/21/97
3-Methylhexane	2.82	3.55	2.40	2.53	4.27	2.78
1-Heptene	0.38	0.38	0.49	0.38	0.43	0.34
2,2,4-Trimethylpentane	3.81	4.42	3.30	3.64	4.44	3.61
n-Heptane	1.53	1.77	1.32	1.90	2.24	1.82
Methylcyclohexane	0.92	1.20	0.91	1.40	1.64	1.32
2,2,3-Trimethylpentane	0.66	0.75	0.54	0.56	0.79	0.64
2,3,4-Trimethylpentane	1.47	1.60	1.35	1.30	1.80	1.55
Toluene	11.46	11.32	9.87	10.67	15.63	11.88
2-Methylheptane	0.61	0.62	0.59	0.81	0.89	0.65
3-Methylheptane	0.60	0.67	0.57	0.72	0.84	0.63
1-Octene	0.10	0.10	0.06	0.17	0.12	0.07
n-Octane	0.61	0.65	0.54	0.81	1.00	0.67
Ethylbenzene	2.79	2.58	2.27	2.38	4.31	2.48
m-Xylene/p-Xylene	7.48	6.52	5.86	6.94	14.01	7.82
Styrene	0.36	0.13	0.19	ND	0.16	0.37
o-Xylene	2.66	2.24	2.11	2.41	4.68	2.58
1-Nonene	0.17	0.09	ND	0.09	0.12	0.10
n-Nonane	0.48	0.51	0.52	0.58	0.98	0.53
Isopropylbenzene	1.60	0.63	0.13	0.20	0.17	0.15
a-Pinene	0.33	0.48	0.27	1.07	1.64	0.52
n-Propylbenzene	0.44	0.45	0.21	0.43	0.59	0.35
m-Ethyltoluene	1.33	1.22	0.96	1.37	2.00	1.23
p-Ethyltoluene	0.71	0.83	0.69	0.81	1.37	0.84
1,3,5-Trimethylbenzene	0.84	0.79	0.79	1.09	1.62	0.91
o-Ethyltoluene	0.70	0.58	0.47	1.00	0.97	0.53
b-Pinene	0.13	0.09	0.11	0.18	0.49	0.20
1,2,4-Trimethylbenzene	2.06	1.86	1.55	2.20	3.11	1.92
1-Decene	ND	ND	0.01	0.06	0.08	0.07
n-Decane	0.63	0.64	0.71	0.83	1.45	0.63
1,2,3-Trimethylbenzene	0.40	0.37	0.35	0.99	0.52	0.27
m-Diethylbenzene	0.06	0.09	0.10	0.11	0.26	0.03
p-Diethylbenzene	0.13	0.18	0.19	0.25	0.40	0.18
1-Undecene	0.06	ND	0.11	0.06	0.15	0.04
n-Undecane	0.76	1.04	1.21	1.06	1.77	0.89
1-Dodecene	ND	0.16	0.21	0.22	0.21	ND
n-Dodecane	0.34	0.70	0.75	0.40	0.59	0.42
1-Tridecene	ND	ND	0.06	ND	ND	ND
n-Tridecane	ND	0.19	0.34	ND	ND	ND
TNMOC (w/ unknowns)	185.14	191.06	180.86	205.23	259.86	173.08
TNMOC (speciated)	162.92	153.44	149.74	173.43	225.32	148.72

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09501	09529	09526	09545	09547	09559
Sampling Date:	6/11/97	6/12/97	6/13/97	6/16/97	6/17/97	6/18/97
Analysis Date:	7/22/97	7/22/97	7/22/97	7/23/97	7/23/97	7/23/97
Ethylene	9.32	3.20	2.67	2.84	3.07	7.96
Acetylene	5.05	2.58	1.31	1.40	1.73	5.13
Ethane	27.13	20.56	9.96	7.70	14.00	31.32
Propylene	3.06	1.00	0.74	0.71	0.98	2.50
Propane	16.78	17.52	6.94	5.10	11.86	22.28
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.52	3.50	2.01	1.23	2.31	4.28
Isobutene/1-Butene	3.41	1.19	0.75	1.03	0.98	2.62
1,3-Butadiene	0.35	0.05	ND	ND	0.02	0.21
n-Butane	8.36	8.07	4.08	2.79	5.53	8.89
trans-2-Butene	0.33	0.11	0.19	0.11	0.09	0.21
cis-2-Butene	0.44	0.16	0.17	0.23	0.13	0.31
3-Methyl-1-butene	0.37	0.11	0.09	0.14	0.10	0.27
Isopentane	18.48	10.93	6.91	7.94	7.84	18.44
1-Pentene	0.50	0.62	0.30	0.42	0.20	0.88
2-Methyl-1-butene	1.03	0.56	0.38	0.60	0.44	0.85
n-Pentane	9.63	6.72	4.44	4.87	5.15	8.54
Isoprene	1.11	0.46	0.71	1.28	0.21	0.83
trans-2-Pentene	1.47	0.75	0.67	1.10	0.76	1.17
cis-2-Pentene	0.82	0.51	0.46	0.66	0.38	0.70
2-Methyl-2-butene	1.53	0.84	0.78	1.33	0.69	1.34
2,2-Dimethylbutane	1.04	0.57	0.48	0.49	0.38	0.95
Cyclopentene	0.29	0.19	0.12	0.24	0.14	0.28
4-Methyl-1-pentene	0.26	0.20	0.09	0.23	0.07	0.14
Cyclopentane	1.22	0.96	0.78	0.87	0.91	1.38
2,3-Dimethylbutane	2.07	1.16	0.90	1.06	0.97	2.93
2-Methylpentane	7.44	4.25	3.12	3.78	3.74	7.14
3-Methylpentane	6.58	4.14	2.63	3.38	3.29	6.68
2-Methyl-1-pentene	0.37	0.25	0.18	0.26	0.18	0.30
1-Hexene	0.38	0.27	0.20	0.26	0.21	0.35
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.66	3.89	3.01	4.48	3.86	6.52
trans-2-Hexene	0.33	0.25	0.21	0.41	0.22	0.27
cis-2-Hexene	0.22	0.18	0.12	0.23	0.15	0.21
Methylcyclopentane	2.99	1.93	1.67	1.76	1.86	2.92
2,4-Dimethylpentane	1.14	0.66	0.55	0.61	0.59	1.41
Benzene	5.87	3.04	1.92	2.96	2.62	4.45
Cyclohexane	0.86	0.85	0.64	0.74	0.95	1.00
2-Methylhexane	4.91	4.01	3.67	4.19	4.34	4.69
2,3-Dimethylpentane	1.90	1.30	1.24	2.19	2.07	1.91

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09501	09529	09526	09545	09547	09559
Sampling Date:	6/11/97	6/12/97	6/13/97	6/16/97	6/17/97	6/18/97
Analysis Date:	7/22/97	7/22/97	7/22/97	7/23/97	7/23/97	7/23/97
3-Methylhexane	3.79	1.81	1.42	1.92	1.94	3.96
1-Heptene	0.47	0.23	0.52	0.40	0.35	ND
2,2,4-Trimethylpentane	4.62	2.17	1.71	2.20	2.19	6.76
n-Heptane	2.59	1.40	1.08	1.33	1.87	2.98
Methylcyclohexane	1.65	1.53	0.93	0.79	1.20	1.86
2,2,3-Trimethylpentane	0.78	0.52	0.27	0.32	0.33	1.01
2,3,4-Trimethylpentane	1.89	0.84	0.65	0.83	0.98	2.33
Toluene	15.10	7.83	5.76	7.48	7.99	17.17
2-Methylheptane	0.81	0.55	0.41	0.52	0.58	1.06
3-Methylheptane	0.79	0.51	0.39	0.45	0.58	1.00
1-Octene	0.13	ND	ND	0.01	ND	0.06
n-Octane	0.83	0.60	0.44	0.52	0.64	1.57
Ethylbenzene	2.97	1.69	1.49	2.14	1.96	7.00
m-Xylene/p-Xylene	9.38	4.95	3.42	5.99	4.96	26.81
Styrene	0.18	0.52	0.43	0.17	0.04	0.11
o-Xylene	3.28	1.64	1.22	1.86	1.74	6.45
1-Nonene	0.12	ND	0.04	0.07	0.17	0.18
n-Nonane	0.68	0.47	0.30	0.46	0.41	1.77
Isopropylbenzene	0.16	0.10	0.08	0.11	0.12	0.17
a-Pinene	1.05	0.30	0.32	0.48	0.19	1.07
n-Propylbenzene	0.50	0.27	0.24	0.29	0.29	0.58
m-Ethyltoluene	1.89	0.75	0.70	0.88	0.80	2.25
p-Ethyltoluene	1.13	0.51	0.44	0.61	0.44	1.56
1,3,5-Trimethylbenzene	1.35	0.63	0.46	0.66	0.65	1.94
o-Ethyltoluene	0.74	0.45	0.37	0.40	0.29	0.91
b-Pinene	0.32	0.12	0.10	0.23	0.07	0.40
1,2,4-Trimethylbenzene	2.70	1.26	1.05	1.39	1.25	3.71
1-Decene	ND	0.05	0.04	0.01	0.04	ND
n-Decane	0.78	0.63	0.46	0.76	0.54	1.57
1,2,3-Trimethylbenzene	0.70	0.18	0.21	0.18	0.23	0.41
m-Diethylbenzene	0.10	0.04	0.06	0.16	0.04	0.18
p-Diethylbenzene	0.29	0.19	0.15	0.31	0.14	0.33
1-Undecene	0.10	0.09	0.21	0.46	0.64	0.14
n-Undecane	0.89	0.82	0.67	1.28	0.85	1.11
1-Dodecene	0.30	ND	ND	ND	ND	0.31
n-Dodecane	0.32	0.20	0.13	0.88	0.34	0.22
1-Tridecene	ND	ND	ND	ND	ND	0.05
n-Tridecane	ND	ND	ND	0.18	ND	0.12
TNMOC (w/ unknowns)	248.38	157.17	101.81	128.36	135.95	291.28
TNMOC (speciated)	220.59	141.38	91.24	106.32	117.86	261.36

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09575	09652	09654	09680	09684	09692
Sampling Date:	6/20/97	6/23/97	6/24/97	6/25/97	6/26/97	6/27/97
Analysis Date:	7/24/97	7/24/97	7/23/97	7/23/97	7/24/97	7/24/97
Ethylene	3.25	3.07	3.22	8.45	4.29	6.05
Acetylene	2.14	0.92	1.44	7.86	3.31	4.17
Ethane	11.54	8.71	15.42	31.63	17.65	24.54
Propylene	1.08	1.38	0.82	2.85	1.23	2.03
Propane	6.94	7.06	12.80	20.42	16.85	14.95
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.71	3.63	4.41	5.88	3.95	4.35
Isobutene/1-Butene	1.17	0.82	0.81	3.31	1.47	2.20
1,3-Butadiene	0.06	0.04	ND	0.33	0.07	0.17
n-Butane	3.77	4.63	6.80	13.56	8.50	7.55
trans-2-Butene	0.07	0.12	0.08	0.05	0.23	0.12
cis-2-Butene	0.35	0.13	0.19	0.56	0.24	0.30
3-Methyl-1-butene	0.11	0.10	0.07	0.37	0.14	0.17
Isopentane	7.30	7.79	6.91	33.66	11.31	13.13
1-Pentene	0.32	0.46	0.32	1.72	0.31	0.65
2-Methyl-1-butene	0.53	0.61	0.39	1.74	0.51	0.76
n-Pentane	4.32	5.12	4.71	15.23	6.45	7.62
Isoprene	1.44	0.74	0.58	2.67	1.10	3.47
trans-2-Pentene	0.76	0.91	0.58	4.57	0.69	0.92
cis-2-Pentene	0.50	0.59	0.37	1.28	0.47	0.61
2-Methyl-2-butene	0.92	1.14	0.73	2.82	0.75	1.03
2,2-Dimethylbutane	0.51	0.48	0.45	1.59	0.53	0.76
Cyclopentene	0.16	0.25	0.16	0.55	0.13	0.20
4-Methyl-1-pentene	0.63	0.19	0.12	0.44	0.14	0.39
Cyclopentane	0.73	0.87	0.90	1.93	1.12	1.01
2,3-Dimethylbutane	1.03	1.22	0.86	3.82	1.33	1.39
2-Methylpentane	3.29	3.90	3.18	10.23	4.14	5.27
3-Methylpentane	2.82	2.54	2.69	10.08	4.35	4.53
2-Methyl-1-pentene	0.13	0.23	0.16	0.55	0.20	0.26
1-Hexene	0.21	0.53	0.15	0.49	0.20	0.19
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.99	3.66	3.78	10.27	3.66	4.27
trans-2-Hexene	0.22	0.28	0.26	0.74	0.20	0.25
cis-2-Hexene	0.14	0.18	0.10	0.38	0.15	0.20
Methylcyclopentane	1.59	1.80	1.57	5.04	1.94	2.21
2,4-Dimethylpentane	0.64	0.63	0.47	1.84	0.66	0.77
Benzene	2.33	2.56	2.48	5.94	3.12	4.45
Cyclohexane	0.63	0.85	0.86	2.08	0.85	0.82
2-Methylhexane	3.71	4.16	3.64	5.98	4.17	4.34
2,3-Dimethylpentane	1.24	1.55	1.09	2.56	1.51	1.46

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09575	09652	09654	09680	09684	09692
Sampling Date:	6/20/97	6/23/97	6/24/97	6/25/97	6/26/97	6/27/97
Analysis Date:	7/24/97	7/24/97	7/23/97	7/23/97	7/24/97	7/24/97
3-Methylhexane	2.03	1.90	1.38	6.00	2.07	2.41
1-Heptene	0.28	0.32	0.26	0.79	0.33	0.38
2,2,4-Trimethylpentane	2.04	1.82	1.42	6.83	2.10	2.86
n-Heptane	1.21	1.21	1.13	4.33	1.27	1.64
Methylcyclohexane	0.88	1.06	1.23	3.60	1.30	1.22
2,2,3-Trimethylpentane	0.32	0.19	0.31	1.07	0.38	0.55
2,3,4-Trimethylpentane	0.78	0.89	0.71	2.64	0.93	1.17
Toluene	6.48	7.06	5.60	24.69	7.58	9.66
2-Methylheptane	0.49	0.47	0.41	1.55	0.49	0.58
3-Methylheptane	0.39	0.40	0.36	1.31	0.41	0.62
1-Octene	0.06	0.01	0.07	0.13	0.03	0.04
n-Octane	0.49	0.38	0.49	2.46	0.59	0.64
Ethylbenzene	1.70	1.89	1.52	6.19	1.76	2.20
m-Xylene/p-Xylene	4.73	6.34	3.98	18.23	4.87	6.79
Styrene	0.31	0.25	0.77	1.30	0.15	1.44
o-Xylene	1.78	1.95	1.42	5.04	1.76	2.38
1-Nonene	0.14	0.10	0.08	0.46	0.11	0.11
n-Nonane	0.56	0.28	0.34	1.96	0.52	0.54
Isopropylbenzene	0.10	0.17	0.10	0.30	0.09	2.20
a-Pinene	0.78	0.42	0.38	4.49	0.30	0.81
n-Propylbenzene	0.26	0.33	0.19	0.77	0.24	0.34
m-Ethyltoluene	0.99	1.12	0.76	2.65	0.92	1.18
p-Ethyltoluene	0.57	0.69	0.49	1.29	0.58	0.61
1,3,5-Trimethylbenzene	0.70	0.62	0.46	1.65	0.75	0.84
o-Ethyltoluene	0.41	0.42	0.35	1.12	0.45	0.71
b-Pinene	0.42	0.36	0.17	0.87	0.14	0.39
1,2,4-Trimethylbenzene	1.21	1.53	1.06	3.65	1.53	1.61
1-Decene	0.07	ND	ND	ND	0.01	0.04
n-Decane	0.75	0.24	0.46	23.83	0.60	0.58
1,2,3-Trimethylbenzene	0.24	0.33	0.06	0.54	0.20	0.39
m-Diethylbenzene	0.04	0.08	0.08	0.27	0.03	0.06
p-Diethylbenzene	0.14	0.22	0.12	0.37	0.14	0.10
1-Undecene	0.28	0.15	0.89	0.12	0.45	0.15
n-Undecane	1.04	0.21	0.57	76.43	0.89	1.23
1-Dodecene	0.13	ND	0.11	0.86	0.06	0.14
n-Dodecane	0.44	ND	0.23	46.63	0.31	1.01
1-Tridecene	ND	ND	ND	0.29	ND	ND
n-Tridecane	ND	ND	ND	4.49	ND	0.16
TNMOC (w/ unknowns)	118.86	123.32	127.59	535.93	155.33	197.87
TNMOC (speciated)	104.49	107.26	111.49	482.69	142.27	175.34

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09700	09703	09819	09823	09836	09900
Sampling Date:	6/30/97	7/1/97	7/2/97	7/3/97	7/7/97	7/8/97
Analysis Date:	7/25/97	7/25/97	7/28/97	7/30/97	7/31/97	8/1/97
Ethylene	3.97	2.96	3.31	3.21	2.06	2.38
Acetylene	1.88	1.59	2.26	1.71	1.19	1.37
Ethane	10.28	5.51	6.29	7.02	11.18	5.97
Propylene	0.84	1.06	1.05	0.86	0.58	0.74
Propane	7.61	4.33	4.05	6.48	7.31	4.77
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.70	1.12	1.14	1.66	4.50	2.09
Isobutene/1-Butene	1.23	1.18	1.31	1.46	1.37	1.42
1,3-Butadiene	0.02	0.07	0.05	0.03	0.07	0.14
n-Butane	3.46	2.65	2.99	2.94	6.51	4.78
trans-2-Butene	0.13	0.13	0.19	0.12	0.15	0.12
cis-2-Butene	0.22	0.22	0.22	0.25	0.26	0.22
3-Methyl-1-bulene	0.12	0.09	0.12	0.12	0.16	0.11
Isopentane	8.13	5.96	7.80	8.27	11.66	7.78
1-Pentene	0.63	0.24	0.41	3.90	0.70	0.48
2-Methyl-1-bulene	0.62	0.41	0.57	0.45	0.81	0.53
n-Pentane	5.11	3.50	4.12	4.21	7.64	4.94
Isoprene	2.67	2.11	2.82	3.41	1.77	1.96
trans-2-Pentene	0.88	0.63	0.79	0.73	1.38	0.75
cis-2-Pentene	0.61	0.44	0.53	0.51	0.77	0.48
2-Methyl-2-bulene	1.18	0.85	1.11	1.09	1.44	0.88
2,2-Dimethylbutane	0.54	0.48	0.49	0.48	0.74	0.50
Cyclopentene	0.31	0.18	0.25	0.15	0.34	0.18
4-Methyl-1-pentene	0.85	0.09	0.07	0.84	0.24	0.08
Cyclopentane	1.07	0.93	0.95	0.87	1.21	0.77
2,3-Dimethylbutane	1.36	1.14	1.22	0.99	1.45	0.93
2-Methylpentane	3.68	2.75	3.61	3.41	5.41	3.39
3-Methylpentane	3.14	2.56	2.94	2.99	4.59	3.54
2-Methyl-1-pentene	0.24	0.21	0.22	0.22	0.35	0.18
1-Hexene	0.24	0.19	0.20	0.22	0.37	0.22
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.07	2.45	3.77	2.94	5.74	3.15
trans-2-Hexene	0.25	0.22	0.31	0.21	0.45	0.22
cis-2-Hexene	0.21	0.14	0.18	0.15	0.27	0.14
Methylcyclopentane	1.72	1.28	1.50	1.46	2.55	1.63
2,4-Dimethylpentane	0.60	0.50	0.71	0.59	0.80	0.52
Benzene	2.60	2.10	2.72	2.35	4.28	2.69
Cyclohexane	0.66	0.60	0.64	0.69	0.95	0.70
2-Methylhexane	3.77	3.60	3.43	3.81	4.49	3.63
2,3-Dimethylpentane	1.34	1.42	1.13	1.29	1.59	1.22

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09700	09703	09819	09823	09836	09900
Sampling Date:	6/30/97	7/1/97	7/2/97	7/3/97	7/7/97	7/8/97
Analysis Date:	7/25/97	7/25/97	7/28/97	7/30/97	7/31/97	8/1/97
3-Methylhexane	2.01	1.07	1.51	1.40	2.70	1.52
1-Heptene	0.39	0.15	0.25	0.18	0.38	0.28
2,2,4-Trimethylpentane	1.94	1.78	1.98	2.01	2.64	1.81
n-Heptane	1.51	1.04	1.23	1.14	2.08	0.99
Methylcyclohexane	1.17	0.88	0.93	0.86	1.14	1.09
2,2,3-Trimethylpentane	0.31	0.35	0.39	0.33	0.47	0.28
2,3,4-Trimethylpentane	0.82	0.79	0.94	0.84	1.04	0.74
Toluene	7.32	6.27	7.72	6.03	10.51	6.09
2-Methylheptane	0.47	1.84	0.58	0.40	0.57	0.40
3-Methylheptane	0.47	1.41	0.50	0.38	0.59	0.36
1-Octene	0.02	0.14	0.05	ND	ND	ND
n-Octane	0.48	4.03	0.61	0.42	0.53	0.36
Ethylbenzene	1.58	1.64	2.48	1.29	0.85	0.50
m-Xylene/p-Xylene	5.15	6.99	6.99	3.76	2.67	1.62
Styrene	0.29	0.95	0.31	ND	0.08	0.01
o-Xylene	1.55	1.95	2.05	1.30	0.95	0.56
1-Nonene	0.08	0.24	0.06	ND	0.02	ND
n-Nonane	0.33	0.76	0.47	0.29	0.18	0.10
Isopropylbenzene	1.99	0.10	0.16	1.87	0.08	0.05
a-Pinene	0.57	0.58	0.76	ND	0.28	0.26
n-Propylbenzene	0.25	0.38	0.29	0.19	0.11	0.08
m-Ethyltoluene	0.97	0.89	1.12	1.23	0.52	0.34
p-Ethyltoluene	0.61	0.56	0.71	0.30	0.28	0.18
1,3,5-Trimethylbenzene	0.58	0.61	0.75	0.53	0.32	0.17
o-Ethyltoluene	0.50	0.49	0.79	0.19	0.19	0.16
b-Pinene	0.28	0.42	0.50	ND	ND	0.11
1,2,4-Trimethylbenzene	1.33	1.21	1.62	1.13	0.63	0.42
1-Decene	0.04	0.09	ND	ND	0.10	ND
n-Decane	0.52	0.52	0.58	0.39	0.21	0.11
1,2,3-Trimethylbenzene	0.43	0.26	0.35	ND	0.08	0.14
m-Diethylbenzene	0.06	0.03	0.07	ND	0.03	0.02
p-Diethylbenzene	0.21	0.15	0.09	ND	0.08	0.02
1-Undecene	0.13	0.08	0.14	0.10	0.05	0.04
n-Undecane	0.98	0.66	0.70	0.58	0.39	0.23
1-Dodecene	0.04	0.10	0.21	0.13	0.07	ND
n-Dodecane	0.20	0.17	0.26	0.11	0.11	0.08
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	142.33	113.16	122.75	109.43	147.96	99.02
TNMOC (speciated)	113.54	95.45	103.65	99.51	128.27	84.71

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09907	09957	09981D1	09981R1	09982D2	09982R2
Sampling Date:	7/9/97	7/10/97	7/11/97	7/11/97	7/11/97	7/11/97
Analysis Date:	8/1/97	8/1/97	7/28/97	8/20/97	7/28/97	8/20/97
Ethylene	2.56	1.92	3.70	3.83	2.90	3.07
Acetylene	1.52	0.79	2.38	2.35	2.36	2.50
Ethane	8.80	0.66	10.10	9.45	10.05	10.56
Propylene	0.69	0.55	1.58	1.91	1.05	1.16
Propane	7.12	5.06	10.00	10.19	10.29	10.58
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.47	2.29	2.53	3.10	2.56	2.68
Isobutene/1-Butene	1.12	1.01	1.66	1.81	1.15	1.45
1,3-Butadiene	0.07	0.04	0.07	0.11	0.05	0.05
n-Butane	6.90	5.67	5.90	5.61	5.53	5.91
trans-2-Butene	0.15	0.13	0.14	0.22	0.13	0.16
cis-2-Butene	0.24	0.23	0.26	0.31	0.27	0.27
3-Methyl-1-butene	0.12	0.10	0.12	0.16	0.11	0.16
Isopentane	12.49	8.01	10.64	11.56	10.66	11.42
1-Pentene	0.31	3.78	0.78	1.00	0.58	0.51
2-Methyl-1-butene	0.58	0.44	0.68	0.65	0.57	0.68
n-Pentane	7.60	4.22	8.08	6.99	8.51	9.18
Isoprene	1.10	1.39	2.90	3.64	2.88	3.34
trans-2-Pentene	0.76	0.66	1.00	1.64	0.94	1.26
cis-2-Pentene	0.52	0.38	0.69	0.63	0.59	0.68
2-Methyl-2-butene	0.92	0.82	1.43	1.14	1.17	1.31
2,2-Dimethylbutane	0.58	0.43	0.40	1.27	0.56	0.68
Cyclopentene	0.19	0.16	0.26	0.24	0.23	0.24
4-Methyl-1-pentene	0.15	0.60	0.12	0.16	0.11	0.18
Cyclopentane	1.00	0.81	1.31	3.54	1.26	1.21
2,3-Dimethylbutane	1.20	0.78	1.10	1.75	1.04	1.27
2-Methylpentane	4.05	3.21	4.43	3.62	4.14	4.45
3-Methylpentane	4.16	2.63	3.92	4.86	3.24	3.51
2-Methyl-1-pentene	0.20	0.17	0.27	0.24	0.27	0.28
1-Hexene	0.26	0.18	0.78	0.74	0.24	0.26
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	3.89	3.04	4.59	4.04	4.49	4.61
trans-2-Hexene	0.20	0.20	0.34	0.26	0.28	0.26
cis-2-Hexene	0.15	0.12	0.24	0.22	0.20	0.20
Methylcyclopentane	1.98	1.92	2.17	1.95	2.08	2.05
2,4-Dimethylpentane	0.75	0.47	0.82	0.84	0.63	0.77
Benzene	3.24	2.07	3.13	3.07	2.78	2.83
Cyclohexane	1.09	0.71	0.99	1.31	0.87	0.95
2-Methylhexane	3.79	3.57	3.77	4.16	3.82	4.72
2,3-Dimethylpentane	1.30	1.14	1.12	1.63	1.40	2.07

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09907	09957	09981D1	09981R1	09982D2	09982R2
Sampling Date:	7/9/97	7/10/97	7/11/97	7/11/97	7/11/97	7/11/97
Analysis Date:	8/1/97	8/1/97	7/28/97	8/20/97	7/28/97	8/20/97
3-Methylhexane	1.55	0.76	1.94	5.12	1.53	2.15
1-Heptene	0.23	0.29	0.62	0.58	0.25	0.35
2,2,4-Trimethylpentane	2.09	1.65	2.07	2.14	1.78	2.00
n-Heptane	1.30	0.99	1.53	1.80	1.35	1.61
Methylcyclohexane	1.29	0.85	1.29	1.08	1.12	1.13
2,2,3-Trimethylpentane	0.37	0.26	0.37	0.47	0.31	0.38
2,3,4-Trimethylpentane	0.90	0.60	1.01	0.97	0.93	0.95
Toluene	7.41	5.82	9.08	8.82	7.85	7.89
2-Methylheptane	0.49	0.34	0.54	0.46	0.51	0.51
3-Methylheptane	0.47	0.35	0.48	0.38	0.50	0.51
1-Octene	ND	ND	0.31	0.26	0.08	0.03
n-Octane	0.54	0.42	0.62	0.56	0.56	0.51
Ethylbenzene	0.63	0.51	2.33	1.66	2.05	2.17
m-Xylene/p-Xylene	1.84	1.64	6.30	5.38	4.99	5.02
Styrene	0.16	0.05	0.50	0.44	0.39	0.37
o-Xylene	0.65	0.61	2.20	2.08	1.84	1.88
1-Nonene	ND	0.02	0.34	0.43	0.08	0.18
n-Nonane	0.17	0.14	0.76	0.90	0.40	0.31
Isopropylbenzene	0.13	0.04	0.12	0.10	0.11	0.25
a-Pinene	0.23	0.16	0.73	2.87	0.80	0.57
n-Propylbenzene	0.08	0.08	0.36	0.16	0.24	0.28
m-Ethyltoluene	0.37	0.38	1.01	1.02	0.95	0.82
p-Ethyltoluene	0.24	0.23	0.72	1.54	0.59	0.51
1,3,5-Trimethylbenzene	0.19	0.18	0.81	0.73	0.59	0.49
o-Ethyltoluene	0.16	0.21	0.58	0.69	0.66	0.54
b-Pinene	0.04	0.12	0.32	1.07	0.37	0.32
1,2,4-Trimethylbenzene	0.41	0.46	1.72	1.35	1.36	1.16
1-Decene	0.06	0.02	ND	ND	ND	0.05
n-Decane	0.42	0.17	0.75	0.69	0.49	0.21
1,2,3-Trimethylbenzene	0.15	0.14	0.28	0.37	0.15	0.28
m-Diethylbenzene	0.02	ND	0.15	0.03	0.06	0.04
p-Diethylbenzene	ND	ND	0.18	0.14	0.12	0.12
1-Undecene	0.09	0.06	0.37	1.19	0.14	0.09
n-Undecane	1.42	0.20	1.43	1.20	0.81	0.86
1-Dodecene	ND	ND	0.12	0.31	ND	ND
n-Dodecane	1.04	0.16	0.96	0.70	0.18	0.28
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	0.21	0.15	ND	ND
TNMOC (w/ unknowns)	127.74	90.37	158.54	198.46	136.82	162.13
TNMOC (speciated)	111.37	78.27	137.55	148.02	124.11	132.30

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09978	10025	10043	10053D1	10053R1	10054D2
Sampling Date:	7/14/97	7/15/97	7/16/97	7/17/97	7/17/97	7/17/97
Analysis Date:	8/7/97	8/8/97	8/8/97	7/29/97	7/31/97	7/29/97
Ethylene	4.59	5.76	7.87	5.36	5.35	5.35
Acetylene	3.17	4.50	4.99	3.44	3.39	3.43
Ethane	16.72	26.07	32.64	20.84	22.36	22.33
Propylene	1.58	1.92	2.57	1.77	1.70	1.71
Propane	12.56	13.18	18.60	15.84	15.15	15.36
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.11	4.08	5.97	4.54	4.43	4.60
Isobutene/1-Butene	1.84	1.92	2.70	1.68	1.79	1.80
1,3-Butadiene	0.10	0.20	0.18	0.10	0.15	0.07
n-Butane	8.81	9.34	9.60	7.38	7.61	7.50
trans-2-Butene	0.24	0.17	0.34	0.16	0.21	0.18
cis-2-Butene	0.34	0.29	0.44	0.24	0.27	0.30
3-Methyl-1-butene	0.20	0.24	0.37	0.20	0.21	0.24
Isopentane	13.22	17.74	21.89	15.22	14.64	14.73
1-Pentene	0.81	0.61	0.61	0.80	1.05	0.87
2-Methyl-1-butene	0.94	0.86	1.29	0.61	0.62	0.66
n-Pentane	7.79	8.73	10.77	7.52	7.46	7.67
Isoprene	2.64	2.17	2.03	1.85	1.89	2.00
trans-2-Pentene	1.45	1.00	1.71	0.74	0.70	0.64
cis-2-Pentene	0.89	0.66	0.97	0.50	0.52	0.52
2-Methyl-2-butene	1.71	0.87	1.77	0.74	0.81	0.78
2,2-Dimethylbutane	0.74	0.94	1.29	0.87	0.91	0.83
Cyclopentene	0.44	0.18	0.34	0.14	0.12	0.16
4-Methyl-1-pentene	0.25	0.41	0.27	0.48	0.52	0.47
Cyclopentane	1.38	1.37	1.50	1.11	1.21	1.07
2,3-Dimethylbutane	1.92	2.12	2.63	1.57	1.81	1.57
2-Methylpentane	6.08	6.58	8.13	5.75	5.41	5.82
3-Methylpentane	5.12	6.56	7.37	5.48	5.53	5.66
2-Methyl-1-pentene	0.39	0.34	0.40	0.23	0.21	0.20
1-Hexene	0.47	0.37	0.45	0.26	0.27	0.27
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	6.02	6.07	7.90	4.63	4.90	4.75
trans-2-Hexene	0.45	0.26	0.66	0.20	0.21	0.23
cis-2-Hexene	0.29	0.21	0.28	0.15	0.12	0.18
Methylcyclopentane	2.89	2.87	3.56	2.28	2.49	2.55
2,4-Dimethylpentane	0.97	1.07	1.17	0.82	0.83	0.93
Benzene	4.09	4.34	6.04	4.40	4.58	4.24
Cyclohexane	0.98	1.07	1.22	0.96	0.97	0.86
2-Methylhexane	4.98	5.39	5.90	4.41	4.62	4.50
2,3-Dimethylpentane	1.78	2.45	2.69	1.45	1.67	1.53

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	09978	10025	10043	10053D1	10053R1	10054D2
Sampling Date:	7/14/97	7/15/97	7/16/97	7/17/97	7/17/97	7/17/97
Analysis Date:	8/7/97	8/8/97	8/8/97	7/29/97	7/31/97	7/29/97
3-Methylhexane	3.01	3.09	3.89	2.66	2.67	2.69
1-Heptene	0.39	0.38	0.43	0.69	0.30	0.74
2,2,4-Trimethylpentane	3.64	4.51	5.04	3.25	3.21	3.46
n-Heptane	2.46	2.25	2.65	1.79	1.94	1.90
Methylcyclohexane	1.34	1.37	1.59	1.33	1.23	1.23
2,2,3-Trimethylpentane	0.60	0.76	0.00	0.60	0.61	0.68
2,3,4-Trimethylpentane	1.62	1.67	1.97	1.32	1.42	1.43
Toluene	12.89	13.60	17.25	11.71	11.38	11.93
2-Methylheptane	0.84	0.80	0.88	0.68	0.63	0.68
3-Methylheptane	0.76	0.72	0.87	0.70	0.63	0.70
1-Octene	0.03	0.08	0.12	ND	ND	ND
n-Octane	0.78	0.85	0.91	0.79	0.67	0.80
Ethylbenzene	3.17	4.59	3.89	2.64	2.03	2.52
m-Xylene/p-Xylene	9.75	17.02	10.54	6.87	6.85	6.90
Styrene	0.42	0.55	0.64	0.35	0.16	0.27
o-Xylene	3.11	4.69	3.93	2.45	2.35	2.42
1-Nonene	0.10	0.47	0.12	0.13	0.08	0.11
n-Nonane	0.61	0.83	0.76	0.62	0.57	0.54
Isopropylbenzene	0.19	0.16	0.23	0.17	0.26	0.11
a-Pinene	1.12	0.86	2.42	0.75	0.83	0.77
n-Propylbenzene	0.46	0.44	0.47	0.37	0.39	0.37
m-Ethyltoluene	1.59	1.45	2.18	1.35	1.29	1.37
p-Ethyltoluene	0.93	1.02	1.22	1.00	0.83	0.75
1,3,5-Trimethylbenzene	1.06	1.01	1.51	1.11	0.84	1.00
o-Ethyitoluene	0.74	0.80	1.12	0.71	0.77	0.81
b-Pinene	0.57	0.39	0.92	0.20	0.23	0.23
1,2,4-Trimethylbenzene	2.30	2.20	3.04	1.90	1.75	1.92
1-Decene	ND	ND	ND	0.09	0.01	0.10
n-Decane	0.91	1.08	1.04	0.63	0.55	0.47
1,2,3-Trimethylbenzene	0.59	0.38	0.58	0.43	0.30	0.32
m-Diethylbenzene	0.07	0.14	0.10	0.05	0.07	0.11
p-Diethylbenzene	0.19	0.23	0.29	0.15	0.18	0.20
1-Undecene	0.25	0.24	0.12	0.39	0.99	0.29
n-Undecane	1.32	1.77	1.30	0.69	0.67	0.75
1-Dodecene	0.14	0.25	0.21	0.16	0.20	0.21
n-Dodecane	0.32	0.61	0.75	0.30	0.21	0.21
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	215.63	256.19	293.86	194.56	192.36	197.02
TNMOC (speciated)	180.22	214.20	252.09	173.73	173.78	175.54

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10054R2	10060	10185	10193	10206D1	10206R1
Sampling Date:	7/17/97	7/18/97	7/21/97	7/22/97	7/23/97	7/23/97
Analysis Date:	7/31/97	8/8/97	8/8/97	8/8/97	8/20/97	8/20/97
Ethylene	5.30	4.27	3.46	3.28	7.56	7.55
Acetylene	3.41	2.84	2.01	1.92	5.35	5.24
Ethane	22.26	26.09	9.40	6.18	12.42	12.26
Propylene	1.72	1.35	1.43	1.13	2.57	2.55
Propane	15.16	18.48	6.66	4.96	12.84	12.80
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.49	5.38	1.77	1.53	2.84	2.82
Isobutene/1-Butene	1.73	1.60	1.67	1.29	2.64	2.71
1,3-Butadiene	0.10	0.10	0.09	0.07	0.20	0.22
n-Butane	7.40	8.62	3.63	2.41	4.96	4.95
trans-2-Butene	0.14	0.15	0.19	0.13	0.26	0.31
cis-2-Butene	0.27	0.25	0.33	0.23	0.38	0.41
3-Methyl-1-butene	0.20	0.13	0.19	0.11	0.25	0.25
Isopentane	14.55	12.43	10.95	7.91	15.99	15.56
1-Pentene	0.97	0.31	0.71	0.23	1.16	0.61
2-Methyl-1-butene	0.61	0.58	0.81	0.51	0.88	0.91
n-Pentane	7.47	7.51	6.16	4.12	6.83	6.81
Isoprene	1.85	0.94	2.13	1.21	2.23	2.15
trans-2-Pentene	0.78	0.69	1.34	0.78	1.06	1.11
cis-2-Pentene	0.54	0.50	0.81	0.51	0.73	0.70
2-Methyl-2-butene	0.79	0.78	1.49	0.92	1.32	1.34
2,2-Dimethylbutane	0.86	0.82	0.74	0.53	0.88	0.89
Cyclopentene	0.14	0.14	0.27	0.21	0.29	0.21
4-Methyl-1-pentene	1.05	0.49	0.20	0.18	0.19	0.12
Cyclopentane	1.11	1.16	1.17	1.07	1.38	1.22
2,3-Dimethylbutane	1.86	1.60	1.62	1.25	2.06	1.99
2-Methylpentane	5.82	5.21	5.19	3.48	5.98	5.93
3-Methylpentane	5.93	6.01	4.27	3.50	6.09	5.83
2-Methyl-1-pentene	0.27	0.22	0.31	0.23	0.42	0.28
1-Hexene	0.32	0.27	0.58	0.22	0.33	0.32
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.55	5.27	4.89	3.16	5.71	5.34
trans-2-Hexene	0.31	0.31	0.45	0.23	0.49	0.23
cis-2-Hexene	0.16	0.16	0.26	0.16	0.23	0.21
Methylcyclopentane	2.52	2.43	2.29	1.54	2.57	2.55
2,4-Dimethylpentane	0.82	0.76	0.78	0.68	0.96	0.96
Benzene	4.06	4.05	3.62	2.62	4.40	4.47
Cyclohexane	0.88	1.11	0.83	0.78	0.92	0.93
2-Methylhexane	4.56	4.51	4.41	4.27	4.80	4.83
2,3-Dimethylpentane	1.57	1.96	1.82	1.92	2.34	2.04

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10054R2	10060	10185	10193	10206D1	10206R1
Sampling Date:	7/17/97	7/18/97	7/21/97	7/22/97	7/23/97	7/23/97
Analysis Date:	7/31/97	8/8/97	8/8/97	8/8/97	8/20/97	8/20/97
3-Methylhexane	2.61	2.25	2.12	1.60	2.69	2.50
1-Heptene	0.61	0.30	0.67	0.18	0.34	0.30
2,2,4-Trimethylpentane	3.34	3.06	2.93	2.76	4.04	3.94
n-Heptane	1.94	1.89	1.98	1.44	1.96	1.91
Methylcyclohexane	1.33	1.25	1.06	0.78	1.12	1.03
2,2,3-Trimethylpentane	0.59	0.48	0.47	0.33	0.71	0.82
2,3,4-Trimethylpentane	1.40	1.26	1.23	0.89	1.66	1.64
Toluene	11.11	9.87	9.65	8.07	13.01	13.11
2-Methylheptane	0.64	0.56	0.57	0.50	0.70	0.60
3-Methylheptane	0.74	0.60	0.57	0.44	0.66	0.66
1-Octene	ND	0.11	0.15	0.01	ND	0.02
n-Octane	0.75	0.64	0.55	0.43	0.73	0.64
Ethylbenzene	1.80	2.23	1.88	1.93	1.89	2.18
m-Xylene/p-Xylene	6.15	6.28	5.92	4.81	5.65	6.24
Styrene	0.20	0.49	0.16	0.10	0.20	0.17
o-Xylene	2.18	2.24	1.88	1.60	2.14	2.06
1-Nonene	0.07	0.12	0.16	0.06	0.13	0.06
n-Nonane	0.56	0.61	0.41	0.44	0.48	0.50
Isopropylbenzene	0.10	0.18	0.09	0.10	0.14	0.21
a-Pinene	0.78	0.60	0.59	0.53	1.07	1.00
n-Propylbenzene	0.38	0.32	0.32	0.26	0.19	0.27
m-Ethyltoluene	1.14	1.15	1.12	0.96	1.44	1.37
p-Ethyltoluene	0.59	0.82	0.73	0.66	0.90	0.80
1,3,5-Trimethylbenzene	0.85	0.90	0.68	0.57	0.87	0.82
o-Ethyltoluene	0.66	0.60	0.46	0.56	0.81	0.86
b-Pinene	0.24	0.15	0.28	0.16	0.51	0.51
1,2,4-Trimethylbenzene	1.55	1.80	1.58	1.34	1.99	1.83
1-Decene	0.16	ND	0.07	0.03	ND	ND
n-Decane	0.55	0.52	0.57	0.48	0.58	0.59
1,2,3-Trimethylbenzene	0.31	0.26	0.16	0.22	0.29	0.19
m-Diethylbenzene	0.08	0.11	0.24	0.03	0.05	0.03
p-Diethylbenzene	0.16	0.16	0.28	0.17	0.23	0.18
1-Undecene	1.00	1.56	0.65	0.89	0.36	0.16
n-Undecane	0.69	1.05	1.05	0.77	0.75	0.76
1-Dodecene	0.20	0.05	0.13	0.10	0.27	0.05
n-Dodecane	0.28	0.34	0.26	0.27	0.36	0.14
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	194.00	213.41	166.94	126.56	206.70	199.87
TNMOC (speciated)	173.25	174.31	130.55	99.92	171.43	167.79

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10207D2	10207R2	10295	10299	10376	10392D1
Sampling Date:	7/23/97	7/23/97	7/24/97	7/25/97	7/28/97	7/29/97
Analysis Date:	8/20/97	8/20/97	8/9/97	8/9/97	8/21/97	8/20/97
Ethylene	7.85	7.85	4.44	3.49	5.20	6.07
Acetylene	5.24	5.19	3.07	2.29	3.34	3.71
Ethane	12.44	12.19	21.47	22.34	27.50	25.64
Propylene	2.71	2.71	1.51	1.05	1.76	1.93
Propane	12.97	12.86	14.41	15.35	14.14	18.56
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.85	2.76	4.01	4.59	4.32	4.77
Isobutene/1-Butene	2.82	2.89	1.67	1.13	1.88	1.84
1,3-Butadiene	0.26	0.21	0.13	0.09	0.16	0.11
n-Butane	4.94	4.91	7.40	7.92	8.33	7.67
trans-2-Butene	0.33	0.36	0.17	0.12	0.19	0.22
cis-2-Butene	0.39	0.43	0.29	0.23	0.38	0.33
3-Methyl-1-butene	0.28	0.24	0.22	0.18	0.33	0.28
Isopentane	15.99	15.70	16.75	13.49	21.16	19.89
1-Pentene	0.47	0.63	0.56	0.83	0.77	0.61
2-Methyl-1-butene	0.87	0.91	0.97	0.66	1.20	0.80
n-Pentane	6.63	6.84	8.77	7.54	10.67	9.16
Isoprene	2.00	2.11	2.72	1.67	2.02	2.69
trans-2-Pentene	1.07	1.09	1.16	0.88	1.65	1.00
cis-2-Pentene	0.72	0.73	0.80	0.56	1.01	0.65
2-Methyl-2-butene	1.32	1.30	1.42	0.99	1.78	1.02
2,2-Dimethylbutane	0.91	0.89	0.81	0.79	1.01	1.12
Cyclopentene	0.27	0.29	0.28	0.22	0.32	0.23
4-Methyl-1-pentene	0.20	0.21	0.28	0.43	0.32	0.36
Cyclopentane	1.37	1.30	1.42	1.20	1.51	1.40
2,3-Dimethylbutane	1.99	1.98	2.08	1.71	2.52	2.33
2-Methylpentane	5.91	5.87	6.47	5.42	7.99	7.33
3-Methylpentane	6.72	6.07	5.50	5.28	6.96	6.79
2-Methyl-1-pentene	0.41	0.35	0.36	0.29	0.43	0.36
1-Hexene	0.39	0.34	0.36	0.27	0.46	0.37
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.52	5.41	6.11	5.69	7.64	6.24
trans-2-Hexene	0.34	0.35	0.37	0.50	0.55	0.25
cis-2-Hexene	0.19	0.18	0.28	0.17	0.30	0.18
Methylcyclopentane	2.49	2.52	2.98	2.52	3.42	3.09
2,4-Dimethylpentane	1.02	1.40	1.10	0.90	1.20	1.02
Benzene	4.25	4.23	4.17	3.58	5.20	5.09
Cyclohexane	0.97	0.90	1.12	1.10	1.31	1.01
2-Methylhexane	4.93	4.98	5.57	5.03	5.94	5.58
2,3-Dimethylpentane	2.50	2.13	2.51	2.17	2.34	2.77

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10207D2	10207R2	10295	10299	10376	10392D1
Sampling Date:	7/23/97	7/23/97	7/24/97	7/25/97	7/28/97	7/29/97
Analysis Date:	8/20/97	8/20/97	8/9/97	8/9/97	8/21/97	8/20/97
3-Methylhexane	2.97	2.41	3.45	2.65	3.78	4.15
1-Heptene	0.50	0.33	0.44	0.41	0.42	0.30
2,2,4-Trimethylpentane	4.10	3.73	4.05	3.19	4.41	4.44
n-Heptane	1.91	1.72	2.48	2.15	2.82	2.32
Methylcyclohexane	1.16	1.08	1.50	1.27	1.68	1.31
2,2,3-Trimethylpentane	0.79	0.77	0.78	0.56	1.01	0.74
2,3,4-Trimethylpentane	1.57	1.61	1.89	1.34	2.09	1.61
Toluene	12.68	12.64	12.56	9.53	14.65	13.14
2-Methylheptane	0.66	0.67	0.86	0.68	1.04	0.72
3-Methylheptane	0.67	0.64	0.86	0.70	0.94	0.82
1-Octene	0.02	0.06	ND	ND	ND	ND
n-Octane	0.68	0.71	0.91	0.76	1.08	0.74
Ethylbenzene	1.86	1.79	2.72	2.00	3.30	2.83
m-Xylene/p-Xylene	5.87	5.91	8.02	5.87	10.00	7.78
Styrene	0.04	0.23	0.71	0.73	0.27	0.26
o-Xylene	1.96	1.95	2.85	1.90	3.32	3.00
1-Nonene	0.11	0.17	0.13	0.12	0.16	0.23
n-Nonane	0.49	0.45	0.66	0.47	0.91	0.86
Isopropylbenzene	0.16	0.13	0.15	0.13	0.23	0.12
a-Pinene	1.06	0.92	1.13	0.54	1.22	1.33
n-Propylbenzene	0.38	0.36	0.52	0.17	0.52	0.46
m-Ethyltoluene	1.33	1.30	1.63	1.13	2.34	1.52
p-Ethyltoluene	0.81	0.83	0.92	0.74	1.33	1.00
1,3,5-Trimethylbenzene	0.84	0.90	1.13	0.74	1.43	1.01
o-Ethyltoluene	0.66	0.51	0.81	0.43	0.82	0.92
b-Pinene	0.40	0.48	0.49	0.20	0.34	0.40
1,2,4-Trimethylbenzene	1.71	1.49	2.21	1.37	2.81	0.20
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.63	0.47	0.84	0.54	0.89	0.67
1,2,3-Trimethylbenzene	0.28	0.19	0.43	0.40	0.32	0.39
m-Diethylbenzene	0.01	0.04	0.07	0.13	0.13	0.12
p-Diethylbenzene	0.16	0.12	0.31	0.20	0.21	0.24
1-Undecene	0.48	0.09	0.27	2.28	0.09	ND
n-Undecane	0.62	0.55	1.55	0.69	1.17	0.81
1-Dodecene	0.26	0.20	0.22	0.15	0.29	0.19
n-Dodecane	0.22	0.14	0.81	0.33	0.32	0.27
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	211.94	203.80	238.28	202.13	275.89	251.52
TNMOC (speciated)	170.60	166.93	192.03	167.16	223.55	207.40

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10392R1	10393D2	10393R2	10421	10422	10515
Sampling Date:	7/29/97	7/29/97	7/29/97	7/30/97	7/31/97	8/1/97
Analysis Date:	8/21/97	8/20/97	8/21/97	8/23/97	8/23/97	8/24/97
Ethylene	5.98	6.04	6.09	3.18	5.04	3.95
Acetylene	3.72	3.63	3.75	1.99	3.03	2.44
Ethane	25.51	25.53	25.61	9.31	8.59	14.82
Propylene	1.98	1.94	1.95	1.17	1.75	1.15
Propane	18.34	18.48	18.22	7.50	8.50	9.83
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.70	4.63	4.66	1.81	1.72	2.57
Isobutene/1-Butene	1.92	1.91	1.97	1.68	2.10	1.19
1,3-Butadiene	0.12	0.15	0.15	0.04	0.17	0.06
n-Butane	7.78	7.62	7.67	8.02	3.67	4.69
trans-2-Butene	0.17	0.20	0.23	0.44	0.18	0.14
cis-2-Butene	0.31	0.27	0.28	0.77	0.26	0.19
3-Methyl-1-butene	0.30	0.27	0.25	0.71	0.19	0.17
Isopentane	19.39	19.70	19.53	40.39	12.45	12.18
1-Pentene	0.66	0.66	0.63	2.52	0.33	0.69
2-Methyl-1-butene	0.81	0.82	0.81	3.65	0.71	0.51
n-Pentane	9.14	9.08	9.04	24.00	5.86	6.08
Isoprene	2.72	2.66	2.66	2.17	0.87	0.83
trans-2-Pentene	1.06	0.95	0.98	6.08	0.94	0.78
cis-2-Pentene	0.67	0.66	0.62	3.33	0.66	0.50
2-Methyl-2-butene	1.08	1.03	1.01	7.44	1.09	0.77
2,2-Dimethylbutane	1.20	1.18	1.11	1.74	0.79	0.73
Cyclopentene	0.25	0.21	0.24	1.29	0.19	0.14
4-Methyl-1-pentene	0.32	0.29	0.33	0.49	0.36	0.29
Cyclopentane	1.08	1.23	1.27	2.79	1.05	0.69
2,3-Dimethylbutane	2.13	2.17	2.33	5.10	1.58	1.41
2-Methylpentane	7.21	7.08	7.32	27.21	5.02	4.90
3-Methylpentane	6.63	6.58	6.49	13.26	4.81	5.44
2-Methyl-1-pentene	0.35	0.29	0.26	1.50	0.37	0.30
1-Hexene	0.33	0.37	0.33	1.35	0.28	0.31
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	6.42	6.32	6.44	18.63	4.65	4.08
trans-2-Hexene	0.35	0.35	0.36	2.45	0.28	0.23
cis-2-Hexene	0.18	0.16	0.18	1.18	0.44	0.11
Methylcyclopentane	2.86	2.83	2.75	7.70	2.07	1.85
2,4-Dimethylpentane	1.06	1.03	1.02	2.09	0.79	0.75
Benzene	5.16	5.11	5.52	9.98	3.72	3.33
Cyclohexane	1.03	1.07	1.06	2.12	0.68	0.72
2-Methylhexane	5.22	5.13	5.29	9.83	4.47	4.60
2,3-Dimethylpentane	2.30	2.22	2.19	4.10	2.14	1.99

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All concentrations reported in ppbC

Sample No.:	10392R1	10393D2	10393R2	10421	10422	10515
Sampling Date:	7/29/97	7/29/97	7/29/97	7/30/97	7/31/97	8/1/97
Analysis Date:	8/21/97	8/20/97	8/21/97	8/23/97	8/23/97	8/24/97
3-Methylhexane	3.24	3.30	3.25	9.89	1.82	2.16
1-Heptene	0.51	0.41	0.51	1.24	0.37	0.28
2,2,4-Trimethylpentane	3.80	3.94	3.71	7.90	2.74	2.23
n-Heptane	2.24	2.32	2.29	7.41	1.71	1.67
Methylcyclohexane	1.24	1.35	1.46	3.15	0.85	1.11
2,2,3-Trimethylpentane	0.72	0.75	0.78	1.91	0.50	0.44
2,3,4-Trimethylpentane	1.58	1.58	1.62	4.04	1.24	1.01
Toluene	13.19	12.74	12.63	32.14	9.59	10.11
2-Methylheptane	0.78	0.74	0.75	2.25	0.59	0.56
3-Methylheptane	0.75	0.73	0.78	1.90	0.60	0.55
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.79	0.76	0.75	1.78	0.61	0.56
Ethylbenzene	2.47	2.50	2.55	8.02	2.78	2.80
m-Xylene/p-Xylene	7.78	7.05	7.29	25.66	7.10	7.89
Styrene	0.23	0.22	0.25	0.31	0.22	0.02
o-Xylene	2.78	2.39	2.68	8.24	2.71	2.52
1-Nonene	0.07	0.10	0.06	0.26	0.30	0.07
n-Nonane	0.96	0.62	0.66	1.09	0.56	0.54
Isopropylbenzene	0.21	0.13	0.25	0.43	0.17	0.16
a-Pinene	1.17	1.32	1.28	1.08	0.43	0.44
n-Propylbenzene	0.37	0.41	0.40	1.05	0.29	0.36
m-Ethyltoluene	1.53	1.39	1.54	4.11	1.35	1.14
p-Ethyltoluene	0.97	0.98	0.94	2.41	0.86	0.95
1,3,5-Trimethylbenzene	1.18	0.90	0.94	2.35	0.79	0.91
o-Ethyltoluene	0.83	0.72	0.66	1.27	0.60	0.46
b-Pinene	0.34	0.37	0.34	0.42	0.16	0.19
1,2,4-Trimethylbenzene	2.24	1.80	2.05	4.97	1.84	1.59
1-Decene	ND	ND	ND	0.02	0.02	ND
n-Decane	0.73	0.50	0.64	0.66	0.49	0.61
1,2,3-Trimethylbenzene	0.42	0.19	0.34	0.85	0.50	0.28
m-Diethylbenzene	0.08	0.16	0.07	0.30	0.15	0.04
p-Diethylbenzene	0.22	0.23	0.15	0.38	0.08	0.15
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.85	0.61	0.80	1.05	1.16	0.64
1-Dodecene	0.22	0.33	0.31	0.14	0.02	0.17
n-Dodecane	0.30	0.31	0.29	0.25	1.03	0.22
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	0.15	0.21	ND	ND	ND
TNMOC (w/ unknowns)	245.17	246.08	246.14	465.58	164.67	209.96
TNMOC (speciated)	205.23	201.84	203.80	377.95	136.01	138.23

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10546	10536	10552	10560	10574	10570
Sampling Date:	8/4/97	8/5/97	8/6/97	8/7/97	8/8/97	8/11/97
Analysis Date:	8/24/97	8/24/97	9/26/97	8/30/97	8/30/97	8/31/97
Ethylene	4.95	7.69	3.55	2.15	2.68	3.19
Acetylene	2.92	4.90	2.05	1.55	1.69	2.81
Ethane	22.17	19.17	3.99	4.97	3.90	15.41
Propylene	1.54	2.36	1.21	0.65	0.95	1.05
Propane	14.17	18.71	8.65	3.02	2.86	15.13
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.16	4.09	2.28	0.75	0.77	4.44
Isobutene/1-Butene	1.42	2.55	1.32	0.98	1.20	1.24
1,3-Butadiene	0.09	0.24	0.04	0.01	0.02	0.07
n-Butane	7.57	10.77	4.48	1.75	1.65	8.81
trans-2-Butene	0.21	0.40	0.14	0.12	0.11	0.18
cis-2-Butene	0.27	0.61	0.21	0.22	0.24	0.27
3-Methyl-1-butene	0.21	0.67	0.12	0.11	0.12	0.16
Isopentane	16.05	41.95	11.61	5.93	6.80	12.51
1-Pentene	0.46	2.45	0.59	0.40	0.39	0.80
2-Methyl-1-butene	0.75	3.07	0.67	0.39	0.47	0.74
n-Pentane	8.43	22.75	5.67	3.29	3.19	7.79
Isoprene	0.77	1.14	2.98	0.26	0.57	2.17
trans-2-Pentene	1.04	4.80	0.92	0.70	0.74	1.18
cis-2-Pentene	0.71	2.50	0.54	0.41	0.47	0.68
2-Methyl-2-butene	1.10	5.73	0.83	0.75	0.88	1.39
2,2-Dimethylbutane	0.90	1.81	0.76	0.51	0.43	0.71
Cyclopentene	0.19	0.94	0.15	0.15	0.13	0.31
4-Methyl-1-pentene	0.27	0.34	0.38	0.15	0.06	0.19
Cyclopentane	0.82	2.72	0.80	0.66	0.91	1.19
2,3-Dimethylbutane	1.70	4.84	1.15	0.93	1.04	1.50
2-Methylpentane	5.93	30.24	3.96	2.67	2.66	4.87
3-Methylpentane	5.63	14.88	5.26	2.48	2.52	3.95
2-Methyl-1-pentene	0.37	1.31	0.30	0.16	0.18	0.27
1-Hexene	0.35	1.14	0.23	0.23	0.18	0.28
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.16	16.46	3.87	2.48	2.40	4.65
trans-2-Hexene	0.33	1.45	0.24	0.19	0.20	0.35
cis-2-Hexene	0.18	0.91	0.15	0.13	0.14	0.21
Methylcyclopentane	2.54	7.08	1.73	1.21	1.23	2.43
2,4-Dimethylpentane	0.91	2.38	0.68	0.54	0.52	0.75
Benzene	4.14	11.50	3.12	2.53	2.43	3.31
Cyclohexane	1.02	2.17	0.57	0.53	0.48	1.09
2-Methylhexane	5.02	9.32	3.75	3.61	3.46	4.25
2,3-Dimethylpentane	2.27	4.00	1.22	1.71	1.46	1.69

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All concentrations reported in ppbC

Sample No.:	10546	10536	10552	10560	10574	10570
Sampling Date:	8/4/97	8/5/97	8/6/97	8/7/97	8/8/97	8/11/97
Analysis Date:	8/24/97	8/24/97	9/26/97	8/30/97	8/30/97	8/31/97
3-Methylhexane	2.59	9.25	1.94	1.55	1.36	2.22
1-Heptene	0.25	0.96	0.36	0.15	0.34	0.27
2,2,4-Trimethylpentane	2.95	8.30	2.11	1.73	1.63	2.45
n-Heptane	1.90	7.03	1.50	1.13	1.13	2.02
Methylcyclohexane	1.36	3.39	0.88	0.58	0.58	1.32
2,2,3-Trimethylpentane	0.60	2.21	0.44	0.32	0.26	0.42
2,3,4-Trimethylpentane	1.33	3.81	0.83	0.69	0.69	0.94
Toluene	9.45	55.12	9.03	6.05	6.35	9.12
2-Methylheptane	0.73	5.01	0.58	0.39	0.39	0.61
3-Methylheptane	0.63	3.68	0.53	0.43	0.39	0.61
1-Octene	0.03	ND	0.10	ND	ND	ND
n-Octane	0.62	5.14	0.73	0.42	0.42	0.78
Ethylbenzene	2.23	8.13	1.70	1.56	1.61	2.05
m-Xylene/p-Xylene	6.75	25.69	5.64	3.96	4.03	5.64
Styrene	ND	0.53	0.28	0.15	0.18	0.16
o-Xylene	2.06	8.62	2.10	1.48	1.38	1.96
1-Nonene	0.12	0.54	0.04	0.05	0.07	0.06
n-Nonane	0.44	1.18	0.46	0.35	0.28	0.44
Isopropylbenzene	0.18	0.37	0.09	0.14	0.15	0.20
a-Pinene	0.45	1.51	0.38	0.25	0.44	0.40
n-Propylbenzene	0.42	1.15	0.41	0.35	0.33	0.54
m-Ethyltoluene	1.21	3.92	1.69	1.08	1.23	1.59
p-Ethyltoluene	0.82	2.43	1.08	0.81	0.65	1.05
1,3,5-Trimethylbenzene	0.74	2.37	0.88	0.51	0.49	0.81
o-Ethyltoluene	0.43	1.37	0.67	0.47	0.42	0.65
b-Pinene	0.05	0.67	ND	1.07	0.25	0.11
1,2,4-Trimethylbenzene	1.68	5.30	2.31	1.76	1.68	2.19
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.57	1.07	0.54	0.29	0.23	0.39
1,2,3-Trimethylbenzene	0.12	0.97	0.26	0.33	0.35	0.35
m-Diethylbenzene	0.10	0.16	0.20	0.23	0.17	0.24
p-Diethylbenzene	0.19	0.39	0.58	0.16	0.19	0.19
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.89	1.76	0.96	0.60	0.57	0.79
1-Dodecene	0.05	0.02	0.33	0.22	0.43	0.21
n-Dodecane	0.51	1.00	0.48	0.41	0.45	0.24
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.17	0.08	0.10	0.16	0.09	0.05
TNMOC (w/ unknowns)	210.10	524.13	187.88	118.35	112.93	199.82
TNMOC (speciated)	169.29	443.18	120.44	79.14	79.35	153.06

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10653	10651	10678	10699D1	10699R1	10700D2
Sampling Date:	8/12/97	8/13/97	8/14/97	8/15/97	8/15/97	8/15/97
Analysis Date:	9/2/97	9/3/97	9/3/97	8/26/97	8/29/97	8/26/97
Ethylene	3.49	4.55	3.33	1.92	1.99	1.98
Acetylene	3.46	3.09	1.74	1.11	1.13	1.12
Ethane	9.77	16.23	7.64	3.86	3.70	3.94
Propylene	1.18	1.62	1.03	0.67	0.73	0.66
Propane	7.89	12.67	6.29	2.85	2.85	2.98
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.04	3.46	1.56	0.83	0.85	0.91
Isobutene/1-Butene	1.37	1.78	1.04	0.80	1.03	0.77
1,3-Butadiene	0.10	0.17	0.08	ND	0.04	ND
n-Butane	4.46	7.33	3.04	2.02	2.06	2.11
trans-2-Butene	0.14	0.23	0.13	0.06	0.17	0.12
cis-2-Butene	0.18	0.29	0.26	0.14	0.26	0.13
3-Methyl-1-butene	0.15	0.18	0.13	0.10	0.08	0.10
Isopentane	9.14	12.53	8.26	6.02	5.55	6.10
1-Pentene	0.28	0.91	0.34	0.24	0.16	0.14
2-Methyl-1-butene	0.57	0.76	0.49	0.39	0.40	0.44
n-Pentane	6.75	6.52	3.92	3.00	2.88	3.16
Isoprene	1.15	4.16	0.80	0.69	0.65	0.66
trans-2-Pentene	0.78	0.98	0.74	0.66	0.67	0.70
cis-2-Pentene	0.50	0.59	0.48	0.44	0.43	0.39
2-Methyl-2-butene	0.97	1.28	0.90	0.81	0.75	0.78
2,2-Dimethylbutane	0.48	0.67	0.51	0.43	0.43	0.48
Cyclopentene	0.18	0.25	0.15	0.16	0.16	0.16
4-Methyl-1-pentene	0.09	0.14	0.09	0.10	0.11	0.07
Cyclopentane	0.72	1.07	0.77	0.77	0.67	0.68
2,3-Dimethylbutane	0.99	1.46	1.08	0.98	0.91	1.01
2-Methylpentane	3.54	4.70	3.15	2.60	2.38	2.77
3-Methylpentane	2.91	4.07	2.69	1.95	1.75	2.00
2-Methyl-1-pentene	0.22	0.29	0.15	0.19	0.14	0.17
1-Hexene	0.21	0.24	0.19	0.17	0.12	0.15
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	3.15	4.09	2.78	2.14	2.03	2.40
trans-2-Hexene	0.23	0.30	0.17	0.16	0.15	0.18
cis-2-Hexene	0.13	0.18	0.12	0.11	0.11	0.13
Methylcyclopentane	1.67	2.14	1.35	1.18	1.07	1.26
2,4-Dimethylpentane	0.58	0.72	0.54	0.55	0.43	0.52
Benzene	2.51	3.38	2.18	1.61	1.51	1.93
Cyclohexane	0.68	0.90	0.59	0.60	0.53	0.61
2-Methylhexane	3.60	4.24	3.56	3.61	3.11	3.99
2,3-Dimethylpentane	1.49	1.81	1.58	1.67	1.42	2.03

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10653	10651	10678	10699D1	10699R1	10700D2
Sampling Date:	8/12/97	8/13/97	8/14/97	8/15/97	8/15/97	8/15/97
Analysis Date:	9/2/97	9/3/97	9/3/97	8/26/97	8/29/97	8/26/97
3-Methylhexane	1.67	2.19	1.45	1.04	0.94	1.35
1-Heptene	0.31	0.37	0.20	0.18	0.41	0.15
2,2,4-Trimethylpentane	1.79	2.31	1.60	1.36	1.36	1.49
n-Heptane	1.31	1.77	1.21	0.93	0.86	1.10
Methylcyclohexane	0.91	1.21	0.77	0.76	0.54	0.73
2,2,3-Trimethylpentane	0.31	0.55	0.29	0.27	0.18	0.23
2,3,4-Trimethylpentane	0.80	1.02	0.72	0.64	0.61	0.60
Toluene	6.82	10.00	6.41	4.92	4.31	5.17
2-Methylheptane	0.47	0.64	0.44	0.33	0.33	0.37
3-Methylheptane	0.45	0.57	0.43	0.33	0.30	0.39
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.50	0.73	0.53	0.41	0.35	0.33
Ethylbenzene	1.66	1.97	1.56	1.62	2.11	2.16
m-Xylene/p-Xylene	4.16	5.73	4.00	5.76	5.53	6.41
Styrene	0.39	0.27	0.22	0.20	0.17	0.21
o-Xylene	1.40	2.00	1.61	1.72	1.65	1.77
1-Nonene	0.03	0.06	0.15	0.11	0.12	ND
n-Nonane	0.35	0.48	0.38	0.69	0.66	0.41
Isopropylbenzene	0.12	0.15	0.15	0.19	0.13	0.20
a-Pinene	0.45	0.52	0.31	0.38	0.39	0.37
n-Propylbenzene	0.44	0.51	0.40	0.30	0.17	0.23
m-Ethyltoluene	1.28	1.68	1.10	0.96	1.05	0.70
p-Ethyltoluene	0.75	0.90	0.75	0.69	0.77	0.58
1,3,5-Trimethylbenzene	0.65	0.80	0.57	0.62	0.84	0.51
o-Ethyltoluene	0.64	0.78	0.45	0.50	0.43	0.28
b-Pinene	0.07	0.25	0.08	0.18	0.12	0.22
1,2,4-Trimethylbenzene	1.87	2.44	1.87	1.82	2.46	1.07
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.54	0.60	0.45	1.39	1.64	0.24
1,2,3-Trimethylbenzene	0.26	0.58	0.30	0.49	0.70	0.29
m-Diethylbenzene	0.19	0.16	0.17	0.01	0.04	ND
p-Diethylbenzene	0.14	0.23	0.17	0.14	0.23	ND
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.93	1.35	1.07	1.52	2.45	0.44
1-Dodecene	0.17	0.31	0.12	ND	ND	ND
n-Dodecane	0.49	0.85	0.44	0.25	0.31	0.25
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.08	0.20	0.14	ND	ND	ND
TNMOC (w/ unknowns)	143.17	199.60	129.61	101.53	98.64	96.04
TNMOC (speciated)	110.11	154.16	94.38	76.29	75.56	75.95

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10700R2	10692	10844	10849	10854D1	10854R1
Sampling Date:	8/15/97	8/18/97	8/19/97	8/20/97	8/21/97	8/21/97
Analysis Date:	8/29/97	9/3/97	9/3/97	9/3/97	9/9/97	9/10/97
Ethylene	2.15	2.73	2.87	3.74	7.01	6.99
Acetylene	1.13	1.43	1.47	2.22	4.31	4.30
Ethane	3.50	4.91	6.32	7.64	12.07	12.01
Propylene	0.74	0.88	0.81	1.22	2.45	2.45
Propane	2.92	4.01	4.24	4.79	8.55	8.50
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	0.88	0.99	1.02	1.21	1.76	1.81
Isobutene/1-Butene	0.98	1.12	1.05	1.39	2.80	3.05
1,3-Butadiene	0.13	0.09	0.06	0.07	0.36	0.42
n-Butane	2.35	2.35	2.58	2.47	5.00	4.80
trans-2-Butene	0.17	0.13	0.13	0.10	0.32	0.27
cis-2-Butene	0.27	0.30	0.18	0.23	0.37	0.38
3-Methyl-1-butene	0.12	0.16	0.14	0.15	0.31	0.28
Isopentane	5.96	9.56	7.01	8.68	17.54	15.89
1-Pentene	0.13	0.35	0.31	0.43	0.53	0.71
2-Methyl-1-butene	0.40	0.69	0.52	0.65	0.98	0.98
n-Pentane	3.11	4.67	3.65	4.35	6.37	6.33
Isoprene	0.58	1.12	0.56	1.53	1.22	1.19
trans-2-Pentene	0.68	1.09	0.74	0.90	0.97	0.74
cis-2-Pentene	0.42	0.63	0.48	0.55	0.71	0.75
2-Methyl-2-butene	0.70	1.38	0.90	1.09	1.45	1.47
2,2-Dimethylbutane	0.41	0.48	0.45	0.56	1.50	0.98
Cyclopentene	0.17	0.23	0.16	0.24	0.29	0.27
4-Methyl-1-pentene	0.07	0.12	0.07	0.15	0.15	0.15
Cyclopentane	0.71	0.97	0.72	0.69	1.10	1.02
2,3-Dimethylbutane	0.96	1.29	1.09	1.33	2.11	1.97
2-Methylpentane	2.54	3.85	3.11	3.77	5.38	5.34
3-Methylpentane	1.85	3.11	2.47	3.27	5.20	4.64
2-Methyl-1-pentene	0.15	0.25	0.19	0.26	0.27	0.29
1-Hexene	0.16	0.30	0.18	0.25	0.28	0.27
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.23	3.71	3.33	3.47	4.20	4.19
trans-2-Hexene	0.19	0.31	0.33	0.29	0.29	0.27
cis-2-Hexene	0.11	0.22	0.14	0.18	0.16	0.20
Methylcyclopentane	1.11	1.73	1.35	1.76	2.14	2.18
2,4-Dimethylpentane	0.44	0.70	0.50	0.73	0.91	1.00
Benzene	1.52	2.57	1.98	2.87	4.29	4.56
Cyclohexane	0.58	0.72	0.52	0.68	0.88	0.65
2-Methylhexane	3.41	4.08	3.47	3.80	4.36	4.00
2,3-Dimethylpentane	1.48	1.95	1.23	1.28	1.69	1.51

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10700R2	10692	10844	10849	10854D1	10854R1
Sampling Date:	8/15/97	8/18/97	8/19/97	8/20/97	8/21/97	8/21/97
Analysis Date:	8/29/97	9/3/97	9/3/97	9/3/97	9/9/97	9/10/97
3-Methylhexane	0.85	2.13	1.27	2.13	2.86	2.74
1-Heptene	0.26	0.22	0.16	0.42	0.21	0.33
2,2,4-Trimethylpentane	1.35	2.24	1.71	2.59	3.72	3.69
n-Heptane	0.83	1.60	1.18	1.34	1.82	1.91
Methylcyclohexane	0.64	0.87	0.81	0.89	1.00	1.08
2,2,3-Trimethylpentane	0.14	0.30	0.27	0.47	0.71	0.75
2,3,4-Trimethylpentane	0.61	0.86	0.69	1.24	1.57	1.51
Toluene	4.13	8.28	6.76	8.73	11.73	12.31
2-Methylheptane	0.31	0.58	0.42	0.65	0.67	0.75
3-Methylheptane	0.30	0.57	0.42	0.63	0.73	0.73
1-Octene	ND	0.11	0.07	ND	ND	ND
n-Octane	0.26	0.75	0.51	0.66	0.76	0.76
Ethylbenzene	1.76	2.96	1.33	1.84	1.91	2.22
m-Xylene/p-Xylene	4.91	11.11	4.42	5.85	6.40	6.70
Styrene	ND	0.39	0.17	0.14	1.40	1.25
o-Xylene	1.18	3.12	1.57	2.10	2.36	2.36
1-Nonene	ND	0.15	0.06	0.10	0.06	0.07
n-Nonane	0.32	0.52	0.33	0.42	0.59	0.66
Isopropylbenzene	0.09	0.19	0.12	0.18	0.24	0.27
a-Pinene	0.35	0.35	0.28	0.39	0.46	0.44
n-Propylbenzene	0.17	0.56	0.38	0.44	0.62	0.63
m-Ethyltoluene	0.71	1.64	1.14	1.61	2.14	2.10
p-Ethyltoluene	0.52	1.16	0.75	1.05	1.36	1.31
1,3,5-Trimethylbenzene	0.42	1.00	0.54	0.83	1.34	1.09
o-Ethyltoluene	0.23	0.70	0.41	0.70	2.07	1.74
b-Pinene	0.13	0.12	0.06	0.12	0.17	0.12
1,2,4-Trimethylbenzene	0.98	2.81	1.83	2.45	3.59	3.12
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.27	0.93	0.43	0.49	0.81	0.66
1,2,3-Trimethylbenzene	0.30	0.41	0.49	0.71	0.79	0.91
m-Diethylbenzene	ND	0.22	0.17	0.21	0.26	0.28
p-Diethylbenzene	ND	0.22	0.16	0.19	0.20	0.25
1-Undecene	ND	ND	0.16	0.05	ND	ND
n-Undecane	0.47	1.76	1.05	0.76	0.96	0.92
1-Dodecene	ND	0.14	ND	0.04	0.34	0.49
n-Dodecane	0.14	0.86	0.91	0.80	0.68	0.67
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	0.10	0.28	0.20	0.23	0.18
TNMOC (w/ unknowns)	84.25	156.50	120.57	157.19	216.46	209.07
TNMOC (speciated)	68.06	115.14	87.61	110.46	165.03	161.82

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	10855D2	10855R2	10874	10910	11019	10972D1
Sampling Date:	8/21/97	8/21/97	8/22/97	8/25/97	8/26/97	8/27/97
Analysis Date:	9/9/97	9/10/97	9/4/97	9/4/97	9/4/97	9/10/97
Ethylene	7.99	8.09	4.17	4.36	3.05	4.44
Acetylene	4.91	5.02	3.14	2.99	2.02	3.25
Ethane	13.14	13.43	21.29	26.78	13.24	14.87
Propylene	2.79	2.77	1.27	1.20	1.07	1.42
Propane	9.71	9.48	14.51	13.63	9.11	10.32
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.92	1.98	4.15	4.57	3.51	3.90
Isobutene/1-Butene	3.18	3.07	1.30	1.19	1.11	1.49
1,3-Butadiene	0.28	0.27	0.07	0.05	0.03	0.07
n-Butane	5.34	5.52	6.52	7.31	4.18	5.18
trans-2-Butene	0.28	0.29	0.13	0.13	0.10	0.14
cis-2-Butene	0.36	0.44	0.20	0.22	0.19	0.21
3-Methyl-1-butene	0.30	0.32	0.17	0.19	0.11	0.17
Isopentane	20.06	18.08	13.87	17.38	10.98	14.12
1-Pentene	0.60	0.82	0.64	0.49	0.50	0.69
2-Methyl-1-butene	1.14	1.07	0.63	0.76	0.51	0.63
n-Pentane	6.96	7.04	6.57	7.93	5.02	6.19
Isoprene	1.05	1.28	0.99	0.67	0.76	1.04
trans-2-Pentene	1.14	1.31	0.84	1.03	0.64	0.71
cis-2-Pentene	0.80	0.81	0.48	0.66	0.47	0.54
2-Methyl-2-butene	1.69	1.66	0.85	1.16	0.70	0.78
2,2-Dimethylbutane	0.94	1.00	0.80	1.02	0.79	0.73
Cyclopentene	0.25	0.29	0.21	0.24	0.19	0.16
4-Methyl-1-pentene	0.19	0.27	0.36	0.21	0.08	0.13
Cyclopentane	1.18	0.96	0.77	1.15	0.79	1.11
2,3-Dimethylbutane	2.32	2.23	1.35	1.88	1.29	1.32
2-Methylpentane	6.41	6.18	5.15	6.18	3.74	4.73
3-Methylpentane	5.22	5.40	4.59	4.99	3.52	4.13
2-Methyl-1-pentene	0.30	0.37	0.25	0.29	0.16	0.22
1-Hexene	0.31	0.32	0.23	0.34	0.26	0.25
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.75	4.40	4.19	5.71	3.19	3.94
trans-2-Hexene	0.34	0.32	0.18	0.29	0.17	0.21
cis-2-Hexene	0.19	0.21	0.17	0.23	0.13	0.15
Methylcyclopentane	2.50	2.45	1.95	2.42	1.56	2.14
2,4-Dimethylpentane	1.02	1.08	0.80	0.89	0.59	0.71
Benzene	4.94	4.85	3.70	4.14	2.98	4.01
Cyclohexane	0.83	0.71	0.73	0.78	0.69	0.76
2-Methylhexane	4.32	4.34	4.12	4.43	3.58	3.77
2,3-Dimethylpentane	1.60	1.74	1.46	1.47	1.24	1.30

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All concentrations reported in ppbC

Sample No.:	10855D2	10855R2	10874	10910	11019	10972D1
Sampling Date:	8/21/97	8/21/97	8/22/97	8/25/97	8/26/97	8/27/97
Analysis Date:	9/9/97	9/10/97	9/4/97	9/4/97	9/4/97	9/10/97
3-Methylhexane	3.36	3.34	2.55	3.00	1.78	2.42
1-Heptene	0.28	0.56	0.25	0.23	0.30	0.19
2,2,4-Trimethylpentane	4.18	4.06	2.80	2.98	1.72	2.56
n-Heptane	2.19	2.07	2.12	2.31	1.49	1.69
Methylcyclohexane	1.03	1.20	1.13	1.25	1.03	1.20
2,2,3-Trimethylpentane	0.98	0.72	0.49	0.59	0.33	0.52
2,3,4-Trimethylpentane	1.70	1.78	1.19	1.36	0.76	1.13
Toluene	12.88	13.42	10.52	12.27	7.71	10.34
2-Methylheptane	0.77	0.51	0.72	0.77	0.58	0.66
3-Methylheptane	0.78	0.80	0.71	0.72	0.53	0.63
1-Octene	ND	ND	ND	ND	0.15	0.08
n-Octane	0.83	0.88	0.84	0.88	0.65	0.78
Ethylbenzene	2.16	2.39	1.93	2.16	1.44	1.95
m-Xylene/p-Xylene	7.25	7.45	6.13	7.09	4.42	5.92
Styrene	0.37	0.34	0.29	0.20	1.35	0.60
o-Xylene	2.68	2.70	2.22	2.49	1.73	2.23
1-Nonene	0.04	0.07	0.10	0.05	0.09	0.05
n-Nonane	0.60	0.59	0.62	0.54	0.38	0.49
Isopropylbenzene	0.23	0.25	0.22	0.20	0.14	0.16
a-Pinene	0.20	0.19	0.32	0.18	0.13	0.20
n-Propylbenzene	0.63	0.75	0.57	0.64	0.41	0.54
m-Ethyltoluene	2.33	2.37	1.84	2.07	1.29	1.72
p-Ethyltoluene	1.42	1.45	1.11	1.43	0.78	1.05
1,3,5-Trimethylbenzene	1.17	1.21	0.96	1.25	0.70	0.85
o-Ethyltoluene	0.93	1.22	0.63	0.78	0.52	0.69
b-Pinene	0.10	0.06	0.03	0.03	0.05	ND
1,2,4-Trimethylbenzene	3.75	3.77	2.66	3.20	2.37	2.86
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.84	0.92	0.64	0.74	0.63	0.83
1,2,3-Trimethylbenzene	0.78	0.87	0.60	0.63	0.48	0.66
m-Diethylbenzene	0.27	0.31	0.17	0.21	0.19	0.22
p-Diethylbenzene	0.31	0.25	0.22	0.26	0.23	0.19
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.69	1.65	0.82	1.11	1.72	2.23
1-Dodecene	0.30	0.57	ND	ND	ND	0.44
n-Dodecane	0.68	0.68	0.26	0.55	0.96	1.56
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.08	0.05	0.09	0.07	0.09	0.34
TNMOC (w/ unknowns)	226.63	222.49	206.91	232.58	160.15	198.18
TNMOC (speciated)	179.02	179.34	158.58	181.64	119.36	147.93

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All concentrations reported in ppbC

Sample No.:	10972R1	10973D2	10973R2	11047	11121	11127
Sampling Date:	8/27/97	8/27/97	8/27/97	8/29/97	9/3/97	9/4/97
Analysis Date:	9/11/97	9/10/97	9/11/97	9/5/97	9/16/97	9/16/97
Ethylene	4.44	4.46	4.43	4.67	7.85	2.68
Acetylene	3.15	3.18	3.15	4.70	4.87	1.87
Ethane	14.77	14.96	10.68	15.78	20.50	5.58
Propylene	1.39	1.35	1.40	1.44	2.42	0.93
Propane	10.10	9.86	9.95	10.84	11.26	2.94
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.78	3.70	3.72	3.50	3.61	0.81
Isobutene/1-Butene	1.57	1.66	1.55	1.42	2.41	1.10
1,3-Butadiene	0.12	0.08	0.06	0.12	0.26	0.08
n-Butane	5.17	5.21	5.19	6.70	5.90	1.90
trans-2-Butene	0.17	0.11	0.14	0.14	0.23	0.12
cis-2-Butene	0.24	0.22	0.21	0.28	0.29	0.18
3-Methyl-1-butene	0.15	0.14	0.19	0.18	0.21	0.12
Isopentane	14.43	12.36	12.66	13.64	18.04	6.39
1-Pentene	0.90	0.55	0.48	0.58	0.83	0.16
2-Methyl-1-butene	0.62	0.57	0.56	0.67	0.75	0.38
n-Pentane	6.18	5.88	5.87	6.81	8.20	3.03
Isoprene	1.11	1.02	1.03	0.97	0.78	0.39
trans-2-Pentene	0.74	0.70	0.69	0.88	0.84	0.65
cis-2-Pentene	0.53	0.44	0.46	0.57	0.61	0.41
2-Methyl-2-butene	0.78	0.72	0.69	1.00	1.17	0.72
2,2-Dimethylbutane	0.71	0.72	0.77	0.75	0.97	0.50
Cyclopentene	0.14	0.13	0.12	0.19	0.20	0.14
4-Methyl-1-pentene	0.11	0.05	0.19	0.18	0.11	0.01
Cyclopentane	0.93	1.28	1.13	0.87	1.10	0.62
2,3-Dimethylbutane	1.31	1.59	1.42	1.51	1.86	0.87
2-Methylpentane	4.75	4.56	4.35	4.73	6.20	2.98
3-Methylpentane	4.50	3.83	3.70	4.09	7.11	2.83
2-Methyl-1-pentene	0.24	0.19	0.20	0.24	0.25	0.16
1-Hexene	0.23	0.21	0.22	0.22	0.30	0.18
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.15	3.79	4.28	4.07	4.91	3.01
trans-2-Hexene	0.22	0.20	0.18	0.23	0.21	0.32
cis-2-Hexene	0.13	0.14	0.12	0.16	0.18	0.12
Methylcyclopentane	2.08	1.92	1.95	2.09	2.45	1.12
2,4-Dimethylpentane	0.72	0.60	0.73	0.72	0.96	0.51
Benzene	4.22	3.67	3.43	3.74	4.65	2.14
Cyclohexane	0.77	0.67	0.66	1.10	0.86	0.43
2-Methylhexane	3.90	3.46	3.43	4.04	4.54	3.29
2,3-Dimethylpentane	1.36	1.10	1.15	1.34	1.58	1.11

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All concentrations reported in ppbC

Sample No.:	10972R1	10973D2	10973R2	11047	11121	11127
Sampling Date:	8/27/97	8/27/97	8/27/97	8/29/97	9/3/97	9/4/97
Analysis Date:	9/11/97	9/10/97	9/11/97	9/5/97	9/16/97	9/16/97
3-Methylhexane	2.33	2.16	2.23	2.23	2.98	1.21
1-Heptene	0.28	0.27	0.30	0.30	0.55	0.33
2,2,4-Trimethylpentane	2.79	2.38	2.35	2.31	3.53	1.57
n-Heptane	1.72	1.69	1.76	1.73	2.29	0.88
Methylcyclohexane	1.16	1.00	1.13	1.19	1.56	0.51
2,2,3-Trimethylpentane	0.46	0.55	0.47	0.44	0.87	0.33
2,3,4-Trimethylpentane	1.01	0.90	0.99	1.04	1.72	0.66
Toluene	9.83	9.29	9.20	10.23	60.36	5.84
2-Methylheptane	0.66	0.56	0.62	0.66	6.63	0.39
3-Methylheptane	0.63	0.55	0.61	0.62	3.99	0.35
1-Octene	0.12	0.15	0.15	ND	ND	ND
n-Octane	0.73	0.66	0.71	0.75	7.34	0.44
Ethylbenzene	1.92	1.49	1.41	1.82	2.94	1.32
m-Xylene/p-Xylene	5.87	4.72	4.51	5.80	8.79	3.62
Styrene	0.62	0.47	0.40	0.26	0.30	0.23
o-Xylene	2.11	1.76	1.62	2.06	2.92	1.43
1-Nonene	0.07	0.07	0.06	0.12	0.10	0.05
n-Nonane	0.54	0.44	0.47	0.48	0.66	0.25
Isopropylbenzene	0.22	0.14	0.17	0.19	0.21	0.16
a-Pinene	0.19	0.13	0.16	0.21	0.45	0.17
n-Propylbenzene	0.58	0.40	0.46	0.47	0.66	0.30
m-Ethyltoluene	1.77	1.46	1.38	1.71	2.26	1.06
p-Ethyltoluene	1.23	1.00	0.87	0.98	1.59	0.75
1,3,5-Trimethylbenzene	1.00	0.87	0.70	0.97	1.36	0.53
o-Ethyltoluene	0.79	0.73	0.63	0.65	0.98	0.48
b-Pinene	0.07	0.05	0.04	0.02	0.13	ND
1,2,4-Trimethylbenzene	3.20	2.48	2.36	2.65	3.49	1.84
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.96	0.56	0.57	1.06	1.58	0.33
1,2,3-Trimethylbenzene	0.87	0.48	0.49	0.61	0.65	0.45
m-Diethylbenzene	0.29	0.14	0.19	0.18	0.20	0.20
p-Diethylbenzene	0.26	0.17	0.18	0.21	0.29	0.16
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	2.41	0.92	1.08	3.35	3.98	0.74
1-Dodecene	0.62	0.23	0.59	ND	ND	ND
n-Dodecane	1.66	0.66	0.77	2.70	2.22	1.36
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.36	0.23	0.26	0.60	0.25	0.53
TNMOC (w/ unknowns)	199.65	179.38	172.56	194.55	321.96	108.98
TNMOC (speciated)	150.15	135.07	130.97	153.75	257.28	79.26

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	11197	11196	11212D1	11212R1		11213D2	11213R2	
Sampling Date:	9/5/97	9/8/97	9/9/97	9/9/97		9/9/97	9/9/97	
Analysis Date:	9/17/97	9/17/97	9/18/97	9/20/97		9/18/97	9/20/97	
Ethylene	4.69	4.37	5.28	4.94		5.45	5.19	
Acetylene	2.11	2.75	3.77	3.89		3.83	3.85	
Ethane	13.02	16.13	16.21	0.17	a	16.71	0.18	a
Propylene	1.38	1.04	1.65	1.57		1.74	1.79	
Propane	8.90	8.26	9.44	7.01		9.23	7.76	
Propyne	ND	ND	ND	ND		ND	ND	
Isobutane	3.39	4.65	2.93	3.00		2.87	2.94	
Isobutene/1-Butene	1.10	1.01	1.76	1.76		2.02	1.97	
1,3-Butadiene	0.03	0.05	0.11	0.09		0.17	0.16	
n-Butane	5.94	6.75	5.58	5.85		5.66	5.86	
trans-2-Butene	0.11	0.13	0.14	0.20		0.15	0.21	
cis-2-Butene	0.20	0.21	0.20	0.27		0.21	0.25	
3-Methyl-1-butene	0.12	0.16	0.16	0.15		0.17	0.19	
Isopentane	10.50	13.10	15.09	13.42		13.85	13.90	
1-Pentene	0.36	0.40	0.27	0.61		0.41	0.43	
2-Methyl-1-butene	0.48	0.64	0.55	0.54		0.65	0.64	
n-Pentane	5.81	6.32	5.71	5.82		5.89	6.04	
Isoprene	0.40	0.47	0.62	0.73		0.67	0.74	
trans-2-Pentene	0.62	0.92	0.66	0.69		0.78	0.80	
cis-2-Pentene	0.43	0.60	0.44	0.46		0.51	0.53	
2-Methyl-2-butene	0.67	0.96	0.70	0.65		0.81	0.77	
2,2-Dimethylbutane	0.72	0.68	0.75	0.76		0.72	0.71	
Cyclopentene	0.20	0.23	0.17	0.12		0.17	0.14	
4-Methyl-1-pentene	0.12	0.11	0.13	0.07		0.09	0.09	
Cyclopentane	0.60	1.05	1.14	0.83		0.89	0.82	
2,3-Dimethylbutane	1.28	1.55	1.35	1.34		1.31	1.30	
2-Methylpentane	4.43	4.77	4.55	4.58		4.80	4.72	
3-Methylpentane	3.69	4.62	4.67	4.92		4.72	4.62	
2-Methyl-1-pentene	0.20	0.24	0.19	0.26		0.22	0.19	
1-Hexene	0.20	0.28	0.18	0.20		0.25	0.27	
2-Ethyl-1-butene	ND	ND	ND	ND		ND	ND	
n-Hexane	4.23	4.33	3.48	3.48		3.61	3.60	
trans-2-Hexene	0.18	0.28	0.16	0.16		0.18	0.18	
cis-2-Hexene	0.10	0.17	0.10	0.11		0.14	0.16	
Methylcyclopentane	1.72	2.05	1.96	1.84		1.94	1.90	
2,4-Dimethylpentane	0.62	0.76	0.77	0.69		0.71	0.69	
Benzene	2.93	3.50	3.36	3.29		3.38	3.17	
Cyclohexane	0.78	0.85	0.83	0.74		0.78	0.72	
2-Methylhexane	3.56	3.58	4.46	4.02		3.94	3.74	
2,3-Dimethylpentane	1.16	1.17	1.92	1.30		1.22	1.15	

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All concentrations reported in ppbC

Sample No.:	11197	11196	11212D1	11212R1	11213D2	11213R2
Sampling Date:	9/5/97	9/8/97	9/9/97	9/9/97	9/9/97	9/9/97
Analysis Date:	9/17/97	9/17/97	9/18/97	9/20/97	9/18/97	9/20/97
3-Methylhexane	1.72	2.00	3.28	2.36	2.57	2.60
1-Heptene	0.43	0.58	0.32	0.36	0.35	0.41
2,2,4-Trimethylpentane	1.84	2.59	2.68	2.81	2.78	2.95
n-Heptane	1.47	1.71	1.91	2.08	2.09	2.30
Methylcyclohexane	1.10	0.97	1.39	1.18	1.39	1.43
2,2,3-Trimethylpentane	0.35	0.43	0.54	0.50	0.52	0.48
2,3,4-Trimethylpentane	0.73	1.06	0.98	0.99	1.11	1.10
Toluene	7.20	9.80	10.27	10.66	10.78	11.10
2-Methylheptane	0.54	0.56	0.66	0.65	0.73	0.73
3-Methylheptane	0.58	0.57	0.64	0.65	0.69	0.72
1-Octene	ND	0.09	0.11	0.14	0.16	0.14
n-Octane	0.72	0.74	0.83	0.89	0.96	1.03
Ethylbenzene	1.52	2.19	1.59	1.84	1.90	2.08
m-Xylene/p-Xylene	4.58	6.87	5.04	5.42	5.56	5.83
Styrene	0.19	0.21	0.23	0.27	0.26	0.30
o-Xylene	1.66	2.32	1.92	2.00	2.06	2.15
1-Nonene	0.05	0.06	0.04	0.06	0.07	0.08
n-Nonane	0.55	0.45	0.51	0.46	0.47	0.50
Isopropylbenzene	0.16	0.19	0.20	0.18	0.17	0.20
a-Pinene	0.15	0.12	0.24	0.25	0.21	0.23
n-Propylbenzene	0.46	0.53	0.49	0.52	0.57	0.61
m-Ethyltoluene	1.26	1.59	1.67	1.77	1.73	1.89
p-Ethyltoluene	0.94	1.03	1.25	1.25	1.07	1.20
1,3,5-Trimethylbenzene	0.82	0.79	0.98	0.89	0.87	1.04
o-Ethyltoluene	0.55	0.79	0.74	0.93	0.79	0.88
b-Pinene	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	2.12	2.83	2.77	2.75	3.01	3.44
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.70	0.56	0.47	0.55	0.57	0.66
1,2,3-Trimethylbenzene	0.54	0.68	0.49	0.61	0.83	0.82
m-Diethylbenzene	0.74	0.32	0.22	0.25	0.27	0.23
p-Diethylbenzene	0.15	0.23	0.19	0.22	0.18	0.21
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.67	1.31	0.59	0.73	1.11	1.27
1-Dodecene	0.50	1.05	0.35	0.86	0.39	1.61
n-Dodecane	2.32	0.78	0.27	0.27	0.40	0.44
1-Tridecene	ND	1.12	ND	ND	ND	ND
n-Tridecane	0.53	1.03	0.07	0.14	0.16	0.14
TNMOC (w/ unknowns)	155.42	190.48	181.01	161.68	185.48	176.69
TNMOC (speciated)	125.80	147.27	145.38	125.98	147.60	133.15

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	11289	11283		11303	11297D1	11297R1		11298RD2
Sampling Date:	9/10/97	9/11/97		9/12/97	9/15/97	9/15/97		9/15/97
Analysis Date:	9/17/97	9/20/97		9/23/97	9/18/97	9/20/97		9/18/97
Ethylene	4.79	5.26		4.03	4.35	4.33		4.48
Acetylene	2.51	3.87		2.58	3.83	3.85		3.82
Ethane	15.56	0.62	a	4.62	12.68	0.19	a	12.66
Propylene	1.52	1.86		1.21	1.02	1.12		1.19
Propane	10.78	2.82		7.42	6.88	6.32		7.01
Propyne	ND	ND		ND	ND	ND		ND
Isobutane	2.96	0.96		2.91	2.54	2.60		2.57
Isobutene/1-Butene	1.79	2.22		1.45	1.02	1.05		1.64
1,3-Butadiene	0.10	0.14		0.05	0.03	0.03		0.09
n-Butane	7.52	2.37		4.90	5.21	5.35		5.30
trans-2-Butene	0.15	0.21		0.09	0.17	0.10		0.11
cis-2-Butene	0.27	0.26		0.16	0.16	0.16		0.21
3-Methyl-1-butene	0.21	0.16		0.15	0.12	0.12		0.18
Isopentane	15.02	10.37		10.64	11.40	10.85		11.42
1-Pentene	0.39	0.90		0.54	0.46	0.45		0.67
2-Methyl-1-butene	0.86	0.70		0.51	0.40	0.34		0.67
n-Pentane	8.69	4.28		4.93	5.33	5.46		5.39
Isoprene	0.53	0.44		0.38	0.31	0.27		0.65
trans-2-Pentene	1.09	0.82		0.66	0.53	0.49		0.85
cis-2-Pentene	0.76	0.52		0.46	0.39	0.36		0.50
2-Methyl-2-butene	1.57	1.03		0.66	0.53	0.41		0.95
2,2-Dimethylbutane	0.76	0.62		0.69	0.57	0.59		0.63
Cyclopentene	0.26	0.18		0.13	0.08	0.08		0.19
4-Methyl-1-pentene	0.27	0.14		0.16	0.07	0.07		0.11
Cyclopentane	1.22	0.69		0.64	0.88	0.77		0.88
2,3-Dimethylbutane	1.42	1.30		1.17	1.33	1.18		1.39
2-Methylpentane	5.54	4.07		4.27	4.22	4.24		4.26
3-Methylpentane	4.82	3.38		3.72	4.15	4.38		3.62
2-Methyl-1-pentene	0.36	0.20		0.19	0.17	0.15		0.23
1-Hexene	0.36	0.21		0.21	0.16	0.16		0.21
2-Ethyl-1-butene	ND	ND		ND	ND	ND		ND
n-Hexane	5.94	2.97		3.29	3.51	3.42		3.45
trans-2-Hexene	0.39	0.21		0.17	0.15	0.12		0.22
cis-2-Hexene	0.24	0.15		0.14	0.09	0.09		0.14
Methylcyclopentane	2.57	1.54		1.58	1.86	1.85		1.99
2,4-Dimethylpentane	0.81	0.73		0.68	0.58	0.63		0.64
Benzene	3.69	3.18		3.13	2.92	2.89		3.02
Cyclohexane	1.00	0.48		0.61	0.68	0.66		0.73
2-Methylhexane	4.26	3.86		3.59	3.67	3.38		3.48
2,3-Dimethylpentane	1.27	1.68		1.19	1.24	1.04		1.23

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Sample No.:	11289	11283	11303	11297D1	11297R1	11298RD2
Sampling Date:	9/10/97	9/11/97	9/12/97	9/15/97	9/15/97	9/15/97
Analysis Date:	9/17/97	9/20/97	9/23/97	9/18/97	9/20/97	9/18/97
3-Methylhexane	3.06	1.85	1.85	1.86	1.91	1.79
1-Heptene	0.71	0.20	0.28	0.16	0.28	0.33
2,2,4-Trimethylpentane	2.54	2.66	2.05	1.95	2.41	2.30
n-Heptane	2.59	1.38	1.36	1.34	1.33	1.26
Methylcyclohexane	1.63	0.76	0.79	1.07	0.90	1.06
2,2,3-Trimethylpentane	0.54	0.42	0.41	0.39	0.42	0.41
2,3,4-Trimethylpentane	1.13	1.07	0.91	0.96	0.94	0.97
Toluene	12.50	8.57	8.36	8.36	8.31	8.16
2-Methylheptane	0.72	0.52	0.55	0.48	0.51	0.54
3-Methylheptane	0.61	0.61	0.56	0.58	0.55	0.56
1-Octene	0.21	0.10	ND	ND	ND	0.14
n-Octane	0.88	0.58	0.61	0.70	0.69	0.71
Ethylbenzene	2.29	1.71	1.69	1.77	1.88	1.73
m-Xylene/p-Xylene	6.17	5.17	5.02	5.21	4.65	5.34
Styrene	0.42	0.28	0.29	0.20	0.18	0.25
o-Xylene	2.40	1.78	1.89	1.91	1.84	1.97
1-Nonene	0.11	0.04	0.03	0.04	0.03	0.07
n-Nonane	0.48	0.29	0.39	0.49	0.43	0.42
Isopropylbenzene	0.19	0.18	0.18	0.11	0.18	0.19
a-Pinene	0.47	0.06	0.12	0.20	0.22	0.26
n-Propylbenzene	0.55	0.47	0.45	0.45	0.54	0.47
m-Ethyltoluene	1.95	1.66	1.50	1.34	1.34	1.45
p-Ethyltoluene	0.96	1.08	0.86	0.81	0.91	0.86
1,3,5-Trimethylbenzene	0.85	0.82	0.75	0.57	0.51	0.79
o-Ethyltoluene	0.82	0.68	0.54	0.69	0.64	0.70
b-Pinene	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	2.85	2.51	2.52	2.02	1.85	2.50
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	4.28	0.39	0.47	0.43	0.46	0.40
1,2,3-Trimethylbenzene	0.93	0.48	0.82	0.42	0.47	0.49
m-Diethylbenzene	0.23	0.27	0.23	0.24	0.20	0.23
p-Diethylbenzene	0.22	0.25	0.20	0.19	0.27	0.16
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	25.31	1.01	0.70	0.58	0.72	0.58
1-Dodecene	0.21	ND	ND	ND	ND	ND
n-Dodecane	13.28	0.83	0.49	0.19	0.24	0.18
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.62	0.29	0.83	0.17	0.41	0.05
TNMOC (w/ unknowns)	243.62	128.41	139.98	148.14	140.40	149.64
TNMOC (speciated)	204.97	104.37	111.60	119.55	105.74	124.12

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

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SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	11298R2		11323	11349	11359	11371	11367
Sampling Date:	9/15/97		9/16/97	9/17/97	9/18/97	9/19/97	9/22/97
Analysis Date:	9/20/97		9/24/97	9/26/97	9/26/97	9/27/97	9/27/97
Ethylene	4.32		3.23	4.01	3.63	4.53	3.54
Acetylene	3.83		2.13	3.10	2.56	2.49	2.26
Ethane	0.22	a	1.41	5.62	8.40	6.06	6.69
Propylene	1.31		1.06	0.97	1.13	1.11	1.12
Propane	5.44		5.74	7.86	11.31	9.26	15.08
Propyne	ND		ND	ND	ND	ND	ND
Isobutane	2.61		2.07	2.52	3.56	3.06	6.87
Isobutene/1-Butene	1.63		1.22	1.25	1.42	1.30	1.14
1,3-Butadiene	0.06		0.05	0.06	0.02	0.03	0.13
n-Butane	5.33		3.84	5.33	7.72	5.79	11.87
trans-2-Butene	0.15		0.06	0.10	0.16	0.12	0.14
cis-2-Butene	0.26		0.12	0.21	0.25	0.21	0.22
3-Methyl-1-butene	0.15		0.07	0.09	0.10	0.11	0.13
Isopentane	10.51		7.36	7.78	9.60	10.51	16.64
1-Pentene	0.50		0.27	0.27	0.38	0.70	0.59
2-Methyl-1-butene	0.68		0.44	0.34	0.52	0.46	0.70
n-Pentane	5.36		4.03	4.40	6.03	4.92	9.73
Isoprene	0.58		0.39	0.34	0.45	0.44	0.30
trans-2-Pentene	0.84		0.56	0.57	0.67	0.55	0.92
cis-2-Pentene	0.53		0.43	0.34	0.50	0.41	0.68
2-Methyl-2-butene	0.98		0.74	0.58	0.79	0.60	1.12
2,2-Dimethylbutane	0.60		0.40	0.47	0.60	0.55	1.04
Cyclopentene	0.16		0.19	0.12	0.19	0.12	0.20
4-Methyl-1-pentene	0.16		0.08	0.07	0.05	0.07	0.21
Cyclopentane	0.79		0.61	0.67	0.87	0.71	1.10
2,3-Dimethylbutane	1.31		0.87	0.86	1.29	1.01	1.87
2-Methylpentane	4.25		3.17	3.07	3.67	3.42	6.43
3-Methylpentane	3.58		2.81	2.61	3.32	3.03	5.61
2-Methyl-1-pentene	0.21		0.17	0.14	0.18	0.16	0.30
1-Hexene	0.21		0.31	0.19	0.21	0.13	0.28
2-Ethyl-1-butene	ND		ND	ND	ND	ND	ND
n-Hexane	3.40		2.77	2.68	3.37	2.84	6.01
trans-2-Hexene	0.22		0.16	0.16	0.19	0.14	0.28
cis-2-Hexene	0.15		0.10	0.11	0.13	0.09	0.22
Methylcyclopentane	1.87		1.37	1.49	1.87	1.56	2.62
2,4-Dimethylpentane	0.72		0.55	0.47	0.66	0.55	0.85
Benzene	3.02		2.23	2.04	2.82	2.64	4.21
Cyclohexane	0.68		0.65	0.65	0.91	0.79	1.16
2-Methylhexane	3.44		3.18	3.25	3.54	3.29	4.53
2,3-Dimethylpentane	1.15		1.03	1.15	1.29	1.23	1.39

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All concentrations reported in ppbC

Sample No.:	11298R2	11323	11349	11359	11371	11367
Sampling Date:	9/15/97	9/16/97	9/17/97	9/18/97	9/19/97	9/22/97
Analysis Date:	9/20/97	9/24/97	9/26/97	9/26/97	9/27/97	9/27/97
3-Methylhexane	1.93	1.46	1.31	1.71	1.49	2.63
1-Heptene	0.21	0.29	0.21	0.33	0.21	0.38
2,2,4-Trimethylpentane	2.34	1.57	1.47	1.63	1.76	2.11
n-Heptane	1.48	1.41	1.21	1.31	1.41	3.12
Methylcyclohexane	0.96	0.90	0.96	1.31	0.94	1.77
2,2,3-Trimethylpentane	0.40	0.33	0.24	0.33	0.35	0.65
2,3,4-Trimethylpentane	0.90	0.63	0.60	0.71	0.70	0.84
Toluene	8.50	6.09	5.38	6.82	6.33	10.47
2-Methylheptane	0.54	0.44	0.42	0.55	0.38	0.87
3-Methylheptane	0.56	0.43	0.38	0.52	0.44	0.83
1-Octene	0.18	0.15	ND	ND	ND	ND
n-Octane	0.71	0.57	0.53	0.67	0.54	1.24
Ethylbenzene	1.93	1.22	0.91	1.26	1.12	1.93
m-Xylene/p-Xylene	6.06	3.53	3.15	3.85	3.45	6.61
Styrene	0.22	0.21	0.10	0.51	1.17	0.19
o-Xylene	1.89	1.29	1.26	1.36	1.22	2.25
1-Nonene	0.04	0.07	0.04	0.04	0.04	0.04
n-Nonane	0.45	0.33	0.32	0.40	0.39	0.55
Isopropylbenzene	0.19	0.09	0.10	0.17	0.14	0.17
a-Pinene	0.24	0.14	0.14	0.18	0.28	0.12
n-Propylbenzene	0.48	0.38	0.28	0.44	0.37	0.53
m-Ethyltoluene	1.60	1.13	0.94	1.23	1.13	1.83
p-Ethyltoluene	1.02	0.68	0.59	0.77	0.70	1.17
1,3,5-Trimethylbenzene	0.92	0.53	0.45	0.60	0.63	0.87
o-Ethyltoluene	0.69	0.49	0.49	0.50	0.45	0.71
b-Pinene	ND	0.05	ND	0.04	0.09	ND
1,2,4-Trimethylbenzene	2.75	2.06	1.32	1.88	1.77	3.01
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.48	0.49	0.40	0.46	0.49	0.91
1,2,3-Trimethylbenzene	0.63	0.77	0.37	0.40	0.38	0.63
m-Diethylbenzene	0.20	0.17	0.18	0.25	0.20	0.23
p-Diethylbenzene	0.23	0.17	0.14	0.20	0.16	0.19
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.78	1.07	0.63	1.09	0.75	3.22
1-Dodecene	ND	ND	ND	ND	ND	0.62
n-Dodecane	0.48	0.73	0.25	0.68	0.59	2.55
1-Tridecene	ND	ND	ND	0.27	ND	ND
n-Tridecane	0.18	0.18	0.09	19.60	0.19	0.48
TNMOC (w/ unknowns)	143.92	110.32	107.52	161.21	128.97	211.62
TNMOC (speciated)	111.35	85.95	90.77	136.45	105.24	171.90

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	11403	11427	11426	11449	11457	11445
Sampling Date:	9/23/97	9/24/97	9/25/97	9/26/97	9/29/97	9/30/97
Analysis Date:	9/26/97	9/30/97	9/30/97	10/3/97	10/4/97	10/4/97
Ethylene	5.21	3.38	2.59	7.61	5.65	5.10
Acetylene	2.80	2.53	2.09	5.67	3.79	3.82
Ethane	5.13	1.70	1.21	3.82	2.92	3.43
Propylene	1.45	1.08	0.83	2.93	1.87	1.47
Propane	5.40	9.16	6.91	11.11	5.79	15.40
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.22	2.91	2.32	6.53	1.34	6.61
Isobutene/1-Butene	1.86	1.30	1.05	4.16	2.75	1.61
1,3-Butadiene	0.10	0.03	0.02	0.22	0.11	0.07
n-Butane	5.65	7.03	5.34	22.95	4.14	12.41
trans-2-Butene	0.15	0.14	0.07	1.09	0.15	0.12
cis-2-Butene	0.26	0.16	0.09	1.45	0.29	0.16
3-Methyl-1-butene	0.17	0.12	0.08	1.14	0.24	0.24
Isopentane	12.53	9.47	7.44	61.67	15.15	17.82
1-Pentene	0.87	0.39	0.06	3.18	0.61	0.53
2-Methyl-1-butene	0.67	0.54	0.42	3.84	1.09	0.60
n-Pentane	4.77	5.59	4.49	20.10	6.57	8.50
Isoprene	0.56	0.20	0.15	0.63	0.93	0.32
trans-2-Pentene	0.86	0.75	0.64	4.94	1.36	0.72
cis-2-Pentene	0.58	0.47	0.38	2.71	0.87	0.46
2-Methyl-2-butene	1.11	0.90	0.79	6.60	1.74	0.69
2,2-Dimethylbutane	0.55	0.55	0.41	1.80	0.78	0.96
Cyclopentene	0.19	0.17	0.15	0.77	0.33	0.17
4-Methyl-1-pentene	0.10	0.07	0.03	0.35	0.17	0.11
Cyclopentane	0.80	0.70	0.64	2.04	0.90	1.12
2,3-Dimethylbutane	1.75	1.02	0.95	4.49	1.48	1.88
2-Methylpentane	4.04	3.82	3.30	16.06	5.70	5.97
3-Methylpentane	3.05	3.02	2.25	9.44	4.46	5.86
2-Methyl-1-pentene	0.23	0.20	0.17	0.76	0.36	0.19
1-Hexene	0.26	0.21	0.16	0.55	0.37	0.28
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	3.38	3.54	2.85	8.36	4.55	5.16
trans-2-Hexene	0.23	0.21	0.19	0.72	0.37	0.24
cis-2-Hexene	0.16	0.14	0.13	0.43	0.26	0.14
Methylcyclopentane	1.61	1.68	1.45	4.11	2.30	2.51
2,4-Dimethylpentane	0.82	0.61	0.51	1.65	0.78	0.81
Benzene	3.21	2.77	2.33	6.72	4.29	4.16
Cyclohexane	0.69	0.63	0.50	1.18	0.80	0.97
2-Methylhexane	3.63	3.42	3.47	5.73	4.62	4.30
2,3-Dimethylpentane	1.48	1.29	1.54	2.59	1.80	1.62

SNMOC 1997 REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	11403	11427	11426	11449	11457	11445
Sampling Date:	9/23/97	9/24/97	9/25/97	9/26/97	9/29/97	9/30/97
Analysis Date:	9/26/97	9/30/97	9/30/97	10/3/97	10/4/97	10/4/97
3-Methylhexane	1.58	1.35	1.25	4.28	2.70	2.67
1-Heptene	0.19	0.29	0.21	0.61	0.34	0.36
2,2,4-Trimethylpentane	2.75	2.12	1.55	5.74	3.03	3.04
n-Heptane	1.41	1.56	1.41	2.87	2.35	1.83
Methylcyclohexane	0.81	0.84	0.68	1.49	0.97	1.33
2,2,3-Trimethylpentane	0.43	0.39	0.32	0.95	0.59	0.54
2,3,4-Trimethylpentane	1.13	0.81	0.62	2.11	1.38	1.22
Toluene	9.06	7.41	6.17	19.20	11.18	12.08
2-Methylheptane	0.55	0.52	0.45	1.26	0.73	0.68
3-Methylheptane	0.53	0.46	0.40	1.16	0.71	0.68
1-Octene	ND	ND	ND	0.12	0.15	ND
n-Octane	0.66	0.62	0.48	1.40	0.68	0.84
Ethylbenzene	1.61	1.41	1.09	2.56	2.17	1.86
m-Xylene/p-Xylene	5.65	4.66	4.03	8.26	7.35	6.65
Styrene	0.33	0.17	0.26	0.55	0.28	0.50
o-Xylene	1.89	1.69	1.46	2.95	2.44	2.31
1-Nonene	0.03	0.03	0.03	0.06	0.05	0.08
n-Nonane	0.48	0.29	0.31	0.57	0.40	0.62
Isopropylbenzene	0.14	0.10	0.13	0.19	0.14	0.16
a-Pinene	1.95	0.10	0.07	0.50	0.15	0.27
n-Propylbenzene	0.45	0.39	0.32	0.69	0.55	0.54
m-Ethyltoluene	2.00	1.25	0.99	2.47	2.09	1.94
p-Ethyltoluene	0.97	0.76	0.55	1.49	1.23	1.27
1,3,5-Trimethylbenzene	0.79	0.60	0.49	1.22	0.94	1.04
o-Ethyltoluene	0.71	0.44	0.38	1.34	0.82	0.80
b-Pinene	1.24	0.07	0.03	0.21	ND	ND
1,2,4-Trimethylbenzene	2.46	2.04	1.65	4.23	3.50	3.55
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.53	0.27	0.22	0.70	0.42	0.74
1,2,3-Trimethylbenzene	0.70	0.42	0.36	0.93	1.01	0.65
m-Diethylbenzene	0.24	0.20	0.17	0.29	0.30	0.22
p-Diethylbenzene	0.21	0.14	0.15	0.25	0.19	0.20
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.00	0.47	0.74	0.80	0.60	0.83
1-Dodecene	0.83	ND	ND	ND	0.15	0.59
n-Dodecane	1.24	0.50	1.07	0.48	0.39	0.46
1-Tridecene	0.06	ND	ND	ND	ND	ND
n-Tridecane	0.31	0.25	0.35	0.12	0.09	0.22
TNMOC (w/ unknowns)	147.94	127.80	105.24	371.44	180.36	206.00
TNMOC (speciated)	123.44	104.51	86.45	312.16	141.76	167.30

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09447	09444	09465	09476	09494	09500
Sampling Date:	6/3/97	6/4/97	6/6/97	6/9/97	6/10/97	6/11/97
Analysis Date:	7/21/97	7/21/97	7/21/97	7/21/97	7/22/97	7/22/97
Ethylene	8.15	4.46	12.01	10.98	6.74	20.23
Acetylene	6.09	5.33	10.07	9.19	6.04	15.54
Ethane	21.66	19.60	24.04	34.35	31.11	38.74
Propylene	2.90	2.06	4.54	3.85	2.37	8.00
Propane	14.75	31.20	19.05	23.93	12.39	33.52
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.57	7.12	5.36	5.46	3.60	6.74
Isobutene/1-Butene	4.74	3.94	6.16	7.15	4.03	10.12
1,3-Butadiene	0.43	0.17	0.56	0.60	0.34	1.37
n-Butane	12.44	19.58	11.95	14.40	8.23	15.53
trans-2-Butene	0.97	0.76	0.70	1.19	0.47	1.25
cis-2-Butene	0.82	0.84	0.66	1.03	0.62	0.97
3-Methyl-1-butene	0.51	0.45	0.43	0.64	0.35	0.72
Isopentane	24.84	22.90	25.69	30.71	19.47	33.87
1-Pentene	0.98	0.70	0.93	1.32	0.74	1.19
2-Methyl-1-butene	1.54	1.36	1.69	2.20	1.10	2.57
n-Pentane	11.87	12.84	12.36	19.99	9.88	20.98
Isoprene	0.54	0.50	0.72	0.95	0.61	2.21
trans-2-Pentene	2.17	1.39	1.95	2.78	1.10	2.82
cis-2-Pentene	0.90	0.97	0.90	1.37	0.79	1.45
2-Methyl-2-butene	1.81	1.71	1.96	2.72	1.25	3.61
2,2-Dimethylbutane	1.46	2.30	3.05	3.35	2.68	3.45
Cyclopentene	0.28	0.25	0.29	0.44	0.20	0.65
4-Methyl-1-pentene	0.15	0.19	0.16	0.21	0.26	0.51
Cyclopentane	1.38	1.42	1.58	1.86	1.23	1.80
2,3-Dimethylbutane	3.39	2.60	2.82	3.56	2.15	4.98
2-Methylpentane	6.18	6.02	8.79	9.09	5.74	12.47
3-Methylpentane	6.42	7.07	9.59	8.37	5.76	11.07
2-Methyl-1-pentene	0.39	0.22	0.39	0.41	0.27	0.67
1-Hexene	0.36	0.22	0.32	0.42	0.18	0.59
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.85	5.29	8.82	7.84	4.57	10.21
trans-2-Hexene	0.23	0.19	0.29	0.53	0.20	0.51
cis-2-Hexene	0.17	0.12	0.21	0.24	0.15	0.35
Methylcyclopentane	2.57	2.72	4.54	4.35	2.65	5.44
2,4-Dimethylpentane	2.07	1.38	1.36	1.86	1.36	2.81
Benzene	3.83	2.78	6.15	5.41	3.69	10.20
Cyclohexane	0.71	1.21	1.43	1.50	0.99	1.64
2-Methylhexane	4.16	3.68	5.66	5.07	4.31	7.05
2,3-Dimethylpentane	2.83	1.88	2.34	2.35	1.91	3.47

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09447	09444	09465	09476	09494	09500
Sampling Date:	6/3/97	6/4/97	6/6/97	6/9/97	6/10/97	6/11/97
Analysis Date:	7/21/97	7/21/97	7/21/97	7/21/97	7/22/97	7/22/97
3-Methylhexane	3.57	2.69	5.72	5.42	3.33	7.10
1-Heptene	ND	0.42	0.60	0.57	0.41	ND
2,2,4-Trimethylpentane	11.16	5.69	6.16	8.31	6.67	16.37
n-Heptane	1.50	1.76	2.98	2.29	1.54	3.20
Methylcyclohexane	1.18	1.94	2.06	1.97	1.06	2.77
2,2,3-Trimethylpentane	1.58	0.86	0.95	1.28	1.03	2.38
2,3,4-Trimethylpentane	3.93	2.33	2.29	3.10	2.50	5.65
Toluene	16.49	8.73	13.19	15.89	11.27	27.75
2-Methylheptane	0.64	0.53	0.90	0.87	0.60	1.27
3-Methylheptane	0.78	0.50	0.96	0.89	0.79	1.24
1-Octene	0.09	0.09	0.15	0.02	ND	0.17
n-Octane	0.67	0.58	0.95	0.80	0.55	1.13
Ethylbenzene	2.69	1.77	2.47	2.71	1.98	4.74
m-Xylene/p-Xylene	8.11	4.37	7.60	7.80	5.00	14.87
Styrene	0.58	0.42	0.40	1.59	0.53	0.78
o-Xylene	2.84	1.68	2.72	2.86	1.88	5.08
1-Nonene	0.31	0.07	0.16	0.17	0.15	0.23
n-Nonane	0.83	0.54	0.84	0.70	0.58	0.84
Isopropylbenzene	0.18	0.13	0.15	0.16	0.19	0.23
a-Pinene	3.79	0.86	0.50	3.17	1.20	3.97
n-Propylbenzene	0.52	0.29	0.50	0.34	0.45	0.91
m-Ethyltoluene	1.44	0.86	1.74	2.03	1.29	3.58
p-Ethyltoluene	0.90	0.59	1.16	0.99	0.89	2.09
1,3,5-Trimethylbenzene	1.02	0.62	1.38	1.34	0.97	2.37
o-Ethyltoluene	0.61	0.33	0.83	1.23	0.67	2.04
b-Pinene	1.67	0.19	0.18	1.96	0.70	3.54
1,2,4-Trimethylbenzene	1.94	1.14	2.33	2.35	1.78	4.52
1-Decene	ND	0.07	ND	0.07	ND	ND
n-Decane	0.94	0.62	0.83	0.67	0.64	0.86
1,2,3-Trimethylbenzene	0.43	0.23	0.65	0.61	0.49	1.30
m-Diethylbenzene	0.05	0.13	0.06	0.04	0.04	0.13
p-Diethylbenzene	0.24	0.14	0.13	0.18	0.16	0.28
1-Undecene	0.48	ND	0.26	0.09	0.13	0.14
n-Undecane	1.30	0.93	0.52	0.53	0.84	0.97
1-Dodecene	0.57	0.03	0.37	0.24	ND	0.50
n-Dodecane	1.06	0.41	0.37	0.34	0.53	0.81
1-Tridecene	0.43	ND	ND	ND	ND	ND
n-Tridecane	0.98	0.11	ND	ND	ND	0.28
TNMOC (w/ unknowns)	307.82	251.38	299.73	345.44	232.03	474.30
TNMOC (speciated)	239.60	220.10	262.56	305.24	200.36	423.39

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09502	09533	09542	09544	09561	09579
Sampling Date:	6/12/97	6/13/97	6/16/97	6/17/97	6/18/97	6/20/97
Analysis Date:	7/22/97	7/22/97	7/23/97	7/23/97	7/31/97	7/24/97
Ethylene	8.20	5.07	4.32	1.91	10.13	4.76
Acetylene	6.54	3.94	4.35	2.54	8.70	4.27
Ethane	19.66	11.31	9.83	26.27	26.15	10.43
Propylene	3.13	1.66	1.51	0.56	3.37	1.66
Propane	20.09	6.46	6.08	27.84	18.42	6.60
Propyne	ND	ND	0.01	ND	ND	ND
Isobutane	3.26	2.47	2.26	5.87	5.15	2.06
Isobutene/1-Butene	4.73	3.44	4.00	2.10	5.51	3.06
1,3-Butadiene	0.40	0.11	0.10	0.05	0.50	0.10
n-Butane	6.03	3.45	3.32	12.90	7.26	2.70
trans-2-Butene	0.28	0.17	0.17	0.13	0.19	0.16
cis-2-Butene	0.25	0.26	0.18	0.11	0.36	0.23
3-Methyl-1-butene	0.21	0.13	0.11	0.04	0.24	0.11
Isopentane	13.21	9.05	7.54	6.54	16.13	6.87
1-Pentene	0.43	0.58	0.30	0.28	0.44	0.22
2-Methyl-1-butene	0.80	0.48	0.48	0.18	0.92	0.49
n-Pentane	7.51	4.47	3.51	5.95	7.91	3.26
Isoprene	0.48	0.74	0.84	0.16	1.16	1.22
trans-2-Pentene	0.67	0.47	0.44	0.15	0.75	0.45
cis-2-Pentene	0.43	0.38	0.27	0.11	0.55	0.38
2-Methyl-2-butene	0.98	0.67	0.62	0.14	1.00	0.71
2,2-Dimethylbutane	1.49	2.30	2.46	2.01	2.39	2.02
Cyclopentene	0.20	0.16	0.19	0.04	0.22	0.15
4-Methyl-1-pentene	0.36	0.17	0.16	0.13	0.22	0.12
Cyclopentane	1.15	0.84	0.70	0.78	1.25	0.77
2,3-Dimethylbutane	1.20	1.23	0.85	0.59	2.09	1.08
2-Methylpentane	4.88	3.45	2.92	2.49	6.58	3.34
3-Methylpentane	5.11	3.26	3.22	2.71	5.90	3.35
2-Methyl-1-pentene	0.20	0.14	0.11	0.05	0.29	0.16
1-Hexene	0.18	0.13	0.13	0.06	0.26	0.13
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.34	2.84	2.83	3.09	5.05	2.84
trans-2-Hexene	0.18	0.12	0.15	0.03	0.23	0.12
cis-2-Hexene	0.10	0.09	0.08	0.02	0.15	0.06
Methylcyclopentane	2.86	1.97	1.87	1.67	3.03	1.59
2,4-Dimethylpentane	0.81	0.59	0.56	0.31	0.95	0.63
Benzene	3.71	2.56	2.22	0.87	4.60	2.15
Cyclohexane	0.73	0.71	0.64	1.38	0.95	0.65
2-Methylhexane	4.11	3.76	3.10	3.53	4.87	3.92
2,3-Dimethylpentane	1.46	1.33	1.14	1.49	1.79	1.29

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09502	09533	09542	09544	09561	09579
Sampling Date:	6/12/97	6/13/97	6/16/97	6/17/97	6/18/97	6/20/97
Analysis Date:	7/22/97	7/22/97	7/23/97	7/23/97	7/31/97	7/24/97
3-Methylhexane	2.85	1.59	1.43	1.00	3.87	1.29
1-Heptene	0.37	ND	0.19	0.51	0.40	0.23
2,2,4-Trimethylpentane	3.41	3.07	1.85	0.68	3.78	2.00
n-Heptane	1.75	0.96	0.83	1.33	2.02	0.95
Methylcyclohexane	0.98	0.86	0.67	1.61	1.50	0.88
2,2,3-Trimethylpentane	0.59	0.38	0.33	0.14	0.69	0.37
2,3,4-Trimethylpentane	1.25	0.88	0.71	0.27	1.50	0.84
Toluene	8.74	5.61	4.50	2.19	10.43	5.55
2-Methylheptane	0.52	0.39	0.33	0.32	0.63	0.39
3-Methylheptane	0.61	0.36	0.37	0.31	0.83	0.45
1-Octene	0.08	0.05	0.08	0.09	0.10	0.08
n-Octane	0.61	0.37	0.36	0.52	0.56	0.42
Ethylbenzene	1.60	1.47	0.83	0.40	1.82	0.85
m-Xylene/p-Xylene	5.62	3.30	2.43	1.22	5.23	3.54
Styrene	0.05	0.19	0.06	0.08	0.12	0.14
o-Xylene	2.02	1.17	0.89	0.64	2.04	1.18
1-Nonene	0.13	0.10	0.10	0.11	ND	0.08
n-Nonane	0.61	0.26	0.32	0.28	0.33	0.39
Isopropylbenzene	0.12	0.12	0.07	1.53	0.30	0.11
a-Pinene	0.49	0.38	0.43	0.43	0.41	0.60
n-Propylbenzene	0.36	0.20	0.20	0.06	0.22	0.23
m-Ethyltoluene	1.28	0.91	0.79	0.39	1.32	0.82
p-Ethyltoluene	0.71	0.66	0.48	0.22	0.81	0.54
1,3,5-Trimethylbenzene	1.09	0.63	0.38	0.24	0.79	0.65
o-Ethyltoluene	0.69	0.58	0.35	0.25	0.50	0.69
b-Pinene	0.30	0.31	0.49	0.56	0.63	0.50
1,2,4-Trimethylbenzene	1.95	1.20	0.86	0.38	1.66	1.14
1-Decene	ND	0.01	0.04	0.04	0.08	0.02
n-Decane	0.70	0.35	0.30	0.16	0.38	0.56
1,2,3-Trimethylbenzene	0.26	0.29	0.13	ND	0.39	0.20
m-Diethylbenzene	0.07	ND	0.03	ND	ND	0.06
p-Diethylbenzene	0.10	ND	0.10	ND	ND	0.06
1-Undecene	0.13	ND	1.14	3.48	ND	1.06
n-Undecane	0.72	0.53	0.23	0.23	0.69	0.47
1-Dodecene	0.25	ND	0.04	ND	0.07	0.09
n-Dodecane	0.57	0.47	0.12	0.28	0.21	0.60
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	0.14	ND	0.12	ND	ND
TNMOC (w/ unknowns)	193.97	123.52	117.75	150.13	222.87	118.23
TNMOC (speciated)	171.90	108.74	95.99	135.13	199.97	102.08

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09655	09651	09683	09682	09693	09701
Sampling Date:	6/23/97	6/24/97	6/25/97	6/26/97	6/27/97	6/30/97
Analysis Date:	7/24/97	7/23/97	7/23/97	7/24/97	7/24/97	7/25/97
Ethylene	6.41	4.11	16.45	6.08	6.87	6.06
Acetylene	4.16	2.97	12.59	5.64	5.43	4.89
Ethane	11.59	7.87	30.98	23.64	22.62	8.42
Propylene	2.39	1.35	6.07	2.02	2.42	2.20
Propane	13.43	7.31	13.11	18.74	13.68	10.24
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.14	1.91	3.58	3.59	3.29	1.86
Isobutene/1-Butene	4.58	3.17	8.74	3.83	4.12	4.83
1,3-Butadiene	0.19	0.05	0.97	0.16	0.22	0.22
n-Butane	5.10	3.20	7.00	7.15	6.83	3.47
trans-2-Butene	0.22	0.18	0.78	0.22	0.24	0.32
cis-2-Butene	0.25	0.28	0.69	0.25	0.33	0.29
3-Methyl-1-butene	0.16	0.11	0.55	0.14	0.20	0.20
Isopentane	9.51	6.17	28.51	11.36	13.65	10.98
1-Pentene	0.25	0.54	0.90	0.27	0.50	0.73
2-Methyl-1-butene	0.58	0.43	2.12	0.61	0.87	0.80
n-Pentane	7.58	3.53	13.48	5.77	6.61	4.84
Isoprene	0.78	1.26	1.79	0.74	1.75	1.82
trans-2-Pentene	0.65	0.45	2.78	0.57	0.76	0.75
cis-2-Pentene	0.48	0.37	1.27	0.43	0.54	0.48
2-Methyl-2-butene	1.00	0.61	3.06	0.62	1.11	1.13
2,2-Dimethylbutane	3.12	2.22	3.35	2.11	2.49	2.35
Cyclopentene	0.18	0.14	0.61	0.09	0.19	0.22
4-Methyl-1-pentene	0.17	0.21	0.53	0.23	0.17	0.26
Cyclopentane	1.11	0.83	1.81	0.96	1.01	0.80
2,3-Dimethylbutane	1.10	0.96	3.17	1.39	1.40	1.17
2-Methylpentane	4.00	2.81	12.23	4.60	4.99	4.20
3-Methylpentane	3.73	2.54	10.75	4.81	5.34	3.36
2-Methyl-1-pentene	0.15	0.14	0.67	0.21	0.29	0.20
1-Hexene	0.15	0.08	0.45	0.14	0.18	0.18
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.52	2.14	10.69	3.51	3.97	3.28
trans-2-Hexene	0.15	0.12	0.63	0.14	0.17	0.20
cis-2-Hexene	0.10	0.05	0.39	0.12	0.11	0.11
Methylcyclopentane	3.21	1.57	5.55	2.17	2.54	2.43
2,4-Dimethylpentane	0.60	0.53	1.91	0.66	0.85	0.64
Benzene	2.68	1.92	8.56	2.98	3.82	2.81
Cyclohexane	0.87	0.71	1.79	0.82	0.78	0.74
2-Methylhexane	4.00	3.83	7.63	3.89	4.37	3.84
2,3-Dimethylpentane	1.32	1.92	2.68	1.36	1.48	1.37

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09655	09651	09683	09682	09693	09701
Sampling Date:	6/23/97	6/24/97	6/25/97	6/26/97	6/27/97	6/30/97
Analysis Date:	7/24/97	7/23/97	7/23/97	7/24/97	7/24/97	7/25/97
3-Methylhexane	2.16	1.36	8.27	2.62	2.81	1.95
1-Heptene	0.20	0.24	1.17	0.26	0.30	0.20
2,2,4-Trimethylpentane	2.13	1.86	8.34	2.67	3.06	2.17
n-Heptane	1.32	0.88	3.58	1.25	1.41	1.12
Methylcyclohexane	1.09	0.91	2.78	1.04	1.24	0.92
2,2,3-Trimethylpentane	0.32	0.26	1.67	0.43	0.52	0.42
2,3,4-Trimethylpentane	0.87	0.67	3.20	1.15	1.16	1.07
Toluene	6.02	4.70	20.26	6.84	7.69	6.12
2-Methylheptane	0.43	0.39	1.35	0.46	0.54	0.44
3-Methylheptane	0.49	0.40	1.32	0.51	0.62	0.50
1-Octene	0.04	0.15	0.02	0.07	0.02	0.01
n-Octane	0.47	0.38	1.09	0.43	0.47	0.46
Ethylbenzene	1.34	1.08	4.60	1.18	2.03	0.99
m-Xylene/p-Xylene	4.34	3.14	13.87	3.73	5.24	3.58
Styrene	0.23	0.23	0.45	0.12	0.14	0.18
o-Xylene	1.49	1.08	4.91	1.47	1.83	1.41
1-Nonene	0.14	ND	0.18	0.07	0.06	0.09
n-Nonane	0.46	0.25	1.04	0.30	0.37	0.48
Isopropylbenzene	1.74	1.94	0.37	0.11	0.11	0.12
a-Pinene	0.78	0.49	2.32	0.49	0.46	0.84
n-Propylbenzene	0.22	0.24	0.85	0.31	0.37	0.19
m-Ethyltoluene	1.04	0.79	3.42	1.02	1.42	1.14
p-Ethyltoluene	0.53	0.50	2.17	0.58	0.83	0.63
1,3,5-Trimethylbenzene	0.74	0.51	2.39	0.61	0.81	0.74
o-Ethyltoluene	0.54	0.40	1.97	0.22	0.78	0.56
b-Pinene	0.44	0.34	2.08	0.72	0.82	0.50
1,2,4-Trimethylbenzene	1.29	0.98	4.56	1.27	1.62	1.36
1-Decene	0.04	0.03	ND	ND	ND	ND
n-Decane	0.43	0.28	1.27	0.29	0.31	0.46
1,2,3-Trimethylbenzene	0.30	0.26	1.42	0.33	0.53	0.26
m-Diethylbenzene	0.05	0.08	0.12	0.05	0.07	0.07
p-Diethylbenzene	0.17	0.30	0.42	0.04	0.04	0.08
1-Undecene	0.63	0.69	0.28	0.60	0.84	0.09
n-Undecane	0.68	0.82	0.97	0.51	0.34	0.38
1-Dodecene	0.11	0.08	0.22	0.09	0.19	0.15
n-Dodecane	0.65	1.26	0.77	0.39	0.27	0.23
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.15	0.21	ND	ND	ND	ND
TNMOC (w/ unknowns)	158.74	114.14	368.35	173.68	186.44	149.90
TNMOC (speciated)	137.68	96.78	332.53	154.26	165.49	122.58

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09702	09821	09908	09953	9979D1	09979R1
Sampling Date:	7/1/97	7/2/97	7/9/97	7/10/97	7/11/97	7/11/97
Analysis Date:	7/25/97	7/30/97	8/1/97	8/1/97	7/28/97	7/31/97
Ethylene	2.68	3.17	4.11	2.50	4.40	4.33
Acetylene	2.21	3.21	2.83	1.72	3.21	3.20
Ethane	4.51	5.15	6.36	0.55	5.74	5.73
Propylene	1.04	1.05	1.42	0.86	1.53	1.54
Propane	3.63	3.77	8.20	2.96	11.08	10.69
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.49	1.64	2.24	1.27	1.62	1.54
Isobutene/1-Butene	2.34	2.99	4.08	2.62	2.59	2.55
1,3-Butadiene	0.04	0.07	0.31	0.08	0.07	0.07
n-Butane	1.88	2.14	4.66	2.19	2.41	2.26
trans-2-Butene	0.14	0.11	0.23	0.21	0.16	0.16
cis-2-Butene	0.18	0.20	0.43	0.19	0.27	0.25
3-Methyl-1-butene	0.07	0.07	0.17	0.18	0.14	0.14
Isopentane	4.73	5.51	11.84	6.91	13.15	12.67
1-Pentene	0.16	0.35	0.91	0.31	0.42	0.26
2-Methyl-1-butene	0.24	0.34	0.73	0.49	0.44	0.43
n-Pentane	2.13	2.57	6.77	3.11	9.25	8.97
Isoprene	1.05	1.13	2.18	1.33	1.44	1.32
trans-2-Pentene	0.30	0.33	0.73	0.44	0.55	0.54
cis-2-Pentene	0.23	0.25	0.48	0.33	0.40	0.40
2-Methyl-2-butene	0.41	0.53	1.11	0.70	0.71	0.67
2,2-Dimethylbutane	1.86	1.58	2.08	2.11	1.58	0.55
Cyclopentene	0.13	0.09	0.20	0.23	0.23	0.21
4-Methyl-1-pentene	0.27	0.30	0.38	0.10	0.15	0.26
Cyclopentane	0.63	0.72	0.93	0.72	1.73	1.94
2,3-Dimethylbutane	0.74	0.84	1.20	0.88	0.95	1.16
2-Methylpentane	1.87	2.11	4.50	2.97	3.17	3.18
3-Methylpentane	1.41	2.36	4.08	2.16	3.04	2.79
2-Methyl-1-pentene	0.06	0.10	0.21	0.11	0.16	0.17
1-Hexene	0.08	0.09	0.20	0.12	0.12	0.12
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	1.33	1.57	3.34	1.97	2.77	2.68
trans-2-Hexene	0.06	0.08	0.17	0.09	0.12	0.12
cis-2-Hexene	0.04	0.06	0.12	0.08	0.08	0.07
Methylcyclopentane	1.16	1.09	2.03	1.43	1.76	1.65
2,4-Dimethylpentane	0.42	0.47	0.68	0.40	0.56	0.54
Benzene	1.43	1.54	3.17	1.90	2.20	1.98
Cyclohexane	0.48	0.53	0.82	0.47	0.97	0.84
2-Methylhexane	3.03	2.86	3.85	3.49	3.74	3.82
2,3-Dimethylpentane	0.97	1.02	1.42	1.09	1.60	1.43

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	09702	09821	09908	09953	9979D1	09979R1
Sampling Date:	7/1/97	7/2/97	7/9/97	7/10/97	7/11/97	7/11/97
Analysis Date:	7/25/97	7/30/97	8/1/97	8/1/97	7/28/97	7/31/97
3-Methylhexane	0.83	1.02	2.34	1.39	1.89	1.43
1-Heptene	0.17	0.15	0.26	0.16	0.51	0.25
2,2,4-Trimethylpentane	1.33	1.40	2.54	1.73	1.85	1.78
n-Heptane	0.51	0.64	1.25	1.00	0.96	1.02
Methylcyclohexane	0.61	0.44	0.99	0.69	0.88	0.78
2,2,3-Trimethylpentane	0.18	0.23	0.44	0.34	0.34	0.33
2,3,4-Trimethylpentane	0.50	0.56	1.06	0.72	0.76	0.66
Toluene	3.06	3.12	7.89	4.51	5.84	5.20
2-Methylheptane	0.24	0.26	0.50	0.32	0.36	0.32
3-Methylheptane	0.28	0.33	0.52	0.36	0.42	0.41
1-Octene	ND	ND	ND	0.05	ND	ND
n-Octane	0.27	0.31	0.51	0.27	0.46	0.36
Ethylbenzene	0.81	0.55	0.72	0.40	1.55	0.99
m-Xylene/p-Xylene	2.13	1.95	1.93	1.49	3.70	3.13
Styrene	0.13	0.08	0.09	0.05	0.27	0.36
o-Xylene	0.83	0.70	0.74	0.43	1.24	1.27
1-Nonene	0.03	0.05	0.04	ND	0.05	0.05
n-Nonane	0.28	0.26	0.19	0.15	0.32	0.30
Isopropylbenzene	0.09	0.12	0.14	0.08	0.12	0.21
a-Pinene	0.72	0.46	0.43	0.29	0.55	0.53
n-Propylbenzene	0.17	0.16	0.15	0.08	0.28	0.12
m-Ethyltoluene	0.68	0.64	0.55	0.35	0.83	0.80
p-Ethyltoluene	0.33	0.37	0.31	0.20	0.51	0.66
1,3,5-Trimethylbenzene	0.39	0.34	0.35	0.25	0.56	0.59
o-Ethyltoluene	0.41	0.36	0.29	0.24	0.58	0.48
b-Pinene	1.13	0.69	0.29	0.16	0.41	0.36
1,2,4-Trimethylbenzene	0.66	0.72	0.71	0.42	1.13	0.97
1-Decene	0.08	0.00	ND	0.01	0.02	0.08
n-Decane	0.14	0.29	0.20	0.11	0.43	0.41
1,2,3-Trimethylbenzene	ND	ND	ND	0.06	0.21	0.23
m-Diethylbenzene	ND	ND	ND	ND	0.06	0.07
p-Diethylbenzene	ND	ND	ND	ND	0.10	0.04
1-Undecene	0.53	0.32	ND	ND	ND	ND
n-Undecane	0.24	0.18	0.14	0.31	0.57	0.51
1-Dodecene	ND	ND	0.06	ND	0.11	1.00
n-Dodecane	ND	ND	0.08	0.47	0.42	0.18
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	0.06	ND	ND
TNMOC (w/ unknowns)	79.04	86.28	134.00	81.82	125.76	119.34
TNMOC (speciated)	63.19	68.67	114.88	66.45	112.85	107.15

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	9980D2	9980R2	09976	10030	10045	10051D1
Sampling Date:	7/11/97	7/11/97	7/14/97	7/15/97	7/16/97	7/17/97
Analysis Date:	7/28/97	7/31/97	8/8/97	8/8/97	8/7/97	7/29/97
Ethylene	4.48	4.40	6.39	8.93	18.87	11.48
Acetylene	3.32	3.26	4.90	6.10	13.90	8.66
Ethane	5.23	5.95	11.82	17.11	27.78	20.97
Propylene	1.35	1.31	2.21	3.26	7.19	4.03
Propane	13.14	12.69	7.93	17.69	33.78	22.12
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.70	1.67	2.26	2.42	6.44	5.23
Isobutene/1-Butene	2.44	2.52	4.49	4.98	8.78	5.21
1,3-Butadiene	0.06	0.13	0.17	0.44	1.02	0.44
n-Butane	2.34	2.22	3.08	4.57	12.82	10.19
trans-2-Butene	0.16	0.20	0.21	0.28	0.85	0.43
cis-2-Butene	0.32	0.27	0.30	0.41	1.04	0.50
3-Methyl-1-butene	0.10	0.11	0.19	0.29	0.70	0.37
Isopentane	14.55	14.31	11.26	16.10	40.57	23.04
1-Pentene	0.23	0.10	0.39	0.56	1.27	0.61
2-Methyl-1-butene	0.47	0.48	0.73	1.01	2.71	1.34
n-Pentane	10.81	10.75	5.14	7.27	21.02	11.19
Isoprene	1.40	1.41	1.18	0.99	1.38	1.28
trans-2-Pentene	0.47	0.55	0.77	0.88	2.46	1.30
cis-2-Pentene	0.34	0.40	0.49	0.58	1.54	0.75
2-Methyl-2-butene	0.66	0.70	1.09	1.06	3.92	1.56
2,2-Dimethylbutane	2.01	1.12	2.81	2.04	3.25	1.89
Cyclopentene	0.34	0.34	0.16	0.28	0.57	0.24
4-Methyl-1-pentene	0.32	0.09	0.20	0.25	0.28	0.43
Cyclopentane	2.01	1.91	1.08	1.34	2.67	1.69
2,3-Dimethylbutane	0.89	1.13	1.66	2.22	4.47	2.68
2-Methylpentane	3.04	3.04	5.26	7.27	15.32	8.09
3-Methylpentane	2.84	2.90	4.20	6.23	12.49	8.54
2-Methyl-1-pentene	0.18	0.18	0.20	0.28	0.69	0.39
1-Hexene	0.12	0.14	0.20	0.24	0.51	0.31
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.78	2.69	3.74	6.05	13.37	7.52
trans-2-Hexene	0.11	0.11	0.21	0.31	0.68	0.28
cis-2-Hexene	0.07	0.10	0.13	0.17	0.42	0.19
Methylcyclopentane	1.70	1.64	2.47	3.26	6.91	4.34
2,4-Dimethylpentane	0.58	0.54	0.84	1.18	2.11	1.19
Benzene	1.95	2.15	3.60	4.92	11.02	6.02
Cyclohexane	0.94	0.80	0.68	1.02	2.07	1.05
2-Methylhexane	3.79	3.04	4.71	5.66	9.10	5.52
2,3-Dimethylpentane	1.39	1.01	2.24	2.52	4.07	1.93

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	9980D2	9980R2	09976	10030	10045	10051D1
Sampling Date:	7/11/97	7/11/97	7/14/97	7/15/97	7/16/97	7/17/97
Analysis Date:	7/28/97	7/31/97	8/8/97	8/8/97	8/7/97	7/29/97
3-Methylhexane	1.55	1.66	2.63	3.45	7.89	4.63
1-Heptene	0.21	0.21	0.26	0.35	0.87	0.54
2,2,4-Trimethylpentane	1.79	1.73	3.18	4.81	9.52	5.87
n-Heptane	1.06	1.04	1.54	1.83	4.51	2.61
Methylcyclohexane	0.94	0.81	0.76	1.09	2.36	1.32
2,2,3-Trimethylpentane	0.34	0.30	0.55	0.80	1.98	1.00
2,3,4-Trimethylpentane	0.69	0.75	1.24	1.73	3.38	2.03
Toluene	6.18	5.72	7.40	12.04	22.30	13.87
2-Methylheptane	0.35	0.40	0.51	0.66	1.41	0.87
3-Methylheptane	0.41	0.41	0.60	0.76	1.51	0.91
1-Octene	ND	ND	0.09	0.08	0.21	ND
n-Octane	0.51	0.50	0.45	0.58	1.28	0.90
Ethylbenzene	1.21	1.14	1.33	3.21	4.23	3.71
m-Xylene/p-Xylene	3.92	3.98	4.65	7.26	13.05	9.59
Styrene	1.35	1.44	0.26	0.29	0.70	0.35
o-Xylene	1.36	1.39	1.70	2.56	4.76	3.61
1-Nonene	ND	0.10	0.07	0.09	0.17	0.15
n-Nonane	0.37	0.16	0.28	0.40	1.40	0.95
Isopropylbenzene	0.15	0.15	0.16	0.24	0.65	0.28
a-Pinene	0.54	0.53	0.66	1.83	2.37	1.17
n-Propylbenzene	0.23	0.27	0.30	0.36	1.01	0.56
m-Ethyltoluene	0.94	0.81	1.29	1.93	5.23	2.39
p-Ethyltoluene	0.51	0.40	0.65	1.07	1.64	1.45
1,3,5-Trimethylbenzene	0.58	0.53	0.66	0.87	2.13	1.75
o-Ethyltoluene	0.63	0.49	0.62	0.93	1.52	1.59
b-Pinene	0.35	0.35	0.87	2.23	1.49	0.64
1,2,4-Trimethylbenzene	1.12	1.01	1.47	1.96	4.11	3.34
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.56	0.67	0.12	0.28	2.63	0.85
1,2,3-Trimethylbenzene	0.25	0.29	0.29	0.60	0.99	0.92
m-Diethylbenzene	0.08	0.04	0.07	0.17	0.14	0.15
p-Diethylbenzene	0.10	0.08	0.05	0.11	0.25	0.20
1-Undecene	ND	0.19	0.27	0.19	0.03	ND
n-Undecane	1.71	1.53	0.23	0.56	0.92	0.74
1-Dodecene	0.13	0.14	0.08	0.33	0.43	0.44
n-Dodecane	1.01	1.02	0.17	0.32	0.50	0.57
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.16	0.20	ND	0.14	ND	ND
TNMOC (w/ unknowns)	137.09	135.17	168.20	239.32	476.02	281.39
TNMOC (speciated)	119.92	116.78	134.85	196.28	405.60	252.98

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10051R1	10052D2	10052R2	10061	10182	10197
Sampling Date:	7/17/97	7/17/97	7/17/97	7/18/97	7/21/97	7/22/97
Analysis Date:	7/31/97	7/29/97	7/31/97	8/7/97	8/7/97	8/9/97
Ethylene	11.64	11.44	11.52	13.56	9.44	5.48
Acetylene	8.72	8.58	8.56	10.73	6.86	4.43
Ethane	21.81	20.47	21.17	27.79	10.44	8.86
Propylene	3.93	3.96	3.92	4.61	3.38	2.18
Propane	21.59	21.81	21.70	28.67	6.81	5.55
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	5.24	5.20	5.26	7.11	2.66	1.79
Isobutene/1-Butene	5.35	5.32	5.41	6.52	6.25	3.84
1,3-Butadiene	0.55	0.41	0.53	0.72	0.34	0.30
n-Butane	10.28	10.05	10.14	14.67	4.31	2.85
trans-2-Butene	0.47	0.43	0.48	0.66	0.40	0.21
cis-2-Butene	0.56	0.52	0.51	0.70	0.49	0.27
3-Methyl-1-butene	0.35	0.35	0.36	0.52	0.25	0.17
Isopentane	22.78	23.15	23.50	32.48	17.38	10.17
1-Pentene	0.72	0.56	0.60	0.94	0.59	0.74
2-Methyl-1-butene	1.30	1.32	1.33	1.81	1.17	0.63
n-Pentane	10.90	11.12	11.04	16.75	6.97	4.10
Isoprene	1.11	1.19	1.18	1.13	1.70	1.11
trans-2-Pentene	1.29	1.26	1.32	1.50	1.05	0.67
cis-2-Pentene	0.78	0.75	0.80	1.02	0.73	0.41
2-Methyl-2-butene	1.55	1.55	1.64	2.07	1.60	0.84
2,2-Dimethylbutane	1.75	2.25	2.27	2.57	2.51	0.72
Cyclopentene	0.26	0.26	0.24	0.37	0.29	0.13
4-Methyl-1-pentene	0.28	0.25	0.32	0.27	0.25	0.15
Cyclopentane	1.74	1.83	1.75	2.37	1.48	1.09
2,3-Dimethylbutane	2.63	2.80	2.75	3.35	2.26	1.53
2-Methylpentane	8.35	8.01	8.74	11.09	7.22	4.53
3-Methylpentane	7.85	8.54	8.66	10.21	6.24	4.01
2-Methyl-1-pentene	0.34	0.40	0.43	0.40	0.42	0.28
1-Hexene	0.25	0.32	0.30	0.39	0.27	0.16
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	8.37	7.92	8.63	10.82	6.35	3.17
trans-2-Hexene	0.43	0.25	0.46	0.73	0.40	0.15
cis-2-Hexene	0.20	0.19	0.17	0.23	0.20	0.11
Methylcyclopentane	4.19	4.17	4.38	5.51	3.20	1.86
2,4-Dimethylpentane	1.16	1.36	1.30	1.59	1.10	0.77
Benzene	6.48	6.09	6.51	8.14	5.65	2.96
Cyclohexane	1.24	1.24	1.40	1.60	1.22	0.75
2-Methylhexane	6.11	5.60	6.31	7.06	5.94	4.28
2,3-Dimethylpentane	2.97	2.01	2.95	3.09	2.93	1.96

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10051R1	10052D2	10052R2	10061	10182	10197
Sampling Date:	7/17/97	7/17/97	7/17/97	7/18/97	7/21/97	7/22/97
Analysis Date:	7/31/97	7/29/97	7/31/97	8/7/97	8/7/97	8/9/97
3-Methylhexane	4.30	4.42	5.17	5.88	3.71	2.04
1-Heptene	0.40	0.50	0.40	0.68	0.35	0.46
2,2,4-Trimethylpentane	5.87	5.61	5.62	6.63	5.36	3.01
n-Heptane	2.60	2.37	2.60	3.51	2.10	1.25
Methylcyclohexane	1.38	1.46	1.33	1.90	1.21	0.67
2,2,3-Trimethylpentane	1.16	1.06	1.14	1.34	0.93	0.47
2,3,4-Trimethylpentane	1.97	2.04	2.11	2.32	1.95	1.00
Toluene	12.91	13.99	12.86	18.40	12.03	6.68
2-Methylheptane	0.79	0.82	0.93	0.99	0.68	0.41
3-Methylheptane	0.87	0.86	0.85	1.10	0.77	0.47
1-Octene	ND	ND	ND	0.12	ND	ND
n-Octane	0.81	0.88	0.71	1.01	0.61	0.46
Ethylbenzene	3.11	3.68	2.76	3.73	2.83	1.69
m-Xylene/p-Xylene	8.83	9.68	7.53	10.69	7.73	4.20
Styrene	0.60	0.29	0.44	0.52	0.32	0.15
o-Xylene	3.44	3.63	3.16	4.29	2.88	1.48
1-Nonene	0.32	0.16	0.32	0.44	0.13	0.04
n-Nonane	0.72	0.81	0.71	0.88	0.56	0.28
Isopropylbenzene	0.20	0.29	0.22	0.24	0.23	0.16
a-Pinene	1.14	1.15	1.15	1.06	1.00	0.54
n-Propylbenzene	0.60	0.61	0.40	0.48	0.41	0.25
m-Ethyltoluene	1.97	2.35	1.78	2.06	1.93	1.03
p-Ethyltoluene	1.25	1.30	1.20	1.34	1.07	0.57
1,3,5-Trimethylbenzene	1.38	1.53	1.27	1.48	1.14	0.56
o-Ethyltoluene	1.26	1.37	1.13	0.90	0.85	0.69
b-Pinene	0.61	0.65	0.70	0.37	0.90	0.59
1,2,4-Trimethylbenzene	2.81	3.26	2.43	2.82	2.28	1.07
1-Decene	ND	ND	ND	ND	ND	0.01
n-Decane	0.80	0.85	0.66	0.74	0.84	0.21
1,2,3-Trimethylbenzene	0.67	1.00	0.59	0.74	0.62	0.30
m-Diethylbenzene	0.14	0.16	0.09	0.12	0.14	ND
p-Diethylbenzene	0.17	0.22	0.16	0.24	0.13	ND
1-Undecene	ND	ND	ND	1.49	0.16	0.20
n-Undecane	0.56	0.75	0.57	0.60	2.39	0.18
1-Dodecene	0.53	0.39	0.45	0.07	0.24	0.17
n-Dodecane	0.56	0.33	0.44	0.46	1.64	0.23
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	0.12	0.14	ND
TNMOC (w/ unknowns)	282.54	277.59	283.26	377.55	234.20	145.57
TNMOC (speciated)	250.25	251.40	250.42	323.51	191.03	114.74

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10248	10291	10303	10420	10388D1	10388R1
Sampling Date:	7/23/97	7/24/97	7/25/97	7/28/97	7/29/97	7/29/97
Analysis Date:	8/9/97	8/9/97	8/9/97	8/21/97	8/20/97	8/21/97
Ethylene	8.44	21.35	6.44	7.57	14.37	14.33
Acetylene	6.28	16.16	4.89	6.38	10.92	11.03
Ethane	12.61	18.30	16.27	15.26	24.92	25.11
Propylene	3.07	8.40	2.19	2.74	5.40	5.31
Propane	15.32	17.03	15.78	13.36	29.58	30.07
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.85	4.17	3.83	3.43	6.44	6.41
Isobutene/1-Butene	4.50	10.73	3.45	5.10	6.47	6.49
1,3-Butadiene	0.42	1.55	0.14	0.36	0.79	0.78
n-Butane	4.58	10.03	6.80	6.51	14.45	14.67
trans-2-Butene	0.25	0.86	0.25	0.31	0.78	0.81
cis-2-Butene	0.32	0.81	0.32	0.36	0.82	0.74
3-Methyl-1-butene	0.26	0.64	0.22	0.26	0.78	0.73
Isopentane	14.34	33.08	13.22	16.84	46.60	46.40
1-Pentene	0.25	1.27	0.44	1.01	1.41	1.51
2-Methyl-1-butene	0.88	2.44	0.63	1.00	2.60	2.56
n-Pentane	6.30	13.92	5.92	7.19	21.62	21.47
Isoprene	1.19	1.53	0.83	1.06	1.60	1.66
trans-2-Pentene	0.83	2.51	0.71	0.96	3.07	2.98
cis-2-Pentene	0.54	1.36	0.43	0.62	1.60	1.59
2-Methyl-2-butene	1.04	3.37	0.73	1.31	3.06	2.97
2,2-Dimethylbutane	0.90	3.20	0.91	2.39	3.29	3.23
Cyclopentene	0.21	0.65	0.14	0.31	0.46	0.48
4-Methyl-1-pentene	0.26	0.42	0.28	0.25	0.29	0.31
Cyclopentane	1.16	2.35	1.14	1.29	2.72	2.45
2,3-Dimethylbutane	1.95	4.66	1.64	2.00	5.19	5.14
2-Methylpentane	6.64	15.82	5.07	6.77	24.18	20.13
3-Methylpentane	5.50	12.65	4.97	6.08	14.56	13.93
2-Methyl-1-pentene	0.33	0.67	0.29	0.28	0.75	0.65
1-Hexene	0.23	0.56	0.16	0.24	0.59	0.56
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.49	11.85	4.31	5.63	12.98	12.78
trans-2-Hexene	0.28	0.62	0.13	0.31	0.62	0.51
cis-2-Hexene	0.16	0.43	0.12	0.18	0.42	0.44
Methylcyclopentane	2.65	6.23	2.34	3.16	6.52	6.82
2,4-Dimethylpentane	0.94	2.38	0.78	0.97	2.29	2.91
Benzene	4.21	11.94	3.37	4.36	9.75	10.17
Cyclohexane	0.89	1.76	0.93	1.07	2.01	1.96
2-Methylhexane	5.38	9.33	4.51	5.39	8.27	8.75
2,3-Dimethylpentane	2.63	4.40	1.64	2.45	4.29	4.34

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All concentrations reported in ppbC

Sample No.:	10248	10291	10303	10420	10388D1	10388R1
Sampling Date:	7/23/97	7/24/97	7/25/97	7/28/97	7/29/97	7/29/97
Analysis Date:	8/9/97	8/9/97	8/9/97	8/21/97	8/20/97	8/21/97
3-Methylhexane	3.52	9.31	2.50	3.34	9.66	9.25
1-Heptene	0.61	0.73	0.60	0.41	0.98	1.00
2,2,4-Trimethylpentane	4.30	13.15	3.26	3.99	10.65	10.24
n-Heptane	1.83	4.79	1.60	1.86	4.45	3.97
Methylcyclohexane	1.13	2.13	1.02	1.24	2.22	2.37
2,2,3-Trimethylpentane	0.75	2.59	0.48	0.78	2.06	1.78
2,3,4-Trimethylpentane	1.44	4.31	1.18	1.42	3.68	3.63
Toluene	10.14	25.38	8.11	8.90	26.44	25.02
2-Methylheptane	0.54	1.67	0.52	0.63	1.30	1.27
3-Methylheptane	0.64	1.60	0.61	0.69	1.43	1.46
1-Octene	0.01	ND	ND	0.01	ND	ND
n-Octane	0.52	1.17	0.51	0.54	1.11	1.11
Ethylbenzene	2.27	6.88	1.57	1.81	4.58	3.86
m-Xylene/p-Xylene	5.95	16.41	4.37	5.49	14.02	12.01
Styrene	0.34	0.76	0.23	0.23	0.49	0.32
o-Xylene	2.14	5.91	1.49	1.98	4.74	4.16
1-Nonene	0.02	0.23	0.08	0.10	0.21	0.28
n-Nonane	0.46	0.77	0.62	0.31	1.03	0.80
Isopropylbenzene	0.20	0.49	0.19	0.19	0.38	0.38
a-Pinene	0.78	1.60	0.55	0.65	11.56	11.49
n-Propylbenzene	0.38	1.01	0.34	0.36	0.99	0.75
m-Ethyltoluene	1.43	3.78	0.98	1.42	4.50	4.15
p-Ethyltoluene	0.84	2.12	0.64	0.86	1.65	1.86
1,3,5-Trimethylbenzene	0.80	2.40	0.78	0.80	1.93	2.04
o-Ethyltoluene	0.92	2.03	0.74	0.90	1.99	1.99
b-Pinene	0.96	0.91	0.39	0.60	9.35	8.90
1,2,4-Trimethylbenzene	1.57	4.99	1.36	1.60	3.95	3.23
1-Decene	ND	ND	0.02	ND	ND	ND
n-Decane	0.31	0.51	0.56	0.26	0.75	0.59
1,2,3-Trimethylbenzene	0.32	1.25	0.32	0.35	0.78	0.75
m-Diethylbenzene	0.08	0.20	0.08	0.09	0.12	0.09
p-Diethylbenzene	0.06	0.23	0.06	0.10	0.29	0.24
1-Undecene	0.36	0.09	1.01	0.06	ND	ND
n-Undecane	0.37	0.58	0.36	0.42	0.61	0.61
1-Dodecene	0.07	0.48	0.17	0.02	0.53	0.63
n-Dodecane	0.09	0.49	0.21	0.26	0.47	0.46
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	0.12	ND	ND
TNMOC (w/ unknowns)	204.13	460.41	186.41	218.84	502.59	490.24
TNMOC (speciated)	170.22	380.35	153.73	177.53	425.35	413.90

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10389D2	10389R2	10387	10380	10548	10539D1
Sampling Date:	7/29/97	7/29/97	7/30/97	7/31/97	8/1/97	8/4/97
Analysis Date:	8/20/97	8/21/97	8/25/97	8/23/97	8/24/97	8/26/97
Ethylene	14.33	14.29	4.22	4.70	11.35	16.34
Acetylene	10.94	11.00	4.20	4.20	8.94	12.75
Ethane	24.87	24.70	12.64	11.84	23.32	25.59
Propylene	5.37	5.30	1.19	1.93	3.81	6.03
Propane	29.53	29.05	11.16	16.18	20.17	25.00
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	6.32	6.36	2.59	11.16	8.50	6.51
Isobutene/1-Butene	6.36	6.29	2.51	5.37	6.02	7.00
1,3-Butadiene	0.71	0.73	0.09	0.33	0.34	0.99
n-Butane	14.32	14.24	6.12	56.13	28.22	15.46
trans-2-Butene	0.79	0.81	0.24	3.13	1.98	0.80
cis-2-Butene	0.79	0.81	0.29	3.50	2.52	0.85
3-Methyl-1-butene	0.78	0.78	0.22	2.50	1.46	0.83
Isopentane	45.97	45.68	11.22	124.58	91.88	48.82
1-Pentene	1.43	1.53	0.45	7.01	2.93	1.73
2-Methyl-1-butene	2.55	2.53	0.69	6.78	4.50	2.66
n-Pentane	21.32	21.37	5.65	42.71	46.72	21.47
Isoprene	1.61	1.56	0.76	1.01	1.42	1.07
trans-2-Pentene	2.46	2.64	0.78	11.07	4.41	2.94
cis-2-Pentene	1.52	1.55	0.46	5.74	2.41	1.51
2-Methyl-2-butene	2.95	2.94	0.98	11.62	4.68	3.07
2,2-Dimethylbutane	3.20	2.72	0.72	13.84	4.18	3.59
Cyclopentene	0.67	0.64	0.10	1.67	0.77	0.53
4-Methyl-1-pentene	0.32	0.32	0.16	0.58	0.42	0.40
Cyclopentane	2.66	2.69	0.95	4.85	4.26	2.81
2,3-Dimethylbutane	5.07	5.24	1.28	8.73	6.04	5.23
2-Methylpentane	20.45	19.70	3.99	48.68	32.65	25.37
3-Methylpentane	14.51	14.52	4.38	18.21	18.18	14.60
2-Methyl-1-pentene	0.82	0.74	0.21	1.26	0.99	0.68
1-Hexene	0.57	0.59	0.16	0.84	0.75	0.55
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	12.75	12.50	3.16	13.17	16.01	13.32
trans-2-Hexene	0.63	0.51	0.15	1.21	0.62	0.58
cis-2-Hexene	0.39	0.40	0.12	0.75	0.45	0.43
Methylcyclopentane	6.38	6.63	1.82	8.71	7.46	7.16
2,4-Dimethylpentane	2.21	2.22	0.61	2.84	2.17	2.30
Benzene	10.03	9.87	2.57	5.01	8.76	10.88
Cyclohexane	1.82	1.96	0.84	2.04	2.01	2.02
2-Methylhexane	8.03	8.47	3.99	7.53	8.41	8.73
2,3-Dimethylpentane	3.63	4.04	1.90	4.07	4.11	3.87

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10389D2	10389R2	10387	10380	10548	10539D1
Sampling Date:	7/29/97	7/29/97	7/30/97	7/31/97	8/1/97	8/4/97
Analysis Date:	8/20/97	8/21/97	8/25/97	8/23/97	8/24/97	8/26/97
3-Methylhexane	7.96	7.84	2.00	8.26	8.49	8.89
1-Heptene	0.83	0.81	0.23	0.78	1.14	0.80
2,2,4-Trimethylpentane	10.32	10.30	1.76	7.97	8.11	10.30
n-Heptane	4.36	4.19	1.16	3.20	3.97	3.79
Methylcyclohexane	2.27	2.35	0.60	2.05	2.38	2.38
2,2,3-Trimethylpentane	1.98	2.03	0.28	1.32	1.51	1.96
2,3,4-Trimethylpentane	3.62	3.62	0.71	2.81	2.81	3.28
Toluene	25.40	25.97	5.03	14.65	22.89	22.33
2-Methylheptane	1.27	1.30	0.31	0.80	1.13	1.56
3-Methylheptane	1.38	1.40	0.43	0.86	1.17	1.44
1-Octene	ND	ND	0.07	ND	ND	ND
n-Octane	1.01	1.07	0.36	0.82	1.19	1.11
Ethylbenzene	4.00	4.19	1.33	2.48	4.67	4.65
m-Xylene/p-Xylene	12.34	13.18	3.79	6.91	14.59	13.98
Styrene	0.54	0.56	0.26	0.50	1.00	0.83
o-Xylene	4.13	4.49	1.41	2.20	5.09	4.91
1-Nonene	0.18	0.24	0.02	0.11	0.42	0.22
n-Nonane	0.96	0.90	0.36	0.81	1.32	1.15
Isopropylbenzene	0.28	0.42	0.18	0.12	0.34	0.44
a-Pinene	11.30	11.11	5.48	10.29	3.52	4.65
n-Propylbenzene	0.64	0.87	0.24	0.27	0.84	0.96
m-Ethyltoluene	4.32	4.36	1.95	1.90	2.78	3.79
p-Ethyltoluene	1.64	1.90	0.52	0.77	1.93	2.31
1,3,5-Trimethylbenzene	1.82	1.98	0.56	0.74	2.16	2.69
o-Ethyltoluene	1.89	2.04	0.72	0.64	1.56	1.76
b-Pinene	8.99	9.01	4.40	5.06	1.78	3.16
1,2,4-Trimethylbenzene	3.51	3.62	1.17	1.58	3.49	4.12
1-Decene	ND	ND	0.02	ND	ND	ND
n-Decane	0.70	0.71	0.43	0.68	1.10	0.67
1,2,3-Trimethylbenzene	0.60	0.77	ND	0.23	0.51	0.97
m-Diethylbenzene	0.11	0.10	ND	0.02	0.09	0.14
p-Diethylbenzene	0.30	0.23	ND	0.15	0.28	0.25
1-Undecene	ND	ND	0.05	ND	0.02	0.15
n-Undecane	0.76	0.80	0.53	0.78	0.91	0.78
1-Dodecene	0.51	0.47	0.07	ND	0.41	0.31
n-Dodecane	0.38	0.40	0.20	0.48	0.38	0.31
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	482.53	487.00	163.05	613.73	571.68	484.87
TNMOC (speciated)	409.34	411.15	130.18	555.70	497.76	415.56

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10539R1	10540D2	10540R2	10547	10553	10534
Sampling Date:	8/4/97	8/4/97	8/4/97	8/5/97	8/6/97	8/7/97
Analysis Date:	8/26/97	8/26/97	8/26/97	9/26/97	9/26/97	8/31/97
Ethylene	16.37	16.36	16.31	3.74	8.94	2.89
Acetylene	12.64	12.62	12.47	3.39	8.97	2.65
Ethane	26.15	26.17	26.12	27.52	8.80	8.76
Propylene	5.89	6.05	5.93	1.22	3.78	1.05
Propane	25.06	25.19	24.88	51.80	19.24	6.79
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	6.55	6.42	6.48	9.67	25.21	2.72
Isobutene/1-Butene	7.01	7.10	6.81	2.09	11.44	2.07
1,3-Butadiene	0.87	0.96	0.69	0.07	1.02	0.06
n-Butane	15.39	15.52	14.88	19.44	140.71	6.18
trans-2-Butene	0.84	0.82	0.71	0.29	8.28	0.15
cis-2-Butene	0.86	0.79	0.81	0.23	9.30	0.20
3-Methyl-1-butene	0.83	0.83	0.87	0.27	6.31	0.14
Isopentane	48.76	48.43	48.15	22.80	287.76	8.79
1-Pentene	1.53	1.59	1.65	0.44	18.23	0.34
2-Methyl-1-butene	2.68	2.66	2.68	0.83	17.91	0.52
n-Pentane	21.63	21.43	21.45	13.44	88.84	4.79
Isoprene	1.11	1.06	1.14	0.51	2.70	0.34
trans-2-Pentene	2.97	2.90	3.00	1.06	28.40	0.57
cis-2-Pentene	1.59	1.57	1.63	0.51	13.63	0.40
2-Methyl-2-butene	3.25	3.21	3.34	0.89	25.87	0.65
2,2-Dimethylbutane	3.23	3.30	3.28	2.22	29.13	2.16
Cyclopentene	0.58	0.53	0.56	0.12	3.69	0.09
4-Methyl-1-pentene	0.42	0.33	0.38	0.12	1.56	0.09
Cyclopentane	2.89	2.72	2.82	1.26	9.39	0.99
2,3-Dimethylbutane	5.41	5.24	5.21	2.29	17.39	2.48
2-Methylpentane	24.61	45.44	26.71	8.38	64.48	10.18
3-Methylpentane	14.89	15.14	14.85	8.97	33.51	7.28
2-Methyl-1-pentene	0.69	0.85	0.69	0.22	2.91	0.20
1-Hexene	0.57	0.60	0.60	0.20	2.17	0.17
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	13.48	13.40	13.41	7.63	26.61	3.11
trans-2-Hexene	0.80	0.59	0.57	0.17	3.28	0.12
cis-2-Hexene	0.60	0.45	0.42	0.11	1.84	0.07
Methylcyclopentane	7.05	6.98	6.99	3.79	17.14	1.66
2,4-Dimethylpentane	2.24	2.17	2.20	0.98	5.29	0.54
Benzene	11.12	10.46	11.02	3.57	10.47	2.21
Cyclohexane	2.07	2.04	2.03	2.55	3.63	0.72
2-Methylhexane	9.20	9.01	9.08	5.40	11.55	3.47
2,3-Dimethylpentane	4.42	4.25	4.26	1.95	6.61	1.42

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10539R1	10540D2	10540R2	10547	10553	10534
Sampling Date:	8/4/97	8/4/97	8/4/97	8/5/97	8/6/97	8/7/97
Analysis Date:	8/26/97	8/26/97	8/26/97	9/26/97	9/26/97	8/31/97
3-Methylhexane	9.68	10.02	9.95	3.68	13.24	1.57
1-Heptene	0.84	1.02	1.02	0.54	1.71	0.35
2,2,4-Trimethylpentane	10.16	10.09	9.99	2.96	13.72	1.30
n-Heptane	4.53	4.32	4.66	3.06	6.90	1.10
Methylcyclohexane	2.50	2.28	2.56	4.26	3.04	0.64
2,2,3-Trimethylpentane	1.91	1.93	1.91	0.56	2.65	0.20
2,3,4-Trimethylpentane	3.30	3.27	3.29	1.18	4.68	0.57
Toluene	23.55	22.55	23.17	10.09	31.26	7.64
2-Methylheptane	1.60	1.58	1.39	0.89	1.86	0.67
3-Methylheptane	1.57	1.44	1.58	0.82	1.87	0.58
1-Octene	ND	ND	ND	0.17	ND	0.12
n-Octane	1.27	1.15	1.20	1.34	2.00	0.85
Ethylbenzene	5.93	4.79	5.48	1.70	3.78	1.47
m-Xylene/p-Xylene	17.35	14.56	16.28	5.37	11.33	3.61
Styrene	0.68	0.96	0.72	0.40	1.18	0.33
o-Xylene	6.28	4.97	5.76	2.21	3.69	1.35
1-Nonene	0.60	0.27	0.33	0.15	0.12	0.09
n-Nonane	1.25	1.03	1.13	0.65	1.32	0.48
Isopropylbenzene	0.57	0.43	0.62	0.13	0.24	0.16
a-Pinene	4.59	4.22	4.48	1.07	1.56	0.84
n-Propylbenzene	1.04	0.94	1.10	0.43	0.84	0.26
m-Ethyltoluene	4.14	3.88	4.13	1.47	2.78	0.91
p-Ethyltoluene	2.32	2.47	2.21	0.76	1.75	0.70
1,3,5-Trimethylbenzene	2.55	2.46	2.23	0.67	1.50	0.65
o-Ethyltoluene	1.90	1.44	1.65	0.55	1.15	0.37
b-Pinene	2.97	3.05	2.95	0.67	0.43	0.62
1,2,4-Trimethylbenzene	4.99	4.37	4.89	2.02	4.30	1.25
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.78	0.71	0.79	0.43	1.90	0.57
1,2,3-Trimethylbenzene	1.13	1.00	1.27	0.37	0.77	0.09
m-Diethylbenzene	0.16	0.16	0.15	0.19	0.23	0.12
p-Diethylbenzene	0.24	0.19	0.37	0.14	0.84	0.14
1-Undecene	ND	0.39	0.20	ND	ND	ND
n-Undecane	0.75	0.76	0.77	1.03	2.65	0.74
1-Dodecene	0.69	0.61	0.53	0.52	ND	0.15
n-Dodecane	0.46	0.45	0.47	0.86	1.66	0.49
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	0.20	0.34	0.11
TNMOC (w/ unknowns)	497.50	486.75	489.52	344.45	1353.81	184.19
TNMOC (speciated)	428.52	438.91	424.31	261.68	1113.26	118.14

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10572	10571	10664	10661	10677	10697D1
Sampling Date:	8/8/97	8/11/97	8/12/97	8/13/97	8/14/97	8/15/97
Analysis Date:	8/31/97	8/31/97	9/2/97	9/3/97	9/3/97	8/26/97
Ethylene	1.40	4.69	4.74	5.71	5.47	2.28
Acetylene	1.70	3.41	2.56	4.63	3.93	1.87
Ethane	14.54	6.41	4.94	13.73	7.14	3.62
Propylene	0.58	1.59	1.29	2.11	1.81	0.82
Propane	16.15	7.08	5.02	15.59	7.17	3.52
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.81	2.14	1.78	7.46	7.27	2.62
Isobutene/1-Butene	1.61	2.84	2.52	4.61	4.44	2.19
1,3-Butadiene	0.01	0.16	0.11	0.34	0.27	0.11
n-Butane	8.26	5.27	4.32	28.15	23.81	8.75
trans-2-Butene	0.13	0.29	0.21	1.67	1.62	0.51
cis-2-Butene	0.18	0.34	0.32	2.08	2.03	0.80
3-Methyl-1-butene	0.09	0.26	0.20	2.49	2.46	0.95
Isopentane	8.19	13.42	10.57	109.47	116.68	41.41
1-Pentene	0.30	0.56	0.35	4.48	4.50	1.26
2-Methyl-1-butene	0.29	0.92	0.67	8.06	7.98	2.76
n-Pentane	4.94	5.65	4.44	51.34	51.08	17.99
Isoprene	0.36	1.75	0.92	3.53	1.37	0.62
trans-2-Pentene	0.38	1.05	0.83	10.73	10.66	3.06
cis-2-Pentene	0.24	0.59	0.52	4.97	4.97	1.65
2-Methyl-2-butene	0.45	1.37	1.21	12.52	12.22	4.22
2,2-Dimethylbutane	1.61	1.87	1.69	4.75	4.40	1.43
Cyclopentene	0.09	0.20	0.20	1.79	1.69	0.54
4-Methyl-1-pentene	0.09	0.13	0.12	0.67	0.66	0.22
Cyclopentane	0.69	1.13	0.74	4.67	4.83	1.99
2,3-Dimethylbutane	1.63	1.65	1.31	7.38	7.59	2.76
2-Methylpentane	4.95	5.36	4.50	65.87	66.44	10.76
3-Methylpentane	4.87	5.49	4.10	22.87	23.45	8.24
2-Methyl-1-pentene	0.15	0.31	0.18	1.75	1.82	0.54
1-Hexene	0.08	0.21	0.17	0.96	0.91	0.32
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.29	4.24	3.38	26.23	25.85	7.97
trans-2-Hexene	0.06	0.21	0.17	1.82	2.16	0.49
cis-2-Hexene	0.02	0.14	0.11	1.06	1.01	0.28
Methylcyclopentane	1.30	2.34	1.98	12.53	12.10	4.10
2,4-Dimethylpentane	0.68	0.78	0.68	2.80	2.62	0.93
Benzene	1.18	3.10	2.56	14.69	13.28	4.58
Cyclohexane	0.93	0.80	0.90	4.02	4.12	1.40
2-Methylhexane	2.99	4.31	3.98	9.99	9.39	5.40
2,3-Dimethylpentane	1.54	1.64	1.69	4.36	4.34	2.45

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10572	10571	10664	10661	10677	10697D1
Sampling Date:	8/8/97	8/11/97	8/12/97	8/13/97	8/14/97	8/15/97
Analysis Date:	8/31/97	8/31/97	9/2/97	9/3/97	9/3/97	8/26/97
3-Methylhexane	0.97	2.81	2.19	13.90	13.22	4.91
1-Heptene	0.25	0.42	0.27	1.66	1.89	0.40
2,2,4-Trimethylpentane	2.43	2.10	1.75	5.72	4.88	1.78
n-Heptane	0.90	1.58	1.30	8.71	8.23	2.14
Methylcyclohexane	0.85	0.88	0.75	3.74	3.52	1.34
2,2,3-Trimethylpentane	0.28	0.40	0.30	0.61	1.35	0.18
2,3,4-Trimethylpentane	0.80	0.88	0.69	2.44	2.19	0.78
Toluene	3.87	7.17	5.77	33.91	60.29	9.11
2-Methylheptane	0.31	0.50	0.46	1.95	1.83	0.54
3-Methylheptane	0.32	0.55	0.48	1.91	1.78	0.53
1-Octene	0.05	ND	ND	ND	ND	ND
n-Octane	0.51	0.57	0.53	2.00	2.33	0.45
Ethylbenzene	1.53	1.85	1.54	7.42	6.75	2.25
m-Xylene/p-Xylene	4.67	4.79	3.85	23.75	22.32	6.94
Styrene	0.31	0.37	0.36	0.43	0.61	0.22
o-Xylene	1.05	1.87	1.55	8.20	7.68	2.36
1-Nonene	ND	0.09	0.09	0.20	0.25	0.02
n-Nonane	0.27	0.41	0.48	0.94	1.04	0.24
Isopropylbenzene	0.11	0.20	0.17	0.54	0.50	0.28
a-Pinene	2.06	0.84	0.57	0.88	0.89	0.69
n-Propylbenzene	0.23	0.52	0.44	1.80	1.75	0.30
m-Ethyltoluene	0.79	1.50	1.22	5.88	5.45	1.11
p-Ethyltoluene	0.41	0.87	0.83	3.52	3.50	0.63
1,3,5-Trimethylbenzene	0.29	0.79	0.75	2.91	3.21	0.80
o-Ethyltoluene	0.35	0.74	0.63	2.41	2.11	0.64
b-Pinene	1.18	0.26	0.15	0.40	0.22	0.30
1,2,4-Trimethylbenzene	0.74	2.15	1.75	8.56	8.74	1.44
1-Decene	ND	ND	ND	ND	ND	0.02
n-Decane	0.28	0.42	0.56	0.80	5.38	0.45
1,2,3-Trimethylbenzene	0.06	0.30	0.70	2.28	2.17	0.27
m-Diethylbenzene	0.12	0.20	0.19	0.45	0.39	0.05
p-Diethylbenzene	0.09	0.16	0.16	0.48	0.52	0.07
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.44	0.47	0.81	0.96	22.76	1.39
1-Dodecene	ND	0.23	0.17	1.06	0.57	ND
n-Dodecane	0.28	0.28	0.60	0.58	12.93	1.63
1-Tridecene	ND	ND	ND	ND	0.04	ND
n-Tridecane	0.09	0.07	0.13	0.21	1.47	ND
TNMOC (w/ unknowns)	158.96	184.26	153.13	742.16	799.03	241.59
TNMOC (speciated)	115.67	130.91	108.14	633.10	676.30	199.66

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10697R1	10698D2	10698R2	10694	10842	10846
Sampling Date:	8/15/97	8/15/97	8/15/97	8/18/97	8/19/97	8/20/97
Analysis Date:	8/29/97	8/26/97	8/29/97	9/3/97	9/3/97	9/3/97
Ethylene	2.35	2.20	2.42	2.92	5.00	4.38
Acetylene	1.83	1.83	1.83	2.14	3.57	3.46
Ethane	3.22	3.67	3.37	3.73	5.61	6.72
Propylene	0.85	0.87	0.91	0.98	1.59	1.68
Propane	2.67	3.45	2.84	3.38	4.37	4.93
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.48	2.68	2.50	3.09	3.88	3.65
Isobutene/1-Butene	2.21	2.36	2.34	3.15	4.13	4.71
1,3-Butadiene	0.14	0.17	0.19	0.16	0.12	0.13
n-Butane	8.88	8.89	8.75	12.85	16.34	14.77
trans-2-Butene	0.68	0.52	0.72	0.87	1.13	1.03
cis-2-Butene	0.89	0.78	0.81	1.17	1.52	1.35
3-Methyl-1-butene	0.80	0.86	0.86	1.43	2.11	1.80
Isopentane	39.62	40.51	39.23	61.47	98.47	83.52
1-Pentene	1.55	1.23	1.45	2.43	5.14	3.15
2-Methyl-1-butene	2.59	2.73	2.56	4.45	7.29	6.17
n-Pentane	17.20	17.79	16.94	26.49	45.94	37.23
Isoprene	0.65	0.84	0.66	1.39	1.57	1.23
trans-2-Pentene	3.07	3.17	3.12	5.34	9.15	7.19
cis-2-Pentene	1.54	1.66	1.65	2.77	4.58	3.74
2-Methyl-2-butene	3.94	4.16	4.00	6.89	12.16	9.19
2,2-Dimethylbutane	1.41	1.56	1.47	3.62	4.78	4.17
Cyclopentene	0.56	0.57	0.52	1.01	1.57	1.34
4-Methyl-1-pentene	0.23	0.23	0.21	0.33	0.60	0.57
Cyclopentane	1.92	2.10	2.03	2.60	4.49	3.67
2,3-Dimethylbutane	2.78	3.00	2.85	4.23	8.07	6.67
2-Methylpentane	9.97	10.89	10.19	47.57	80.75	67.93
3-Methylpentane	7.45	8.14	7.19	11.97	24.13	19.70
2-Methyl-1-pentene	0.48	0.59	0.47	0.87	1.70	1.20
1-Hexene	0.28	0.27	0.30	0.45	0.92	0.90
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	7.67	7.92	7.33	12.56	25.63	20.42
trans-2-Hexene	0.40	0.46	0.44	0.99	1.69	1.38
cis-2-Hexene	0.28	0.30	0.26	0.49	1.01	0.80
Methylcyclopentane	3.79	4.10	3.80	6.26	12.33	9.96
2,4-Dimethylpentane	0.83	0.96	0.92	1.41	2.92	2.35
Benzene	3.99	4.61	3.95	7.71	12.98	10.74
Cyclohexane	1.42	1.53	1.37	2.30	3.76	3.25
2-Methylhexane	4.98	5.43	4.89	6.78	10.18	8.93
2,3-Dimethylpentane	2.25	2.55	2.35	2.71	4.27	4.13

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10697R1	10698D2	10698R2	10694	10842	10846
Sampling Date:	8/15/97	8/15/97	8/15/97	8/18/97	8/19/97	8/20/97
Analysis Date:	8/29/97	8/26/97	8/29/97	9/3/97	9/3/97	9/3/97
3-Methylhexane	3.92	4.82	3.81	7.62	13.95	11.35
1-Heptene	0.59	0.42	0.45	0.67	1.96	1.49
2,2,4-Trimethylpentane	1.63	1.59	1.71	2.75	5.68	4.36
n-Heptane	1.34	2.04	1.88	3.61	7.56	5.73
Methylcyclohexane	1.06	1.28	1.10	1.71	3.39	3.26
2,2,3-Trimethylpentane	0.29	0.37	0.27	0.59	1.24	1.04
2,3,4-Trimethylpentane	0.66	0.81	0.62	1.09	2.49	1.97
Toluene	7.49	9.32	7.04	16.52	27.68	21.33
2-Methylheptane	0.45	0.57	0.42	0.89	1.69	1.46
3-Methylheptane	0.49	0.53	0.43	0.80	1.72	1.46
1-Octene	ND	ND	ND	ND	0.21	ND
n-Octane	0.38	0.51	0.38	0.81	1.61	1.49
Ethylbenzene	2.28	2.73	2.31	3.14	4.76	4.02
m-Xylene/p-Xylene	6.05	7.80	5.85	10.17	17.17	13.83
Styrene	0.11	0.16	0.12	0.24	0.35	0.17
o-Xylene	2.07	2.54	1.86	3.65	5.71	4.96
1-Nonene	0.06	0.08	ND	0.10	0.04	0.15
n-Nonane	0.39	0.48	0.37	0.43	0.63	0.68
Isopropylbenzene	0.14	0.24	0.18	0.27	0.37	0.35
a-Pinene	0.59	0.59	0.61	0.43	0.20	0.30
n-Propylbenzene	0.32	0.38	0.42	0.75	1.31	1.12
m-Ethyltoluene	1.17	1.24	1.30	2.52	4.25	3.77
p-Ethyltoluene	0.71	0.67	0.67	1.65	2.54	2.52
1,3,5-Trimethylbenzene	0.68	0.66	0.70	1.45	1.97	2.32
o-Ethyltoluene	0.54	0.66	0.55	1.12	1.61	1.59
b-Pinene	0.28	0.39	0.34	0.19	0.13	0.29
1,2,4-Trimethylbenzene	1.63	1.71	1.67	3.91	6.58	5.89
1-Decene	0.01	0.02	0.02	ND	ND	ND
n-Decane	0.49	0.36	0.34	0.27	0.77	0.46
1,2,3-Trimethylbenzene	0.34	0.26	0.44	0.66	1.59	1.23
m-Diethylbenzene	0.06	0.09	0.09	0.26	0.29	0.28
p-Diethylbenzene	0.08	0.10	0.05	0.20	1.13	0.28
1-Undecene	ND	ND	ND	ND	0.17	0.13
n-Undecane	1.18	0.35	0.48	0.68	1.55	0.46
1-Dodecene	ND	ND	ND	0.30	ND	ND
n-Dodecane	0.79	0.21	0.19	0.72	1.67	0.37
1-Tridecene	ND	ND	ND	ND	ND	0.05
n-Tridecane	ND	ND	ND	0.10	0.33	0.08
TNMOC (w/ unknowns)	227.51	239.09	222.64	385.91	639.74	533.03
TNMOC (speciated)	186.15	199.57	184.37	331.26	559.75	468.35

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	10852D1	10852R1	10853D2	10853R2	10875	10905
Sampling Date:	8/21/97	8/21/97	8/21/97	8/21/97	8/22/97	8/25/97
Analysis Date:	9/9/97	9/11/97	9/9/97	9/10/97	9/4/97	9/4/97
Ethylene	6.36	6.37	4.70	4.71	8.40	15.54
Acetylene	4.46	4.62	3.35	3.40	6.67	13.60
Ethane	13.55	13.83	10.29	10.52	12.88	22.54
Propylene	1.94	2.03	1.53	1.65	3.07	5.57
Propane	13.92	13.68	10.14	10.47	10.74	21.93
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.21	4.31	3.15	3.16	5.44	12.52
Isobutene/1-Butene	4.13	4.23	3.21	3.47	6.38	10.47
1,3-Butadiene	0.29	0.34	0.37	0.51	0.50	1.11
n-Butane	16.39	16.10	11.53	11.47	22.31	59.34
trans-2-Butene	1.09	1.18	0.82	0.88	1.60	4.43
cis-2-Butene	1.37	1.41	0.99	1.13	1.85	5.35
3-Methyl-1-butene	1.80	1.76	1.21	1.15	2.59	7.92
Isopentane	85.41	85.25	59.49	57.85	122.07	385.09
1-Pentene	3.46	3.40	2.38	2.34	4.86	16.25
2-Methyl-1-butene	6.04	6.23	4.06	4.08	9.04	29.10
n-Pentane	40.53	40.76	27.50	27.34	53.46	182.15
Isoprene	1.01	1.05	1.20	1.19	1.26	1.54
trans-2-Pentene	7.84	7.79	5.51	5.05	10.32	39.45
cis-2-Pentene	3.75	3.79	2.58	2.54	5.17	18.76
2-Methyl-2-butene	9.69	9.85	6.84	6.23	13.07	48.80
2,2-Dimethylbutane	4.14	4.09	3.97	3.12	5.84	16.70
Cyclopentene	1.26	1.27	0.90	0.92	1.75	6.76
4-Methyl-1-pentene	0.42	0.52	0.31	0.37	0.86	2.78
Cyclopentane	3.88	3.79	2.82	3.27	4.98	17.99
2,3-Dimethylbutane	5.91	6.56	4.71	5.23	8.95	204.94
2-Methylpentane	66.99	70.03	32.44	47.59	77.41	179.53
3-Methylpentane	19.91	19.85	13.94	13.42	28.26	95.76
2-Methyl-1-pentene	1.35	1.32	0.87	0.83	1.90	7.93
1-Hexene	0.69	0.72	0.51	0.50	0.98	4.31
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	19.48	19.41	13.15	13.09	27.85	109.60
trans-2-Hexene	1.21	1.13	0.78	0.75	1.58	7.22
cis-2-Hexene	0.74	0.73	0.50	0.47	1.01	4.59
Methylcyclopentane	9.55	9.47	6.38	6.43	13.43	51.33
2,4-Dimethylpentane	2.39	2.41	1.71	1.65	3.24	11.75
Benzene	11.00	10.83	7.10	7.52	14.40	51.68
Cyclohexane	3.08	3.02	2.08	2.06	3.77	15.19
2-Methylhexane	8.05	8.15	6.85	7.05	10.77	35.05
2,3-Dimethylpentane	3.80	3.63	2.86	2.99	4.58	12.84

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All concentrations reported in ppbC

Sample No.:	10852D1	10852R1	10853D2	10853R2	10875	10905
Sampling Date:	8/21/97	8/21/97	8/21/97	8/21/97	8/22/97	8/25/97
Analysis Date:	9/9/97	9/11/97	9/9/97	9/10/97	9/4/97	9/4/97
3-Methylhexane	10.75	10.38	7.27	7.04	14.18	40.10
1-Heptene	1.32	1.40	0.77	0.79	1.63	7.13
2,2,4-Trimethylpentane	4.66	4.68	3.48	3.58	7.04	20.18
n-Heptane	5.73	5.57	3.66	3.85	7.54	32.09
Methylcyclohexane	2.45	2.28	1.68	1.74	3.52	13.33
2,2,3-Trimethylpentane	1.06	1.01	0.77	0.72	1.45	6.45
2,3,4-Trimethylpentane	2.23	2.26	1.61	1.60	2.64	8.62
Toluene	24.42	24.45	17.99	18.25	28.77	105.58
2-Methylheptane	1.38	1.36	0.96	0.99	1.77	6.83
3-Methylheptane	1.33	1.36	0.94	1.01	1.83	6.51
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	1.37	1.32	0.94	0.97	1.59	6.19
Ethylbenzene	3.82	3.92	2.63	3.02	4.75	18.95
m-Xylene/p-Xylene	14.02	13.74	9.75	9.87	17.01	67.93
Styrene	0.49	0.41	2.33	2.37	0.38	0.90
o-Xylene	4.90	4.85	3.53	3.49	6.27	22.53
1-Nonene	0.07	0.06	0.06	0.06	0.31	0.12
n-Nonane	0.82	0.79	0.63	0.63	0.85	2.12
Isopropylbenzene	0.34	0.37	0.30	0.31	0.34	1.42
a-Pinene	3.02	2.93	2.92	2.66	0.25	1.01
n-Propylbenzene	1.21	1.14	0.83	0.83	1.38	4.94
m-Ethyltoluene	4.48	4.37	3.12	3.19	4.70	16.53
p-Ethyltoluene	2.59	2.39	1.61	1.93	3.08	9.43
1,3,5-Trimethylbenzene	2.44	1.94	1.37	1.76	2.81	7.91
o-Ethyltoluene	1.67	1.87	4.18	3.05	1.72	6.18
b-Pinene	2.68	2.76	2.39	2.38	0.11	0.44
1,2,4-Trimethylbenzene	6.07	6.42	4.73	5.02	6.93	25.33
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.87	0.85	0.72	0.66	0.60	1.55
1,2,3-Trimethylbenzene	1.46	1.83	0.97	1.56	1.55	5.51
m-Diethylbenzene	0.30	0.32	0.29	0.33	0.31	0.94
p-Diethylbenzene	0.32	0.27	0.31	0.33	0.29	1.16
1-Undecene	ND	ND	ND	ND	0.17	0.45
n-Undecane	1.22	1.09	0.90	0.79	0.67	2.17
1-Dodecene	ND	ND	ND	ND	0.08	ND
n-Dodecane	0.67	0.72	0.57	0.56	0.86	1.90
1-Tridecene	0.09	0.11	0.09	0.04	ND	ND
n-Tridecane	0.28	0.25	0.43	0.30	0.08	0.29
TNMOC (w/ unknowns)	583.33	581.41	435.74	428.96	772.95	2419.70
TNMOC (speciated)	501.63	504.38	347.49	362.08	640.74	2190.12

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All concentrations reported in ppbC

Sample No.:	10966	10976D1	10976R1	10977D2	10977R1	11016
Sampling Date:	8/26/97	8/27/97	8/27/97	8/27/97	8/27/97	8/28/97
Analysis Date:	9/4/97	9/10/97	9/16/97	9/10/97	9/16/97	9/4/97
Ethylene	12.36	6.96	7.00	7.11	7.10	9.42
Acetylene	9.68	5.70	5.72	5.87	5.68	7.95
Ethane	15.45	13.36	10.49	13.65	12.32	19.12
Propylene	4.42	2.33	2.47	2.47	2.38	3.01
Propane	16.49	12.42	13.08	12.55	12.47	18.79
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	8.96	6.96	7.08	7.42	6.94	10.08
Isobutene/1-Butene	8.05	4.68	4.61	4.73	4.70	6.32
1,3-Butadiene	0.82	0.41	0.28	0.27	0.38	0.52
n-Butane	39.01	26.37	26.22	26.60	26.32	36.95
trans-2-Butene	2.80	1.64	1.60	1.79	1.70	2.15
cis-2-Butene	3.54	2.00	2.16	2.19	2.06	2.88
3-Methyl-1-butene	4.97	3.11	3.19	3.35	3.16	4.49
Isopentane	237.41	156.34	156.42	157.16	156.52	242.52
1-Pentene	10.36	6.44	6.33	6.62	6.45	9.15
2-Methyl-1-butene	18.56	11.61	11.91	12.09	11.96	16.48
n-Pentane	114.11	72.47	73.31	74.16	73.74	108.24
Isoprene	2.56	0.74	1.73	1.93	1.70	2.24
trans-2-Pentene	24.08	14.78	15.08	15.28	14.98	21.19
cis-2-Pentene	11.69	7.35	7.33	7.54	7.38	10.32
2-Methyl-2-butene	29.02	18.04	17.87	18.20	17.94	24.73
2,2-Dimethylbutane	10.82	7.85	7.87	7.70	8.01	11.45
Cyclopentene	3.85	2.29	2.33	2.41	2.31	3.26
4-Methyl-1-pentene	1.77	1.04	0.93	1.16	0.92	1.55
Cyclopentane	11.10	7.51	7.13	7.65	7.16	10.70
2,3-Dimethylbutane	15.08	13.22	12.37	12.99	12.46	15.11
2-Methylpentane	123.44	100.19	96.11	97.41	95.02	118.58
3-Methylpentane	61.08	41.43	40.73	40.94	40.80	59.65
2-Methyl-1-pentene	4.94	3.01	3.15	2.94	3.04	4.32
1-Hexene	2.60	1.63	1.52	1.52	1.50	2.53
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	67.91	44.17	43.74	44.58	44.14	65.35
trans-2-Hexene	4.35	2.85	2.60	2.89	2.63	3.86
cis-2-Hexene	2.70	1.66	1.67	1.69	1.70	2.41
Methylcyclopentane	32.53	20.77	20.65	20.98	20.82	30.87
2,4-Dimethylpentane	7.94	4.76	4.70	4.89	4.80	6.78
Benzene	32.40	21.46	20.45	21.38	21.04	29.49
Cyclohexane	9.28	6.66	5.92	6.34	6.18	9.19
2-Methylhexane	23.07	15.99	15.75	15.76	15.46	22.12
2,3-Dimethylpentane	9.24	7.07	6.41	6.58	6.41	8.61

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All concentrations reported in ppbC

Sample No.:	10966	10976D1	10976R1	10977D2	10977R1	11016
Sampling Date:	8/26/97	8/27/97	8/27/97	8/27/97	8/27/97	8/28/97
Analysis Date:	9/4/97	9/10/97	9/16/97	9/10/97	9/16/97	9/4/97
3-Methylhexane	27.01	23.59	22.77	23.17	23.84	27.24
1-Heptene	4.42	2.70	2.50	2.50	2.60	4.34
2,2,4-Trimethylpentane	14.84	9.23	9.32	9.30	9.29	12.18
n-Heptane	20.08	12.73	12.69	13.31	12.67	18.51
Methylcyclohexane	8.62	5.62	5.35	5.53	5.40	8.05
2,2,3-Trimethylpentane	4.13	2.52	2.02	2.56	2.57	3.54
2,3,4-Trimethylpentane	5.96	3.56	3.57	3.61	3.55	4.82
Toluene	70.73	43.32	42.36	44.53	42.58	63.04
2-Methylheptane	4.43	2.85	2.79	2.85	2.81	3.94
3-Methylheptane	4.38	2.54	2.70	2.75	2.72	3.89
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	4.09	2.70	2.60	2.76	2.63	3.82
Ethylbenzene	12.17	7.76	6.97	8.00	6.98	11.29
m-Xylene/p-Xylene	44.74	27.91	24.71	29.15	26.80	38.91
Styrene	0.66	0.37	0.36	0.42	0.33	0.46
o-Xylene	15.01	9.33	8.42	9.59	9.00	13.47
1-Nonene	0.09	0.05	0.05	0.07	0.06	0.34
n-Nonane	1.64	1.04	1.00	1.08	1.02	1.38
Isopropylbenzene	1.00	0.56	0.54	0.65	0.54	0.81
a-Pinene	0.73	0.34	0.35	0.38	0.37	0.68
n-Propylbenzene	3.39	2.11	1.95	2.21	2.18	2.97
m-Ethyltoluene	11.34	7.03	6.44	6.96	6.67	9.44
p-Ethyltoluene	6.58	4.45	3.95	4.25	3.98	5.85
1,3,5-Trimethylbenzene	5.46	3.86	3.26	3.35	3.14	5.16
o-Ethyltoluene	4.46	2.68	2.72	2.89	2.84	3.61
b-Pinene	0.12	0.09	ND	0.10	0.10	0.12
1,2,4-Trimethylbenzene	17.25	10.59	9.99	10.73	10.47	14.14
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.22	0.72	0.89	0.69	0.72	1.58
1,2,3-Trimethylbenzene	4.40	2.70	2.23	2.57	2.76	3.07
m-Diethylbenzene	0.72	0.51	0.53	0.55	0.51	0.55
p-Diethylbenzene	0.86	0.47	0.51	0.56	0.57	0.65
1-Undecene	ND	ND	ND	ND	ND	0.20
n-Undecane	1.22	1.30	1.28	0.75	0.79	4.39
1-Dodecene	ND	0.45	0.46	0.64	0.58	ND
n-Dodecane	1.22	1.33	1.49	0.61	0.87	5.07
1-Tridecene	0.02	ND	ND	ND	ND	ND
n-Tridecane	0.25	0.42	0.43	0.17	0.42	0.71
TNMOC (w/ unknowns)	1613.81	1050.94	1026.52	1064.43	1044.13	1493.51
TNMOC (speciated)	1301.68	874.67	855.09	880.01	862.62	1240.61

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All concentrations reported in ppbC

Sample No.:	11045	11049	11119	11130	11198	11195
Sampling Date:	8/29/97	9/1/97	9/3/97	9/4/97	9/5/97	9/8/97
Analysis Date:	9/5/97	9/5/97	9/17/97	9/17/97	9/17/97	9/17/97
Ethylene	9.25	2.77	8.06	3.09	11.68	6.38
Acetylene	7.44	2.09	5.51	2.65	10.40	5.58
Ethane	15.12	17.63	17.51	8.00	20.08	16.61
Propylene	3.23	0.93	3.04	0.92	3.86	2.02
Propane	14.06	12.39	21.25	7.09	15.90	10.69
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	7.90	7.84	9.03	5.29	17.68	7.05
Isobutene/1-Butene	6.37	3.95	6.78	3.44	7.93	5.00
1,3-Butadiene	0.55	0.15	0.54	0.10	0.71	0.34
n-Butane	34.59	35.44	41.93	24.02	54.00	25.00
trans-2-Butene	2.37	1.91	2.75	1.45	3.65	1.44
cis-2-Butene	2.98	2.53	3.45	1.83	4.32	1.65
3-Methyl-1-butene	4.49	4.52	5.57	3.10	5.96	2.84
Isopentane	219.32	222.01	285.99	149.24	338.67	142.72
1-Pentene	9.41	9.54	11.59	6.43	13.06	5.99
2-Methyl-1-butene	17.26	16.88	20.91	11.61	22.14	10.26
n-Pentane	108.91	112.41	136.15	76.42	159.12	73.92
Isoprene	2.26	0.72	0.91	0.51	1.08	0.58
trans-2-Pentene	22.64	21.94	28.53	16.04	31.30	14.43
cis-2-Pentene	10.75	10.93	14.01	7.88	15.42	7.00
2-Methyl-2-butene	26.52	25.70	35.17	19.40	40.39	16.56
2,2-Dimethylbutane	10.76	10.74	14.17	8.28	14.62	8.26
Cyclopentene	3.66	3.39	4.71	2.63	5.72	2.32
4-Methyl-1-pentene	1.66	1.76	2.00	0.94	2.39	1.32
Cyclopentane	11.11	11.62	14.20	7.88	16.44	8.55
2,3-Dimethylbutane	16.58	16.22	163.94	13.39	185.23	14.75
2-Methylpentane	123.93	116.30	155.07	103.57	151.92	104.99
3-Methylpentane	60.44	64.83	79.92	46.11	86.82	49.50
2-Methyl-1-pentene	4.65	5.15	6.17	3.59	7.28	3.87
1-Hexene	2.48	2.56	3.67	1.88	3.91	2.00
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	67.05	72.29	91.03	51.98	102.00	56.36
trans-2-Hexene	4.19	4.85	5.77	3.51	7.34	3.59
cis-2-Hexene	2.61	2.43	3.83	2.03	4.10	2.12
Methylcyclopentane	31.72	34.22	42.83	24.74	47.55	28.47
2,4-Dimethylpentane	7.19	7.18	9.92	5.49	11.22	6.51
Benzene	30.25	31.25	40.17	22.58	45.79	24.79
Cyclohexane	9.31	10.93	12.71	7.38	14.35	9.49
2-Methylhexane	22.75	23.89	30.29	17.83	33.21	21.45
2,3-Dimethylpentane	8.78	10.04	12.23	6.89	12.53	8.54

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All concentrations reported in ppbC

Sample No.:	11045	11049	11119	11130	11198	11195
Sampling Date:	8/29/97	9/1/97	9/3/97	9/4/97	9/5/97	9/8/97
Analysis Date:	9/5/97	9/5/97	9/17/97	9/17/97	9/17/97	9/17/97
3-Methylhexane	26.80	28.34	36.33	19.03	35.62	25.53
1-Heptene	4.02	4.47	5.80	3.47	6.76	4.75
2,2,4-Trimethylpentane	13.05	11.71	18.30	8.71	21.96	14.92
n-Heptane	19.24	20.34	26.69	14.23	31.43	17.93
Methylcyclohexane	8.17	8.58	10.72	6.44	14.18	8.93
2,2,3-Trimethylpentane	3.61	3.36	5.09	2.61	6.07	4.04
2,3,4-Trimethylpentane	5.24	5.02	7.60	3.57	9.28	6.28
Toluene	64.56	64.21	85.81	48.11	122.00	58.20
2-Methylheptane	4.11	4.56	5.42	3.08	6.52	4.36
3-Methylheptane	3.99	3.98	4.95	2.92	6.17	4.21
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	3.80	4.00	4.95	2.97	6.59	4.19
Ethylbenzene	10.90	10.85	15.22	9.12	19.38	11.27
m-Xylene/p-Xylene	40.73	39.93	55.08	32.89	67.51	40.89
Styrene	0.55	0.20	0.76	0.47	1.71	0.36
o-Xylene	14.24	13.18	18.41	10.86	22.58	14.34
1-Nonene	0.39	0.08	0.12	0.04	0.27	0.13
n-Nonane	1.41	1.25	1.70	1.03	3.32	1.72
Isopropylbenzene	0.92	0.68	0.93	0.55	1.12	0.75
a-Pinene	0.54	0.46	1.94	1.57	2.21	0.52
n-Propylbenzene	3.10	2.83	4.24	2.35	4.84	3.25
m-Ethyltoluene	9.88	8.37	12.94	7.71	16.24	10.54
p-Ethyltoluene	5.77	5.08	7.65	4.57	9.67	6.24
1,3,5-Trimethylbenzene	4.48	4.08	6.07	3.70	8.71	5.06
o-Ethyltoluene	3.90	3.15	4.91	2.92	5.84	4.37
b-Pinene	0.18	0.11	1.05	0.72	0.58	ND
1,2,4-Trimethylbenzene	15.27	12.78	19.80	11.77	24.27	16.81
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.11	0.63	0.85	0.69	6.66	1.06
1,2,3-Trimethylbenzene	3.38	2.45	4.84	2.77	6.25	4.15
m-Diethylbenzene	0.59	0.49	0.78	0.51	1.25	0.95
p-Diethylbenzene	0.81	0.56	1.10	0.70	1.26	0.98
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.66	0.68	1.01	1.36	18.17	3.16
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	2.75	0.67	0.78	1.63	10.81	3.76
1-Tridecene	ND	ND	ND	ND	ND	0.15
n-Tridecane	0.76	0.09	0.14	0.56	1.31	0.91
TNMOC (w/ unknowns)	1508.69	1463.26	1879.32	1072.22	2290.72	1221.31
TNMOC (speciated)	1224.43	1209.09	1723.25	892.84	2030.31	997.65

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	11231D1	11231R1		11232D2	11232R2		11216	11281
Sampling Date:	9/9/97	9/9/97		9/9/97	9/9/97		9/10/97	9/11/97
Analysis Date:	9/18/97	9/20/97		9/18/97	9/20/97		9/18/97	9/22/97
Ethylene	15.79	15.29		15.62	13.82		1.66	6.05
Acetylene	12.92	12.89		12.93	13.18		1.06	5.71
Ethane	21.62	1.24	a	21.59	0.62	a	14.09	6.66
Propylene	5.51	5.45		5.47	5.48		0.88	2.20
Propane	13.25	12.48		13.18	12.67		15.40	12.99
Propyne	ND	ND		ND	ND		ND	ND
Isobutane	6.67	6.74		6.67	7.81		6.47	12.68
Isobutene/1-Butene	7.98	8.08		8.06	7.85		2.28	7.40
1,3-Butadiene	0.97	0.97		1.01	0.77		0.04	0.25
n-Butane	22.61	22.78		22.88	22.95		25.95	64.97
trans-2-Butene	1.64	1.76		1.74	1.87		0.85	4.52
cis-2-Butene	1.78	1.95		1.84	2.23		1.08	5.16
3-Methyl-1-butene	2.81	2.84		2.96	2.82		1.81	6.55
Isopentane	141.77	141.53		141.60	141.99		99.83	309.78
1-Pentene	5.80	5.96		5.87	6.43		4.14	14.12
2-Methyl-1-butene	10.34	10.26		10.40	10.97		6.97	21.88
n-Pentane	71.06	70.78		70.79	73.09		53.24	134.25
Isoprene	1.05	1.07		1.03	1.54		0.23	0.96
trans-2-Pentene	14.57	14.39		14.53	14.95		10.15	31.71
cis-2-Pentene	6.82	7.01		6.84	7.68		4.90	15.15
2-Methyl-2-butene	16.19	17.13		16.48	17.25		11.91	37.37
2,2-Dimethylbutane	8.73	8.36		8.49	7.61		5.87	15.69
Cyclopentene	2.44	2.51		2.52	3.06		1.64	5.04
4-Methyl-1-pentene	1.19	1.29		1.37	1.28		0.80	2.05
Cyclopentane	7.93	8.28		8.32	10.06		6.13	13.12
2,3-Dimethylbutane	13.74	14.08		14.88	113.18		11.84	153.72
2-Methylpentane	102.23	93.03		105.08	72.54		92.23	135.82
3-Methylpentane	49.61	49.39		49.43	48.11		35.24	67.93
2-Methyl-1-pentene	3.67	3.60		3.84	3.39		2.38	5.78
1-Hexene	2.23	2.25		2.15	2.38		1.38	3.49
2-Ethyl-1-butene	ND	ND		ND	ND		ND	ND
n-Hexane	56.24	56.06		56.43	57.10		40.16	77.47
trans-2-Hexene	3.36	3.67		3.78	4.48		2.49	5.50
cis-2-Hexene	2.15	2.12		2.16	2.23		1.48	3.43
Methylcyclopentane	28.45	28.26		28.36	28.42		19.99	38.11
2,4-Dimethylpentane	7.06	7.12		7.09	7.25		5.26	10.24
Benzene	26.72	26.50		26.93	26.34		17.05	35.65
Cyclohexane	9.40	9.41		9.28	9.60		6.63	11.35
2-Methylhexane	22.74	22.67		22.27	22.78		15.17	27.34
2,3-Dimethylpentane	9.74	9.09		8.81	9.78		7.00	11.93

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All concentrations reported in ppbC

Sample No.:	11231D1	11231R1	11232D2	11232R2	11216	11281
Sampling Date:	9/9/97	9/9/97	9/9/97	9/9/97	9/10/97	9/11/97
Analysis Date:	9/18/97	9/20/97	9/18/97	9/20/97	9/18/97	9/22/97
3-Methylhexane	28.38	27.08	25.30	24.04	23.30	30.05
1-Heptene	4.81	4.45	4.96	4.28	3.58	5.28
2,2,4-Trimethylpentane	19.31	19.74	20.79	18.09	13.06	21.82
n-Heptane	20.23	20.11	20.15	18.35	13.40	25.41
Methylcyclohexane	9.63	9.77	9.45	0.91	6.15	10.72
2,2,3-Trimethylpentane	4.99	5.24	5.01	5.13	3.15	5.43
2,3,4-Trimethylpentane	8.10	7.97	7.84	7.21	5.33	9.28
Toluene	67.19	68.04	66.07	56.10	41.39	85.06
2-Methylheptane	4.84	5.00	4.88	4.79	2.85	5.52
3-Methylheptane	5.06	5.08	4.73	5.00	2.67	5.63
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	4.84	4.94	4.53	4.76	2.84	5.60
Ethylbenzene	12.36	13.48	12.81	12.53	7.50	16.99
m-Xylene/p-Xylene	43.65	47.10	44.27	45.16	27.60	62.86
Styrene	0.96	0.85	0.80	0.89	0.61	1.15
o-Xylene	15.57	16.49	15.76	15.91	9.36	20.84
1-Nonene	0.15	0.21	0.18	0.15	0.06	0.13
n-Nonane	1.94	2.01	1.92	2.01	1.03	2.02
Isopropylbenzene	0.97	1.09	1.00	1.00	0.37	1.24
a-Pinene	0.97	1.26	1.08	1.07	1.14	2.10
n-Propylbenzene	3.80	4.21	3.92	4.06	1.99	4.91
m-Ethyltoluene	12.87	13.80	13.36	14.02	6.29	15.02
p-Ethyltoluene	7.98	7.85	8.20	8.77	3.93	8.79
1,3,5-Trimethylbenzene	7.04	6.49	7.75	7.94	3.55	7.31
o-Ethyltoluene	5.39	5.35	5.62	5.49	2.51	5.58
b-Pinene	0.48	0.35	1.15	1.27	0.33	0.57
1,2,4-Trimethylbenzene	19.60	21.32	20.65	22.33	9.98	23.12
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.51	1.64	1.64	1.66	0.61	1.43
1,2,3-Trimethylbenzene	4.99	5.59	5.28	5.60	1.87	5.96
m-Diethylbenzene	0.87	1.02	1.28	1.03	0.57	1.03
p-Diethylbenzene	0.83	1.20	1.28	1.28	0.61	1.27
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.35	1.54	1.33	1.65	0.91	2.43
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	1.44	1.48	1.65	2.02	0.61	1.90
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	2.48	3.58	ND	ND	0.60	0.62
TNMOC (w/ unknowns)	1290.34	1294.84	1535.52	1542.06	848.76	1905.02
TNMOC (speciated)	1063.37	1043.64	1067.31	1100.05	735.47	1721.09

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	11295	11301D1	11301R1		11302D2	11302R2		11321
Sampling Date:	9/12/97	9/15/97	9/15/97		9/15/97	9/15/97		9/16/97
Analysis Date:	9/22/97	9/18/97	9/20/97		9/18/97	9/20/97		9/24/97
Ethylene	7.43	7.13	6.65		7.06	6.90		4.81
Acetylene	5.58	6.46	6.44		6.39	6.45		3.39
Ethane	5.58	8.56	0.30	a	8.62	0.43	a	1.59
Propylene	2.64	2.60	2.57		2.50	2.48		1.35
Propane	14.66	7.03	5.71		7.20	6.48		4.80
Propyne	ND	ND	ND		ND	ND		ND
Isobutane	7.19	5.44	5.60		5.59	5.64		3.04
Isobutene/1-Butene	5.38	5.42	5.49		5.22	5.18		3.18
1,3-Butadiene	0.34	0.45	0.32		0.42	0.34		0.15
n-Butane	29.59	24.68	24.86		24.44	24.96		13.16
trans-2-Butene	1.74	1.73	1.78		1.71	1.73		1.39
cis-2-Butene	2.26	2.16	2.18		2.16	2.18		1.08
3-Methyl-1-butene	3.33	3.51	3.54		3.53	3.46		1.79
Isopentane	158.56	168.57	168.85		170.28	168.77		88.96
1-Pentene	6.57	7.20	7.32		7.03	7.00		3.60
2-Methyl-1-butene	11.68	13.03	13.01		12.94	12.96		6.62
n-Pentane	76.62	82.38	82.18		82.40	82.49		42.13
Isoprene	0.60	0.91	0.91		0.86	0.90		0.51
trans-2-Pentene	15.60	17.60	17.52		18.07	17.51		8.81
cis-2-Pentene	7.24	8.65	8.61		8.62	8.60		4.38
2-Methyl-2-butene	17.31	22.39	22.12		22.21	22.13		11.37
2,2-Dimethylbutane	8.25	8.56	8.48		9.44	8.31		4.75
Cyclopentene	2.47	2.95	3.06		3.04	3.02		1.49
4-Methyl-1-pentene	1.27	1.03	1.41		1.38	1.32		0.69
Cyclopentane	7.31	8.23	8.68		8.48	8.67		4.44
2,3-Dimethylbutane	12.78	14.64	14.80		14.40	14.57		7.82
2-Methylpentane	84.43	106.47	93.49		101.98	95.63		59.31
3-Methylpentane	43.13	48.66	48.18		49.09	48.64		26.54
2-Methyl-1-pentene	3.10	3.86	3.64		3.97	3.78		1.97
1-Hexene	1.72	2.10	2.10		1.96	1.86		0.95
2-Ethyl-1-butene	ND	ND	ND		ND	ND		ND
n-Hexane	48.13	54.43	54.14		54.39	54.33		28.74
trans-2-Hexene	2.90	3.79	3.84		3.80	3.77		1.91
cis-2-Hexene	1.87	2.39	2.20		2.34	2.22		1.18
Methylcyclopentane	23.36	26.30	26.30		26.32	26.27		14.08
2,4-Dimethylpentane	5.35	6.16	6.30		6.21	6.23		3.37
Benzene	22.27	25.25	25.10		25.18	25.02		13.58
Cyclohexane	7.31	8.53	8.07		8.40	8.22		4.52
2-Methylhexane	17.67	20.12	19.40		19.26	19.34		11.89
2,3-Dimethylpentane	6.87	8.22	7.87		7.66	7.72		5.32

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	11295	11301D1	11301R1	11302D2	11302R2	11321
Sampling Date:	9/12/97	9/15/97	9/15/97	9/15/97	9/15/97	9/16/97
Analysis Date:	9/22/97	9/18/97	9/20/97	9/18/97	9/20/97	9/24/97
3-Methylhexane	20.40	30.33	24.78	22.56	22.03	13.90
1-Heptene	3.20	3.49	3.52	3.39	3.26	1.98
2,2,4-Trimethylpentane	10.47	12.83	12.95	12.86	13.30	6.31
n-Heptane	15.66	17.32	17.29	17.63	17.51	9.50
Methylcyclohexane	6.83	7.40	7.41	7.16	7.65	4.13
2,2,3-Trimethylpentane	3.20	3.57	3.55	3.60	3.58	1.84
2,3,4-Trimethylpentane	4.36	5.31	5.54	5.40	5.56	2.73
Toluene	52.89	56.22	58.07	56.79	59.19	30.42
2-Methylheptane	3.52	3.74	3.83	3.74	3.88	2.18
3-Methylheptane	3.54	4.47	3.80	3.75	3.97	2.16
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	3.71	3.89	3.93	3.47	3.65	2.16
Ethylbenzene	11.29	10.86	11.18	9.88	11.58	5.73
m-Xylene/p-Xylene	38.74	39.06	40.53	36.81	41.01	21.82
Styrene	0.59	0.38	0.44	0.38	0.42	0.55
o-Xylene	13.07	13.24	13.83	12.84	13.95	7.53
1-Nonene	0.10	0.13	0.13	0.10	0.11	0.04
n-Nonane	1.53	1.44	1.47	1.39	1.48	0.89
Isopropylbenzene	0.89	0.77	0.80	0.76	0.82	0.55
a-Pinene	1.34	0.59	0.58	0.53	0.61	0.28
n-Propylbenzene	3.08	3.20	3.30	3.01	3.52	1.89
m-Ethyltoluene	10.35	10.26	10.69	10.17	10.85	6.24
p-Ethyltoluene	6.18	6.64	6.41	6.28	6.59	4.28
1,3,5-Trimethylbenzene	5.12	5.92	4.98	5.57	5.37	3.63
o-Ethyltoluene	3.95	4.14	4.45	3.96	4.47	2.66
b-Pinene	0.09	0.27	0.31	0.27	0.26	0.12
1,2,4-Trimethylbenzene	16.08	16.04	17.09	15.85	17.00	9.73
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.09	1.01	1.20	1.04	1.22	0.77
1,2,3-Trimethylbenzene	3.74	3.84	3.65	3.96	4.35	2.06
m-Diethylbenzene	0.70	0.63	0.77	0.68	0.79	0.48
p-Diethylbenzene	0.84	0.78	0.87	0.73	0.87	0.63
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.54	0.85	1.07	0.84	1.05	1.32
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	1.46	0.79	1.12	0.93	0.88	1.05
1-Tridecene	ND	0.07	0.08	0.34	0.50	ND
n-Tridecane	0.59	0.42	0.46	0.70	0.65	0.51
TNMOC (w/ unknowns)	1125.34	1195.76	1208.23	1204.05	1212.90	641.27
TNMOC (speciated)	930.24	1017.48	993.09	1001.89	997.41	548.71

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	11356	11352	11373	11369	11390	11394
Sampling Date:	9/17/97	9/18/97	9/19/97	9/22/97	9/23/97	9/24/97
Analysis Date:	9/25/97	9/26/97	9/26/97	9/27/97	10/1/97	9/26/97
Ethylene	4.94	4.14	4.58	8.19	5.49	1.10
Acetylene	3.10	2.64	3.24	4.98	4.70	1.11
Ethane	1.94	4.05	4.02	4.28	1.20	6.86
Propylene	1.18	1.15	1.43	2.45	1.98	0.33
Propane	5.08	8.99	10.10	27.61	15.27	21.38
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.63	6.25	6.05	15.29	9.56	6.41
Isobutene/1-Butene	2.83	4.15	3.89	5.54	5.39	1.77
1,3-Butadiene	0.10	0.20	0.16	0.27	0.28	ND
n-Butane	9.14	26.72	25.66	55.51	41.74	18.84
trans-2-Butene	0.49	1.76	1.72	2.83	2.76	0.52
cis-2-Butene	0.58	2.22	2.20	3.45	3.39	0.76
3-Methyl-1-butene	0.81	3.22	2.97	5.57	5.34	1.14
Isopentane	41.63	139.48	139.36	276.62	246.70	61.21
1-Pentene	1.56	5.72	5.63	10.18	10.13	2.37
2-Methyl-1-butene	2.74	10.36	10.36	17.94	18.31	4.30
n-Pentane	18.29	61.35	61.10	116.15	111.48	28.72
Isoprene	0.35	0.51	0.65	0.77	1.04	0.21
trans-2-Pentene	3.51	12.52	13.28	22.34	23.50	4.96
cis-2-Pentene	1.68	6.21	6.40	10.91	11.35	2.58
2-Methyl-2-butene	3.92	15.30	16.67	26.14	29.00	6.51
2,2-Dimethylbutane	2.43	6.15	6.30	11.00	10.96	3.22
Cyclopentene	0.60	2.03	2.02	3.33	3.87	0.83
4-Methyl-1-pentene	0.31	0.89	0.89	1.74	1.94	0.34
Cyclopentane	2.00	5.73	6.07	11.12	11.00	2.89
2,3-Dimethylbutane	3.32	9.67	10.24	139.66	14.18	4.85
2-Methylpentane	35.98	69.25	68.30	121.78	116.76	37.20
3-Methylpentane	10.67	30.92	31.27	60.93	60.54	14.63
2-Methyl-1-pentene	0.69	2.32	2.36	4.73	4.85	0.96
1-Hexene	0.44	1.21	1.17	2.44	2.49	0.50
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	11.65	32.93	33.20	66.88	64.95	15.38
trans-2-Hexene	0.65	2.25	2.06	4.08	4.16	0.90
cis-2-Hexene	0.42	1.31	1.32	2.61	2.66	0.54
Methylcyclopentane	5.76	15.79	16.25	34.73	33.94	7.51
2,4-Dimethylpentane	1.45	3.63	3.83	8.53	8.35	1.67
Benzene	6.16	15.04	15.51	27.97	26.83	6.60
Cyclohexane	2.07	4.95	5.03	12.52	12.07	2.81
2-Methylhexane	6.48	12.71	12.87	25.77	24.89	7.53
2,3-Dimethylpentane	2.65	5.55	5.48	10.22	9.56	2.98

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SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	11356	11352	11373	11369	11390	11394
Sampling Date:	9/17/97	9/18/97	9/19/97	9/22/97	9/23/97	9/24/97
Analysis Date:	9/25/97	9/26/97	9/26/97	9/27/97	10/1/97	9/26/97
3-Methylhexane	7.31	13.72	14.34	29.46	29.85	7.43
1-Heptene	0.78	2.24	2.51	5.33	5.29	0.99
2,2,4-Trimethylpentane	3.23	6.24	6.68	22.93	20.68	2.51
n-Heptane	4.80	10.08	10.54	24.02	22.76	4.93
Methylcyclohexane	2.17	4.44	4.74	13.44	11.84	2.66
2,2,3-Trimethylpentane	0.73	1.80	1.71	6.13	5.81	0.60
2,3,4-Trimethylpentane	1.52	2.71	3.21	10.33	9.26	0.98
Toluene	17.55	31.39	33.82	70.11	63.49	13.62
2-Methylheptane	1.24	2.35	2.52	6.46	5.84	1.04
3-Methylheptane	1.18	2.32	2.46	6.36	5.99	1.00
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	1.35	2.23	2.48	6.27	5.37	1.17
Ethylbenzene	3.87	6.86	6.23	14.30	12.67	2.84
m-Xylene/p-Xylene	13.89	24.57	24.29	51.22	48.20	10.21
Styrene	0.44	0.38	0.63	1.06	0.59	0.30
o-Xylene	4.81	8.70	8.31	18.54	17.06	3.52
1-Nonene	0.03	0.05	0.05	0.20	0.17	0.02
n-Nonane	0.71	0.97	0.93	2.90	2.36	0.43
Isopropylbenzene	0.31	0.55	0.54	0.88	0.85	0.17
a-Pinene	0.28	0.34	0.39	0.43	1.65	0.52
n-Propylbenzene	1.23	2.23	2.00	4.14	4.02	0.70
m-Ethyltoluene	4.35	7.80	6.91	14.38	13.98	2.76
p-Ethyltoluene	3.00	5.03	4.17	8.29	7.99	1.51
1,3,5-Trimethylbenzene	2.68	4.63	3.43	8.56	7.97	1.09
o-Ethyltoluene	1.92	3.24	2.53	5.66	5.19	1.06
b-Pinene	0.15	0.14	0.14	0.17	2.04	0.73
1,2,4-Trimethylbenzene	7.05	12.41	11.07	22.78	20.89	4.05
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.75	0.78	0.90	1.55	1.13	0.34
1,2,3-Trimethylbenzene	1.39	3.49	2.36	5.88	5.83	0.83
m-Diethylbenzene	0.33	0.60	0.56	1.09	0.99	0.28
p-Diethylbenzene	0.37	0.62	0.64	1.18	0.92	0.32
1-Undecene	ND	ND	ND	ND	0.50	ND
n-Undecane	0.76	1.33	2.19	1.65	1.14	2.05
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	0.74	1.56	2.34	1.55	1.83	3.54
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.26	0.50	0.63	0.45	0.31	0.82
TNMOC (w/ unknowns)	333.00	848.85	841.77	1700.22	1593.97	408.22
TNMOC (speciated)	291.40	705.54	709.88	1534.76	1307.03	357.45

SNMOC 1997 REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	11424	11446	11462	11451D1	11451R1	11452D2
Sampling Date:	9/25/97	9/26/97	9/29/97	9/30/97	9/30/97	9/30/97
Analysis Date:	10/1/97	10/4/97	10/4/97	10/3/97	10/4/97	10/3/97
Ethylene	2.01	7.53	3.55	11.41	11.43	10.67
Acetylene	1.79	8.65	2.67	9.18	9.21	8.88
Ethane	2.08	20.85	3.08	5.47	9.41	2.18
Propylene	0.80	2.23	1.45	4.30	4.35	4.60
Propane	26.99	76.95	46.80	36.52	36.48	33.19
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	8.10	20.92	19.47	12.54	12.60	11.58
Isobutene/1-Butene	2.18	5.19	5.73	6.10	6.34	5.72
1,3-Butadiene	0.04	0.37	0.15	0.64	0.63	0.58
n-Butane	27.11	62.53	106.37	38.70	38.79	35.22
trans-2-Butene	0.81	2.09	3.80	1.61	1.73	1.60
cis-2-Butene	1.02	2.54	4.19	2.10	2.20	2.02
3-Methyl-1-butene	2.00	4.30	4.77	3.57	3.54	3.22
Isopentane	95.27	206.67	228.73	179.15	178.97	160.10
1-Pentene	3.58	8.53	10.50	7.15	7.25	6.60
2-Methyl-1-butene	6.74	15.32	16.92	12.88	12.95	11.54
n-Pentane	45.65	102.40	104.98	81.27	81.47	72.19
Isoprene	0.22	0.64	0.55	0.80	0.83	0.97
trans-2-Pentene	8.19	20.14	23.51	15.88	15.94	14.15
cis-2-Pentene	3.95	9.39	11.24	7.68	7.54	6.79
2-Methyl-2-butene	9.98	24.37	27.97	18.50	17.44	15.58
2,2-Dimethylbutane	4.22	9.51	12.02	8.72	8.73	7.48
Cyclopentene	1.26	3.48	3.62	2.38	2.36	2.07
4-Methyl-1-pentene	0.57	1.49	1.71	1.24	1.20	1.14
Cyclopentane	4.33	9.68	9.96	8.26	8.22	7.53
2,3-Dimethylbutane	8.19	15.85	15.36	13.30	13.54	12.62
2-Methylpentane	60.40	103.72	99.41	97.35	85.12	91.54
3-Methylpentane	22.47	50.30	50.72	44.03	44.39	39.74
2-Methyl-1-pentene	1.49	3.96	4.11	3.16	3.22	2.73
1-Hexene	0.72	2.06	2.19	1.73	1.76	1.79
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	23.25	57.07	52.96	47.43	47.57	42.42
trans-2-Hexene	1.26	3.76	3.48	2.95	2.97	2.63
cis-2-Hexene	0.87	2.19	2.32	1.75	1.76	1.56
Methylcyclopentane	11.21	27.36	26.21	22.81	23.07	20.55
2,4-Dimethylpentane	2.70	6.34	5.93	5.16	5.23	4.69
Benzene	9.89	25.43	22.14	21.87	21.65	19.83
Cyclohexane	3.56	9.82	7.89	8.13	7.99	7.26
2-Methylhexane	8.86	19.49	18.47	17.41	17.51	16.02
2,3-Dimethylpentane	3.96	7.75	7.30	7.31	7.35	6.81

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All concentrations reported in ppbC

Sample No.:	11424	11446	11462	11451D1	11451R1	11452D2
Sampling Date:	9/25/97	9/26/97	9/29/97	9/30/97	9/30/97	9/30/97
Analysis Date:	10/1/97	10/4/97	10/4/97	10/3/97	10/4/97	10/3/97
3-Methylhexane	11.52	22.78	22.21	20.23	20.62	24.42
1-Heptene	1.38	4.15	3.76	2.76	3.03	3.30
2,2,4-Trimethylpentane	5.87	12.24	10.16	11.73	11.43	10.08
n-Heptane	6.81	18.17	15.75	14.15	14.77	13.24
Methylcyclohexane	3.28	10.53	6.45	6.76	6.86	6.25
2,2,3-Trimethylpentane	1.14	3.53	2.97	3.12	3.42	2.97
2,3,4-Trimethylpentane	2.24	5.29	4.32	4.52	4.57	4.09
Toluene	20.77	55.40	46.98	50.76	50.98	45.72
2-Methylheptane	1.43	4.03	3.33	3.51	3.66	3.33
3-Methylheptane	1.43	3.93	3.33	3.58	3.58	3.45
1-Octene	ND	0.43	ND	ND	ND	ND
n-Octane	1.56	4.45	3.21	3.69	3.69	3.49
Ethylbenzene	4.21	10.91	8.88	9.73	9.71	8.62
m-Xylene/p-Xylene	14.78	39.60	33.50	35.55	35.58	31.56
Styrene	0.64	0.72	0.52	0.67	0.68	0.64
o-Xylene	5.00	12.91	11.32	11.80	11.91	10.72
1-Nonene	0.05	0.06	0.04	0.21	0.23	0.34
n-Nonane	0.67	1.45	1.13	1.45	1.41	1.57
Isopropylbenzene	0.26	0.59	0.53	0.72	0.72	0.70
a-Pinene	0.51	2.01	0.81	0.42	0.43	0.77
n-Propylbenzene	1.04	2.76	2.38	2.76	2.82	2.57
m-Ethyltoluene	3.44	9.62	7.95	9.79	9.75	8.71
p-Ethyltoluene	2.41	5.69	4.97	6.03	6.11	5.60
1,3,5-Trimethylbenzene	1.93	5.07	4.47	5.52	5.56	5.07
o-Ethyltoluene	1.38	3.77	3.28	4.13	3.81	3.88
b-Pinene	0.19	2.26	0.41	0.10	0.10	0.24
1,2,4-Trimethylbenzene	5.74	14.31	12.96	15.28	15.23	14.10
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.39	0.75	0.96	4.85	5.09	3.92
1,2,3-Trimethylbenzene	1.37	3.66	3.32	3.35	4.27	3.78
m-Diethylbenzene	0.30	0.66	0.52	0.71	0.73	0.90
p-Diethylbenzene	0.25	0.80	0.69	0.83	1.14	0.75
1-Undecene	ND	ND	0.22	ND	ND	ND
n-Undecane	0.68	0.78	2.01	19.42	20.94	15.47
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	0.59	0.94	1.00	18.96	18.98	12.45
1-Tridecene	ND	ND	ND	0.06	0.06	0.15
n-Tridecane	0.17	0.21	0.23	5.43	5.43	2.15
TNMOC (w/ unknowns)	593.31	1435.78	1411.66	1250.77	1254.18	1124.52
TNMOC (speciated)	521.15	1225.35	1196.83	1053.01	1050.05	950.75

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All concentrations reported in ppbC

Sample No.:	**11452R2**
Sampling Date:	**9/30/97**
Analysis Date:	**10/4/97**
Ethylene	10.04
Acetylene	8.12
Ethane	10.00
Propylene	3.91
Propane	31.18
Propyne	ND
Isobutane	10.83
Isobutene/1-Butene	5.57
1,3-Butadiene	0.54
n-Butane	32.56
trans-2-Butene	1.46
cis-2-Butene	1.83
3-Methyl-1-butene	2.97
Isopentane	147.31
1-Pentene	6.45
2-Methyl-1-butene	10.55
n-Pentane	66.32
Isoprene	0.97
trans-2-Pentene	13.07
cis-2-Pentene	6.35
2-Methyl-2-butene	15.18
2,2-Dimethylbutane	6.83
Cyclopentene	1.90
4-Methyl-1-pentene	1.06
Cyclopentane	6.95
2,3-Dimethylbutane	12.06
2-Methylpentane	73.42
3-Methylpentane	36.70
2-Methyl-1-pentene	2.64
1-Hexene	1.49
2-Ethyl-1-butene	ND
n-Hexane	39.35
trans-2-Hexene	2.39
cis-2-Hexene	1.46
Methylcyclopentane	18.93
2,4-Dimethylpentane	4.37
Benzene	17.55
Cyclohexane	6.66
2-Methylhexane	14.84
2,3-Dimethylpentane	6.25

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All concentrations reported in ppbC

Sample No.:	**11452R2**
Sampling Date:	**9/30/97**
Analysis Date:	**10/4/97**
3-Methylhexane	17.58
1-Heptene	2.59
2,2,4-Trimethylpentane	9.68
n-Heptane	12.29
Methylcyclohexane	5.60
2,2,3-Trimethylpentane	2.79
2,3,4-Trimethylpentane	3.76
Toluene	41.84
2-Methylheptane	3.00
3-Methylheptane	3.05
1-Octene	ND
n-Octane	3.20
Ethylbenzene	7.86
m-Xylene/p-Xylene	28.68
Styrene	0.95
o-Xylene	9.77
1-Nonene	0.34
n-Nonane	1.28
Isopropylbenzene	0.64
a-Pinene	0.91
n-Propylbenzene	2.36
m-Ethyltoluene	7.93
p-Ethyltoluene	5.22
1,3,5-Trimethylbenzene	4.59
o-Ethyltoluene	3.00
b-Pinene	0.27
1,2,4-Trimethylbenzene	12.75
1-Decene	ND
n-Decane	3.67
1,2,3-Trimethylbenzene	3.25
m-Diethylbenzene	0.77
p-Diethylbenzene	0.70
1-Undecene	ND
n-Undecane	14.71
1-Dodecene	ND
n-Dodecane	10.84
1-Tridecene	0.10
n-Tridecane	1.98
TNMOC (w/ unknowns)	1039.89
TNMOC (speciated)	867.97

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09434	09438	09450	09459	09466	09486
Sampling Date:	6/2/97	6/3/97	6/4/97	6/5/97	6/6/97	6/9/97
Analysis Date:	7/21/97	7/21/97	7/21/97	7/31/97	7/21/97	7/22/97
Ethylene	19.17	7.92	8.16	7.77	13.15	13.66
Acetylene	16.67	6.07	6.39	6.04	13.32	13.77
Ethane	22.03	17.95	13.86	11.70	27.02	13.86
Propylene	8.31	2.46	2.62	2.66	4.15	5.75
Propane	43.53	16.55	15.08	10.06	28.62	23.66
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	5.74	3.84	2.21	1.52	5.81	10.31
Isobutene/1-Butene	10.13	3.93	3.12	3.45	4.69	7.06
1,3-Butadiene	1.47	0.31	0.19	0.35	0.50	1.01
n-Butane	17.46	6.35	5.06	3.72	9.99	12.72
trans-2-Butene	1.35	0.17	0.38	0.32	0.42	1.01
cis-2-Butene	0.97	0.31	0.34	0.37	0.44	0.78
3-Methyl-1-butene	0.72	0.22	0.21	0.24	0.30	0.66
Isopentane	38.23	16.37	11.79	11.15	17.93	34.96
1-Pentene	1.80	0.13	0.66	0.37	0.44	1.13
2-Methyl-1-butene	2.65	0.74	0.28	0.72	0.98	2.36
n-Pentane	17.32	6.91	5.43	4.29	8.52	16.82
Isoprene	1.55	0.65	0.51	0.71	0.94	1.47
trans-2-Pentene	3.51	1.77	0.68	1.48	1.03	3.23
cis-2-Pentene	1.49	0.45	0.48	0.48	0.68	1.34
2-Methyl-2-butene	3.67	0.75	0.64	0.95	1.30	3.25
2,2-Dimethylbutane	2.21	2.12	0.78	0.84	1.57	2.52
Cyclopentene	0.58	0.12	0.15	0.15	0.25	0.62
4-Methyl-1-pentene	0.19	0.22	0.08	0.16	0.13	0.35
Cyclopentane	2.90	0.94	0.76	0.85	1.14	2.20
2,3-Dimethylbutane	4.69	1.33	1.47	1.69	2.14	4.56
2-Methylpentane	33.74	4.53	4.63	3.90	6.40	17.79
3-Methylpentane	11.19	6.65	3.25	4.64	7.16	11.73
2-Methyl-1-pentene	0.61	0.15	0.19	0.19	0.35	0.53
1-Hexene	0.75	0.24	0.21	0.22	0.32	0.61
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	10.86	4.48	3.66	3.14	5.44	10.54
trans-2-Hexene	1.50	0.07	0.14	0.15	0.19	0.70
cis-2-Hexene	0.40	0.14	0.08	0.08	0.15	0.37
Methylcyclopentane	5.20	1.96	1.88	1.74	2.81	5.34
2,4-Dimethylpentane	2.20	1.17	0.83	0.98	1.20	2.00
Benzene	11.55	4.19	3.51	3.71	5.91	9.56
Cyclohexane	1.41	1.71	0.67	0.71	1.11	1.69
2-Methylhexane	8.37	4.15	4.32	3.74	4.68	8.00
2,3-Dimethylpentane	3.88	1.85	1.76	1.45	1.49	3.73

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09434	09438	09450	09459	09466	09486
Sampling Date:	6/2/97	6/3/97	6/4/97	6/5/97	6/6/97	6/9/97
Analysis Date:	7/21/97	7/21/97	7/21/97	7/31/97	7/21/97	7/22/97
3-Methylhexane	9.55	4.35	2.62	2.56	3.90	8.59
1-Heptene	ND	ND	ND	ND	ND	1.06
2,2,4-Trimethylpentane	11.85	3.55	4.19	4.85	4.59	9.59
n-Heptane	9.30	1.90	1.67	1.26	2.64	5.05
Methylcyclohexane	3.32	1.21	1.17	0.98	1.99	3.05
2,2,3-Trimethylpentane	2.17	0.71	0.64	0.78	0.87	1.87
2,3,4-Trimethylpentane	4.14	1.42	1.46	1.69	1.79	3.59
Toluene	27.89	14.42	13.46	10.74	13.51	26.44
2-Methylheptane	1.61	0.76	0.81	0.96	0.89	1.71
3-Methylheptane	1.67	0.99	0.89	1.12	0.81	1.73
1-Octene	0.44	0.05	0.11	ND	0.11	0.31
n-Octane	1.75	1.12	1.04	1.37	0.96	2.11
Ethylbenzene	6.55	2.61	3.23	3.26	3.28	6.13
m-Xylene/p-Xylene	20.18	5.97	10.40	12.07	7.66	21.97
Styrene	0.81	0.79	0.26	0.30	0.43	ND
o-Xylene	7.26	2.30	3.22	3.74	2.89	6.30
1-Nonene	1.47	0.64	0.14	0.38	0.12	0.41
n-Nonane	2.99	2.33	1.42	1.17	0.87	2.07
Isopropylbenzene	0.40	0.19	0.28	ND	0.18	0.28
a-Pinene	1.74	1.70	0.28	0.58	0.66	1.94
n-Propylbenzene	1.63	1.05	0.75	0.56	0.60	1.31
m-Ethyltoluene	4.65	1.94	1.82	1.62	1.66	3.77
p-Ethyltoluene	3.67	2.16	1.48	1.49	1.05	2.87
1,3,5-Trimethylbenzene	4.96	2.92	1.50	1.49	1.26	3.13
o-Ethyltoluene	1.83	0.76	0.81	0.77	0.71	1.59
b-Pinene	0.56	0.23	0.14	0.19	0.17	1.04
1,2,4-Trimethylbenzene	7.23	3.16	2.78	2.24	2.46	5.10
1-Decene	0.28	0.10	0.22	0.17	0.09	0.32
n-Decane	2.84	4.10	1.21	1.15	1.01	1.91
1,2,3-Trimethylbenzene	1.75	0.46	0.39	0.47	0.50	0.71
m-Diethylbenzene	0.42	0.28	0.08	0.05	0.03	0.07
p-Diethylbenzene	1.96	0.34	0.21	ND	0.13	0.34
1-Undecene	0.47	0.24	0.15	ND	0.10	0.16
n-Undecane	2.15	12.35	0.72	0.67	4.63	1.55
1-Dodecene	0.74	0.26	0.25	0.26	0.19	0.39
n-Dodecane	1.28	8.56	0.22	0.42	5.24	0.81
1-Tridecene	0.15	0.07	ND	ND	ND	ND
n-Tridecane	0.51	0.93	ND	0.18	0.50	ND
TNMOC (w/ unknowns)	516.69	245.70	187.35	178.87	280.54	439.03
TNMOC (speciated)	472.19	216.80	166.46	156.26	251.17	380.96

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09493	09532	09528	09546	09543	09562
Sampling Date:	6/10/97	6/11/97	6/12/97	6/13/97	6/16/97	6/17/97
Analysis Date:	7/22/97	7/22/97	7/31/97	7/21/97	7/23/97	7/23/97
Ethylene	7.35	20.83	7.14	4.45	4.86	4.62
Acetylene	6.37	14.95	4.96	2.42	2.36	2.88
Ethane	13.05	30.68	19.32	8.25	7.74	17.56
Propylene	2.44	7.31	2.39	1.21	1.56	1.60
Propane	10.09	38.08	27.12	8.63	6.97	17.38
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.41	9.23	3.31	1.86	1.29	3.48
Isobutene/1-Butene	3.01	7.24	2.92	1.57	2.06	1.82
1,3-Butadiene	0.26	1.05	0.22	0.05	0.10	0.12
n-Butane	4.55	15.81	7.45	3.49	2.65	8.43
trans-2-Butene	0.22	0.80	0.19	0.13	0.13	0.24
cis-2-Butene	0.35	0.86	0.30	0.21	0.20	0.28
3-Methyl-1-butene	0.22	0.76	0.17	0.09	0.10	0.12
Isopentane	12.74	41.46	12.38	7.59	5.14	8.44
1-Pentene	0.44	1.91	0.32	0.25	0.27	0.04
2-Methyl-1-butene	0.78	2.46	0.76	0.31	0.30	0.32
n-Pentane	5.44	18.09	7.08	4.12	2.27	5.43
Isoprene	0.66	1.51	0.71	0.69	1.07	0.44
trans-2-Pentene	0.87	3.68	2.83	0.39	0.35	0.39
cis-2-Pentene	0.54	1.40	0.44	0.29	0.27	0.25
2-Methyl-2-butene	1.00	3.17	0.82	0.43	0.46	0.37
2,2-Dimethylbutane	1.05	2.56	0.81	0.46	0.11	0.54
Cyclopentene	0.21	0.60	0.15	0.11	0.15	0.10
4-Methyl-1-pentene	0.19	0.16	0.34	0.30	0.09	0.05
Cyclopentane	1.03	3.18	0.97	0.84	0.61	0.78
2,3-Dimethylbutane	1.84	4.62	1.50	0.78	0.75	0.93
2-Methylpentane	4.70	22.50	4.39	2.32	2.04	3.22
3-Methylpentane	4.84	12.68	5.81	2.08	2.65	3.12
2-Methyl-1-pentene	0.24	0.64	0.21	0.07	0.14	0.11
1-Hexene	0.21	0.63	0.18	0.06	0.13	0.14
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.47	11.37	3.46	2.02	1.46	3.07
trans-2-Hexene	0.18	0.65	0.12	0.09	0.08	0.07
cis-2-Hexene	0.12	0.35	0.10	0.03	0.04	0.05
Methylcyclopentane	2.15	6.13	1.96	1.22	0.86	1.63
2,4-Dimethylpentane	0.87	2.47	0.69	0.45	0.40	0.58
Benzene	3.59	8.91	3.18	1.70	3.36	1.98
Cyclohexane	1.05	2.91	0.94	0.95	0.90	1.18
2-Methylhexane	4.31	9.01	4.09	4.81	3.30	3.73
2,3-Dimethylpentane	1.62	4.68	1.41	2.35	1.65	1.26

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09493	09532	09528	09546	09543	09562
Sampling Date:	6/10/97	6/11/97	6/12/97	6/13/97	6/16/97	6/17/97
Analysis Date:	7/22/97	7/22/97	7/31/97	7/21/97	7/23/97	7/23/97
3-Methylhexane	3.10	10.82	3.08	3.73	1.05	1.28
1-Heptene	0.26	ND	0.34	0.31	0.18	0.33
2,2,4-Trimethylpentane	3.46	10.63	2.71	1.47	1.43	1.52
n-Heptane	2.32	7.73	1.61	1.68	0.67	1.35
Methylcyclohexane	1.44	4.80	1.29	0.93	0.44	1.63
2,2,3-Trimethylpentane	0.65	1.82	0.56	0.25	0.14	0.19
2,3,4-Trimethylpentane	1.53	3.61	1.12	0.63	0.58	0.71
Toluene	12.04	42.51	9.72	6.40	3.82	5.22
2-Methylheptane	0.65	1.97	0.43	0.30	0.29	0.62
3-Methylheptane	0.60	2.31	0.46	0.31	0.30	0.54
1-Octene	0.09	0.52	ND	ND	ND	0.05
n-Octane	0.85	2.93	0.67	0.35	0.30	0.80
Ethylbenzene	3.03	6.08	1.64	1.16	0.80	0.98
m-Xylene/p-Xylene	8.80	18.30	6.50	2.43	1.90	3.27
Styrene	0.25	1.99	0.52	0.28	0.17	0.15
o-Xylene	2.85	7.48	2.28	1.03	0.82	1.03
1-Nonene	0.08	1.29	ND	ND	ND	0.12
n-Nonane	0.85	1.76	0.55	0.38	0.25	0.60
Isopropylbenzene	0.16	0.35	0.29	0.10	0.00	0.10
a-Pinene	0.54	3.28	0.53	0.28	0.82	0.31
n-Propylbenzene	0.36	1.05	0.38	0.20	0.17	0.28
m-Ethyltoluene	1.63	3.43	1.24	0.73	0.57	0.77
p-Ethyltoluene	1.03	2.31	0.72	0.49	0.34	0.40
1,3,5-Trimethylbenzene	1.39	2.54	0.92	0.63	0.45	0.60
o-Ethyltoluene	0.69	1.77	0.86	0.34	0.24	0.33
b-Pinene	0.20	0.82	0.21	0.08	0.37	0.28
1,2,4-Trimethylbenzene	2.37	5.06	1.92	0.91	0.79	1.13
1-Decene	0.08	ND	0.08	0.05	0.02	0.04
n-Decane	0.93	1.86	0.71	0.57	0.24	0.63
1,2,3-Trimethylbenzene	0.51	0.76	0.40	0.23	0.12	0.13
m-Diethylbenzene	0.03	0.08	0.04	0.02	ND	0.07
p-Diethylbenzene	0.12	0.43	0.09	ND	ND	0.17
1-Undecene	0.12	0.26	0.52	0.30	ND	ND
n-Undecane	0.85	1.49	1.95	1.14	0.32	0.46
1-Dodecene	0.15	0.52	0.94	ND	ND	ND
n-Dodecane	0.70	0.90	2.53	0.66	0.19	0.31
1-Tridecene	ND	ND	1.71	ND	0.12	ND
n-Tridecane	0.24	0.14	3.28	ND	0.38	ND
TNMOC (w/ unknowns)	182.39	522.40	202.56	103.92	92.86	137.22
TNMOC (speciated)	160.40	468.95	183.95	95.46	77.18	123.13

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09590	09594	09593	09677	09689	09691
Sampling Date:	6/20/97	6/23/97	6/24/97	6/25/97	6/27/97	6/30/97
Analysis Date:	7/24/97	7/24/97	7/24/97	7/23/97	7/25/97	7/25/97
Ethylene	6.67	6.94	5.42	17.69	10.94	7.21
Acetylene	9.87	3.37	4.52	11.16	12.38	3.89
Ethane	10.57	11.68	14.47	31.39	21.57	7.65
Propylene	2.25	2.99	1.60	6.59	4.66	2.15
Propane	11.58	10.67	19.74	40.47	20.74	7.82
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.20	4.32	3.59	7.11	4.86	1.31
Isobutene/1-Butene	3.39	2.70	2.17	7.96	6.23	2.89
1,3-Butadiene	0.35	0.29	0.16	1.10	0.75	0.18
n-Butane	4.29	5.86	6.63	12.17	9.65	2.84
trans-2-Butene	0.27	0.24	0.21	1.17	0.75	0.17
cis-2-Butene	0.42	0.28	0.18	0.94	0.59	0.40
3-Methyl-1-butene	0.18	0.12	0.10	0.62	0.33	0.18
Isopentane	9.57	8.53	6.71	30.98	18.32	7.69
1-Pentene	0.32	0.23	0.32	1.02	0.45	0.59
2-Methyl-1-butene	0.67	0.45	0.34	2.23	1.12	0.51
n-Pentane	5.62	4.41	4.22	13.96	9.36	3.90
Isoprene	1.65	0.94	0.81	2.36	3.28	1.97
trans-2-Pentene	1.47	0.49	0.39	2.27	1.17	0.58
cis-2-Pentene	0.43	0.37	0.28	1.29	0.74	0.37
2-Methyl-2-butene	0.96	0.68	0.52	3.35	1.59	0.79
2,2-Dimethylbutane	0.61	0.80	0.47	1.65	1.00	0.52
Cyclopentene	0.23	0.13	0.08	0.58	0.26	0.15
4-Methyl-1-pentene	0.16	0.09	0.07	0.31	0.34	0.14
Cyclopentane	0.79	0.83	0.79	1.76	1.25	0.77
2,3-Dimethylbutane	1.14	1.00	1.02	3.41	2.22	0.99
2-Methylpentane	3.70	3.24	2.80	10.60	6.85	3.25
3-Methylpentane	4.75	4.05	2.45	9.52	6.68	2.74
2-Methyl-1-pentene	0.15	0.15	0.08	0.53	0.32	0.15
1-Hexene	0.25	0.38	0.10	0.50	0.26	0.11
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	3.21	2.71	2.25	8.34	6.77	2.53
trans-2-Hexene	0.14	0.10	0.08	0.46	0.33	0.13
cis-2-Hexene	0.11	0.09	0.06	0.32	0.21	0.09
Methylcyclopentane	1.79	1.51	1.35	4.17	2.91	1.43
2,4-Dimethylpentane	0.68	0.53	0.44	1.62	1.03	0.54
Benzene	3.99	2.66	2.19	7.52	5.31	2.48
Cyclohexane	1.05	1.14	0.86	1.44	1.48	0.78
2-Methylhexane	3.67	3.30	3.46	8.03	6.12	3.57
2,3-Dimethylpentane	1.19	0.96	1.14	3.04	3.52	1.37

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09590	09594	09593	09677	09689	09691
Sampling Date:	6/20/97	6/23/97	6/24/97	6/25/97	6/27/97	6/30/97
Analysis Date:	7/24/97	7/24/97	7/24/97	7/23/97	7/25/97	7/25/97
3-Methylhexane	1.89	1.40	0.97	7.60	5.15	1.52
1-Heptene	0.27	0.25	0.18	0.77	0.44	0.21
2,2,4-Trimethylpentane	2.43	1.77	1.62	6.64	3.90	1.96
n-Heptane	1.14	1.17	0.79	5.19	3.24	0.92
Methylcyclohexane	1.13	1.27	1.27	2.82	2.11	0.92
2,2,3-Trimethylpentane	0.41	0.39	0.29	1.43	0.79	0.27
2,3,4-Trimethylpentane	1.05	0.89	0.65	2.67	1.76	0.84
Toluene	8.85	6.21	4.53	21.98	12.79	5.30
2-Methylheptane	0.48	0.47	0.39	1.12	0.82	0.44
3-Methylheptane	0.54	0.52	0.36	1.12	0.85	0.38
1-Octene	0.08	0.03	ND	0.17	0.01	0.00
n-Octane	0.57	0.53	0.40	1.42	0.95	0.37
Ethylbenzene	1.97	2.78	0.86	5.61	2.39	0.89
m-Xylene/p-Xylene	5.68	9.79	2.42	17.62	7.44	3.48
Styrene	1.10	0.54	0.19	0.63	1.16	0.33
o-Xylene	2.13	2.91	1.03	5.56	2.52	1.20
1-Nonene	0.05	0.02	ND	0.20	0.09	0.06
n-Nonane	0.40	0.40	0.33	1.26	0.94	0.30
Isopropylbenzene	0.16	0.14	0.67	0.26	0.16	0.09
a-Pinene	1.08	0.92	0.50	4.56	1.75	0.66
n-Propylbenzene	0.33	ND	0.23	0.68	0.52	0.21
m-Ethyltoluene	1.18	0.96	0.78	3.08	1.84	0.86
p-Ethyltoluene	0.62	0.43	0.53	1.77	1.02	0.45
1,3,5-Trimethylbenzene	0.76	0.59	0.49	2.27	1.22	0.52
o-Ethyltoluene	0.75	0.56	0.39	1.43	0.55	0.52
b-Pinene	ND	0.60	0.35	2.50	0.27	0.49
1,2,4-Trimethylbenzene	1.49	1.17	1.07	4.10	2.38	1.07
1-Decene	0.02	ND	ND	ND	ND	0.02
n-Decane	0.45	0.38	0.45	1.20	0.68	0.25
1,2,3-Trimethylbenzene	0.33	0.27	0.24	0.63	0.43	0.28
m-Diethylbenzene	0.03	0.07	0.03	0.12	0.08	0.06
p-Diethylbenzene	0.12	0.11	0.04	0.21	0.22	0.05
1-Undecene	0.25	0.20	0.16	0.06	0.23	0.04
n-Undecane	0.63	0.84	0.98	1.02	0.71	0.38
1-Dodecene	0.09	0.10	0.06	0.42	0.14	0.15
n-Dodecane	0.26	1.33	1.73	0.59	0.27	0.16
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	0.27	0.25	ND	ND	ND
TNMOC (w/ unknowns)	153.59	149.99	127.04	404.79	259.10	115.62
TNMOC (speciated)	139.06	129.51	117.30	368.37	236.16	100.47

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09696	09704	09820	09837	09835	09915
Sampling Date:	7/1/97	7/2/97	7/3/97	7/7/97	7/8/97	7/9/97
Analysis Date:	7/24/97	7/28/97	8/1/97	7/31/97	7/31/97	8/1/97
Ethylene	4.25	6.26	2.56	4.41	4.23	4.59
Acetylene	2.59	4.04	1.44	11.45	7.24	7.00
Ethane	5.26	6.53	3.77	10.82	7.21	9.59
Propylene	1.44	2.29	0.82	1.43	1.51	1.43
Propane	4.78	5.62	4.21	13.29	8.21	9.22
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.61	1.38	1.50	4.59	2.50	5.05
Isobutene/1-Butene	2.27	2.91	1.89	3.91	2.74	2.78
1,3-Butadiene	0.23	0.33	0.09	0.25	0.25	0.29
n-Butane	2.58	3.99	2.91	6.86	5.46	8.02
trans-2-Butene	0.34	0.27	0.22	0.27	0.25	0.22
cis-2-Butene	0.32	0.33	0.36	0.32	0.27	0.37
3-Methyl-1-butene	0.16	0.15	0.15	0.17	0.15	0.14
Isopentane	6.59	7.89	8.63	12.28	10.15	11.76
1-Pentene	0.12	0.32	0.50	0.54	0.49	0.36
2-Methyl-1-butene	0.42	0.53	0.53	0.70	0.57	0.54
n-Pentane	3.02	3.72	3.59	5.96	5.18	7.06
Isoprene	1.94	2.73	2.81	1.63	2.24	1.18
trans-2-Pentene	0.52	0.53	0.52	0.67	0.65	0.56
cis-2-Pentene	0.35	0.40	0.37	0.47	0.45	0.40
2-Methyl-2-butene	0.66	0.82	0.75	0.87	0.91	0.77
2,2-Dimethylbutane	0.59	0.59	0.53	1.15	0.61	0.66
Cyclopentene	0.11	0.15	0.19	0.17	0.19	0.11
4-Methyl-1-pentene	0.42	0.40	0.15	0.24	0.12	0.28
Cyclopentane	0.90	0.75	0.68	0.88	0.82	1.02
2,3-Dimethylbutane	1.09	0.97	0.91	1.32	1.14	1.43
2-Methylpentane	2.16	3.27	2.82	4.70	3.88	4.27
3-Methylpentane	2.54	3.31	2.59	5.04	3.44	4.54
2-Methyl-1-pentene	0.10	0.17	0.12	0.19	0.16	0.12
1-Hexene	0.11	0.12	0.11	0.14	0.18	0.15
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	1.87	2.27	2.11	4.03	3.02	3.58
trans-2-Hexene	0.09	0.15	0.09	0.15	0.14	0.14
cis-2-Hexene	0.07	0.07	0.06	0.11	0.10	0.08
Methylcyclopentane	1.06	1.42	1.20	2.15	1.88	2.15
2,4-Dimethylpentane	0.58	0.53	0.61	0.67	0.64	0.64
Benzene	1.86	2.74	1.93	4.04	3.08	4.68
Cyclohexane	0.99	0.74	1.03	1.03	0.84	1.42
2-Methylhexane	4.14	3.79	6.11	3.82	3.89	4.36
2,3-Dimethylpentane	1.59	1.31	2.65	1.38	1.45	2.27

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09696	09704	09820	09837	09835	09915
Sampling Date:	7/1/97	7/2/97	7/3/97	7/7/97	7/8/97	7/9/97
Analysis Date:	7/24/97	7/28/97	8/1/97	7/31/97	7/31/97	8/1/97
3-Methylhexane	2.77	1.74	3.97	1.81	2.05	1.76
1-Heptene	0.41	0.14	0.26	0.31	0.25	0.33
2,2,4-Trimethylpentane	1.58	2.41	1.56	2.79	2.70	2.63
n-Heptane	1.38	0.92	2.72	1.55	1.22	1.30
Methylcyclohexane	1.21	0.90	1.39	1.24	1.33	1.44
2,2,3-Trimethylpentane	0.24	0.34	0.26	0.48	0.42	0.45
2,3,4-Trimethylpentane	0.60	0.94	0.62	1.19	1.15	1.10
Toluene	4.33	6.38	4.00	8.12	7.76	11.00
2-Methylheptane	0.32	0.42	0.36	0.56	0.57	0.52
3-Methylheptane	0.37	0.41	0.31	0.60	0.50	0.54
1-Octene	ND	0.04	ND	ND	ND	ND
n-Octane	0.35	0.44	0.34	0.50	0.51	0.63
Ethylbenzene	0.71	1.68	0.32	0.68	0.70	0.83
m-Xylene/p-Xylene	2.32	4.68	0.87	2.42	2.13	2.35
Styrene	0.30	0.26	0.05	0.16	0.35	0.47
o-Xylene	0.91	1.77	0.34	0.80	0.87	0.87
1-Nonene	ND	0.06	0.02	ND	ND	0.09
n-Nonane	0.40	0.35	0.20	0.15	0.24	0.23
Isopropylbenzene	0.14	0.13	0.11	0.05	0.94	0.11
a-Pinene	1.03	0.84	0.47	0.20	0.42	0.31
n-Propylbenzene	0.19	0.25	0.10	0.10	0.15	0.13
m-Ethyltoluene	0.73	1.00	0.37	0.51	0.60	0.53
p-Ethyltoluene	0.47	0.52	0.20	0.20	0.29	0.33
1,3,5-Trimethylbenzene	0.49	0.66	0.17	0.25	0.30	0.30
o-Ethyltoluene	0.50	0.61	0.23	0.16	0.44	0.26
b-Pinene	0.96	0.87	0.66	0.09	0.35	0.17
1,2,4-Trimethylbenzene	0.83	0.97	0.36	0.54	0.72	0.59
1-Decene	0.03	0.39	0.01	0.05	0.00	0.06
n-Decane	0.33	0.35	0.14	0.15	0.18	0.20
1,2,3-Trimethylbenzene	0.34	0.16	ND	0.15	0.14	0.14
m-Diethylbenzene	0.10	0.13	ND	0.03	0.03	0.03
p-Diethylbenzene	0.18	0.10	ND	0.04	0.04	0.02
1-Undecene	ND	ND	ND	ND	ND	0.00
n-Undecane	0.75	0.31	0.24	0.28	0.28	0.30
1-Dodecene	ND	ND	0.04	0.07	0.10	0.05
n-Dodecane	1.27	0.11	0.26	0.23	0.11	0.28
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.63	ND	0.07	ND	ND	ND
TNMOC (w/ unknowns)	96.49	116.30	94.26	162.08	128.75	148.47
TNMOC (speciated)	86.87	105.06	82.53	138.53	114.07	133.56

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09914	10049D1	10049R1	10050D2	10050R2	09977
Sampling Date:	7/10/97	7/11/97	7/11/97	7/11/97	7/11/97	7/14/97
Analysis Date:	8/1/97	7/28/97	7/30/97	7/28/97	7/30/97	8/8/97
Ethylene	3.39	5.08	5.03	4.49	4.56	8.04
Acetylene	2.22	2.98	3.05	2.82	2.87	6.08
Ethane	0.51	10.17	10.22	9.80	10.08	14.99
Propylene	1.36	1.78	1.79	1.66	1.65	2.88
Propane	6.63	14.73	14.57	14.44	14.21	23.20
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.77	4.04	4.32	3.91	4.04	3.35
Isobutene/1-Butene	2.94	2.12	2.04	2.05	2.11	3.75
1,3-Butadiene	0.12	0.22	0.15	0.18	0.11	0.43
n-Butane	7.72	12.51	12.35	12.17	11.62	8.38
trans-2-Butene	0.30	0.24	0.22	0.23	0.26	0.29
cis-2-Butene	0.25	0.29	0.32	0.24	0.26	0.45
3-Methyl-1-butene	0.15	0.14	0.13	0.13	0.11	0.23
Isopentane	10.08	22.78	20.42	19.38	19.08	15.71
1-Pentene	0.47	0.14	0.47	0.44	0.49	1.15
2-Methyl-1-butene	0.52	0.60	0.53	0.52	0.50	0.84
n-Pentane	4.34	7.48	7.37	7.24	7.09	6.55
Isoprene	1.61	1.84	1.97	2.01	1.94	2.50
trans-2-Pentene	1.29	4.12	1.41	1.60	1.26	0.79
cis-2-Pentene	0.33	0.43	0.45	0.45	0.42	0.56
2-Methyl-2-butene	0.68	0.84	0.83	0.83	0.81	1.23
2,2-Dimethylbutane	0.59	1.03	0.71	0.70	0.77	0.81
Cyclopentene	0.13	0.13	0.17	0.17	0.16	0.22
4-Methyl-1-pentene	0.48	0.19	0.12	0.12	0.12	0.13
Cyclopentane	0.95	1.45	1.19	1.21	1.12	1.14
2,3-Dimethylbutane	1.26	1.33	1.00	0.99	1.02	1.66
2-Methylpentane	3.30	3.66	3.46	3.67	3.53	5.02
3-Methylpentane	3.42	4.38	3.99	3.96	3.66	4.30
2-Methyl-1-pentene	0.12	0.19	0.19	0.14	0.12	0.20
1-Hexene	0.12	0.13	0.17	0.27	0.28	0.20
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.72	6.70	6.52	6.19	6.47	4.01
trans-2-Hexene	0.12	0.15	0.09	0.11	0.11	0.14
cis-2-Hexene	0.07	0.10	0.07	0.11	0.07	0.12
Methylcyclopentane	1.71	2.58	2.32	2.35	2.35	2.28
2,4-Dimethylpentane	0.51	1.04	0.74	0.60	0.59	0.90
Benzene	2.59	2.41	2.34	2.26	2.20	4.01
Cyclohexane	0.90	2.15	2.13	2.17	2.09	1.50
2-Methylhexane	3.78	3.57	3.68	3.74	3.87	6.39
2,3-Dimethylpentane	1.30	1.65	1.43	1.43	1.93	2.91

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	09914	10049D1	10049R1	10050D2	10050R2	09977
Sampling Date:	7/10/97	7/11/97	7/11/97	7/11/97	7/11/97	7/14/97
Analysis Date:	8/1/97	7/28/97	7/30/97	7/28/97	7/30/97	8/8/97
3-Methylhexane	1.83	2.14	1.83	1.94	1.78	4.57
1-Heptene	0.23	0.36	0.48	0.29	0.26	0.33
2,2,4-Trimethylpentane	2.09	2.21	2.05	1.98	2.01	3.60
n-Heptane	1.16	1.32	1.41	1.32	1.34	3.29
Methylcyclohexane	0.90	1.41	1.25	1.32	1.27	1.82
2,2,3-Trimethylpentane	0.49	0.49	0.43	0.32	0.39	0.63
2,3,4-Trimethylpentane	0.90	0.89	0.98	0.97	0.94	1.39
Toluene	6.75	10.79	9.70	9.85	8.96	10.15
2-Methylheptane	0.40	0.47	0.48	0.45	0.45	0.64
3-Methylheptane	0.42	0.49	0.50	0.50	0.51	0.61
1-Octene	ND	0.13	0.01	ND	ND	0.04
n-Octane	0.58	0.69	0.58	0.56	0.55	0.60
Ethylbenzene	0.41	1.61	1.23	1.75	1.17	1.92
m-Xylene/p-Xylene	1.47	5.05	3.40	4.27	3.57	4.71
Styrene	0.20	0.93	0.52	0.91	0.65	0.33
o-Xylene	0.53	2.18	1.41	1.97	1.71	1.98
1-Nonene	0.02	0.72	0.64	0.52	0.54	0.09
n-Nonane	0.15	0.58	0.48	0.55	0.53	0.46
Isopropylbenzene	0.07	0.11	0.29	0.08	0.24	0.19
a-Pinene	0.58	1.38	1.21	1.11	1.06	1.67
n-Propylbenzene	0.08	0.42	0.25	0.34	0.37	0.33
m-Ethyltoluene	0.40	1.25	1.25	1.43	1.23	1.28
p-Ethyltoluene	0.22	0.67	0.80	0.74	0.60	0.62
1,3,5-Trimethylbenzene	0.27	0.64	0.69	0.82	0.67	0.71
o-Ethyltoluene	0.26	0.78	0.52	0.70	0.57	0.62
b-Pinene	0.22	0.49	0.28	0.48	0.37	1.38
1,2,4-Trimethylbenzene	0.45	1.78	1.26	1.48	1.32	1.43
1-Decene	0.08	ND	ND	ND	ND	0.09
n-Decane	2.69	2.43	1.92	2.14	1.86	0.54
1,2,3-Trimethylbenzene	0.09	0.12	0.35	0.55	ND	0.32
m-Diethylbenzene	ND	0.06	ND	0.03	ND	0.10
p-Diethylbenzene	ND	0.08	ND	0.13	ND	0.10
1-Undecene	ND	0.62	0.15	0.10	0.06	0.03
n-Undecane	8.08	4.75	3.54	3.77	2.97	0.92
1-Dodecene	ND	0.07	0.13	0.04	0.18	0.11
n-Dodecane	3.66	3.04	2.21	1.70	1.06	0.92
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.29	2.07	1.18	0.37	0.14	0.16
TNMOC (w/ unknowns)	122.82	205.22	181.64	178.55	170.13	219.04
TNMOC (speciated)	107.72	178.63	161.37	160.28	153.23	185.97

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10028	10041	10047D1	10047R1	10048D2	10048R2
Sampling Date:	7/15/97	7/16/97	7/17/97	7/17/97	7/17/97	7/17/97
Analysis Date:	8/7/97	8/8/97	7/29/97	7/31/97	7/29/97	7/31/97
Ethylene	13.73	15.00	11.24	11.17	11.15	11.25
Acetylene	16.14	24.46	23.25	23.10	23.12	23.12
Ethane	27.25	25.55	20.19	20.25	20.08	20.48
Propylene	5.21	5.48	4.02	3.98	4.05	4.03
Propane	61.60	22.04	20.19	19.81	19.90	20.04
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.65	4.84	4.47	4.47	4.59	4.50
Isobutene/1-Butene	5.75	5.96	4.32	4.14	4.42	4.17
1,3-Butadiene	0.75	0.85	0.61	0.44	0.56	0.43
n-Butane	12.92	8.94	8.96	8.40	8.45	8.32
trans-2-Butene	0.57	0.57	0.37	0.39	0.36	0.37
cis-2-Butene	0.64	0.57	0.41	0.43	0.40	0.39
3-Methyl-1-butene	0.41	0.34	0.29	0.28	0.26	0.27
Isopentane	25.31	23.92	19.04	18.79	18.75	19.26
1-Pentene	1.05	0.61	0.68	0.74	0.45	0.38
2-Methyl-1-butene	1.49	1.46	0.93	0.96	0.98	0.97
n-Pentane	12.16	10.81	8.68	8.64	8.64	8.68
Isoprene	2.18	2.21	2.49	2.58	2.47	2.61
trans-2-Pentene	1.17	1.65	0.96	0.89	1.02	0.97
cis-2-Pentene	0.89	0.83	0.60	0.63	0.61	0.60
2-Methyl-2-butene	1.81	1.90	1.21	1.26	1.25	1.18
2,2-Dimethylbutane	1.55	1.70	1.19	1.21	1.33	1.27
Cyclopentene	0.33	0.36	0.23	0.21	0.20	0.21
4-Methyl-1-pentene	0.28	0.30	0.36	0.48	0.48	1.01
Cyclopentane	1.61	1.88	1.32	1.22	1.22	1.33
2,3-Dimethylbutane	2.52	2.94	2.25	1.98	1.80	2.16
2-Methylpentane	9.11	9.02	7.00	6.89	6.95	6.93
3-Methylpentane	8.73	9.53	8.92	8.40	8.93	8.33
2-Methyl-1-pentene	0.36	0.57	0.40	0.23	0.37	0.26
1-Hexene	0.35	0.40	0.31	0.21	0.29	0.22
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	7.70	7.79	5.71	5.66	5.36	5.65
trans-2-Hexene	0.25	0.29	0.21	0.20	0.20	0.20
cis-2-Hexene	0.20	0.26	0.16	0.18	0.17	0.13
Methylcyclopentane	4.00	3.72	2.90	2.93	2.94	2.95
2,4-Dimethylpentane	1.45	1.56	1.03	1.02	1.07	1.08
Benzene	6.42	7.37	6.16	5.97	6.00	6.56
Cyclohexane	1.68	1.52	1.28	1.26	1.26	1.21
2-Methylhexane	6.66	6.76	5.16	5.22	4.88	5.05
2,3-Dimethylpentane	3.06	3.17	1.83	2.06	1.60	1.86

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All concentrations reported in ppbC

Sample No.:	10028	10041	10047D1	10047R1	10048D2	10048R2
Sampling Date:	7/15/97	7/16/97	7/17/97	7/17/97	7/17/97	7/17/97
Analysis Date:	8/7/97	8/8/97	7/29/97	7/31/97	7/29/97	7/31/97
3-Methylhexane	5.24	5.54	4.00	3.87	4.01	3.74
1-Heptene	0.60	0.49	0.50	0.49	0.80	0.42
2,2,4-Trimethylpentane	6.66	6.40	4.58	4.79	4.85	4.60
n-Heptane	3.32	3.39	2.37	2.49	2.67	2.41
Methylcyclohexane	2.23	1.72	1.64	1.66	1.60	1.79
2,2,3-Trimethylpentane	1.18	1.20	0.93	0.84	0.89	0.90
2,3,4-Trimethylpentane	2.40	2.60	1.90	1.82	1.86	1.96
Toluene	18.81	20.15	17.01	16.14	16.74	15.58
2-Methylheptane	1.13	1.23	0.96	1.00	0.92	0.94
3-Methylheptane	1.15	1.11	0.95	0.94	0.92	0.94
1-Octene	0.10	0.12	ND	ND	ND	ND
n-Octane	1.26	1.24	1.23	1.17	1.31	1.14
Ethylbenzene	3.54	5.04	4.76	4.03	4.19	3.99
m-Xylene/p-Xylene	10.56	16.72	14.78	14.15	13.72	14.06
Styrene	1.28	1.55	1.43	1.75	1.35	1.31
o-Xylene	3.78	5.11	4.59	4.27	4.85	4.25
1-Nonene	0.17	0.14	0.16	0.09	0.43	0.15
n-Nonane	1.15	0.82	1.07	0.85	0.85	0.93
Isopropylbenzene	0.26	0.26	0.27	0.22	0.23	0.17
a-Pinene	2.85	2.55	1.66	1.53	1.60	1.55
n-Propylbenzene	0.72	0.74	0.67	0.50	0.60	0.52
m-Ethyltoluene	2.52	2.82	2.59	2.31	2.37	2.29
p-Ethyltoluene	1.35	1.42	1.41	1.04	1.11	1.23
1,3,5-Trimethylbenzene	1.83	1.57	1.61	1.29	1.25	1.27
o-Ethyltoluene	1.39	1.16	1.21	0.95	1.03	0.98
b-Pinene	1.40	0.87	0.91	0.77	0.75	0.82
1,2,4-Trimethylbenzene	3.63	3.33	2.79	2.54	2.69	2.51
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.03	0.85	0.95	0.79	0.85	0.79
1,2,3-Trimethylbenzene	0.79	0.71	0.53	0.40	0.37	0.40
m-Diethylbenzene	0.07	0.09	0.13	0.06	0.10	0.06
p-Diethylbenzene	0.17	0.21	0.20	0.12	0.17	0.19
1-Undecene	0.07	0.02	0.14	0.11	0.13	0.12
n-Undecane	1.15	0.77	1.18	1.03	1.08	1.09
1-Dodecene	0.42	0.22	0.31	0.24	0.27	0.30
n-Dodecane	0.62	0.47	0.67	0.59	0.52	0.48
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.15	0.18	0.04	ND	ND	ND
TNMOC (w/ unknowns)	392.89	369.81	284.66	275.78	279.00	276.25
TNMOC (speciated)	336.92	309.91	259.46	251.54	253.63	252.28

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10046	10179	10181	10259D1	10259R1	10260D2
Sampling Date:	7/18/97	7/21/97	7/22/97	7/23/97	7/23/97	7/23/97
Analysis Date:	8/7/97	8/8/97	8/8/97	8/20/97	8/20/97	8/20/97
Ethylene	9.06	6.38	6.08	10.52	10.62	11.09
Acetylene	12.86	3.85	3.60	6.40	6.51	7.47
Ethane	23.98	10.85	8.51	12.44	12.56	13.66
Propylene	3.36	2.29	2.01	3.71	3.68	4.00
Propane	20.70	10.70	9.71	22.78	22.85	24.67
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	5.54	2.06	1.79	11.70	11.64	12.55
Isobutene/1-Butene	3.70	3.25	2.43	3.73	3.87	4.05
1,3-Butadiene	0.30	0.33	0.23	0.44	0.47	0.49
n-Butane	9.77	4.12	3.45	5.54	5.56	6.01
trans-2-Butene	0.33	0.42	0.27	0.46	0.53	0.55
cis-2-Butene	0.37	0.49	0.34	0.49	0.58	0.56
3-Methyl-1-butene	0.23	0.21	0.18	0.38	0.39	0.41
Isopentane	17.02	13.24	11.39	20.21	20.08	21.42
1-Pentene	0.42	0.71	0.57	0.68	0.69	0.78
2-Methyl-1-butene	0.80	0.73	0.60	1.23	1.19	1.35
n-Pentane	9.32	5.22	4.23	7.69	7.77	8.31
Isoprene	1.47	2.06	1.55	1.85	1.94	2.02
trans-2-Pentene	0.74	0.74	0.65	1.14	1.30	1.18
cis-2-Pentene	0.52	0.49	0.47	0.80	0.94	0.81
2-Methyl-2-butene	0.99	1.05	0.87	1.66	1.80	1.84
2,2-Dimethylbutane	1.13	0.75	0.63	1.04	1.20	1.02
Cyclopentene	0.22	0.20	0.15	0.23	0.26	0.33
4-Methyl-1-pentene	0.25	0.71	0.09	0.33	0.18	0.21
Cyclopentane	1.33	1.17	1.01	1.28	1.42	1.39
2,3-Dimethylbutane	1.94	1.72	1.37	2.30	2.33	2.36
2-Methylpentane	6.03	4.76	3.70	7.03	7.03	7.57
3-Methylpentane	8.27	4.09	3.64	8.21	7.14	7.95
2-Methyl-1-pentene	0.20	0.19	0.14	0.34	0.45	0.32
1-Hexene	0.20	0.24	0.15	0.28	0.32	0.31
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.76	4.10	3.61	5.94	6.42	6.63
trans-2-Hexene	0.26	0.25	0.20	0.25	0.28	0.37
cis-2-Hexene	0.11	0.09	0.09	0.21	0.18	0.19
Methylcyclopentane	2.81	2.14	1.56	2.85	2.92	3.03
2,4-Dimethylpentane	0.99	0.83	0.67	1.14	1.23	1.23
Benzene	5.28	3.03	2.55	4.71	4.45	4.95
Cyclohexane	1.57	1.34	1.02	1.32	1.26	1.27
2-Methylhexane	5.06	5.66	6.14	7.43	7.47	7.84
2,3-Dimethylpentane	2.21	2.84	3.00	3.30	3.20	3.57

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10046	10179	10181	10259D1	10259R1	10260D2
Sampling Date:	7/18/97	7/21/97	7/22/97	7/23/97	7/23/97	7/23/97
Analysis Date:	8/7/97	8/8/97	8/8/97	8/20/97	8/20/97	8/20/97
3-Methylhexane	3.05	3.76	4.08	6.23	5.94	6.31
1-Heptene	0.32	0.45	0.43	0.50	0.64	0.66
2,2,4-Trimethylpentane	4.04	3.24	2.87	5.05	4.85	4.89
n-Heptane	2.07	1.99	2.58	4.48	4.41	4.38
Methylcyclohexane	1.52	1.16	1.27	2.19	2.30	2.24
2,2,3-Trimethylpentane	0.63	0.60	0.41	0.95	1.03	1.01
2,3,4-Trimethylpentane	1.54	1.17	0.99	1.87	1.92	1.97
Toluene	15.07	7.87	8.63	21.75	21.51	21.69
2-Methylheptane	0.76	0.63	0.49	0.96	1.01	0.95
3-Methylheptane	0.77	0.60	0.46	0.89	1.02	0.95
1-Octene	ND	0.03	ND	ND	0.01	0.02
n-Octane	0.91	0.53	0.57	1.16	1.06	1.09
Ethylbenzene	3.56	1.70	1.78	3.27	3.33	3.18
m-Xylene/p-Xylene	10.76	4.52	4.50	10.01	10.03	9.53
Styrene	2.31	0.23	0.25	0.27	0.38	0.44
o-Xylene	3.52	1.70	1.41	3.05	3.22	3.09
1-Nonene	0.18	0.21	0.10	0.15	0.30	0.16
n-Nonane	0.60	0.32	0.36	0.87	0.95	0.91
Isopropylbenzene	0.24	0.12	0.15	0.18	0.20	0.17
a-Pinene	0.79	1.99	1.33	2.61	2.73	2.71
n-Propylbenzene	0.62	0.27	0.28	0.38	0.41	0.37
m-Ethyltoluene	1.66	1.23	1.00	1.95	1.94	2.03
p-Ethyltoluene	1.03	0.57	0.55	0.88	1.03	1.05
1,3,5-Trimethylbenzene	1.10	0.53	0.55	1.00	1.12	1.09
o-Ethyltoluene	0.74	0.60	0.53	0.96	1.20	0.97
b-Pinene	0.26	1.32	0.92	1.63	1.41	1.70
1,2,4-Trimethylbenzene	2.00	1.40	1.07	2.04	2.06	2.20
1-Decene	ND	ND	0.01	0.06	0.04	0.03
n-Decane	1.04	0.33	0.38	0.81	0.88	0.85
1,2,3-Trimethylbenzene	0.36	0.25	0.27	0.36	0.40	0.48
m-Diethylbenzene	0.09	0.09	0.02	0.08	0.07	0.09
p-Diethylbenzene	0.15	0.05	0.04	0.17	0.14	0.20
1-Undecene	0.07	ND	0.24	0.36	0.09	0.08
n-Undecane	2.57	0.48	0.46	0.79	0.74	0.75
1-Dodecene	0.23	0.10	0.23	0.04	0.15	0.31
n-Dodecane	2.00	0.44	0.29	0.31	0.34	0.42
1-Tridecene	0.07	ND	ND	ND	ND	ND
n-Tridecane	0.37	ND	0.25	ND	ND	ND
TNMOC (w/ unknowns)	277.83	176.67	161.77	287.58	294.69	300.64
TNMOC (speciated)	232.09	143.77	128.39	240.31	241.57	252.69

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10260R2	10293	10294	10305	10315D1	10315R1
Sampling Date:	7/23/97	7/24/97	7/25/97	7/28/97	7/29/97	7/29/97
Analysis Date:	8/20/97	8/8/97	8/8/97	8/9/97	8/20/97	8/20/97
Ethylene	10.21	11.48	9.58	13.34	9.15	9.26
Acetylene	6.53	23.89	14.39	17.61	17.04	17.22
Ethane	12.63	19.12	21.42	22.71	20.72	20.91
Propylene	3.60	4.48	3.46	4.98	3.48	3.44
Propane	22.66	24.75	18.83	38.93	28.69	28.91
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	11.84	3.68	4.95	4.36	4.79	4.95
Isobutene/1-Butene	3.79	5.16	4.10	5.83	3.53	3.64
1,3-Butadiene	0.42	0.44	0.46	0.81	0.36	0.41
n-Butane	5.59	8.20	9.19	8.37	7.40	7.61
trans-2-Butene	0.44	0.54	0.36	0.59	0.35	0.32
cis-2-Butene	0.51	0.58	0.41	0.64	0.34	0.37
3-Methyl-1-butene	0.35	0.35	0.25	0.35	0.25	0.21
Isopentane	20.11	19.52	16.16	21.31	15.39	15.84
1-Pentene	0.65	0.56	0.46	0.58	0.39	0.37
2-Methyl-1-butene	1.23	1.22	0.82	1.33	0.77	0.76
n-Pentane	7.73	10.53	7.93	9.75	7.11	7.22
Isoprene	1.98	3.29	2.25	2.58	2.38	2.46
trans-2-Pentene	1.14	1.26	0.56	1.22	0.84	0.93
cis-2-Pentene	0.82	0.74	0.53	0.92	0.51	0.53
2-Methyl-2-butene	1.76	1.58	0.99	1.78	1.04	1.05
2,2-Dimethylbutane	1.21	1.37	0.98	1.27	1.03	1.13
Cyclopentene	0.32	0.29	0.22	0.29	0.23	0.22
4-Methyl-1-pentene	0.16	0.30	0.35	0.38	0.32	0.25
Cyclopentane	1.43	1.44	1.19	1.55	1.15	1.10
2,3-Dimethylbutane	2.32	2.41	1.97	2.64	1.80	1.91
2-Methylpentane	7.03	7.38	6.29	8.01	5.94	6.07
3-Methylpentane	7.75	8.48	6.73	7.40	7.00	7.02
2-Methyl-1-pentene	0.39	0.30	0.23	0.34	0.37	0.36
1-Hexene	0.35	0.25	0.20	0.35	0.29	0.24
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.88	6.53	5.43	7.48	5.75	5.80
trans-2-Hexene	0.29	0.34	0.27	0.38	0.29	0.28
cis-2-Hexene	0.18	0.18	0.14	0.21	0.14	0.14
Methylcyclopentane	2.98	3.22	2.64	3.54	2.40	2.45
2,4-Dimethylpentane	1.47	1.13	1.04	1.31	0.89	0.93
Benzene	5.06	5.90	5.10	6.39	5.05	5.11
Cyclohexane	1.32	1.39	1.47	1.70	1.13	1.10
2-Methylhexane	7.50	5.95	5.35	7.83	5.07	5.16
2,3-Dimethylpentane	3.06	2.92	2.41	3.64	2.60	2.41

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10260R2	10293	10294	10305	10315D1	10315R1
Sampling Date:	7/23/97	7/24/97	7/25/97	7/28/97	7/29/97	7/29/97
Analysis Date:	8/20/97	8/8/97	8/8/97	8/9/97	8/20/97	8/20/97
3-Methylhexane	5.78	4.08	3.00	6.25	2.99	3.02
1-Heptene	0.49	0.50	0.38	0.56	0.26	0.34
2,2,4-Trimethylpentane	4.72	5.12	3.99	5.84	3.35	3.46
n-Heptane	4.29	2.34	2.17	4.07	1.82	2.02
Methylcyclohexane	2.56	1.55	1.57	2.11	1.45	1.37
2,2,3-Trimethylpentane	0.95	0.86	0.67	1.19	0.63	0.61
2,3,4-Trimethylpentane	1.86	1.95	1.60	2.18	1.47	1.40
Toluene	21.60	16.40	12.93	18.49	11.44	11.94
2-Methylheptane	1.01	0.84	0.85	0.96	0.74	0.72
3-Methylheptane	1.00	0.90	0.82	1.00	0.75	0.84
1-Octene	0.02	ND	ND	ND	ND	ND
n-Octane	1.17	1.01	0.98	0.94	0.68	0.72
Ethylbenzene	3.43	3.73	3.15	3.25	2.01	2.27
m-Xylene/p-Xylene	10.03	11.37	9.82	9.97	6.87	7.35
Styrene	0.35	1.18	1.53	0.82	0.39	0.54
o-Xylene	3.07	4.11	3.15	3.34	2.40	2.74
1-Nonene	0.09	0.32	0.09	0.13	0.22	0.39
n-Nonane	0.96	0.89	0.79	0.83	0.52	0.56
Isopropylbenzene	0.22	0.24	0.23	0.29	0.17	0.13
a-Pinene	2.31	1.54	1.00	2.29	2.67	2.66
n-Propylbenzene	0.50	0.62	0.49	0.49	0.31	0.32
m-Ethyltoluene	2.10	2.31	1.77	2.19	1.93	2.00
p-Ethyltoluene	1.05	1.42	0.98	1.16	0.69	0.81
1,3,5-Trimethylbenzene	1.20	1.61	1.23	1.53	0.69	0.77
o-Ethyltoluene	0.92	1.09	0.82	1.28	0.65	0.74
b-Pinene	1.65	0.79	0.59	1.36	0.73	0.73
1,2,4-Trimethylbenzene	2.08	2.87	2.42	2.75	1.66	1.50
1-Decene	0.05	ND	ND	ND	ND	ND
n-Decane	0.77	1.06	0.87	0.88	0.54	0.63
1,2,3-Trimethylbenzene	0.26	0.55	0.46	0.63	0.29	0.26
m-Diethylbenzene	0.08	0.12	0.16	0.14	0.04	0.04
p-Diethylbenzene	0.16	0.15	0.11	0.13	0.07	0.09
1-Undecene	0.07	0.08	0.07	0.08	0.04	0.25
n-Undecane	0.79	1.21	0.81	0.97	0.88	0.91
1-Dodecene	0.26	0.28	0.17	0.38	0.22	0.17
n-Dodecane	0.44	0.77	0.50	0.67	0.49	0.56
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	286.92	319.20	257.05	341.06	253.83	255.94
TNMOC (speciated)	240.98	265.02	219.29	291.88	216.04	220.95

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10316D2	10316R2	10367	10419	10382	10534D1
Sampling Date:	7/29/97	7/29/97	7/30/97	7/31/97	8/1/97	8/4/97
Analysis Date:	8/20/97	8/20/97	8/23/97	8/23/97	8/23/97	8/26/97
Ethylene	9.14	9.19	4.13	3.97	6.80	9.69
Acetylene	16.98	17.16	2.60	2.83	4.93	11.93
Ethane	20.54	20.59	10.61	10.81	17.50	20.67
Propylene	3.49	3.37	1.48	1.21	2.07	3.43
Propane	28.80	28.75	11.29	10.50	13.46	23.15
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.85	4.90	2.58	2.18	3.08	4.57
Isobutene/1-Butene	3.53	3.57	2.00	1.53	2.14	3.73
1,3-Butadiene	0.47	0.44	0.16	0.09	0.21	0.40
n-Butane	7.59	7.58	3.36	4.05	5.22	8.30
trans-2-Butene	0.38	0.35	0.16	0.16	0.20	0.35
cis-2-Butene	0.39	0.40	0.23	0.17	0.24	0.42
3-Methyl-1-butene	0.22	0.22	0.10	0.13	0.15	0.26
Isopentane	16.12	15.96	11.79	8.92	11.60	17.59
1-Pentene	0.40	0.36	0.22	0.43	0.34	0.41
2-Methyl-1-butene	0.78	0.80	0.45	0.26	0.45	0.86
n-Pentane	7.05	7.10	3.54	3.82	4.95	7.93
Isoprene	2.29	2.39	1.39	0.52	0.85	1.11
trans-2-Pentene	0.84	0.77	0.51	0.31	0.45	0.96
cis-2-Pentene	0.51	0.54	0.39	0.24	0.37	0.56
2-Methyl-2-butene	1.05	1.06	0.50	0.25	0.38	1.08
2,2-Dimethylbutane	1.06	0.97	0.59	0.63	0.82	1.05
Cyclopentene	0.21	0.17	0.15	0.07	0.07	0.21
4-Methyl-1-pentene	0.13	0.22	0.12	0.23	0.19	0.33
Cyclopentane	1.03	1.01	0.54	0.80	1.25	1.34
2,3-Dimethylbutane	1.82	1.82	1.02	1.14	1.54	2.08
2-Methylpentane	6.04	6.00	3.07	2.90	4.37	6.37
3-Methylpentane	6.90	7.20	2.07	4.21	4.16	6.18
2-Methyl-1-pentene	0.23	0.44	0.13	0.19	0.13	0.23
1-Hexene	0.21	0.30	0.13	0.12	0.15	0.24
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.69	5.79	2.83	2.27	3.23	4.98
trans-2-Hexene	0.24	0.26	0.09	0.03	0.11	0.21
cis-2-Hexene	0.14	0.12	0.07	0.04	0.09	0.14
Methylcyclopentane	2.50	2.37	1.25	1.31	1.65	2.77
2,4-Dimethylpentane	0.90	0.83	0.52	0.47	0.62	1.03
Benzene	5.02	5.51	2.29	2.42	3.25	5.05
Cyclohexane	1.18	0.91	0.75	0.72	0.91	1.18
2-Methylhexane	5.32	4.65	4.09	3.78	4.56	5.85
2,3-Dimethylpentane	2.47	2.20	1.70	1.63	2.05	2.73

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10316D2	10316R2	10367	10419	10382	10534D1
Sampling Date:	7/29/97	7/29/97	7/30/97	7/31/97	8/1/97	8/4/97
Analysis Date:	8/20/97	8/20/97	8/23/97	8/23/97	8/23/97	8/26/97
3-Methylhexane	3.07	2.86	1.40	1.38	2.16	4.03
1-Heptene	0.46	0.39	0.13	0.24	0.20	0.46
2,2,4-Trimethylpentane	3.38	3.46	2.01	1.63	2.56	3.88
n-Heptane	2.04	2.05	1.08	1.05	1.44	2.52
Methylcyclohexane	1.60	1.52	0.57	0.75	0.87	1.55
2,2,3-Trimethylpentane	0.75	0.71	0.41	0.24	0.47	0.82
2,3,4-Trimethylpentane	1.38	1.38	0.84	0.74	1.01	1.67
Toluene	12.01	11.89	8.07	7.59	7.75	10.75
2-Methylheptane	0.76	0.73	0.53	0.42	0.52	0.76
3-Methylheptane	0.79	0.78	0.49	0.43	0.52	0.76
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.73	0.75	0.78	0.55	0.55	0.73
Ethylbenzene	2.16	2.31	2.18	1.63	1.74	2.19
m-Xylene/p-Xylene	7.43	7.27	9.23	3.92	4.72	6.00
Styrene	0.44	0.48	0.47	0.27	0.30	0.35
o-Xylene	2.63	2.70	2.42	1.65	1.83	2.01
1-Nonene	0.16	0.29	0.21	0.37	0.24	0.08
n-Nonane	0.56	0.55	1.81	3.23	1.49	0.57
Isopropylbenzene	0.17	0.12	0.17	0.30	0.21	0.21
a-Pinene	2.76	2.84	0.72	0.84	0.50	1.33
n-Propylbenzene	0.33	0.37	0.50	1.07	0.65	0.33
m-Ethyltoluene	2.02	1.91	1.89	1.95	1.40	1.71
p-Ethyltoluene	0.79	0.73	1.13	1.92	1.19	1.06
1,3,5-Trimethylbenzene	0.78	0.74	1.11	2.02	1.27	0.86
o-Ethyltoluene	0.61	0.58	0.62	0.75	0.56	0.46
b-Pinene	0.70	0.74	0.74	0.20	0.42	0.50
1,2,4-Trimethylbenzene	1.64	1.69	1.88	2.93	2.00	1.90
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.63	0.65	1.94	2.40	1.47	0.47
1,2,3-Trimethylbenzene	0.47	0.33	0.31	0.38	0.30	0.30
m-Diethylbenzene	0.03	0.03	0.02	0.02	0.05	0.10
p-Diethylbenzene	0.09	0.12	0.22	0.25	0.22	0.11
1-Undecene	0.17	0.09	0.08	ND	ND	ND
n-Undecane	0.91	0.84	3.07	1.15	0.90	0.67
1-Dodecene	0.06	0.20	ND	ND	ND	0.23
n-Dodecane	0.41	0.51	1.69	0.42	0.34	0.53
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	258.03	256.66	151.94	155.62	176.04	250.77
TNMOC (speciated)	219.48	218.91	127.59	118.02	144.40	209.30

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10543R1	10544D2	10544R2	10520	10514	10566
Sampling Date:	8/4/97	8/4/97	8/4/97	8/5/97	8/6/97	8/7/97
Analysis Date:	8/26/97	8/26/97	8/26/97	8/24/97	9/26/97	8/30/97
Ethylene	9.76	9.41	9.58	16.61	8.50	2.64
Acetylene	11.97	11.89	12.02	11.44	6.21	1.93
Ethane	20.72	20.49	20.71	24.23	19.81	6.77
Propylene	3.45	3.44	3.41	5.55	2.40	0.89
Propane	23.35	23.40	23.21	31.48	22.88	5.42
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.66	4.61	4.63	6.34	6.17	1.15
Isobutene/1-Butene	3.66	3.68	3.75	5.45	2.94	1.46
1,3-Butadiene	0.43	0.42	0.46	0.76	0.27	0.12
n-Butane	8.37	8.21	8.50	12.09	9.33	2.28
trans-2-Butene	0.36	0.38	0.39	0.59	0.26	0.13
cis-2-Butene	0.42	0.44	0.43	0.59	0.31	0.23
3-Methyl-1-butene	0.29	0.29	0.27	0.52	0.22	0.07
Isopentane	17.48	17.51	17.44	34.37	16.10	4.33
1-Pentene	0.39	0.70	0.44	1.02	0.47	0.26
2-Methyl-1-butene	0.90	0.87	0.86	1.41	0.73	0.16
n-Pentane	7.95	7.89	7.98	13.91	7.81	2.58
Isoprene	1.07	1.12	1.15	1.97	2.37	0.28
trans-2-Pentene	0.94	0.95	0.98	1.84	1.65	0.22
cis-2-Pentene	0.58	0.55	0.61	0.86	0.53	0.20
2-Methyl-2-butene	1.05	1.05	1.07	1.89	0.78	0.18
2,2-Dimethylbutane	1.28	1.06	1.05	1.77	1.40	0.39
Cyclopentene	0.20	0.22	0.18	0.39	0.16	ND
4-Methyl-1-pentene	0.31	0.22	0.15	0.19	0.22	0.08
Cyclopentane	1.33	1.11	1.23	2.33	1.35	0.46
2,3-Dimethylbutane	2.08	1.87	2.03	3.71	1.57	0.71
2-Methylpentane	6.28	6.28	6.40	11.16	5.66	1.82
3-Methylpentane	6.07	6.59	5.96	10.93	5.13	2.07
2-Methyl-1-pentene	0.27	0.39	0.25	0.36	0.18	0.08
1-Hexene	0.23	0.28	0.24	0.38	0.25	0.08
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.92	4.83	4.97	8.48	4.55	1.61
trans-2-Hexene	0.19	0.20	0.20	0.25	0.58	0.05
cis-2-Hexene	0.13	0.15	0.14	0.22	0.11	ND
Methylcyclopentane	2.65	2.55	2.67	4.57	2.42	0.79
2,4-Dimethylpentane	1.01	0.96	1.03	1.60	1.01	0.40
Benzene	5.36	5.07	4.98	8.48	4.34	1.98
Cyclohexane	1.18	1.23	1.17	1.79	1.29	0.41
2-Methylhexane	6.01	5.72	5.95	7.29	4.95	3.10
2,3-Dimethylpentane	2.90	2.52	2.79	3.46	1.96	1.30

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10543R1	10544D2	10544R2	10520	10514	10566
Sampling Date:	8/4/97	8/4/97	8/4/97	8/5/97	8/6/97	8/7/97
Analysis Date:	8/26/97	8/26/97	8/26/97	8/24/97	9/26/97	8/30/97
3-Methylhexane	4.12	3.78	3.81	7.15	3.64	0.88
1-Heptene	0.36	0.55	0.24	0.73	0.56	ND
2,2,4-Trimethylpentane	4.00	4.04	3.75	6.74	2.84	1.56
n-Heptane	2.43	2.47	2.45	3.41	6.37	0.81
Methylcyclohexane	1.57	1.37	1.62	2.38	1.74	0.52
2,2,3-Trimethylpentane	0.84	0.83	0.86	1.24	0.66	0.18
2,3,4-Trimethylpentane	1.58	1.48	1.63	2.70	1.23	0.53
Toluene	11.49	10.87	10.47	25.63	14.60	4.20
2-Methylheptane	0.74	0.71	0.75	1.30	0.84	0.30
3-Methylheptane	0.83	0.77	0.70	1.29	0.75	0.30
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.79	0.65	0.67	1.40	1.07	0.43
Ethylbenzene	2.53	2.62	2.21	4.34	2.07	1.03
m-Xylene/p-Xylene	7.08	6.76	6.00	12.98	7.08	2.64
Styrene	0.19	0.33	0.28	1.00	0.59	0.24
o-Xylene	2.42	2.25	2.31	4.59	2.31	1.13
1-Nonene	0.18	0.17	0.29	0.33	0.10	0.24
n-Nonane	0.91	0.71	0.64	1.23	1.76	1.81
Isopropylbenzene	0.29	0.29	0.22	0.21	0.20	0.32
a-Pinene	1.34	1.15	1.33	3.78	0.46	0.32
n-Propylbenzene	0.49	0.55	0.38	0.92	0.73	0.87
m-Ethyltoluene	1.80	1.71	1.46	3.03	2.18	2.27
p-Ethyltoluene	1.13	1.06	0.90	1.86	1.57	1.56
1,3,5-Trimethylbenzene	1.13	1.09	1.04	2.01	1.60	1.57
o-Ethyltoluene	0.88	0.77	0.74	1.38	0.80	0.67
b-Pinene	0.50	0.46	0.57	1.89	0.22	0.09
1,2,4-Trimethylbenzene	2.30	2.25	1.96	3.92	3.26	2.96
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.74	0.57	0.54	1.62	1.73	2.01
1,2,3-Trimethylbenzene	0.21	0.46	0.33	0.63	0.55	0.32
m-Diethylbenzene	0.11	0.07	0.09	0.13	0.19	0.23
p-Diethylbenzene	0.18	0.13	0.13	0.32	0.52	0.22
1-Undecene	ND	ND	ND	0.15	ND	ND
n-Undecane	0.75	0.73	0.62	1.54	1.09	1.10
1-Dodecene	0.28	0.29	0.27	0.42	0.44	0.15
n-Dodecane	0.49	0.28	0.36	0.66	0.67	0.43
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	0.29	0.04
TNMOC (w/ unknowns)	258.74	248.57	245.52	416.28	284.68	117.06
TNMOC (speciated)	214.92	210.82	208.92	343.22	211.55	78.61

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10569	10573	10670	10671	10673	10683D1
Sampling Date:	8/8/97	8/11/97	8/12/97	8/13/97	8/14/97	8/15/97
Analysis Date:	8/30/97	8/31/97	9/2/97	9/2/97	9/3/97	8/26/97
Ethylene	3.80	5.91	6.94	7.74	5.85	2.87
Acetylene	3.09	3.78	4.53	12.78	3.62	1.76
Ethane	5.89	14.90	9.27	17.26	8.23	3.88
Propylene	1.39	2.22	2.49	2.77	1.94	0.99
Propane	7.60	19.72	14.43	22.77	9.23	3.65
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.02	4.00	2.07	4.37	2.29	1.24
Isobutene/1-Butene	1.75	2.90	2.93	3.36	2.34	1.12
1,3-Butadiene	0.09	0.31	0.22	0.39	0.24	0.07
n-Butane	1.86	9.45	4.40	7.83	3.50	1.57
trans-2-Butene	0.17	0.25	0.29	0.34	0.34	0.10
cis-2-Butene	0.22	0.32	0.36	0.39	0.40	0.21
3-Methyl-1-butene	0.09	0.12	0.14	0.17	0.20	0.07
Isopentane	5.59	9.73	10.02	12.48	12.03	4.59
1-Pentene	0.75	0.29	0.38	0.36	0.34	0.03
2-Methyl-1-butene	0.34	0.51	0.60	0.73	0.66	0.24
n-Pentane	2.26	5.36	7.32	5.81	4.51	1.80
Isoprene	0.58	2.05	1.00	3.54	1.14	0.75
trans-2-Pentene	0.65	0.56	0.67	0.82	0.75	0.36
cis-2-Pentene	0.25	0.37	0.43	0.55	0.48	0.25
2-Methyl-2-butene	0.43	0.77	0.95	1.23	1.05	0.41
2,2-Dimethylbutane	0.93	0.69	0.72	0.87	0.94	0.42
Cyclopentene	0.09	0.15	0.18	0.20	0.16	0.10
4-Methyl-1-pentene	0.07	0.09	0.12	0.10	0.13	0.09
Cyclopentane	0.69	0.95	0.64	0.85	0.83	0.54
2,3-Dimethylbutane	0.91	1.13	1.16	1.49	1.41	0.66
2-Methylpentane	2.28	3.57	4.00	4.77	4.64	1.78
3-Methylpentane	2.87	3.02	3.61	4.22	5.06	1.17
2-Methyl-1-pentene	0.13	0.15	0.20	0.20	0.27	0.05
1-Hexene	0.09	0.15	0.18	0.22	0.18	0.06
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	1.60	2.99	2.87	3.80	4.41	1.16
trans-2-Hexene	0.07	0.11	0.17	0.19	0.18	0.06
cis-2-Hexene	0.06	0.07	0.13	0.15	0.11	0.03
Methylcyclopentane	0.95	1.77	1.76	2.17	1.97	0.79
2,4-Dimethylpentane	0.55	0.61	0.73	0.78	0.78	0.42
Benzene	1.99	2.54	3.10	3.89	2.80	1.49
Cyclohexane	0.70	1.03	0.81	1.09	1.07	0.61
2-Methylhexane	3.43	3.78	4.02	4.81	6.23	3.71
2,3-Dimethylpentane	1.33	1.73	1.78	2.28	2.46	1.77

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10569	10573	10670	10671	10673	10683D1
Sampling Date:	8/8/97	8/11/97	8/12/97	8/13/97	8/14/97	8/15/97
Analysis Date:	8/30/97	8/31/97	9/2/97	9/2/97	9/3/97	8/26/97
3-Methylhexane	1.30	1.78	2.11	2.83	4.40	1.31
1-Heptene	0.34	0.48	0.26	0.27	0.32	0.20
2,2,4-Trimethylpentane	1.61	2.22	2.64	2.91	2.25	1.25
n-Heptane	0.89	1.40	1.47	1.95	3.16	0.88
Methylcyclohexane	0.49	1.00	0.90	1.26	1.67	0.78
2,2,3-Trimethylpentane	0.35	0.32	0.53	0.53	0.44	0.21
2,3,4-Trimethylpentane	0.72	0.92	1.09	1.17	0.89	0.51
Toluene	5.32	6.23	8.57	9.57	8.59	2.94
2-Methylheptane	0.38	0.49	0.58	0.68	0.62	0.28
3-Methylheptane	0.37	0.51	0.55	0.69	0.69	0.33
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.39	0.58	0.61	0.88	0.89	0.27
Ethylbenzene	1.24	1.42	2.20	1.90	1.78	0.59
m-Xylene/p-Xylene	3.09	3.63	6.64	5.47	5.12	1.51
Styrene	0.24	0.25	0.23	0.55	0.47	0.20
o-Xylene	1.28	1.35	2.19	1.92	2.15	0.68
1-Nonene	0.08	0.05	0.04	0.05	0.13	0.04
n-Nonane	0.35	0.34	0.35	0.46	0.60	0.21
Isopropylbenzene	0.14	0.19	0.22	0.22	0.24	0.15
a-Pinene	1.27	1.11	0.58	1.51	1.45	0.69
n-Propylbenzene	0.30	0.36	0.73	0.47	0.53	0.18
m-Ethyltoluene	1.02	1.38	1.54	1.93	1.72	0.48
p-Ethyltoluene	0.56	0.73	0.97	1.06	1.05	0.29
1,3,5-Trimethylbenzene	0.50	0.68	0.80	1.04	0.90	0.33
o-Ethyltoluene	0.58	0.59	0.82	0.79	0.66	0.16
b-Pinene	0.39	0.33	0.11	0.58	0.40	0.50
1,2,4-Trimethylbenzene	1.50	1.83	2.38	2.80	2.49	0.63
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.35	0.28	0.44	0.65	1.52	0.14
1,2,3-Trimethylbenzene	0.19	0.25	0.67	0.98	0.49	0.19
m-Diethylbenzene	0.19	0.20	0.20	0.17	0.20	0.02
p-Diethylbenzene	0.15	0.17	0.19	0.20	0.18	0.04
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.58	0.44	0.96	1.54	4.54	0.33
1-Dodecene	0.16	0.21	0.66	0.46	0.17	ND
n-Dodecane	0.66	0.29	0.70	1.74	1.92	0.11
1-Tridecene	ND	ND	0.17	ND	ND	ND
n-Tridecane	0.27	0.05	0.63	0.48	0.26	ND
TNMOC (w/ unknowns)	125.09	180.24	178.04	230.89	192.13	73.19
TNMOC (speciated)	83.79	140.16	139.36	187.48	145.65	57.34

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10683R1	10682D2	10682R2	10695	10712	10851
Sampling Date:	8/15/97	8/15/97	8/15/97	8/18/97	8/19/97	8/20/97
Analysis Date:	8/27/97	8/26/97	8/27/97	9/3/97	9/3/97	9/3/97
Ethylene	3.61	2.83	2.86	5.95	5.06	13.51
Acetylene	2.07	1.75	1.71	3.79	2.83	12.28
Ethane	4.65	3.85	3.84	6.04	6.07	11.71
Propylene	1.31	0.98	1.06	2.17	1.53	5.10
Propane	4.66	3.72	3.83	10.73	5.72	12.85
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.49	1.15	1.25	1.31	1.39	2.75
Isobutene/1-Butene	1.48	1.36	1.29	3.02	2.04	5.59
1,3-Butadiene	0.08	0.05	0.07	0.34	0.20	0.89
n-Butane	1.89	1.50	1.44	2.26	2.70	9.09
trans-2-Butene	0.16	0.12	0.13	0.31	0.27	0.72
cis-2-Butene	0.28	0.03	0.09	0.39	0.36	0.73
3-Methyl-1-butene	0.10	0.08	0.07	0.15	0.17	0.47
Isopentane	5.69	4.66	4.69	6.72	9.33	24.85
1-Pentene	0.23	0.09	0.08	0.32	0.39	0.99
2-Methyl-1-butene	0.29	0.23	0.20	0.50	0.54	1.71
n-Pentane	2.42	1.80	1.83	2.77	3.25	9.16
Isoprene	0.97	0.77	0.75	1.29	0.79	2.63
trans-2-Pentene	0.45	0.36	0.34	0.62	0.59	1.64
cis-2-Pentene	0.27	0.23	0.25	0.37	0.41	1.09
2-Methyl-2-butene	0.54	0.39	0.41	0.81	0.68	2.59
2,2-Dimethylbutane	0.46	0.39	0.37	0.74	0.58	1.48
Cyclopentene	0.13	0.08	0.07	0.20	0.13	0.42
4-Methyl-1-pentene	0.11	0.05	0.07	0.08	0.08	0.21
Cyclopentane	0.86	0.67	0.61	0.67	0.66	1.23
2,3-Dimethylbutane	0.95	0.82	0.68	1.12	1.06	2.73
2-Methylpentane	2.24	1.79	1.73	2.94	3.06	8.51
3-Methylpentane	1.62	1.25	1.23	2.62	2.94	8.38
2-Methyl-1-pentene	0.08	0.06	0.07	0.14	0.15	0.47
1-Hexene	0.10	0.06	0.06	0.13	0.13	0.41
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	1.54	1.21	1.22	2.11	2.42	6.08
trans-2-Hexene	0.09	0.05	0.08	0.12	0.11	0.36
cis-2-Hexene	0.05	0.04	0.05	0.06	0.06	0.27
Methylcyclopentane	1.01	0.83	0.88	1.25	1.46	3.28
2,4-Dimethylpentane	0.49	0.47	0.45	0.61	0.57	1.48
Benzene	1.79	1.55	1.47	3.90	2.08	6.48
Cyclohexane	0.83	0.62	0.54	0.85	1.03	1.23
2-Methylhexane	4.16	3.91	3.98	3.65	4.53	6.62
2,3-Dimethylpentane	1.90	1.71	1.80	1.63	2.03	2.51

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10683R1	10682D2	10682R2	10695	10712	10851
Sampling Date:	8/15/97	8/15/97	8/15/97	8/18/97	8/19/97	8/20/97
Analysis Date:	8/27/97	8/26/97	8/27/97	9/3/97	9/3/97	9/3/97
3-Methylhexane	1.73	1.47	1.42	1.62	2.64	6.59
1-Heptene	0.15	0.20	0.14	0.29	0.21	0.66
2,2,4-Trimethylpentane	1.51	1.21	1.54	1.91	1.80	5.23
n-Heptane	1.20	0.85	0.94	1.02	1.81	3.60
Methylcyclohexane	0.82	0.79	0.61	0.67	0.89	1.72
2,2,3-Trimethylpentane	0.32	0.25	0.23	0.40	0.31	1.14
2,3,4-Trimethylpentane	0.67	0.55	0.57	0.84	0.70	2.15
Toluene	4.34	3.00	3.31	6.44	6.23	17.82
2-Methylheptane	0.36	0.30	0.32	0.42	0.41	1.14
3-Methylheptane	0.35	0.28	0.29	0.48	0.47	1.11
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.38	0.28	0.32	0.51	0.55	1.22
Ethylbenzene	0.98	0.95	1.01	1.43	1.16	3.93
m-Xylene/p-Xylene	2.95	1.78	2.07	3.68	2.73	13.48
Styrene	0.22	0.16	0.14	0.33	0.28	1.20
o-Xylene	0.88	0.64	0.73	1.46	1.19	4.84
1-Nonene	0.05	0.06	0.03	0.08	0.09	0.24
n-Nonane	0.32	0.18	0.25	0.35	0.39	0.81
Isopropylbenzene	0.21	0.11	0.16	0.18	0.17	0.36
a-Pinene	1.01	0.71	0.72	1.12	0.81	1.50
n-Propylbenzene	0.20	0.14	0.23	0.42	0.39	0.89
m-Ethyltoluene	0.70	0.50	0.55	1.25	1.07	3.25
p-Ethyltoluene	0.35	0.39	0.37	0.72	0.69	1.99
1,3,5-Trimethylbenzene	0.46	0.43	0.40	0.67	0.65	2.02
o-Ethyltoluene	0.37	0.26	0.24	0.65	0.48	1.23
b-Pinene	0.56	0.54	0.49	0.28	0.27	0.28
1,2,4-Trimethylbenzene	0.90	0.54	0.60	2.01	1.53	4.90
1-Decene	ND	ND	ND	0.04	0.01	ND
n-Decane	0.13	0.17	0.12	0.32	0.71	1.04
1,2,3-Trimethylbenzene	0.20	0.16	0.13	0.64	0.57	1.71
m-Diethylbenzene	0.07	0.06	0.09	0.20	0.15	0.21
p-Diethylbenzene	0.06	0.08	0.10	0.13	0.28	0.33
1-Undecene	ND	ND	ND	ND	ND	0.10
n-Undecane	0.34	0.39	0.49	0.51	5.33	1.47
1-Dodecene	ND	ND	ND	0.28	0.44	ND
n-Dodecane	0.30	0.27	0.36	0.27	8.55	1.44
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	0.06	2.17	0.40
TNMOC (w/ unknowns)	93.16	78.91	78.67	145.50	148.75	343.72
TNMOC (speciated)	74.15	59.21	60.55	104.36	113.73	262.47

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10862D1	10862R1	10863D2	10863R2	10861	10908
Sampling Date:	8/21/97	8/21/97	8/21/97	8/21/97	8/22/97	8/25/97
Analysis Date:	9/9/97	9/10/97	9/9/97	9/10/97	9/4/97	9/4/97
Ethylene	11.58	11.48	11.56	11.56	11.70	11.19
Acetylene	8.50	8.43	8.39	8.37	16.86	17.30
Ethane	21.21	21.76	21.75	21.84	16.85	22.27
Propylene	3.94	3.83	3.92	3.83	4.10	4.00
Propane	19.14	18.67	19.09	18.63	23.06	19.57
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.88	3.70	3.71	3.66	3.55	4.20
Isobutene/1-Butene	8.98	9.42	4.35	4.44	4.77	4.82
1,3-Butadiene	0.69	0.70	0.41	0.61	0.61	0.57
n-Butane	8.02	8.05	8.08	8.03	6.26	6.45
trans-2-Butene	0.53	0.61	0.53	0.54	0.44	0.40
cis-2-Butene	0.56	0.60	0.56	0.58	0.47	0.41
3-Methyl-1-butene	0.44	0.40	0.44	0.46	0.35	0.27
Isopentane	24.26	24.47	24.09	25.88	20.36	18.07
1-Pentene	1.09	1.10	1.05	1.11	0.87	0.68
2-Methyl-1-butene	1.01	0.98	1.53	1.53	1.21	1.02
n-Pentane	9.82	9.83	9.94	9.88	12.48	10.59
Isoprene	1.30	1.40	1.44	1.40	1.47	1.13
trans-2-Pentene	1.43	1.40	1.46	1.87	1.09	0.85
cis-2-Pentene	0.96	0.98	0.94	0.94	0.81	0.65
2-Methyl-2-butene	3.21	3.26	2.00	1.99	1.69	1.21
2,2-Dimethylbutane	3.70	3.75	1.75	1.73	1.46	1.37
Cyclopentene	0.35	0.35	0.37	0.40	0.33	0.23
4-Methyl-1-pentene	0.15	0.17	0.07	0.21	0.33	0.23
Cyclopentane	1.76	1.52	1.51	1.36	1.18	1.07
2,3-Dimethylbutane	3.15	3.10	3.09	3.09	2.46	2.29
2-Methylpentane	8.71	8.52	21.38	9.90	7.78	7.28
3-Methylpentane	7.10	7.27	6.99	7.24	7.43	7.67
2-Methyl-1-pentene	0.25	0.29	0.38	0.30	0.34	0.36
1-Hexene	0.40	0.39	0.38	0.44	0.30	0.30
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	6.24	6.21	6.67	6.68	6.01	5.77
trans-2-Hexene	0.49	0.51	0.91	0.77	0.29	0.23
cis-2-Hexene	0.24	0.22	0.24	0.22	0.18	0.17
Methylcyclopentane	3.36	3.38	3.27	3.23	3.15	2.85
2,4-Dimethylpentane	1.71	1.73	1.45	1.57	1.32	1.09
Benzene	6.00	5.39	5.51	6.05	5.86	5.90
Cyclohexane	1.06	1.07	1.00	1.03	1.17	0.97
2-Methylhexane	5.51	5.55	5.67	5.54	5.40	5.10
2,3-Dimethylpentane	2.44	2.24	2.38	2.44	2.10	1.93

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10862D1	10862R1	10863D2	10863R2	10861	10908
Sampling Date:	8/21/97	8/21/97	8/21/97	8/21/97	8/22/97	8/25/97
Analysis Date:	9/9/97	9/10/97	9/9/97	9/10/97	9/4/97	9/4/97
3-Methylhexane	4.00	4.11	4.94	4.94	4.05	3.82
1-Heptene	0.51	1.19	0.49	0.79	0.50	0.37
2,2,4-Trimethylpentane	6.53	5.66	6.54	6.28	4.84	4.19
n-Heptane	2.98	3.13	3.20	2.60	2.62	2.27
Methylcyclohexane	1.85	1.85	1.71	1.88	1.44	1.35
2,2,3-Trimethylpentane	1.21	1.21	1.33	1.34	0.91	0.84
2,3,4-Trimethylpentane	2.60	2.63	2.56	2.55	1.95	1.82
Toluene	21.98	22.68	21.72	22.56	17.71	15.80
2-Methylheptane	2.69	2.96	2.71	2.92	1.10	0.96
3-Methylheptane	2.22	2.31	2.24	2.25	1.02	0.89
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	6.20	6.18	5.97	5.91	1.26	1.07
Ethylbenzene	8.15	7.97	7.88	7.95	2.79	4.42
m-Xylene/p-Xylene	34.43	33.49	33.09	33.12	9.60	13.69
Styrene	1.40	1.46	1.60	1.65	4.28	0.52
o-Xylene	8.38	8.88	8.77	8.81	3.85	4.74
1-Nonene	0.27	0.61	0.67	0.68	0.27	0.20
n-Nonane	4.33	4.24	4.44	4.03	1.01	0.59
Isopropylbenzene	0.74	0.81	0.76	0.78	0.38	0.31
a-Pinene	0.33	0.39	2.50	1.65	1.67	0.49
n-Propylbenzene	2.61	2.66	3.02	2.68	0.92	0.83
m-Ethyltoluene	9.03	8.96	8.78	8.58	3.28	2.86
p-Ethyltoluene	5.53	5.62	5.72	5.09	1.91	1.72
1,3,5-Trimethylbenzene	6.13	6.11	6.21	4.95	1.67	1.48
o-Ethyltoluene	3.59	4.53	3.88	3.71	1.48	1.31
b-Pinene	0.02	0.04	0.96	0.59	0.21	0.08
1,2,4-Trimethylbenzene	13.32	13.28	14.10	13.14	4.65	4.70
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	5.71	5.75	6.28	5.98	1.15	0.73
1,2,3-Trimethylbenzene	3.46	3.60	2.86	3.88	1.19	1.10
m-Diethylbenzene	0.68	0.73	0.37	0.76	0.26	0.30
p-Diethylbenzene	0.52	0.56	0.62	0.64	0.24	0.22
1-Undecene	0.43	0.41	0.67	0.64	ND	ND
n-Undecane	8.17	8.59	14.56	14.81	2.31	0.88
1-Dodecene	0.80	0.87	0.94	0.77	ND	ND
n-Dodecane	3.87	4.29	13.85	14.90	3.08	0.66
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.34	0.42	2.20	2.67	0.85	0.11
TNMOC (w/ unknowns)	473.92	474.64	499.06	498.23	328.45	307.08
TNMOC (speciated)	358.16	360.90	386.40	375.85	260.55	245.82

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	10935	10961D1	10961R1	10692D2	10962R2	11017
Sampling Date:	8/26/97	8/27/97	8/27/97	8/27/97	8/27/97	8/28/97
Analysis Date:	9/4/97	9/9/97	9/11/97	9/10/97	9/11/97	9/4/97
Ethylene	13.15	10.50	10.32	10.61	10.58	14.28
Acetylene	34.41	10.73	10.55	10.53	10.63	34.05
Ethane	19.86	16.95	16.59	16.72	16.85	25.14
Propylene	4.63	3.57	3.51	3.63	3.56	4.56
Propane	13.25	15.33	14.84	15.11	14.82	22.08
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.09	3.48	3.42	3.48	3.55	6.48
Isobutene/1-Butene	5.24	3.74	3.72	3.92	4.04	5.22
1,3-Butadiene	0.73	0.37	0.38	0.41	0.49	0.76
n-Butane	6.75	6.09	5.91	6.11	6.10	10.46
trans-2-Butene	0.47	0.31	0.33	0.35	0.35	0.50
cis-2-Butene	0.44	0.34	0.35	0.39	0.38	0.43
3-Methyl-1-butene	0.29	0.26	0.22	0.25	0.23	0.29
Isopentane	19.87	16.43	15.91	18.00	16.32	24.71
1-Pentene	0.63	0.59	0.48	0.42	0.58	0.75
2-Methyl-1-butene	1.22	0.90	0.90	0.96	0.95	1.28
n-Pentane	7.98	7.14	7.01	7.17	7.14	10.72
Isoprene	1.30	0.95	0.88	1.08	1.10	1.75
trans-2-Pentene	1.10	0.52	0.75	0.73	0.90	2.26
cis-2-Pentene	0.79	0.59	0.56	0.60	0.67	0.73
2-Methyl-2-butene	1.69	1.06	1.02	1.12	1.16	1.71
2,2-Dimethylbutane	1.54	1.30	1.18	1.63	1.32	1.67
Cyclopentene	0.31	0.20	0.19	0.18	0.22	0.32
4-Methyl-1-pentene	0.21	0.10	0.11	0.21	0.20	0.44
Cyclopentane	1.10	1.29	1.07	1.13	1.17	1.27
2,3-Dimethylbutane	2.52	2.17	2.01	2.13	2.06	2.58
2-Methylpentane	7.61	6.49	6.54	6.50	6.71	8.24
3-Methylpentane	7.63	7.27	7.12	8.14	7.31	7.94
2-Methyl-1-pentene	0.40	0.28	0.24	0.35	0.28	0.30
1-Hexene	0.32	0.22	0.23	0.27	0.19	0.30
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	6.46	4.93	5.06	5.12	5.10	6.51
trans-2-Hexene	0.27	0.20	0.20	0.22	0.23	0.25
cis-2-Hexene	0.22	0.14	0.15	0.16	0.15	0.20
Methylcyclopentane	3.16	2.66	2.62	2.66	2.63	3.38
2,4-Dimethylpentane	1.22	0.95	1.07	0.98	1.00	1.36
Benzene	7.15	5.74	5.35	5.50	5.54	7.23
Cyclohexane	1.04	1.02	0.96	1.05	1.15	1.27
2-Methylhexane	5.59	5.62	5.43	5.37	5.97	5.84
2,3-Dimethylpentane	2.14	2.00	2.09	2.08	2.59	2.32

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All concentrations reported in ppbC

Sample No.:	10935	10961D1	10961R1	10692D2	10962R2	11017
Sampling Date:	8/26/97	8/27/97	8/27/97	8/27/97	8/27/97	8/28/97
Analysis Date:	9/4/97	9/9/97	9/11/97	9/10/97	9/11/97	9/4/97
3-Methylhexane	4.22	4.42	4.15	4.58	4.17	5.34
1-Heptene	0.51	0.33	0.34	0.32	0.41	0.58
2,2,4-Trimethylpentane	4.71	3.52	3.91	3.88	3.94	4.86
n-Heptane	2.93	2.79	2.72	2.79	2.78	3.64
Methylcyclohexane	1.73	1.48	1.49	1.51	1.60	2.37
2,2,3-Trimethylpentane	1.03	0.79	0.88	0.82	0.74	1.14
2,3,4-Trimethylpentane	2.02	1.55	1.55	1.59	1.53	1.92
Toluene	18.85	15.69	15.75	15.64	15.82	25.99
2-Methylheptane	1.19	0.90	0.95	0.89	0.94	1.38
3-Methylheptane	1.14	0.90	0.94	0.93	0.95	1.33
1-Octene	0.14	ND	ND	ND	ND	ND
n-Octane	1.38	1.25	1.18	1.16	1.25	1.76
Ethylbenzene	3.70	4.59	4.71	4.78	4.83	6.52
m-Xylene/p-Xylene	11.22	15.86	15.92	15.78	16.33	21.67
Styrene	1.73	0.56	0.46	0.57	0.58	2.74
o-Xylene	4.11	5.02	5.06	5.07	5.28	7.27
1-Nonene	0.26	0.04	0.05	0.04	0.05	0.30
n-Nonane	0.82	0.68	0.60	0.71	0.69	1.04
Isopropylbenzene	0.34	0.32	0.34	0.33	0.42	0.38
a-Pinene	0.52	0.67	0.53	0.81	0.61	0.89
n-Propylbenzene	0.94	0.82	0.86	0.80	0.88	1.03
m-Ethyltoluene	3.31	2.92	2.84	2.93	2.94	3.87
p-Ethyltoluene	1.92	2.03	1.77	1.74	1.82	2.14
1,3,5-Trimethylbenzene	1.70	1.86	1.43	1.51	1.52	2.00
o-Ethyltoluene	1.26	1.25	1.14	1.29	1.31	1.53
b-Pinene	0.11	0.15	0.13	0.14	0.11	0.09
1,2,4-Trimethylbenzene	5.20	4.38	4.50	4.51	4.53	6.32
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.99	0.83	0.83	0.80	0.81	1.65
1,2,3-Trimethylbenzene	1.24	1.33	1.01	1.16	1.20	1.75
m-Diethylbenzene	0.31	0.31	0.34	0.38	0.38	0.33
p-Diethylbenzene	0.28	0.22	0.19	0.26	0.29	0.35
1-Undecene	0.11	0.18	0.09	0.20	0.22	ND
n-Undecane	1.28	1.28	1.31	1.11	1.01	2.97
1-Dodecene	ND	0.10	0.07	0.08	0.10	ND
n-Dodecane	0.85	0.66	0.71	0.67	0.70	3.03
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.17	0.13	0.14	0.28	0.11	0.75
TNMOC (w/ unknowns)	327.08	279.64	272.22	288.65	285.20	435.52
TNMOC (speciated)	268.99	222.25	218.17	225.31	225.07	338.52

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11018	11032	11044	11118	11125	11192
Sampling Date:	8/29/97	9/2/97	9/3/97	9/4/97	9/5/97	9/8/97
Analysis Date:	9/5/97	9/5/97	9/5/97	9/17/97	9/17/97	9/17/97
Ethylene	16.20	12.87	18.41	2.76	11.36	7.09
Acetylene	76.94	17.43	13.41	2.34	5.33	5.60
Ethane	21.01	27.41	22.11	6.64	20.27	16.95
Propylene	4.73	4.36	6.09	0.88	3.13	2.00
Propane	26.98	29.52	25.15	4.44	22.19	10.46
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.95	5.05	6.83	1.06	6.54	4.75
Isobutene/1-Butene	5.31	5.30	6.01	1.78	2.70	3.15
1,3-Butadiene	0.57	0.70	0.87	0.06	0.26	0.31
n-Butane	7.53	9.13	8.61	2.34	11.50	6.25
trans-2-Butene	0.55	0.44	0.59	0.11	0.22	0.19
cis-2-Butene	0.53	0.45	0.64	0.17	0.25	0.25
3-Methyl-1-butene	0.30	0.33	0.44	0.07	0.14	0.13
Isopentane	20.04	22.27	27.21	7.23	12.87	10.52
1-Pentene	0.92	0.70	0.97	0.33	0.30	0.23
2-Methyl-1-butene	1.24	1.23	1.61	0.29	0.51	0.43
n-Pentane	8.55	8.79	10.63	2.07	7.28	4.11
Isoprene	1.82	1.18	1.80	0.31	0.41	0.57
trans-2-Pentene	1.31	1.49	2.91	0.24	0.88	0.53
cis-2-Pentene	0.87	0.71	1.03	0.21	0.32	0.34
2-Methyl-2-butene	1.79	1.75	2.34	0.23	0.54	0.51
2,2-Dimethylbutane	1.66	1.55	2.08	0.40	1.18	1.01
Cyclopentene	0.35	0.29	0.44	0.05	0.09	0.08
4-Methyl-1-pentene	0.19	0.23	0.22	0.02	0.07	0.06
Cyclopentane	1.23	1.15	2.02	0.52	1.83	0.69
2,3-Dimethylbutane	2.45	2.29	3.49	0.73	1.72	1.06
2-Methylpentane	7.84	7.88	13.48	1.70	4.76	3.61
3-Methylpentane	8.47	7.90	8.96	2.21	4.22	4.44
2-Methyl-1-pentene	0.44	0.42	0.41	0.10	0.15	0.13
1-Hexene	0.33	0.33	0.38	0.06	0.16	0.12
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.64	6.41	8.26	1.54	4.48	2.90
trans-2-Hexene	0.27	0.23	0.93	0.28	1.38	0.10
cis-2-Hexene	0.22	0.17	0.26	ND	0.08	0.06
Methylcyclopentane	3.18	3.01	4.16	0.87	2.25	1.43
2,4-Dimethylpentane	1.25	1.06	1.64	0.41	0.82	0.62
Benzene	7.13	6.33	8.22	1.78	3.36	3.36
Cyclohexane	1.11	1.07	1.60	0.57	1.50	1.05
2-Methylhexane	5.56	5.71	8.02	2.77	4.94	3.97
2,3-Dimethylpentane	2.21	2.17	3.75	0.98	2.23	1.37

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All concentrations reported in ppbC

Sample No.:	11018	11032	11044	11118	11125	11192
Sampling Date:	8/29/97	9/2/97	9/3/97	9/4/97	9/5/97	9/8/97
Analysis Date:	9/5/97	9/5/97	9/5/97	9/17/97	9/17/97	9/17/97
3-Methylhexane	4.14	5.01	7.59	0.98	3.42	2.47
1-Heptene	0.63	0.79	0.85	ND	0.92	0.41
2,2,4-Trimethylpentane	4.78	4.40	6.25	1.69	1.87	2.07
n-Heptane	2.86	3.02	5.09	0.64	11.58	1.77
Methylcyclohexane	1.74	1.60	2.94	0.33	2.03	1.07
2,2,3-Trimethylpentane	0.93	0.95	1.35	0.19	0.53	0.46
2,3,4-Trimethylpentane	1.99	1.89	2.49	0.53	0.93	0.83
Toluene	21.29	16.57	39.53	5.15	8.93	7.68
2-Methylheptane	1.20	1.08	1.44	0.30	0.75	0.49
3-Methylheptane	1.24	0.99	1.41	0.31	0.64	0.55
1-Octene	ND	ND	ND	ND	ND	0.06
n-Octane	1.42	1.37	1.74	0.45	1.18	0.75
Ethylbenzene	5.87	2.35	3.88	0.99	1.52	1.67
m-Xylene/p-Xylene	19.78	8.05	12.35	2.34	4.51	4.98
Styrene	1.24	0.40	0.91	0.18	0.58	0.32
o-Xylene	6.43	2.90	4.39	0.91	1.59	1.83
1-Nonene	0.25	0.08	0.17	0.11	0.05	0.04
n-Nonane	1.03	0.83	1.12	1.65	0.70	0.38
Isopropylbenzene	0.42	0.15	0.28	0.26	0.18	0.21
a-Pinene	1.80	1.88	1.50	0.68	0.77	2.44
n-Propylbenzene	1.09	0.78	1.23	0.82	0.49	0.48
m-Ethyltoluene	3.76	2.90	4.60	2.29	1.45	1.45
p-Ethyltoluene	2.13	1.61	2.92	1.27	1.06	0.88
1,3,5-Trimethylbenzene	1.98	1.41	2.81	1.22	0.88	0.73
o-Ethyltoluene	1.70	1.25	1.99	0.68	0.67	0.83
b-Pinene	0.19	0.31	1.51	0.05	ND	0.20
1,2,4-Trimethylbenzene	5.57	4.64	6.55	2.46	2.28	2.26
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.79	0.73	2.02	2.29	0.75	0.44
1,2,3-Trimethylbenzene	1.71	1.45	1.65	0.78	0.55	0.49
m-Diethylbenzene	0.30	0.20	0.45	0.23	0.24	0.20
p-Diethylbenzene	0.32	0.22	0.41	0.31	0.18	0.18
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	3.11	0.98	2.56	1.72	0.77	1.02
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	2.65	0.89	2.54	1.16	0.56	0.82
1-Tridecene	ND	ND	ND	ND	ND	0.19
n-Tridecane	0.80	0.30	0.72	0.34	0.24	0.26
TNMOC (w/ unknowns)	430.40	332.82	438.18	113.26	252.39	181.02
TNMOC (speciated)	356.79	271.30	353.20	81.85	195.02	141.33

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11207D1	11207R1		11208D2	11208R2		11218	11277
Sampling Date:	9/9/97	9/9/97		9/9/97	9/9/97		9/10/97	9/11/97
Analysis Date:	9/17/97	9/19/97		9/17/97	9/20/97		9/17/97	9/22/97
Ethylene	7.29	6.77		7.31	7.01		7.45	6.71
Acetylene	5.29	5.28		5.25	5.27		5.86	6.72
Ethane	16.11	0.25	a	16.14	0.28	a	23.68	3.47
Propylene	2.29	2.18		2.21	2.23		2.43	1.17
Propane	14.43	11.23		14.30	11.89		20.03	8.27
Propyne	ND	ND		ND	ND		ND	ND
Isobutane	4.26	4.14		4.14	4.25		5.00	1.47
Isobutene/1-Butene	2.48	2.77		2.63	2.63		3.40	0.86
1,3-Butadiene	0.25	0.31		0.19	0.22		0.41	ND
n-Butane	6.28	6.32		6.24	6.48		11.83	2.93
trans-2-Butene	0.26	0.25		0.20	0.29		0.22	0.08
cis-2-Butene	0.25	0.30		0.24	0.29		0.27	0.08
3-Methyl-1-butene	0.19	0.21		0.24	0.21		0.18	0.09
Isopentane	15.31	15.48		15.70	15.31		14.32	10.66
1-Pentene	0.28	0.45		0.45	0.37		0.70	0.15
2-Methyl-1-butene	0.75	0.77		0.75	0.75		0.68	0.12
n-Pentane	5.75	5.74		5.68	5.75		7.45	3.79
Isoprene	0.68	0.67		0.64	0.69		0.67	0.10
trans-2-Pentene	0.78	0.80		0.77	0.80		0.79	1.12
cis-2-Pentene	0.61	0.50		0.56	0.47		0.44	0.15
2-Methyl-2-butene	0.97	0.93		0.99	0.96		0.88	0.07
2,2-Dimethylbutane	0.75	0.78		0.84	0.73		0.75	0.81
Cyclopentene	0.18	0.17		0.13	0.17		0.14	ND
4-Methyl-1-pentene	0.17	0.13		0.12	0.12		0.10	ND
Cyclopentane	0.79	0.82		0.87	0.76		1.24	0.82
2,3-Dimethylbutane	1.34	1.50		1.48	1.32		1.31	1.38
2-Methylpentane	4.92	4.92		5.01	4.63		5.13	3.97
3-Methylpentane	5.50	5.64		5.53	5.42		5.31	5.47
2-Methyl-1-pentene	0.20	0.18		0.18	0.17		0.26	ND
1-Hexene	0.15	0.18		0.18	0.18		0.18	ND
2-Ethyl-1-butene	ND	ND		ND	ND		ND	ND
n-Hexane	3.69	3.65		3.69	3.68		4.77	3.57
trans-2-Hexene	0.16	0.15		0.16	0.16		0.11	0.69
cis-2-Hexene	0.12	0.11		0.12	0.08		0.11	ND
Methylcyclopentane	1.91	1.93		1.99	1.95		2.34	1.43
2,4-Dimethylpentane	0.76	0.82		0.77	0.78		0.75	0.78
Benzene	3.51	3.43		3.38	3.40		3.41	3.29
Cyclohexane	0.87	1.02		0.91	1.00		1.22	0.86
2-Methylhexane	4.97	5.61		5.00	5.73		4.14	3.79
2,3-Dimethylpentane	1.59	2.05		1.63	2.12		1.33	1.10

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SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11207D1	11207R1	11208D2	11208R2	11218	11277
Sampling Date:	9/9/97	9/9/97	9/9/97	9/9/97	9/10/97	9/11/97
Analysis Date:	9/17/97	9/19/97	9/17/97	9/20/97	9/17/97	9/22/97
3-Methylhexane	4.10	3.78	4.15	4.03	2.91	2.97
1-Heptene	0.32	0.44	0.41	0.35	0.59	ND
2,2,4-Trimethylpentane	2.93	3.14	3.04	2.91	3.05	3.26
n-Heptane	2.47	2.60	2.61	2.69	2.24	2.18
Methylcyclohexane	1.54	1.55	1.57	1.56	1.62	1.22
2,2,3-Trimethylpentane	0.61	0.62	0.57	0.69	0.53	0.53
2,3,4-Trimethylpentane	1.14	1.06	1.11	1.08	1.16	1.10
Toluene	14.19	14.32	13.82	14.46	16.65	12.44
2-Methylheptane	0.66	0.70	0.71	0.70	1.33	0.66
3-Methylheptane	0.68	0.70	0.69	0.69	1.03	0.71
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.86	0.98	0.87	0.91	1.76	1.27
Ethylbenzene	1.94	1.99	1.88	2.00	1.96	2.51
m-Xylene/p-Xylene	5.47	6.26	5.69	6.17	6.41	5.27
Styrene	0.37	0.35	0.26	0.35	0.31	0.08
o-Xylene	2.05	2.04	1.89	2.07	2.07	2.02
1-Nonene	0.06	0.07	0.04	0.04	0.05	0.05
n-Nonane	0.59	0.53	0.53	0.55	0.70	0.97
Isopropylbenzene	0.15	0.25	0.19	0.23	0.20	0.18
a-Pinene	0.52	0.67	0.64	0.54	0.56	0.22
n-Propylbenzene	0.55	0.60	0.53	0.59	0.60	0.73
m-Ethyltoluene	1.81	1.96	1.77	1.94	2.00	1.40
p-Ethyltoluene	1.18	1.39	1.20	1.48	1.23	1.46
1,3,5-Trimethylbenzene	0.94	1.08	1.11	1.34	1.14	0.64
o-Ethyltoluene	0.98	0.88	0.76	1.01	0.77	0.85
b-Pinene	0.14	0.13	0.17	0.09	0.18	ND
1,2,4-Trimethylbenzene	2.84	3.40	2.78	2.88	3.18	1.50
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.62	0.81	0.70	0.69	0.70	1.02
1,2,3-Trimethylbenzene	0.78	0.91	0.67	0.79	0.63	0.19
m-Diethylbenzene	0.26	0.20	0.15	0.23	0.22	0.17
p-Diethylbenzene	0.20	0.22	0.14	0.17	0.21	0.20
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.98	1.20	0.69	0.85	1.29	0.98
1-Dodecene	ND	0.91	ND	0.56	ND	ND
n-Dodecane	0.58	0.99	0.51	0.57	1.76	0.61
1-Tridecene	ND	ND	0.12	0.31	ND	ND
n-Tridecane	0.19	0.66	0.22	0.44	0.46	0.18
TNMOC (w/ unknowns)	201.74	198.43	201.92	192.80	239.69	164.51
TNMOC (speciated)	168.78	155.83	168.77	154.51	198.83	123.53

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11290	11299D1	11299R1		11300D2	11300R2		11312
Sampling Date:	9/12/97	9/15/97	9/15/97		9/15/97	9/15/97		9/16/97
Analysis Date:	9/23/97	9/18/97	9/20/97		9/18/97	9/20/97		9/24/97
Ethylene	7.78	9.20	8.64		9.19	9.06		7.08
Acetylene	7.67	7.81	7.86		7.76	7.77		8.73
Ethane	7.95	13.34	0.33	a	13.07	0.90	a	2.72
Propylene	2.77	3.07	3.10		3.08	3.19		2.47
Propane	10.18	21.69	17.95		21.86	21.43		9.04
Propyne	ND	ND	ND		ND	ND		ND
Isobutane	3.31	3.05	3.08		2.98	3.02		2.18
Isobutene/1-Butene	3.53	3.55	3.57		3.67	3.57		3.25
1,3-Butadiene	0.26	0.25	0.40		0.50	0.38		0.39
n-Butane	5.30	6.57	6.81		6.68	6.62		4.38
trans-2-Butene	0.24	0.30	0.37		0.30	0.29		0.18
cis-2-Butene	0.30	0.36	0.37		0.35	0.36		0.21
3-Methyl-1-butene	0.16	0.25	0.25		0.24	0.22		0.16
Isopentane	12.49	14.33	15.00		14.50	14.92		9.63
1-Pentene	0.49	0.79	0.81		0.72	0.77		0.50
2-Methyl-1-butene	0.65	0.85	0.91		0.94	0.87		0.61
n-Pentane	5.10	5.58	5.67		5.60	5.52		3.84
Isoprene	0.71	0.82	0.92		0.89	0.83		0.70
trans-2-Pentene	0.35	0.85	0.86		0.91	0.87		0.41
cis-2-Pentene	0.47	0.55	0.55		0.54	0.54		0.39
2-Methyl-2-butene	0.92	1.29	1.31		1.31	1.28		0.77
2,2-Dimethylbutane	1.05	0.79	0.77		0.76	0.73		0.74
Cyclopentene	0.28	0.25	0.22		0.26	0.21		0.15
4-Methyl-1-pentene	0.10	0.10	0.11		0.12	0.14		0.08
Cyclopentane	0.71	0.88	0.81		0.89	0.85		0.63
2,3-Dimethylbutane	1.35	1.42	1.38		1.62	1.62		1.05
2-Methylpentane	4.61	5.35	5.24		5.32	5.30		3.61
3-Methylpentane	5.44	4.46	4.67		4.47	4.59		3.89
2-Methyl-1-pentene	0.18	0.25	0.23		0.21	0.23		0.18
1-Hexene	0.20	0.17	0.21		0.20	0.20		0.16
2-Ethyl-1-butene	ND	ND	ND		ND	ND		ND
n-Hexane	3.70	3.69	4.31		3.67	4.26		2.86
trans-2-Hexene	0.13	0.21	0.22		0.21	0.24		0.12
cis-2-Hexene	0.10	0.12	0.12		0.13	0.14		0.09
Methylcyclopentane	1.72	2.10	2.11		2.13	2.14		1.67
2,4-Dimethylpentane	0.87	0.88	0.78		0.71	0.85		0.58
Benzene	4.34	4.16	4.64		4.13	4.22		3.16
Cyclohexane	0.85	0.99	0.89		1.00	1.00		0.73
2-Methylhexane	3.61	4.29	3.89		4.13	4.25		3.54
2,3-Dimethylpentane	1.16	1.51	1.39		1.49	1.93		1.17

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11290	11299D1	11299R1	11300D2	11300R2	11312
Sampling Date:	9/12/97	9/15/97	9/15/97	9/15/97	9/15/97	9/16/97
Analysis Date:	9/23/97	9/18/97	9/20/97	9/18/97	9/20/97	9/24/97
3-Methylhexane	2.61	2.73	2.70	2.88	2.62	2.06
1-Heptene	0.18	0.23	0.21	0.19	0.30	0.25
2,2,4-Trimethylpentane	2.87	3.27	3.42	3.25	3.28	2.37
n-Heptane	1.78	1.82	1.65	1.82	1.73	1.28
Methylcyclohexane	1.15	0.98	1.00	0.97	1.01	0.92
2,2,3-Trimethylpentane	0.52	0.60	0.60	0.57	0.62	0.59
2,3,4-Trimethylpentane	1.11	1.28	1.25	1.29	1.20	0.99
Toluene	11.27	10.17	10.01	9.99	10.46	8.62
2-Methylheptane	0.72	0.66	0.71	0.68	0.65	0.55
3-Methylheptane	0.73	0.67	0.73	0.67	0.70	0.56
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.92	0.72	0.71	0.71	0.75	0.67
Ethylbenzene	1.95	1.62	1.80	1.60	1.82	1.34
m-Xylene/p-Xylene	6.32	5.45	5.66	5.34	5.75	4.46
Styrene	0.47	0.38	0.44	0.33	0.49	0.79
o-Xylene	2.14	1.99	2.12	1.92	2.11	1.63
1-Nonene	0.05	0.05	0.04	0.04	0.06	0.05
n-Nonane	0.62	0.41	0.46	0.38	0.48	0.40
Isopropylbenzene	0.17	0.25	0.27	0.21	0.25	0.19
a-Pinene	1.34	1.16	1.16	1.02	1.16	0.91
n-Propylbenzene	0.65	0.60	0.63	0.54	0.63	0.51
m-Ethyltoluene	2.15	2.13	2.37	2.12	2.29	1.78
p-Ethyltoluene	1.33	1.34	1.47	1.23	1.41	1.16
1,3,5-Trimethylbenzene	1.15	1.10	1.20	1.06	1.16	0.91
o-Ethyltoluene	0.96	0.98	0.99	1.06	1.07	0.74
b-Pinene	ND	0.24	0.22	0.23	0.22	0.23
1,2,4-Trimethylbenzene	3.51	3.32	3.63	3.25	3.66	2.93
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.76	0.38	0.44	0.39	0.46	0.47
1,2,3-Trimethylbenzene	1.06	0.61	0.91	0.74	0.99	0.66
m-Diethylbenzene	0.26	0.23	0.25	0.25	0.32	0.19
p-Diethylbenzene	0.24	0.21	0.29	0.20	0.23	0.19
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.20	0.58	0.70	0.54	0.65	0.97
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	1.31	0.35	0.46	0.31	0.43	0.89
1-Tridecene	0.41	ND	ND	ND	ND	ND
n-Tridecane	0.76	0.08	0.23	0.10	0.16	0.23
TNMOC (w/ unknowns)	202.11	202.18	191.67	201.48	199.19	149.88
TNMOC (speciated)	153.72	172.74	159.47	172.39	164.51	122.53

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11350	11357	11363	11372	11387	11423
Sampling Date:	9/17/97	9/18/97	9/19/97	9/22/97	9/23/97	9/24/97
Analysis Date:	9/25/97	9/26/97	9/22/97	10/1/97	10/1/97	9/30/97
Ethylene	6.08	7.46	8.51	6.07	7.11	4.04
Acetylene	3.13	16.66	34.43	4.82	4.62	3.33
Ethane	1.51	6.02	5.93	6.95	4.25	6.71
Propylene	1.86	2.57	2.76	1.67	2.29	1.26
Propane	9.05	13.52	11.47	18.48	7.76	13.50
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.37	3.67	2.83	7.31	2.74	3.47
Isobutene/1-Butene	2.61	3.41	3.67	2.32	3.20	2.23
1,3-Butadiene	0.32	0.31	0.35	0.10	0.18	0.12
n-Butane	5.86	8.49	5.76	12.24	6.18	8.86
trans-2-Butene	0.15	0.28	0.20	0.16	0.27	0.09
cis-2-Butene	0.23	0.32	0.28	0.20	0.29	0.12
3-Methyl-1-butene	0.11	0.12	0.17	0.11	0.23	0.07
Isopentane	7.62	11.72	10.42	13.38	13.48	7.59
1-Pentene	0.16	0.57	0.37	0.28	0.37	0.08
2-Methyl-1-butene	0.40	0.65	0.65	0.39	0.78	0.29
n-Pentane	3.50	6.22	5.33	7.04	4.52	4.73
Isoprene	0.72	0.90	0.69	0.29	0.65	0.23
trans-2-Pentene	0.24	0.93	0.71	1.34	0.79	0.30
cis-2-Pentene	0.30	0.51	0.44	0.35	0.50	0.29
2-Methyl-2-butene	0.61	0.96	0.98	0.43	1.20	0.39
2,2-Dimethylbutane	0.66	1.01	0.57	1.03	0.60	0.43
Cyclopentene	0.14	0.17	0.17	0.10	0.25	0.04
4-Methyl-1-pentene	0.03	0.07	0.07	ND	0.10	0.03
Cyclopentane	0.57	0.93	0.75	1.75	0.67	0.63
2,3-Dimethylbutane	0.88	1.54	1.37	1.49	1.30	0.82
2-Methylpentane	3.09	4.53	4.11	4.49	3.53	2.94
3-Methylpentane	3.02	4.95	4.67	5.06	3.64	2.87
2-Methyl-1-pentene	0.11	0.20	0.18	0.12	0.18	0.08
1-Hexene	0.18	0.17	0.18	0.11	0.17	0.09
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.45	3.94	3.35	3.99	3.35	2.62
trans-2-Hexene	0.08	0.14	0.16	0.72	0.14	0.08
cis-2-Hexene	0.09	0.13	0.11	0.06	0.10	0.04
Methylcyclopentane	1.45	2.19	1.96	1.99	1.69	1.45
2,4-Dimethylpentane	0.51	0.83	0.71	0.77	0.62	0.39
Benzene	2.38	3.85	3.75	3.48	3.09	2.01
Cyclohexane	0.86	1.12	0.97	1.56	1.10	0.96
2-Methylhexane	2.82	3.61	3.66	4.49	4.69	3.09
2,3-Dimethylpentane	0.85	1.17	1.14	1.54	1.46	1.07

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11350	11357	11363	11372	11387	11423
Sampling Date:	9/17/97	9/18/97	9/19/97	9/22/97	9/23/97	9/24/97
Analysis Date:	9/25/97	9/26/97	9/22/97	10/1/97	10/1/97	9/30/97
3-Methylhexane	1.60	2.56	2.06	2.84	2.87	1.29
1-Heptene	0.27	0.30	0.30	0.27	0.28	0.31
2,2,4-Trimethylpentane	1.66	2.47	2.62	1.84	2.31	1.42
n-Heptane	1.02	1.69	1.36	7.95	2.69	1.41
Methylcyclohexane	0.88	1.31	1.20	1.78	1.56	0.83
2,2,3-Trimethylpentane	0.31	0.42	0.49	0.54	0.54	0.42
2,3,4-Trimethylpentane	0.67	1.04	1.17	0.74	0.96	0.51
Toluene	6.09	10.56	9.57	7.24	9.73	5.91
2-Methylheptane	0.44	0.68	0.62	0.66	0.53	0.44
3-Methylheptane	0.42	0.73	0.67	0.59	0.57	0.40
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	0.51	0.84	0.90	0.92	0.63	0.57
Ethylbenzene	1.06	1.73	2.35	1.04	1.34	0.88
m-Xylene/p-Xylene	4.16	5.88	7.86	3.41	4.64	2.60
Styrene	0.32	0.51	1.32	0.52	0.49	0.23
o-Xylene	1.37	2.06	2.58	1.29	1.63	1.08
1-Nonene	0.03	0.05	0.04	0.02	0.04	0.02
n-Nonane	0.29	0.52	0.44	0.68	0.36	0.31
Isopropylbenzene	0.15	0.23	0.22	0.13	0.15	0.12
a-Pinene	0.42	0.88	0.56	0.34	3.73	0.31
n-Propylbenzene	0.36	0.67	0.60	0.40	0.40	0.33
m-Ethyltoluene	1.36	2.20	2.01	1.17	2.26	1.11
p-Ethyltoluene	0.84	1.52	1.25	0.77	0.92	0.72
1,3,5-Trimethylbenzene	0.72	1.39	1.07	0.70	0.79	0.60
o-Ethyltoluene	0.65	1.05	0.93	0.51	1.04	0.59
b-Pinene	0.18	0.21	0.14	ND	2.33	0.13
1,2,4-Trimethylbenzene	2.29	3.44	3.27	1.95	2.38	1.68
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.43	0.69	0.61	0.74	0.40	0.38
1,2,3-Trimethylbenzene	0.62	0.77	0.68	0.53	0.49	0.39
m-Diethylbenzene	0.18	0.25	0.21	0.16	0.17	0.19
p-Diethylbenzene	0.13	0.23	0.15	0.17	0.13	0.18
1-Undecene	ND	ND	ND	0.11	0.05	ND
n-Undecane	0.82	0.99	1.91	1.01	0.56	0.81
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	0.90	0.76	3.11	0.79	0.31	0.98
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.26	0.21	0.88	0.28	0.07	0.31
TNMOC (w/ unknowns)	123.61	198.14	205.14	199.48	162.78	122.99
TNMOC (speciated)	98.46	164.68	176.97	158.77	135.44	104.79

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11422	11435	11444	11458
Sampling Date:	9/25/97	9/26/97	9/29/97	9/30/97
Analysis Date:	9/30/97	10/1/97	10/1/97	10/4/97
Ethylene	3.30	14.95	6.39	13.47
Acetylene	3.34	9.87	4.75	27.84
Ethane	0.92	4.92	4.32	6.54
Propylene	1.01	4.97	2.05	4.60
Propane	7.81	24.09	8.09	17.71
Propyne	ND	ND	ND	ND
Isobutane	2.33	6.05	2.11	6.18
Isobutene/1-Butene	1.78	5.98	3.30	5.99
1,3-Butadiene	0.11	0.72	0.24	0.74
n-Butane	5.24	14.61	6.06	11.78
trans-2-Butene	0.15	0.48	0.28	0.43
cis-2-Butene	0.10	0.45	0.43	0.36
3-Methyl-1-butene	0.09	0.36	0.26	0.32
Isopentane	5.83	24.12	14.63	22.33
1-Pentene	0.80	0.80	0.51	0.88
2-Methyl-1-butene	0.27	1.37	0.87	1.25
n-Pentane	2.96	10.02	5.24	9.07
Isoprene	0.23	0.77	0.93	0.67
trans-2-Pentene	0.28	2.33	0.88	1.39
cis-2-Pentene	0.22	0.85	0.60	0.67
2-Methyl-2-butene	0.36	2.07	0.91	1.77
2,2-Dimethylbutane	0.40	1.47	0.93	1.48
Cyclopentene	0.04	0.36	0.15	0.31
4-Methyl-1-pentene	0.01	0.11	ND	0.17
Cyclopentane	0.45	1.46	0.77	1.52
2,3-Dimethylbutane	0.68	2.46	1.59	2.32
2-Methylpentane	2.03	7.80	4.27	7.56
3-Methylpentane	2.44	7.40	5.44	8.71
2-Methyl-1-pentene	0.12	0.35	0.19	0.30
1-Hexene	0.11	0.36	0.16	0.32
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	1.97	6.59	2.83	5.87
trans-2-Hexene	0.06	0.67	0.12	0.26
cis-2-Hexene	0.04	0.21	0.10	0.21
Methylcyclopentane	1.02	3.31	1.68	3.36
2,4-Dimethylpentane	0.38	1.13	0.79	1.01
Benzene	1.78	6.74	3.28	6.79
Cyclohexane	0.67	1.45	1.12	1.46
2-Methylhexane	2.85	5.43	3.91	5.66
2,3-Dimethylpentane	0.98	2.19	1.68	2.38

SNMOC 1997 REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	11422	11435	11444	11458
Sampling Date:	9/25/97	9/26/97	9/29/97	9/30/97
Analysis Date:	9/30/97	10/1/97	10/1/97	10/4/97
3-Methylhexane	1.11	4.72	2.03	4.10
1-Heptene	0.13	0.53	0.11	0.39
2,2,4-Trimethylpentane	1.39	4.91	2.46	4.80
n-Heptane	0.78	3.26	1.17	2.76
Methylcyclohexane	0.57	2.25	0.98	1.64
2,2,3-Trimethylpentane	0.25	1.03	0.47	0.93
2,3,4-Trimethylpentane	0.52	2.02	0.99	1.95
Toluene	5.26	24.07	14.86	16.66
2-Methylheptane	0.38	1.23	0.63	1.11
3-Methylheptane	0.37	1.23	0.62	1.05
1-Octene	ND	ND	ND	ND
n-Octane	0.46	1.68	0.89	1.40
Ethylbenzene	0.80	2.86	2.06	3.09
m-Xylene/p-Xylene	2.62	10.08	6.89	11.13
Styrene	0.21	0.78	0.59	1.92
o-Xylene	0.90	3.62	2.35	3.71
1-Nonene	ND	0.14	0.03	0.08
n-Nonane	0.33	1.10	1.07	0.87
Isopropylbenzene	0.15	0.35	0.24	0.27
a-Pinene	0.13	2.48	0.33	0.99
n-Propylbenzene	0.31	1.19	0.69	0.92
m-Ethyltoluene	0.91	4.61	2.12	3.51
p-Ethyltoluene	0.59	2.85	1.57	2.04
1,3,5-Trimethylbenzene	0.54	2.78	1.50	1.82
o-Ethyltoluene	0.41	1.93	0.98	1.51
b-Pinene	0.05	1.13	0.18	0.13
1,2,4-Trimethylbenzene	1.88	6.78	3.16	5.74
1-Decene	ND	ND	ND	ND
n-Decane	0.88	1.61	1.38	1.26
1,2,3-Trimethylbenzene	0.55	1.40	0.60	1.29
m-Diethylbenzene	0.13	0.30	0.22	0.36
p-Diethylbenzene	0.13	0.35	0.25	0.37
1-Undecene	ND	0.18	0.09	ND
n-Undecane	3.10	1.78	1.14	2.96
1-Dodecene	ND	ND	ND	0.85
n-Dodecane	4.64	1.56	0.67	3.79
1-Tridecene	ND	ND	ND	ND
n-Tridecane	1.50	0.38	0.34	0.95
TNMOC (w/ unknowns)	105.87	342.20	182.86	330.01
TNMOC (speciated)	85.11	276.45	145.45	270.02

SNMOC 1997 REPORT
SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10169	10170	10165D1	10165R1	10174D2	10174R2
Sampling Date:	7/15/97	7/16/97	7/17/97	7/17/97	7/17/97	7/17/97
Analysis Date:	8/7/97	8/8/97	7/29/97	7/31/97	7/29/97	7/31/97
Ethylene	10.28	7.48	12.34	12.29	11.77	9.88
Acetylene	8.60	7.18	11.62	11.47	10.67	8.46
Ethane	19.39	7.81	14.42	15.35	14.08	12.88
Propylene	3.84	2.53	4.18	4.13	3.99	3.09
Propane	59.22	59.37	131.81	131.53	126.39	103.05
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	6.51	2.57	4.49	4.38	4.51	4.06
Isobutene/1-Butene	2.24	1.85	2.42	2.41	2.41	2.02
1,3-Butadiene	0.29	0.13	0.41	0.37	0.39	0.30
n-Butane	16.91	11.44	21.47	21.16	20.74	17.33
trans-2-Butene	0.33	0.18	0.35	0.36	0.39	0.30
cis-2-Butene	0.41	0.25	0.41	0.39	0.42	0.33
3-Methyl-1-butene	0.26	0.14	0.26	0.23	0.26	0.21
Isopentane	27.18	10.28	19.82	19.99	19.51	17.27
1-Pentene	0.52	0.72	0.90	0.98	0.69	0.81
2-Methyl-1-butene	0.97	0.48	0.95	0.94	0.89	0.74
n-Pentane	15.95	12.29	13.19	13.08	12.91	10.63
Isoprene	1.14	0.74	0.86	0.74	0.99	1.58
trans-2-Pentene	3.13	0.49	2.18	1.83	2.95	1.01
cis-2-Pentene	0.67	0.39	0.65	0.64	0.68	0.53
2-Methyl-2-butene	0.97	0.50	1.02	1.02	0.96	0.84
2,2-Dimethylbutane	1.06	0.27	0.80	0.95	0.98	0.79
Cyclopentene	0.20	0.13	0.23	0.23	0.14	0.14
4-Methyl-1-pentene	0.12	0.13	0.11	0.13	0.15	0.17
Cyclopentane	2.02	1.01	1.51	1.29	1.75	1.40
2,3-Dimethylbutane	2.81	1.78	2.69	2.39	2.56	2.23
2-Methylpentane	8.08	5.44	7.10	6.73	6.97	5.69
3-Methylpentane	7.35	5.36	6.66	6.39	6.38	5.66
2-Methyl-1-pentene	0.29	0.28	0.28	0.33	0.33	0.25
1-Hexene	0.30	0.21	0.38	0.36	0.30	0.21
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	6.93	6.02	6.46	6.17	5.60	4.72
trans-2-Hexene	0.21	0.18	0.35	0.28	0.24	0.18
cis-2-Hexene	0.18	0.09	0.19	0.16	0.16	0.15
Methylcyclopentane	4.56	2.33	3.77	3.72	3.80	3.07
2,4-Dimethylpentane	2.63	1.61	2.38	2.24	2.39	1.79
Benzene	7.74	4.06	7.80	7.64	7.45	5.94
Cyclohexane	2.88	1.49	2.09	2.00	2.09	1.62
2-Methylhexane	5.14	4.72	5.16	5.31	5.07	5.29
2,3-Dimethylpentane	4.72	4.31	4.52	5.63	4.43	4.82

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10169	10170	10165D1	10165R1	10174D2	10174R2
Sampling Date:	7/15/97	7/16/97	7/17/97	7/17/97	7/17/97	7/17/97
Analysis Date:	8/7/97	8/8/97	7/29/97	7/31/97	7/29/97	7/31/97
3-Methylhexane	2.83	2.63	3.88	3.55	3.52	3.36
1-Heptene	0.71	0.28	1.23	0.63	1.06	0.51
2,2,4-Trimethylpentane	5.83	3.40	5.42	5.59	5.74	4.56
n-Heptane	2.26	2.09	3.13	2.98	2.92	2.30
Methylcyclohexane	1.80	1.01	1.58	1.66	1.59	1.35
2,2,3-Trimethylpentane	0.86	0.52	1.15	0.97	0.97	0.78
2,3,4-Trimethylpentane	2.15	1.20	2.35	2.32	2.23	1.80
Toluene	18.80	12.92	19.40	18.46	19.47	12.33
2-Methylheptane	0.75	0.43	0.91	1.03	0.89	0.64
3-Methylheptane	0.80	0.45	0.93	0.92	0.95	0.65
1-Octene	ND	0.08	0.04	ND	0.02	ND
n-Octane	0.73	0.41	1.13	1.05	1.17	0.67
Ethylbenzene	5.76	2.68	4.93	3.98	4.47	1.80
m-Xylene/p-Xylene	19.48	6.89	13.57	12.00	12.53	6.24
Styrene	0.48	0.48	0.72	0.58	0.54	0.45
o-Xylene	6.37	2.16	4.67	3.88	4.12	2.06
1-Nonene	0.63	0.22	0.88	0.55	0.50	0.30
n-Nonane	0.76	0.59	0.87	0.69	0.97	0.29
Isopropylbenzene	0.24	0.18	0.20	0.13	0.21	0.12
a-Pinene	3.00	2.15	1.68	1.67	1.90	2.57
n-Propylbenzene	0.37	0.26	0.50	0.44	0.72	0.29
m-Ethyltoluene	1.54	1.35	1.86	1.54	1.72	1.08
p-Ethyltoluene	0.80	0.67	1.04	0.81	0.98	0.54
1,3,5-Trimethylbenzene	0.92	0.80	1.34	1.11	1.26	0.61
o-Ethyltoluene	1.20	0.62	0.78	0.85	0.72	0.38
b-Pinene	0.49	0.35	0.36	0.38	ND	0.31
1,2,4-Trimethylbenzene	1.95	1.40	3.10	2.48	2.70	1.24
1-Decene	ND	0.05	ND	ND	0.08	0.06
n-Decane	1.68	2.18	0.75	0.60	0.69	0.28
1,2,3-Trimethylbenzene	0.15	0.53	0.48	0.39	0.31	0.31
m-Diethylbenzene	0.04	0.38	0.07	0.03	0.11	0.02
p-Diethylbenzene	0.16	0.24	0.21	0.14	0.12	0.06
1-Undecene	0.08	0.02	0.21	0.14	0.07	0.23
n-Undecane	3.66	4.49	0.83	0.68	0.74	0.45
1-Dodecene	0.28	0.14	0.15	0.15	0.16	0.07
n-Dodecane	1.51	3.14	0.33	0.26	0.33	0.19
1-Tridecene	ND	7.78	0.26	0.19	0.56	0.15
n-Tridecane	0.20	1.89	ND	ND	ND	ND
TNMOC (w/ unknowns)	371.40	300.39	405.42	396.25	387.93	308.08
TNMOC (speciated)	325.28	233.26	377.18	368.12	363.43	288.52

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10253	10256	10257	10390	10391	10379
Sampling Date:	7/21/97	7/22/97	7/23/97	7/24/97	7/25/97	7/28/97
Analysis Date:	8/8/97	8/8/97	8/9/97	8/23/97	8/23/97	8/21/97
Ethylene	14.53	5.89	15.40	13.91	13.92	6.19
Acetylene	13.45	4.70	11.54	13.17	12.49	5.56
Ethane	16.65	6.11	22.97	12.43	12.40	6.00
Propylene	4.98	2.13	5.97	4.92	4.74	2.20
Propane	74.54	16.07	144.57	80.03	81.16	13.43
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	5.30	1.73	5.05	4.21	4.28	1.79
Isobutene/1-Butene	3.29	1.60	3.54	2.95	2.88	1.87
1,3-Butadiene	0.48	0.18	0.72	0.59	0.52	0.20
n-Butane	20.19	4.73	23.67	18.82	18.90	4.39
trans-2-Butene	0.30	0.17	0.58	0.39	0.36	0.19
cis-2-Butene	0.42	0.27	0.53	0.36	0.40	0.25
3-Methyl-1-butene	0.28	0.10	0.31	0.28	0.31	0.13
Isopentane	19.41	7.89	18.32	15.25	15.44	7.66
1-Pentene	0.43	0.25	0.97	0.55	0.56	0.37
2-Methyl-1-butene	0.94	0.33	1.10	0.90	0.91	0.33
n-Pentane	10.66	4.13	12.66	11.81	11.82	4.28
Isoprene	0.74	0.47	0.71	0.78	0.76	0.36
trans-2-Pentene	0.86	0.51	3.50	0.91	0.94	0.43
cis-2-Pentene	0.61	0.31	0.70	0.56	0.58	0.31
2-Methyl-2-butene	0.80	0.41	1.28	0.71	0.70	0.24
2,2-Dimethylbutane	0.93	0.53	1.09	0.90	0.87	0.43
Cyclopentene	0.13	0.11	0.20	0.15	0.15	0.10
4-Methyl-1-pentene	0.16	0.05	0.15	0.10	0.13	0.10
Cyclopentane	1.49	0.92	1.53	1.29	1.49	0.88
2,3-Dimethylbutane	2.70	1.39	2.75	2.41	2.62	1.32
2-Methylpentane	6.74	3.15	7.00	6.54	6.76	3.12
3-Methylpentane	6.67	2.20	7.77	6.39	6.08	2.18
2-Methyl-1-pentene	0.36	0.19	0.30	0.48	0.29	0.12
1-Hexene	0.32	0.15	0.38	0.33	0.26	0.14
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	6.50	2.54	6.56	5.97	5.99	2.56
trans-2-Hexene	0.28	0.13	0.26	0.34	0.33	0.11
cis-2-Hexene	0.16	0.08	0.21	0.36	0.14	0.04
Methylcyclopentane	3.89	1.91	4.11	3.84	3.80	1.80
2,4-Dimethylpentane	2.76	1.16	2.93	2.73	2.60	1.25
Benzene	7.85	3.67	9.38	8.23	8.09	3.71
Cyclohexane	2.15	1.07	2.48	2.14	2.24	1.08
2-Methylhexane	5.01	4.26	6.22	5.44	5.12	3.85
2,3-Dimethylpentane	5.93	3.46	6.31	5.77	5.40	3.12

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10253	10256	10257	10390	10391	10379
Sampling Date:	7/21/97	7/22/97	7/23/97	7/24/97	7/25/97	7/28/97
Analysis Date:	8/8/97	8/8/97	8/9/97	8/23/97	8/23/97	8/21/97
3-Methylhexane	3.07	1.70	4.04	3.40	2.94	1.50
1-Heptene	1.04	0.32	0.78	0.90	1.12	0.36
2,2,4-Trimethylpentane	6.35	3.07	6.41	5.83	6.35	2.82
n-Heptane	2.14	1.22	3.19	2.13	2.18	1.21
Methylcyclohexane	1.56	0.83	1.71	1.41	1.57	0.90
2,2,3-Trimethylpentane	1.13	0.44	1.09	1.12	1.09	0.53
2,3,4-Trimethylpentane	2.45	1.20	2.60	2.46	2.48	1.22
Toluene	21.19	8.71	23.67	18.56	20.28	8.25
2-Methylheptane	0.83	0.43	0.86	0.74	0.83	0.44
3-Methylheptane	0.90	0.43	0.91	0.89	0.90	0.45
1-Octene	0.10	ND	ND	ND	ND	0.10
n-Octane	0.78	0.40	0.92	0.68	0.71	0.34
Ethylbenzene	4.02	2.17	9.78	4.23	5.47	1.75
m-Xylene/p-Xylene	12.01	5.37	33.57	11.85	15.35	4.97
Styrene	3.33	0.14	1.42	0.30	0.42	0.22
o-Xylene	4.72	1.84	12.23	4.55	4.99	1.97
1-Nonene	0.88	0.16	0.99	0.88	0.41	0.31
n-Nonane	0.62	0.28	0.99	0.52	0.66	0.28
Isopropylbenzene	0.13	0.14	0.21	0.25	0.29	0.12
a-Pinene	0.85	0.58	1.78	2.09	1.95	0.46
n-Propylbenzene	0.51	0.16	0.57	0.57	0.56	0.18
m-Ethyltoluene	1.52	0.90	2.17	1.76	2.05	0.78
p-Ethyltoluene	1.10	0.44	1.01	1.14	1.54	0.42
1,3,5-Trimethylbenzene	0.91	0.57	1.42	1.42	1.37	0.45
o-Ethyltoluene	0.73	0.49	0.95	1.19	0.96	0.36
b-Pinene	0.18	0.11	0.28	0.48	0.41	0.13
1,2,4-Trimethylbenzene	2.06	1.04	2.89	2.17	2.41	0.96
1-Decene	0.05	ND	ND	ND	0.13	ND
n-Decane	0.55	0.28	0.88	0.34	0.54	0.08
1,2,3-Trimethylbenzene	0.50	0.32	0.75	0.50	0.79	ND
m-Diethylbenzene	0.05	0.06	0.16	0.05	0.04	ND
p-Diethylbenzene	0.11	0.05	0.23	0.10	0.10	ND
1-Undecene	ND	ND	ND	0.14	ND	ND
n-Undecane	0.85	0.39	1.02	0.51	0.53	0.50
1-Dodecene	0.26	ND	0.29	ND	0.11	ND
n-Dodecane	0.58	0.13	0.19	0.04	0.15	0.38
1-Tridecene	0.17	ND	ND	ND	ND	ND
n-Tridecane	0.25	ND	ND	ND	ND	ND
TNMOC (w/ unknowns)	359.39	146.60	1075.61	417.61	422.23	158.03
TNMOC (speciated)	321.34	119.33	453.65	310.13	318.08	114.53

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10377	10524D1	10524R1	10533D2	10533R2	10523
Sampling Date:	7/29/97	7/30/97	7/30/97	7/30/97	7/30/97	7/31/97
Analysis Date:	8/21/97	8/25/97	8/26/97	8/25/97	8/30/97	8/23/97
Ethylene	6.17	11.41	11.45	11.43	11.36	26.15
Acetylene	5.72	11.49	11.20	11.35	11.58	26.14
Ethane	5.95	10.51	10.74	10.50	10.66	29.29
Propylene	2.21	4.09	3.99	3.96	3.95	9.65
Propane	18.74	40.49	40.36	40.82	48.26	263.33
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.52	3.18	3.21	3.24	3.19	8.56
Isobutene/1-Butene	1.66	2.25	2.28	2.32	2.28	5.10
1,3-Butadiene	0.15	0.28	0.32	0.44	0.41	1.12
n-Butane	5.38	12.05	12.08	12.04	11.93	48.23
trans-2-Butene	0.18	0.26	0.22	0.26	0.30	0.68
cis-2-Butene	0.18	0.33	0.35	0.30	0.32	0.58
3-Methyl-1-butene	0.09	0.23	0.26	0.25	0.21	0.57
Isopentane	8.49	13.39	14.39	13.42	13.37	29.52
1-Pentene	0.32	0.55	0.76	0.63	0.73	1.50
2-Methyl-1-butene	0.43	1.22	1.08	0.86	0.89	2.02
n-Pentane	3.88	6.76	6.63	6.67	6.61	15.84
Isoprene	0.41	0.61	0.58	0.54	0.17	0.83
trans-2-Pentene	4.80	0.86	0.86	1.58	0.76	1.95
cis-2-Pentene	0.31	0.55	0.61	0.65	0.59	1.13
2-Methyl-2-bulene	0.29	1.12	1.18	1.08	1.06	2.15
2,2-Dimethylbutane	0.51	0.71	0.79	0.73	1.08	1.65
Cyclopentene	ND	0.17	0.22	0.23	0.25	0.42
4-Methyl-1-pentene	ND	0.02	0.07	0.05	0.11	0.22
Cyclopentane	0.70	1.31	1.37	1.20	1.06	1.89
2,3-Dimethylbutane	1.48	2.00	2.11	2.07	2.04	4.08
2-Methylpentane	4.14	5.25	5.52	5.28	5.38	11.84
3-Methylpentane	4.10	3.67	3.75	5.15	4.82	9.69
2-Methyl-1-pentene	0.20	0.21	0.23	0.22	0.27	0.56
1-Hexene	0.13	0.19	0.19	0.23	0.21	0.51
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.72	5.04	5.02	5.60	5.21	10.52
trans-2-Hexene	0.17	0.25	0.22	0.22	0.42	1.09
cis-2-Hexene	0.09	0.15	0.15	0.16	0.17	0.35
Methylcyclopentane	1.96	3.06	3.08	3.27	3.18	6.71
2,4-Dimethylpentane	1.39	2.10	2.12	2.26	2.21	4.77
Benzene	3.63	6.39	6.29	6.46	6.74	14.11
Cyclohexane	1.37	1.83	1.94	1.90	2.29	4.31
2-Methylhexane	3.41	4.65	4.93	4.70	4.68	7.03
2,3-Dimethylpentane	2.98	4.86	5.38	5.10	5.30	9.68

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10377	10524D1	10524R1	10533D2	10533R2	10523
Sampling Date:	7/29/97	7/30/97	7/30/97	7/30/97	7/30/97	7/31/97
Analysis Date:	8/21/97	8/25/97	8/26/97	8/25/97	8/30/97	8/23/97
3-Methylhexane	1.35	1.82	2.74	2.26	2.91	5.14
1-Heptene	0.39	0.60	0.63	0.71	0.78	1.38
2,2,4-Trimethylpentane	2.74	4.54	4.55	4.67	4.51	10.37
n-Heptane	1.09	1.97	1.78	1.80	2.06	3.80
Methylcyclohexane	0.77	1.50	1.51	1.55	1.39	2.49
2,2,3-Trimethylpentane	0.50	0.87	0.88	0.82	0.83	1.94
2,3,4-Trimethylpentane	1.19	1.82	1.83	1.86	1.79	3.98
Toluene	13.53	17.94	16.73	18.47	20.64	35.70
2-Methylheptane	0.52	0.68	0.64	0.67	0.74	1.32
3-Methylheptane	0.48	0.69	0.65	0.70	0.79	1.43
1-Octene	0.05	ND	ND	ND	ND	ND
n-Octane	0.51	0.77	0.70	0.83	1.07	1.26
Ethylbenzene	2.03	5.07	4.36	5.47	4.58	8.18
m-Xylene/p-Xylene	5.90	14.08	12.86	15.58	13.89	24.01
Styrene	0.47	0.69	0.64	0.80	0.79	1.36
o-Xylene	2.31	4.89	4.26	5.53	4.69	7.49
1-Nonene	0.21	0.80	0.78	0.87	0.26	1.28
n-Nonane	0.64	0.60	0.42	0.82	0.67	1.37
Isopropylbenzene	0.09	0.16	0.15	0.16	0.26	0.30
a-Pinene	0.63	1.17	1.15	1.22	0.52	2.77
n-Propylbenzene	0.20	0.50	0.28	0.49	0.75	0.97
m-Ethyltoluene	0.76	1.60	1.45	1.80	2.42	3.12
p-Ethyltoluene	0.57	0.93	0.97	0.97	1.35	1.64
1,3,5-Trimethylbenzene	0.54	1.11	0.93	1.38	1.29	2.18
o-Ethyltoluene	0.35	0.62	0.68	0.77	1.02	1.32
b-Pinene	0.32	0.15	0.10	0.15	2.12	0.46
1,2,4-Trimethylbenzene	1.32	2.03	1.73	2.41	4.44	4.14
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.58	0.28	0.09	1.10	1.23	1.77
1,2,3-Trimethylbenzene	0.26	0.36	0.15	0.39	1.26	0.86
m-Diethylbenzene	0.02	0.09	0.04	0.10	0.23	0.05
p-Diethylbenzene	0.14	0.19	0.11	0.17	0.29	0.26
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.63	0.22	0.15	2.29	3.69	1.83
1-Dodecene	ND	ND	ND	ND	0.75	0.06
n-Dodecane	0.15	ND	ND	1.61	2.77	0.98
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	0.12	0.57	ND
TNMOC (w/ unknowns)	185.28	253.99	252.26	279.38	349.69	765.50
TNMOC (speciated)	139.08	232.23	229.84	245.77	261.42	699.01

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10521	10537D1	10537R1	10538D2	10538R2	10563
Sampling Date:	8/1/97	8/4/97	8/4/97	8/4/97	8/4/97	8/5/97
Analysis Date:	8/23/97	8/25/97	8/26/97	8/25/97	8/26/97	9/26/97
Ethylene	6.13	18.58	18.76	18.86	18.78	6.31
Acetylene	5.14	15.67	15.91	15.85	15.80	5.26
Ethane	11.07	29.72	29.77	29.72	29.90	9.64
Propylene	2.24	7.14	7.32	7.38	7.33	1.95
Propane	23.49	44.36	45.07	46.74	46.68	20.70
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.43	6.33	6.40	6.30	6.30	3.17
Isobutene/1-Butene	17.69	4.62	4.62	4.51	4.61	1.98
1,3-Butadiene	0.54	1.11	1.12	1.05	1.06	0.13
n-Butane	6.92	16.02	16.31	16.24	16.00	8.11
trans-2-Butene	0.27	0.76	0.82	0.78	0.83	0.15
cis-2-Butene	0.24	0.66	0.66	0.64	0.63	0.19
3-Methyl-1-butene	0.17	0.48	0.47	0.44	0.43	0.11
Isopentane	7.35	27.75	27.72	27.75	27.54	7.33
1-Pentene	0.31	1.00	1.40	0.87	0.81	0.33
2-Methyl-1-butene	0.37	1.61	1.61	1.57	1.61	0.34
n-Pentane	4.71	15.26	15.45	15.34	15.47	4.82
Isoprene	0.45	1.15	1.30	1.28	1.32	0.50
trans-2-Pentene	0.35	1.96	1.96	1.94	1.93	0.39
cis-2-Pentene	0.34	1.10	1.11	1.09	1.09	0.32
2-Methyl-2-butene	0.26	2.16	2.15	2.07	2.10	0.31
2,2-Dimethylbutane	0.29	1.27	1.31	1.32	1.27	0.44
Cyclopentene	0.03	0.41	0.48	0.39	0.36	0.07
4-Methyl-1-pentene	0.06	0.19	0.25	0.18	0.25	0.04
Cyclopentane	0.90	2.01	2.04	2.03	2.12	0.65
2,3-Dimethylbutane	1.36	3.78	3.85	3.82	3.84	1.04
2-Methylpentane	3.45	10.89	10.64	11.10	10.72	3.24
3-Methylpentane	3.99	9.33	9.14	9.44	9.12	2.31
2-Methyl-1-pentene	0.18	0.65	0.64	0.66	0.56	0.12
1-Hexene	0.23	0.49	0.50	0.47	0.44	0.19
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	3.26	9.40	9.51	9.41	9.51	2.95
trans-2-Hexene	0.12	0.49	0.55	0.49	0.54	0.10
cis-2-Hexene	0.10	0.36	0.33	0.32	0.32	0.07
Methylcyclopentane	1.91	6.21	6.18	6.23	6.25	1.93
2,4-Dimethylpentane	1.19	3.65	3.58	3.52	3.60	1.02
Benzene	3.86	14.15	14.24	13.21	13.49	3.65
Cyclohexane	1.12	3.19	3.35	3.20	3.30	1.05
2-Methylhexane	3.80	6.69	6.89	6.82	6.64	3.10
2,3-Dimethylpentane	3.03	7.03	7.23	7.10	6.93	2.29

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All concentrations reported in ppbC

Sample No.:	10521	10537D1	10537R1	10538D2	10538R2	10563
Sampling Date:	8/1/97	8/4/97	8/4/97	8/4/97	8/4/97	8/5/97
Analysis Date:	8/23/97	8/25/97	8/26/97	8/25/97	8/26/97	9/26/97
3-Methylhexane	1.58	4.96	5.27	5.28	4.75	1.30
1-Heptene	0.34	1.28	1.15	1.16	1.30	0.22
2,2,4-Trimethylpentane	2.60	9.03	8.77	8.99	8.96	2.75
n-Heptane	1.24	3.83	3.58	3.75	3.79	1.43
Methylcyclohexane	1.10	2.45	2.59	2.49	2.50	0.99
2,2,3-Trimethylpentane	0.53	1.72	1.64	1.70	1.68	0.42
2,3,4-Trimethylpentane	1.19	3.59	3.66	3.52	3.61	0.95
Toluene	10.12	31.29	30.51	30.46	30.35	10.09
2-Methylheptane	0.45	1.21	1.40	1.19	1.16	0.47
3-Methylheptane	0.43	1.26	1.27	1.22	1.26	0.46
1-Octene	0.09	ND	ND	ND	ND	ND
n-Octane	0.43	1.12	1.09	0.99	0.97	0.57
Ethylbenzene	2.15	6.64	6.29	6.33	6.22	1.70
m-Xylene/p-Xylene	6.42	21.72	20.08	20.42	20.14	5.23
Styrene	0.31	0.52	0.51	0.57	0.53	0.32
o-Xylene	2.65	7.73	6.98	7.19	7.26	2.03
1-Nonene	0.45	1.09	1.12	1.09	0.94	0.21
n-Nonane	0.94	0.96	0.88	0.99	0.89	0.36
Isopropylbenzene	0.11	0.31	0.32	0.31	0.27	0.12
a-Pinene	0.83	5.87	6.04	5.70	5.93	0.24
n-Propylbenzene	0.44	0.89	0.88	0.90	0.91	0.37
m-Ethyltoluene	0.95	2.92	2.84	2.73	2.67	1.09
p-Ethyltoluene	0.69	1.83	1.95	1.66	1.91	0.63
1,3,5-Trimethylbenzene	0.83	2.10	2.29	2.16	2.17	0.57
o-Ethyltoluene	0.38	1.53	1.58	1.67	1.44	0.58
b-Pinene	0.15	0.72	0.68	0.62	0.68	ND
1,2,4-Trimethylbenzene	1.64	4.23	4.10	3.87	3.73	1.78
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.01	0.84	0.97	0.99	0.86	0.43
1,2,3-Trimethylbenzene	0.21	0.57	0.74	0.45	0.58	0.24
m-Diethylbenzene	ND	0.11	0.09	0.04	0.05	0.20
p-Diethylbenzene	ND	0.18	0.28	0.19	0.19	0.22
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.61	1.05	0.94	1.39	1.10	0.63
1-Dodecene	ND	0.30	0.30	0.25	0.28	0.24
n-Dodecane	0.04	0.27	0.48	0.53	0.30	0.41
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND	ND	0.13
TNMOC (w/ unknowns)	1268.19	519.13	511.00	468.84	467.26	192.66
TNMOC (speciated)	160.31	401.77	401.92	400.95	398.87	133.64

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All concentrations reported in ppbC

Sample No.:	10535	10655	10665	10663	10709	10708
Sampling Date:	8/6/97	8/7/97	8/8/97	8/11/97	8/12/97	8/13/97
Analysis Date:	8/30/97	8/30/97	8/30/97	8/31/97	9/2/97	9/2/97
Ethylene	19.92	2.59	2.94	23.08	8.15	8.36
Acetylene	18.51	2.80	2.52	22.61	7.35	8.06
Ethane	29.13	8.94	20.52	21.14	6.97	7.90
Propylene	7.18	0.90	1.07	8.22	2.90	3.88
Propane	117.68	8.49	23.97	115.82	61.17	31.95
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	9.08	1.47	3.76	7.65	16.24	19.94
Isobutene/1-Butene	4.24	1.20	1.12	4.98	2.34	2.27
1,3-Butadiene	0.85	0.05	0.03	1.24	0.28	0.14
n-Butane	29.87	3.26	9.24	27.98	13.69	11.65
trans-2-Butene	0.08	0.09	0.10	0.65	0.17	0.28
cis-2-Butene	0.57	0.18	0.17	0.62	0.26	0.30
3-Methyl-1-butene	0.55	0.05	0.06	0.57	0.20	0.16
Isopentane	27.38	3.06	5.90	29.68	17.67	21.34
1-Pentene	1.29	0.09	0.15	1.38	0.22	0.52
2-Methyl-1-butene	1.67	0.12	0.17	2.21	0.71	0.76
n-Pentane	19.16	1.99	4.41	16.78	8.69	7.60
Isoprene	0.66	0.18	0.27	1.56	0.64	0.62
trans-2-Pentene	1.29	0.20	0.24	1.85	0.52	0.87
cis-2-Pentene	0.97	0.19	0.18	1.33	0.48	0.57
2-Methyl-2-butene	1.64	0.09	0.05	2.99	0.70	1.04
2,2-Dimethylbutane	1.96	0.26	0.47	1.88	0.99	1.37
Cyclopentene	0.35	0.04	0.04	0.51	0.24	0.17
4-Methyl-1-pentene	0.20	0.05	0.03	0.19	0.08	0.19
Cyclopentane	2.08	0.44	0.77	2.03	1.14	1.23
2,3-Dimethylbutane	4.05	0.62	1.06	3.98	1.69	1.70
2-Methylpentane	11.54	1.43	2.85	11.44	4.58	5.74
3-Methylpentane	8.88	2.27	3.65	11.14	4.40	5.77
2-Methyl-1-pentene	0.48	0.09	0.05	0.69	0.22	0.24
1-Hexene	0.49	0.09	0.11	0.52	0.20	0.25
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	11.21	1.32	2.65	10.28	4.38	5.96
trans-2-Hexene	1.49	0.06	0.04	0.54	0.17	0.35
cis-2-Hexene	0.32	0.04	0.03	0.39	0.14	0.16
Methylcyclopentane	6.59	0.89	1.39	6.91	2.74	2.95
2,4-Dimethylpentane	4.67	0.59	0.69	4.33	1.62	1.75
Benzene	12.59	1.85	2.29	13.74	4.68	5.34
Cyclohexane	3.71	0.67	1.07	3.83	2.02	2.53
2-Methylhexane	6.98	2.71	3.45	7.03	4.90	5.20
2,3-Dimethylpentane	9.32	1.66	1.89	8.74	4.06	4.42

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All concentrations reported in ppbC

Sample No.:	10535	10655	10665	10663	10709	10708
Sampling Date:	8/6/97	8/7/97	8/8/97	8/11/97	8/12/97	8/13/97
Analysis Date:	8/30/97	8/30/97	8/30/97	8/31/97	9/2/97	9/2/97
3-Methylhexane	6.72	0.65	1.13	5.82	3.32	3.93
1-Heptene	1.43	0.26	0.44	1.48	0.66	0.57
2,2,4-Trimethylpentane	10.02	1.15	1.36	8.91	3.46	3.79
n-Heptane	4.31	0.55	1.20	3.91	2.36	2.50
Methylcyclohexane	2.65	0.53	0.74	2.35	2.53	2.89
2,2,3-Trimethylpentane	1.95	0.13	0.29	1.84	0.53	0.62
2,3,4-Trimethylpentane	3.94	0.52	0.56	3.62	1.29	1.51
Toluene	42.67	4.26	6.69	38.07	17.28	38.50
2-Methylheptane	1.42	0.27	0.39	1.47	0.58	0.67
3-Methylheptane	1.51	0.29	0.42	1.57	0.60	0.69
1-Octene	ND	ND	0.10	ND	ND	ND
n-Octane	1.67	0.36	0.58	1.51	0.70	0.80
Ethylbenzene	7.14	1.09	1.17	6.58	2.77	3.24
m-Xylene/p-Xylene	22.42	2.36	2.63	20.21	8.03	11.06
Styrene	1.05	0.16	0.18	1.11	0.48	0.58
o-Xylene	8.50	1.23	1.02	7.11	2.78	3.69
1-Nonene	1.04	0.16	0.06	0.49	0.53	0.77
n-Nonane	1.27	0.21	0.33	0.99	0.84	1.52
Isopropylbenzene	0.38	0.13	0.14	0.29	0.22	0.19
a-Pinene	1.10	0.27	0.26	0.77	1.15	0.62
n-Propylbenzene	1.37	0.26	0.28	1.41	0.62	0.74
m-Ethyltoluene	4.46	0.56	0.65	4.75	2.05	2.15
p-Ethyltoluene	2.72	0.38	0.48	2.94	1.29	1.57
1,3,5-Trimethylbenzene	2.58	0.34	0.36	2.84	1.35	1.92
o-Ethyltoluene	1.87	0.36	0.41	2.00	0.96	0.89
b-Pinene	1.79	1.87	1.25	0.14	1.71	0.94
1,2,4-Trimethylbenzene	7.75	0.95	1.08	7.70	3.14	3.50
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.45	0.25	0.40	0.92	3.93	5.83
1,2,3-Trimethylbenzene	1.97	0.09	0.36	1.72	1.08	0.36
m-Diethylbenzene	0.33	0.16	0.16	0.34	0.15	0.14
p-Diethylbenzene	0.45	0.12	0.12	0.36	0.21	0.47
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	2.88	0.39	0.48	0.91	14.20	17.02
1-Dodecene	0.45	0.42	0.33	0.03	0.13	1.02
n-Dodecane	3.52	0.23	0.27	0.23	12.63	12.98
1-Tridecene	ND	ND	ND	ND	ND	0.14
n-Tridecane	0.69	0.08	0.10	0.15	2.52	3.03
TNMOC (w/ unknowns)	655.26	124.69	170.38	599.91	367.13	438.75
TNMOC (speciated)	534.11	72.10	125.89	515.04	283.66	304.37

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10710	10706D1	10706R1	10707D2	10707R2	10705
Sampling Date:	8/14/97	8/15/97	8/15/97	8/15/97	8/15/97	8/18/97
Analysis Date:	9/3/97	8/26/97	8/30/97	8/26/97	8/30/97	9/3/97
Ethylene	9.38	10.11	10.18	10.05	10.01	4.45
Acetylene	9.17	9.37	9.76	9.54	9.76	4.12
Ethane	8.28	10.40	10.43	10.46	10.61	4.61
Propylene	3.35	3.61	3.62	3.60	3.50	1.58
Propane	43.14	27.18	26.98	27.31	26.77	57.25
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.34	2.31	2.38	2.38	2.33	1.64
Isobutene/1-Butene	2.29	2.05	2.26	2.02	2.17	1.41
1,3-Butadiene	0.43	0.43	0.50	0.41	0.47	0.13
n-Butane	11.94	9.13	9.41	9.27	9.39	10.42
trans-2-Butene	0.31	0.31	0.36	0.27	0.32	0.07
cis-2-Butene	0.29	0.36	0.36	0.30	0.33	0.18
3-Methyl-1-butene	0.23	0.25	0.27	0.21	0.25	0.08
Isopentane	12.73	10.55	10.52	10.62	10.99	5.42
1-Pentene	0.45	0.50	0.44	0.28	0.42	0.20
2-Methyl-1-butene	0.68	0.88	0.91	0.87	0.89	0.29
n-Pentane	13.89	5.91	5.97	5.87	5.95	4.00
Isoprene	0.43	0.57	0.16	0.56	0.58	0.23
trans-2-Pentene	0.82	0.69	0.56	0.32	0.59	1.70
cis-2-Pentene	0.43	0.58	0.63	0.64	0.66	0.26
2-Methyl-2-butene	0.50	1.18	1.20	1.21	1.24	0.18
2,2-Dimethylbutane	1.05	0.82	0.76	0.77	0.90	0.23
Cyclopentene	0.22	0.25	0.25	0.24	0.20	ND
4-Methyl-1-pentene	0.07	0.05	0.07	0.13	0.13	ND
Cyclopentane	1.19	1.05	0.87	1.17	0.90	0.71
2,3-Dimethylbutane	1.77	1.85	1.81	1.89	1.78	0.93
2-Methylpentane	4.92	4.94	4.81	4.73	4.84	2.05
3-Methylpentane	4.54	4.26	4.23	3.79	4.21	2.76
2-Methyl-1-pentene	0.18	0.24	0.27	0.23	0.23	0.16
1-Hexene	0.23	0.21	0.27	0.25	0.24	0.14
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.43	4.25	4.31	4.24	4.27	1.80
trans-2-Hexene	0.29	0.26	0.30	0.24	0.25	0.04
cis-2-Hexene	0.12	0.17	0.18	0.18	0.17	0.06
Methylcyclopentane	3.09	2.93	2.94	2.92	2.91	1.24
2,4-Dimethylpentane	1.76	1.88	1.91	1.87	1.92	0.91
Benzene	5.30	6.00	5.96	5.86	6.03	2.18
Cyclohexane	1.98	1.70	1.66	1.66	1.85	0.90
2-Methylhexane	4.34	4.61	4.21	4.29	4.23	3.06
2,3-Dimethylpentane	4.06	4.64	4.22	4.24	4.15	2.11

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10710	10706D1	10706R1	10707D2	10707R2	10705
Sampling Date:	8/14/97	8/15/97	8/15/97	8/15/97	8/15/97	8/18/97
Analysis Date:	9/3/97	8/26/97	8/30/97	8/26/97	8/30/97	9/3/97
3-Methylhexane	2.52	2.39	2.02	1.73	1.99	0.83
1-Heptene	0.74	0.50	0.50	0.49	0.51	0.17
2,2,4-Trimethylpentane	3.86	3.54	4.05	3.62	3.67	1.70
n-Heptane	2.17	1.63	1.92	1.54	1.87	0.71
Methylcyclohexane	1.36	1.19	1.13	1.22	1.06	0.51
2,2,3-Trimethylpentane	0.74	0.71	0.78	0.71	0.74	0.20
2,3,4-Trimethylpentane	1.44	1.54	1.54	1.48	1.57	0.68
Toluene	16.32	14.36	17.62	14.32	17.52	6.91
2-Methylheptane	0.64	0.59	0.66	0.59	0.76	0.31
3-Methylheptane	0.71	0.67	0.77	0.70	0.76	0.24
1-Octene	ND	0.09	0.16	0.11	ND	0.09
n-Octane	0.91	0.50	0.79	0.49	0.75	0.39
Ethylbenzene	4.03	4.94	5.00	4.85	4.67	1.49
m-Xylene/p-Xylene	12.25	15.53	16.45	15.84	15.56	3.67
Styrene	1.06	0.65	0.93	0.69	0.90	0.34
o-Xylene	4.55	4.84	5.26	4.72	5.59	1.36
1-Nonene	0.31	0.47	0.17	0.35	0.42	0.09
n-Nonane	0.60	0.52	0.59	0.48	0.52	0.32
Isopropylbenzene	0.25	0.17	0.20	0.20	0.23	0.13
a-Pinene	0.30	0.54	0.22	0.58	0.27	0.40
n-Propylbenzene	0.67	0.46	0.67	0.41	0.67	0.33
m-Ethyltoluene	2.03	1.31	2.14	1.28	2.08	0.81
p-Ethyltoluene	1.39	0.90	1.15	0.83	1.37	0.55
1,3,5-Trimethylbenzene	1.26	0.94	1.18	0.86	1.37	0.44
o-Ethyltoluene	0.84	0.56	0.94	0.51	0.93	0.50
b-Pinene	1.84	0.23	0.46	0.11	0.82	1.43
1,2,4-Trimethylbenzene	3.51	1.84	3.59	2.06	3.66	1.28
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.67	0.51	0.45	0.42	0.66	0.29
1,2,3-Trimethylbenzene	1.07	0.25	0.95	0.35	0.58	0.27
m-Diethylbenzene	0.22	0.08	0.23	0.06	0.24	0.16
p-Diethylbenzene	0.23	0.15	0.21	0.04	0.18	0.13
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.49	0.50	0.77	0.32	0.60	0.48
1-Dodecene	0.64	ND	ND	ND	ND	0.39
n-Dodecane	0.82	0.19	0.29	0.12	0.31	0.44
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.20	ND	0.07	ND	0.05	0.10
TNMOC (w/ unknowns)	1583.15	359.52	469.57	288.86	336.03	210.31
TNMOC (speciated)	234.24	199.77	209.79	196.99	209.34	145.62

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	10850	10970D1	10970R1	10971D2	10971R2	10975
Sampling Date:	8/19/97	8/21/97	8/21/97	8/21/97	8/21/97	8/22/97
Analysis Date:	9/3/97	9/9/97	9/11/97	9/9/97	9/11/97	9/4/97
Ethylene	10.19	20.10	20.00	20.13	20.00	15.54
Acetylene	8.84	14.92	15.10	14.99	14.94	13.89
Ethane	7.93	20.59	20.86	20.86	21.01	14.30
Propylene	3.33	7.50	7.45	7.39	7.42	5.71
Propane	98.64	93.19	94.92	94.77	94.58	31.09
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	5.33	47.29	46.90	40.03	39.51	8.73
Isobutene/1-Butene	2.01	4.13	4.15	4.19	4.20	3.69
1,3-Butadiene	0.27	1.14	1.13	1.15	1.13	0.87
n-Butane	22.69	25.86	25.77	25.80	25.65	15.60
trans-2-Butene	0.24	0.44	0.64	0.58	0.40	0.76
cis-2-Butene	0.35	0.66	0.67	0.68	0.64	0.66
3-Methyl-1-butene	0.19	0.57	0.52	0.55	0.53	0.70
Isopentane	16.67	62.61	62.34	55.35	55.53	26.56
1-Pentene	0.42	1.27	1.25	1.22	1.28	2.23
2-Methyl-1-butene	0.70	1.77	1.76	1.79	1.77	2.14
n-Pentane	11.29	26.53	26.90	26.65	26.55	16.03
Isoprene	0.57	1.34	1.30	1.09	1.28	0.97
trans-2-Pentene	0.76	1.74	1.68	1.86	1.74	1.71
cis-2-Pentene	0.54	1.12	1.19	1.14	1.11	1.20
2-Methyl-2-butene	0.68	2.31	2.30	2.30	2.10	2.22
2,2-Dimethylbutane	0.85	2.45	1.70	1.63	1.53	1.03
Cyclopentene	0.17	0.44	0.58	0.47	0.49	0.46
4-Methyl-1-pentene	0.11	0.18	0.23	0.19	0.21	0.22
Cyclopentane	1.03	2.34	2.01	2.17	1.93	1.83
2,3-Dimethylbutane	1.78	4.12	3.73	4.14	3.68	3.31
2-Methylpentane	4.48	13.09	11.22	11.25	10.95	10.13
3-Methylpentane	4.55	9.91	10.99	10.07	9.88	9.03
2-Methyl-1-pentene	0.25	0.66	0.67	0.66	0.49	0.47
1-Hexene	0.28	0.70	0.73	0.70	0.68	0.47
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.14	11.33	11.28	11.06	10.95	9.66
trans-2-Hexene	0.17	0.89	0.82	0.78	0.79	0.42
cis-2-Hexene	0.14	0.38	0.36	0.34	0.35	0.32
Methylcyclopentane	2.84	6.51	6.46	6.41	6.38	5.67
2,4-Dimethylpentane	1.89	3.96	3.94	3.93	3.93	3.39
Benzene	5.04	13.11	13.26	13.34	13.07	10.25
Cyclohexane	1.63	4.31	4.24	4.30	3.99	3.01
2-Methylhexane	4.19	6.81	7.03	7.23	7.02	5.95
2,3-Dimethylpentane	4.23	7.89	7.58	7.99	7.65	6.52

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Sample No.:	10850	10970D1	10970R1	10971D2	10971R2	10975
Sampling Date:	8/19/97	8/21/97	8/21/97	8/21/97	8/21/97	8/22/97
Analysis Date:	9/3/97	9/9/97	9/11/97	9/9/97	9/11/97	9/4/97
3-Methylhexane	1.91	6.95	6.09	6.85	6.09	4.00
1-Heptene	0.63	1.17	1.42	1.42	0.84	0.96
2,2,4-Trimethylpentane	3.62	12.16	12.06	11.91	12.50	6.81
n-Heptane	1.50	5.01	4.89	5.05	4.94	3.11
Methylcyclohexane	1.09	2.97	3.04	2.64	2.27	2.13
2,2,3-Trimethylpentane	0.65	2.02	1.80	1.91	1.75	1.13
2,3,4-Trimethylpentane	1.40	3.56	3.58	3.58	3.53	2.71
Toluene	15.97	42.89	42.96	41.32	41.52	32.52
2-Methylheptane	0.58	1.72	1.43	1.41	1.41	1.10
3-Methylheptane	0.66	1.56	1.50	1.49	1.42	1.10
1-Octene	0.12	0.27	ND	0.37	ND	ND
n-Octane	0.66	2.09	1.94	1.98	1.98	1.23
Ethylbenzene	3.15	7.41	7.49	7.13	7.44	5.54
m-Xylene/p-Xylene	8.75	23.98	23.89	22.99	23.69	19.69
Styrene	1.07	2.83	2.95	2.46	2.63	8.86
o-Xylene	3.89	8.70	8.25	7.63	8.12	7.43
1-Nonene	0.62	ND	0.72	0.43	0.67	0.68
n-Nonane	1.02	1.59	1.54	1.42	1.45	0.95
Isopropylbenzene	0.26	0.35	0.39	0.33	0.37	0.26
a-Pinene	1.52	2.26	2.00	2.40	1.89	0.42
n-Propylbenzene	0.80	1.32	1.42	1.28	1.31	0.91
m-Ethyltoluene	2.27	4.32	4.48	4.17	4.24	3.09
p-Ethyltoluene	1.62	2.40	2.66	2.48	2.53	1.90
1,3,5-Trimethylbenzene	1.64	2.36	2.80	2.51	2.60	1.98
o-Ethyltoluene	1.16	2.08	2.00	2.06	1.79	1.30
b-Pinene	0.24	0.27	0.47	0.21	0.48	0.05
1,2,4-Trimethylbenzene	3.69	6.90	7.92	6.15	7.31	5.46
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	3.43	2.48	2.72	1.79	1.78	1.25
1,2,3-Trimethylbenzene	0.33	1.90	2.53	1.53	1.61	1.12
m-Diethylbenzene	0.16	0.27	0.34	0.30	0.33	0.24
p-Diethylbenzene	0.28	0.49	0.55	0.43	0.50	0.30
1-Undecene	ND	0.30	0.18	0.41	0.22	0.29
n-Undecane	2.59	4.41	5.08	2.53	2.34	1.78
1-Dodecene	ND	0.35	0.40	0.36	ND	0.05
n-Dodecane	2.34	4.04	4.09	1.05	1.06	1.96
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.44	1.08	1.04	0.44	0.36	0.68
TNMOC (w/ unknowns)	360.87	1236.19	1127.14	1058.12	1122.53	621.08
TNMOC (speciated)	299.50	588.61	590.32	561.60	558.33	359.75

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All concentrations reported in ppbC

Sample No.:	10974	10968	10963D1	10963R1	10964D2	10964R2
Sampling Date:	8/25/97	8/26/97	8/27/97	8/27/97	8/27/97	8/27/97
Analysis Date:	9/4/97	9/4/97	9/10/97	9/11/97	9/10/97	9/11/97
Ethylene	12.05	11.43	14.60	14.56	14.52	14.49
Acetylene	10.67	10.68	11.88	11.98	11.88	11.79
Ethane	11.04	14.37	20.24	20.88	20.58	20.47
Propylene	4.49	4.25	5.67	5.97	5.65	5.99
Propane	13.88	23.36	70.02	70.20	70.12	70.63
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.47	3.29	3.66	3.66	3.64	3.60
Isobutene/1-Butene	3.50	3.26	1.42	3.87	3.87	3.87
1,3-Butadiene	0.51	0.71	0.89	0.95	0.86	0.97
n-Butane	6.62	8.84	12.03	12.09	12.10	12.29
trans-2-Butene	0.39	0.53	0.74	0.74	0.55	0.68
cis-2-Butene	0.37	0.44	0.57	0.59	0.60	0.58
3-Methyl-1-butene	0.23	0.30	0.40	0.38	0.37	0.39
Isopentane	13.22	15.22	18.79	18.74	18.77	18.61
1-Pentene	0.51	0.65	1.00	1.00	0.80	0.84
2-Methyl-1-butene	0.79	1.04	1.19	1.20	1.20	1.20
n-Pentane	7.57	9.27	11.43	11.37	11.43	11.35
Isoprene	0.81	0.68	0.84	0.88	0.84	0.87
trans-2-Pentene	0.99	1.33	1.65	1.27	0.88	1.21
cis-2-Pentene	0.56	0.73	0.81	0.92	0.83	0.85
2-Methyl-2-butene	0.85	1.32	1.43	1.45	1.34	1.43
2,2-Dimethylbutane	0.57	0.76	0.81	0.84	0.78	0.88
Cyclopentene	0.18	0.31	0.38	0.41	0.41	0.40
4-Methyl-1-pentene	0.12	0.11	0.17	0.17	0.16	0.17
Cyclopentane	1.07	1.19	1.42	1.65	1.60	1.68
2,3-Dimethylbutane	2.22	2.42	2.85	2.86	2.83	3.14
2-Methylpentane	5.94	6.65	8.47	8.07	8.42	8.60
3-Methylpentane	4.87	6.18	6.84	6.89	6.94	6.96
2-Methyl-1-pentene	0.29	0.43	0.42	0.44	0.40	0.41
1-Hexene	0.30	0.37	0.56	0.58	0.59	0.58
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.88	6.12	7.45	7.03	7.30	7.59
trans-2-Hexene	0.29	0.31	0.44	0.42	0.44	0.37
cis-2-Hexene	0.16	0.23	0.29	0.29	0.29	0.27
Methylcyclopentane	3.70	4.20	4.95	4.91	4.97	4.91
2,4-Dimethylpentane	2.26	2.86	2.96	2.99	3.05	2.96
Benzene	7.64	8.65	10.09	9.98	10.60	10.07
Cyclohexane	1.85	2.13	2.62	2.68	2.70	2.54
2-Methylhexane	4.54	4.90	5.96	5.89	6.01	5.36
2,3-Dimethylpentane	3.75	4.64	5.84	5.81	6.00	4.92

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Sample No.:	10974	10968	10963D1	10963R1	10964D2	10964R2
Sampling Date:	8/25/97	8/26/97	8/27/97	8/27/97	8/27/97	8/27/97
Analysis Date:	9/4/97	9/4/97	9/10/97	9/11/97	9/10/97	9/11/97
3-Methylhexane	2.82	3.32	4.36	4.27	4.93	4.12
1-Heptene	0.71	0.90	0.88	0.92	0.75	1.11
2,2,4-Trimethylpentane	5.26	5.88	6.34	6.84	6.91	6.89
n-Heptane	2.34	2.52	3.14	3.38	3.64	3.19
Methylcyclohexane	1.53	1.68	2.23	2.01	1.98	1.98
2,2,3-Trimethylpentane	0.93	1.05	1.11	1.27	1.19	1.40
2,3,4-Trimethylpentane	2.30	2.69	2.94	2.91	2.88	2.92
Toluene	17.40	20.67	25.15	24.96	24.78	24.79
2-Methylheptane	0.81	0.94	1.12	1.09	1.09	1.08
3-Methylheptane	0.82	1.00	1.15	1.13	1.15	1.11
1-Octene	ND	0.15	0.29	0.28	0.37	0.26
n-Octane	0.73	0.92	1.27	1.28	1.22	1.20
Ethylbenzene	2.98	3.37	4.46	4.10	4.02	4.15
m-Xylene/p-Xylene	10.27	11.88	14.73	14.12	14.31	14.35
Styrene	0.33	0.46	0.63	0.61	0.39	0.61
o-Xylene	3.76	4.63	5.41	5.25	5.18	5.24
1-Nonene	0.33	0.49	0.57	0.46	0.58	0.47
n-Nonane	0.38	0.61	1.03	1.02	0.83	0.98
Isopropylbenzene	0.24	0.26	0.25	0.32	0.24	0.29
a-Pinene	0.51	0.84	0.96	0.93	1.10	1.03
n-Propylbenzene	0.66	0.82	0.98	1.05	0.99	0.98
m-Ethyltoluene	2.20	2.70	3.31	3.31	3.21	3.20
p-Ethyltoluene	1.33	1.59	2.11	2.06	2.01	1.99
1,3,5-Trimethylbenzene	1.21	1.63	2.24	2.07	2.08	2.05
o-Ethyltoluene	1.08	1.02	1.27	1.37	1.36	1.37
b-Pinene	0.07	0.10	0.12	0.10	0.19	0.09
1,2,4-Trimethylbenzene	3.59	4.08	5.54	5.05	5.70	4.98
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.51	0.66	1.11	1.05	1.00	1.01
1,2,3-Trimethylbenzene	0.93	0.91	1.16	1.38	1.06	1.12
m-Diethylbenzene	0.27	0.25	0.26	0.33	0.27	0.29
p-Diethylbenzene	0.25	0.21	0.29	0.29	0.28	0.29
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	0.73	0.79	1.08	1.15	1.15	1.23
1-Dodecene	ND	ND	0.56	0.40	0.45	0.10
n-Dodecane	0.39	0.34	0.48	0.53	0.60	0.51
1-Tridecene	ND	ND	ND	ND	ND	ND
n-Tridecane	0.06	0.08	0.11	0.16	0.14	0.14
TNMOC (w/ unknowns)	252.73	1595.36	1205.09	1204.31	1225.63	1200.60
TNMOC (speciated)	203.86	243.63	340.42	342.03	342.32	340.43

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All concentrations reported in ppbC

Sample No.:	10967	11131	11122	11129	11128	11199
Sampling Date:	8/28/97	8/29/97	9/1/97	9/2/97	9/3/97	9/4/97
Analysis Date:	9/4/97	9/16/97	10/29/97	9/16/97	9/16/97	9/17/97
Ethylene	18.71	14.39	2.39	15.13	11.31	5.79
Acetylene	16.66	14.77	3.58	12.33	9.34	6.38
Ethane	22.41	8.62	3.26	9.65	15.45	13.26
Propylene	6.48	4.77	1.26	5.27	4.02	1.96
Propane	146.06	37.40	12.59	66.56	30.29	11.22
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	5.92	3.58	1.11	4.33	4.45	2.60
Isobutene/1-Butene	3.99	3.09	1.73	3.39	3.34	1.68
1,3-Butadiene	1.00	0.69	0.14	0.87	0.68	0.19
n-Butane	28.29	14.84	2.96	20.32	11.24	6.13
trans-2-Butene	0.59	0.48	0.25	0.70	0.61	0.18
cis-2-Butene	0.58	0.46	0.19	0.45	0.42	0.20
3-Methyl-1-butene	0.54	0.40	0.08	0.33	0.25	0.15
Isopentane	27.62	18.02	4.27	15.46	15.11	6.61
1-Pentene	1.29	0.96	0.32	0.66	0.44	0.14
2-Methyl-1-butene	1.70	1.42	0.27	1.00	0.81	0.30
n-Pentane	20.09	9.72	2.98	21.39	12.17	4.47
Isoprene	0.95	0.58	0.38	0.95	0.77	0.36
trans-2-Pentene	2.14	1.29	0.37	1.26	1.24	0.41
cis-2-Pentene	1.14	0.88	0.31	0.71	0.62	0.29
2-Methyl-2-butene	2.21	1.83	0.19	1.34	0.95	0.21
2,2-Dimethylbutane	1.57	1.21	0.40	0.80	1.07	0.44
Cyclopentene	0.50	0.40	0.16	0.45	0.23	0.02
4-Methyl-1-pentene	0.21	0.22	0.06	0.10	0.10	0.06
Cyclopentane	1.95	1.56	0.36	1.40	1.25	0.78
2,3-Dimethylbutane	4.10	2.75	2.90	2.45	2.29	1.19
2-Methylpentane	11.51	7.54	2.20	6.79	6.50	3.18
3-Methylpentane	9.59	5.84	1.70	5.57	5.91	3.44
2-Methyl-1-pentene	0.56	0.36	0.14	0.33	0.31	0.10
1-Hexene	0.63	0.35	0.11	0.38	0.32	0.16
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	10.04	6.99	ND	5.85	5.80	2.72
trans-2-Hexene	0.56	0.72	0.30	0.32	0.26	0.10
cis-2-Hexene	0.37	0.26	ND	0.23	0.20	0.07
Methylcyclopentane	6.60	4.42	1.29	4.04	3.86	1.94
2,4-Dimethylpentane	4.17	3.04	0.79	2.38	2.45	0.96
Benzene	12.38	8.73	2.52	8.86	7.99	3.44
Cyclohexane	3.66	3.62	1.00	2.11	2.05	1.11
2-Methylhexane	7.89	5.27	ND	4.99	4.79	3.24
2,3-Dimethylpentane	7.99	5.98	2.08	5.04	4.61	2.63

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All concentrations reported in ppbC

Sample No.:	10967	11131	11122	11129	11128	11199
Sampling Date:	8/28/97	8/29/97	9/1/97	9/2/97	9/3/97	9/4/97
Analysis Date:	9/4/97	9/16/97	10/29/97	9/16/97	9/16/97	9/17/97
3-Methylhexane	6.89	3.27	2.18	3.05	2.95	1.29
1-Heptene	1.40	0.66	ND	0.92	0.83	0.41
2,2,4-Trimethylpentane	9.12	5.81	1.86	5.88	5.28	2.63
n-Heptane	5.62	2.76	0.91	2.29	2.02	1.23
Methylcyclohexane	2.80	1.53	0.63	1.52	1.44	0.94
2,2,3-Trimethylpentane	1.71	1.05	0.31	1.20	0.85	0.37
2,3,4-Trimethylpentane	3.85	2.37	0.73	2.44	2.18	1.10
Toluene	32.90	25.00	6.55	19.85	18.46	9.59
2-Methylheptane	1.32	0.97	0.35	0.86	0.77	0.40
3-Methylheptane	1.39	1.08	0.40	0.89	0.82	0.38
1-Octene	0.26	0.23	ND	ND	ND	ND
n-Octane	1.56	0.99	0.40	0.86	0.80	0.50
Ethylbenzene	6.72	7.72	1.29	3.89	3.22	1.69
m-Xylene/p-Xylene	23.50	24.20	4.17	12.58	10.59	4.97
Styrene	0.79	1.20	0.29	0.47	0.43	0.27
o-Xylene	8.79	8.27	1.78	4.38	3.76	2.13
1-Nonene	0.69	0.55	0.67	0.22	0.18	0.17
n-Nonane	1.05	0.79	0.41	0.51	0.63	0.38
Isopropylbenzene	0.45	0.25	0.26	0.19	0.17	0.13
a-Pinene	9.61	0.87	0.83	0.84	1.12	0.38
n-Propylbenzene	1.31	0.96	0.44	0.79	0.73	0.37
m-Ethyltoluene	5.73	3.22	1.02	2.58	2.36	1.10
p-Ethyltoluene	2.26	1.95	0.55	1.42	1.54	0.59
1,3,5-Trimethylbenzene	2.21	1.95	0.54	1.28	1.60	0.63
o-Ethyltoluene	1.91	1.24	0.67	0.96	0.99	0.60
b-Pinene	0.18	0.05	0.12	0.05	0.07	ND
1,2,4-Trimethylbenzene	6.71	4.93	1.84	3.97	3.59	2.17
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.28	0.81	0.52	0.48	0.72	0.43
1,2,3-Trimethylbenzene	1.84	0.89	ND	0.97	1.17	0.70
m-Diethylbenzene	0.43	0.27	0.26	0.25	0.25	0.33
p-Diethylbenzene	0.63	0.27	0.26	0.18	0.25	0.18
1-Undecene	0.21	ND	ND	0.16	0.11	ND
n-Undecane	1.92	1.05	0.98	0.79	1.70	0.95
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	1.51	0.61	0.36	0.57	1.45	0.58
1-Tridecene	ND	ND	ND	ND	ND	0.05
n-Tridecane	0.24	0.13	0.19	0.20	0.31	0.44
TNMOC (w/ unknowns)	943.16	414.76	658.71	1267.52	476.96	206.95
TNMOC (speciated)	541.43	305.38	86.36	311.64	246.81	126.19

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SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	11194	11193	11287		11279	11404	11405
Sampling Date:	9/5/97	9/8/97	9/9/97		9/10/97	9/11/97	9/12/97
Analysis Date:	9/17/97	9/17/97	9/20/97		9/18/97	9/27/97	9/26/97
Ethylene	12.08	21.62	13.88		2.42	19.00	14.41
Acetylene	12.82	20.52	12.49		2.20	20.12	14.28
Ethane	21.06	21.08	1.89	a	10.97	5.44	5.22
Propylene	3.94	7.64	4.99		0.84	6.47	5.16
Propane	35.71	32.35	28.08		16.71	63.29	22.27
Propyne	ND	ND	ND		ND	ND	ND
Isobutane	4.40	6.77	5.44		1.87	13.35	4.37
Isobutene/1-Butene	2.65	5.28	3.47		0.77	3.90	3.65
1,3-Butadiene	0.54	1.32	0.57		0.05	0.85	0.70
n-Butane	13.68	15.94	12.44		6.16	30.22	10.85
trans-2-Butene	0.30	0.71	0.47		0.07	0.70	0.34
cis-2-Butene	0.34	0.67	0.43		0.08	0.82	0.41
3-Methyl-1-butene	0.31	0.46	0.27		0.04	0.76	0.27
Isopentane	13.98	23.69	16.98		3.35	33.81	16.71
1-Pentene	0.52	0.79	0.87		0.16	1.40	1.19
2-Methyl-1-butene	0.93	1.79	1.01		0.10	2.60	1.18
n-Pentane	8.81	13.08	9.10		3.54	22.18	9.31
Isoprene	0.49	0.94	0.80		0.19	0.67	0.64
trans-2-Pentene	0.69	1.54	1.53		0.21	2.28	2.59
cis-2-Pentene	0.57	1.14	0.69		0.17	1.48	0.79
2-Methyl-2-butene	0.83	2.41	1.30		0.10	2.58	1.49
2,2-Dimethylbutane	0.70	1.81	0.97		0.30	1.51	1.11
Cyclopentene	0.20	0.46	0.24		ND	0.40	0.26
4-Methyl-1-pentene	0.26	0.23	0.19		ND	0.23	0.18
Cyclopentane	1.25	1.78	1.18		0.77	2.26	1.22
2,3-Dimethylbutane	2.27	3.89	2.43		0.63	3.66	2.64
2-Methylpentane	6.81	11.46	7.40		1.39	11.76	7.73
3-Methylpentane	6.75	9.34	6.91		2.32	9.25	6.97
2-Methyl-1-pentene	0.38	0.57	0.35		0.06	0.56	0.43
1-Hexene	0.30	0.52	0.34		0.07	0.50	0.39
2-Ethyl-1-butene	ND	ND	ND		ND	ND	ND
n-Hexane	6.07	9.98	6.50		1.37	9.92	7.42
trans-2-Hexene	0.14	0.63	0.31		0.14	0.74	0.34
cis-2-Hexene	0.17	0.37	0.22		ND	0.36	0.24
Methylcyclopentane	3.71	6.39	4.16		0.89	6.84	5.69
2,4-Dimethylpentane	2.20	3.77	2.42		0.42	3.66	8.14
Benzene	7.07	14.15	8.73		1.44	11.86	8.91
Cyclohexane	2.35	3.48	2.62		0.68	3.87	2.44
2-Methylhexane	4.72	6.65	4.96		2.45	6.52	5.49
2,3-Dimethylpentane	3.97	7.35	4.88		1.08	7.33	5.33

SNMOC 1997 REPORT
SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	11194	11193	11287	11279	11404	11405
Sampling Date:	9/5/97	9/8/97	9/9/97	9/10/97	9/11/97	9/12/97
Analysis Date:	9/17/97	9/17/97	9/20/97	9/18/97	9/27/97	9/26/97
3-Methylhexane	3.91	6.28	3.73	0.57	5.34	3.75
1-Heptene	0.86	1.33	1.03	0.18	1.27	0.71
2,2,4-Trimethylpentane	4.73	8.47	5.49	0.93	7.31	5.51
n-Heptane	3.67	3.38	2.63	0.60	3.80	2.93
Methylcyclohexane	1.82	2.96	1.75	0.47	2.81	1.87
2,2,3-Trimethylpentane	0.95	1.55	0.88	0.18	1.40	0.94
2,3,4-Trimethylpentane	1.95	3.47	2.27	0.37	2.91	2.41
Toluene	31.79	49.53	33.55	3.72	37.22	30.65
2-Methylheptane	0.86	1.46	0.97	0.21	1.42	1.01
3-Methylheptane	0.87	1.49	1.04	0.28	1.47	1.09
1-Octene	ND	0.57	0.21	ND	ND	ND
n-Octane	1.28	1.80	1.13	0.33	1.98	1.06
Ethylbenzene	5.62	9.38	4.95	0.90	7.56	4.96
m-Xylene/p-Xylene	19.56	32.97	16.63	2.22	25.49	16.43
Styrene	4.12	3.74	0.63	0.17	2.82	0.63
o-Xylene	6.25	10.24	5.40	0.85	8.15	5.35
1-Nonene	0.18	1.01	0.23	0.05	0.38	0.28
n-Nonane	0.67	1.40	0.87	0.24	1.14	1.01
Isopropylbenzene	0.22	4.94	0.26	0.11	0.28	0.20
a-Pinene	0.72	1.34	0.84	0.27	0.77	0.72
n-Propylbenzene	0.84	1.43	0.92	0.25	1.20	0.96
m-Ethyltoluene	2.64	4.77	3.05	0.58	4.05	3.14
p-Ethyltoluene	1.71	2.84	1.93	0.45	2.22	1.69
1,3,5-Trimethylbenzene	1.76	2.94	1.92	0.36	2.16	1.87
o-Ethyltoluene	1.17	1.94	1.38	0.35	2.19	1.22
b-Pinene	0.04	1.24	0.09	ND	ND	0.05
1,2,4-Trimethylbenzene	3.90	10.51	4.94	0.83	5.97	5.13
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	0.93	1.53	1.17	0.32	1.29	1.25
1,2,3-Trimethylbenzene	1.07	1.73	0.97	0.23	1.67	1.29
m-Diethylbenzene	0.23	0.41	0.24	0.17	0.33	0.26
p-Diethylbenzene	0.28	0.58	0.39	0.10	0.52	0.35
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.23	19.49	1.93	1.07	1.45	1.39
1-Dodecene	ND	108.56	ND	ND	0.48	ND
n-Dodecane	0.69	76.23	1.01	1.12	0.81	0.79
1-Tridecene	ND	706.16	0.19	ND	0.07	0.08
n-Tridecane	0.18	467.20	0.55	0.83	0.31	0.31
TNMOC (w/ unknowns)	350.35	1942.94	331.43	153.53	541.14	333.82
TNMOC (speciated)	290.70	1817.42	276.68	83.28	451.39	282.02

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

SNMOC 1997 REPORT
SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	11393	11401	11402	11467D1	11467R1	11468D2
Sampling Date:	9/18/97	9/19/97	9/22/97	9/24/97	9/24/97	9/24/97
Analysis Date:	9/26/97	9/27/97	10/1/97	10/3/97	10/4/97	10/3/97
Ethylene	15.76	8.52	8.53	1.68	1.71	1.73
Acetylene	12.86	7.08	13.02	2.07	2.04	2.12
Ethane	8.40	6.06	0.60	2.07	5.92	4.86
Propylene	6.03	2.95	3.91	0.54	0.56	0.56
Propane	75.17	17.93	30.63	10.86	11.23	11.27
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	4.97	2.56	5.97	3.54	3.57	3.23
Isobutene/1-Butene	4.71	2.43	2.81	0.79	0.83	0.87
1,3-Butadiene	0.94	0.40	0.41	ND	ND	ND
n-Butane	19.76	7.58	19.31	6.87	6.74	6.62
trans-2-Butene	0.05	0.28	0.30	0.06	0.08	0.12
cis-2-Butene	0.58	0.31	0.32	0.09	0.06	0.13
3-Methyl-1-butene	0.43	0.17	0.28	ND	ND	ND
Isopentane	23.98	11.68	18.16	4.98	5.26	4.41
1-Pentene	0.85	0.73	0.72	0.21	0.13	0.12
2-Methyl-1-butene	1.30	0.70	1.12	0.12	0.12	0.11
n-Pentane	16.52	6.75	10.20	3.46	3.64	3.22
Isoprene	0.96	0.74	0.41	0.14	0.20	0.17
trans-2-Pentene	4.28	0.89	2.36	0.16	0.20	0.18
cis-2-Pentene	0.99	0.53	0.63	0.14	0.13	0.20
2-Methyl-2-butene	3.25	0.86	1.07	0.18	0.20	0.16
2,2-Dimethylbutane	1.65	0.60	0.84	0.29	0.34	0.37
Cyclopentene	0.96	0.34	0.24	ND	ND	ND
4-Methyl-1-pentene	0.22	0.08	0.09	ND	ND	ND
Cyclopentane	1.87	0.92	1.26	0.54	0.63	0.50
2,3-Dimethylbutane	3.36	1.75	2.28	0.55	0.60	0.59
2-Methylpentane	11.06	5.12	7.40	1.53	1.68	1.58
3-Methylpentane	9.21	4.20	6.78	1.13	1.16	1.06
2-Methyl-1-pentene	0.46	0.20	0.30	0.04	ND	ND
1-Hexene	0.69	0.32	0.31	0.02	ND	ND
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	8.70	4.01	6.37	1.47	1.49	1.42
trans-2-Hexene	0.77	0.22	0.28	0.11	ND	0.09
cis-2-Hexene	0.34	0.16	0.20	0.02	ND	0.03
Methylcyclopentane	6.03	2.87	4.19	1.10	1.10	1.02
2,4-Dimethylpentane	3.36	1.61	2.33	0.36	0.39	0.40
Benzene	11.56	6.11	7.26	1.42	1.42	1.56
Cyclohexane	3.32	1.54	2.40	1.30	1.30	1.15
2-Methylhexane	8.32	4.03	5.17	2.75	2.76	2.69
2,3-Dimethylpentane	6.87	2.78	4.90	1.54	1.56	1.55

SNMOC 1997 REPORT
SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	11393	11401	11402	11467D1	11467R1	11468D2
Sampling Date:	9/18/97	9/19/97	9/22/97	9/24/97	9/24/97	9/24/97
Analysis Date:	9/26/97	9/27/97	10/1/97	10/3/97	10/4/97	10/3/97
3-Methylhexane	7.66	2.45	3.02	0.60	0.62	0.53
1-Heptene	1.23	0.54	0.71	0.19	0.20	0.22
2,2,4-Trimethylpentane	7.25	3.60	4.81	0.70	0.72	0.71
n-Heptane	6.54	1.81	2.81	0.64	0.71	0.62
Methylcyclohexane	2.88	1.24	1.91	0.90	0.84	0.79
2,2,3-Trimethylpentane	1.61	0.72	1.09	0.06	0.07	0.11
2,3,4-Trimethylpentane	3.05	1.58	1.86	0.34	0.34	0.34
Toluene	30.84	14.85	27.24	3.94	3.87	3.21
2-Methylheptane	1.22	0.67	1.02	0.25	0.23	0.28
3-Methylheptane	1.32	0.73	1.10	0.29	0.27	0.25
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	1.47	0.69	1.42	0.34	0.33	0.34
Ethylbenzene	5.69	2.68	6.37	0.65	0.62	0.56
m-Xylene/p-Xylene	20.08	9.11	22.45	2.06	1.85	1.70
Styrene	1.25	0.34	7.23	0.21	0.14	0.13
o-Xylene	6.81	3.31	6.90	0.81	0.70	0.67
1-Nonene	0.31	0.20	0.21	0.10	0.08	ND
n-Nonane	1.08	0.43	0.87	0.22	0.22	0.20
Isopropylbenzene	0.32	0.20	0.20	0.05	0.08	0.11
a-Pinene	0.30	1.53	0.52	0.12	0.08	ND
n-Propylbenzene	1.35	0.68	0.81	0.25	0.22	0.16
m-Ethyltoluene	5.79	2.25	2.83	0.61	0.63	0.38
p-Ethyltoluene	2.80	1.21	1.79	0.45	0.55	0.22
1,3,5-Trimethylbenzene	2.97	1.16	1.76	0.36	0.49	0.28
o-Ethyltoluene	1.95	1.03	1.12	0.35	0.32	0.23
b-Pinene	ND	0.15	0.10	ND	ND	ND
1,2,4-Trimethylbenzene	7.75	3.38	4.89	0.99	0.98	0.96
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.16	0.62	0.85	0.45	0.48	0.25
1,2,3-Trimethylbenzene	2.23	0.73	1.06	0.45	0.27	0.30
m-Diethylbenzene	0.31	0.27	0.24	0.16	0.17	0.19
p-Diethylbenzene	0.31	0.19	0.23	0.12	0.10	0.12
1-Undecene	ND	ND	ND	ND	ND	ND
n-Undecane	1.58	0.94	1.33	1.23	1.15	0.40
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	0.98	1.71	0.74	0.78	0.78	0.34
1-Tridecene	ND	ND	0.05	ND	ND	ND
n-Tridecane	0.34	1.12	0.28	0.20	0.20	0.13
TNMOC (w/ unknowns)	1105.01	317.93	339.42	90.25	94.68	84.80
TNMOC (speciated)	410.94	178.09	283.12	71.04	75.35	68.81

SNMOC 1997 REPORT
SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	11468R2	11465	11463	11464	11502
Sampling Date:	9/24/97	9/25/97	9/26/97	9/29/97	9/30/97
Analysis Date:	10/4/97	10/4/97	10/4/97	10/4/97	10/29/97
Ethylene	1.65	16.15	10.23	15.13	14.50
Acetylene	2.00	14.65	10.91	12.94	17.21
Ethane	3.84	9.53	4.96	6.01	5.15
Propylene	0.55	5.51	2.22	4.89	5.99
Propane	11.03	27.54	30.71	34.69	206.30
Propyne	ND	ND	ND	ND	ND
Isobutane	3.36	6.42	6.66	7.06	16.35
Isobutene/1-Butene	0.82	4.37	1.49	3.90	4.64
1,3-Butadiene	ND	0.65	0.05	0.68	1.22
n-Butane	6.56	16.03	18.69	19.13	61.39
trans-2-Butene	0.11	0.56	0.15	0.44	1.57
cis-2-Butene	0.10	0.45	0.18	0.48	1.26
3-Methyl-1-butene	ND	0.32	0.16	0.29	0.80
Isopentane	4.32	20.23	26.68	19.88	52.16
1-Pentene	0.09	0.49	0.40	0.69	2.62
2-Methyl-1-butene	0.15	1.41	0.37	1.33	2.87
n-Pentane	3.15	11.10	16.73	11.42	36.96
Isoprene	0.13	0.65	0.13	0.67	0.69
trans-2-Pentene	0.17	1.35	1.40	3.34	3.41
cis-2-Pentene	0.12	0.81	0.31	0.85	1.88
2-Methyl-2-butene	0.15	1.85	0.28	1.74	3.40
2,2-Dimethylbutane	0.31	1.08	1.15	1.36	2.07
Cyclopentene	ND	0.38	0.06	0.32	0.59
4-Methyl-1-pentene	ND	0.15	0.12	0.13	0.61
Cyclopentane	0.53	1.43	2.10	1.52	3.11
2,3-Dimethylbutane	0.56	2.86	3.34	2.91	6.87
2-Methylpentane	1.54	8.64	10.67	9.43	17.32
3-Methylpentane	1.06	8.60	10.69	8.16	12.25
2-Methyl-1-pentene	ND	0.53	0.12	0.36	0.83
1-Hexene	ND	0.41	0.16	0.36	0.84
2-Ethyl-1-butene	ND	ND	ND	ND	ND
n-Hexane	1.41	7.56	10.02	8.78	ND
trans-2-Hexene	ND	0.39	0.06	0.42	1.49
cis-2-Hexene	ND	0.28	0.06	0.25	0.57
Methylcyclopentane	1.03	5.05	5.40	5.24	10.52
2,4-Dimethylpentane	0.36	2.80	2.65	2.64	4.73
Benzene	1.39	11.01	9.96	9.03	14.14
Cyclohexane	1.11	2.88	2.88	3.48	5.82
2-Methylhexane	2.86	6.10	5.60	5.79	6.05
2,3-Dimethylpentane	1.51	5.81	4.97	5.46	7.22

SNMOC 1997 REPORT
SITE CODE: JUMX
All concentrations reported in ppbC

Sample No.:	11468R2	11465	11463	11464	11502
Sampling Date:	9/24/97	9/25/97	9/26/97	9/29/97	9/30/97
Analysis Date:	10/4/97	10/4/97	10/4/97	10/4/97	10/29/97
3-Methylhexane	0.51	4.68	5.24	4.56	6.81
1-Heptene	0.20	0.91	0.88	1.12	ND
2,2,4-Trimethylpentane	0.73	6.47	5.89	5.10	9.54
n-Heptane	0.63	3.61	3.05	3.44	5.81
Methylcyclohexane	0.77	2.23	2.03	2.61	4.33
2,2,3-Trimethylpentane	0.06	1.12	0.94	0.99	1.87
2,3,4-Trimethylpentane	0.34	2.57	2.19	2.26	3.68
Toluene	3.07	26.15	27.29	32.59	42.28
2-Methylheptane	0.26	1.16	0.83	1.11	1.61
3-Methylheptane	0.22	1.17	0.98	1.19	2.21
1-Octene	ND	0.19	ND	ND	ND
n-Octane	0.34	1.33	0.96	1.53	2.23
Ethylbenzene	0.51	4.54	4.44	4.77	8.24
m-Xylene/p-Xylene	1.65	15.26	10.80	16.43	25.78
Styrene	0.15	0.67	0.22	0.33	1.53
o-Xylene	0.53	5.16	3.84	5.27	10.20
1-Nonene	0.05	0.27	0.20	0.22	ND
n-Nonane	0.25	0.66	0.93	0.89	0.13
Isopropylbenzene	0.08	0.19	0.23	0.21	0.79
a-Pinene	0.07	0.86	0.62	0.72	6.30
n-Propylbenzene	0.21	0.97	0.77	0.92	2.17
m-Ethyltoluene	0.37	3.35	1.79	3.04	5.82
p-Ethyltoluene	0.26	2.11	1.31	1.94	2.50
1,3,5-Trimethylbenzene	0.26	2.14	0.72	1.93	2.65
o-Ethyltoluene	0.29	1.42	0.90	1.27	2.46
b-Pinene	ND	0.11	ND	0.10	1.30
1,2,4-Trimethylbenzene	0.95	5.70	2.47	4.82	1.08
1-Decene	ND	ND	ND	ND	ND
n-Decane	0.24	0.74	1.47	1.14	3.15
1,2,3-Trimethylbenzene	0.21	1.59	0.46	1.07	2.68
m-Diethylbenzene	0.17	0.31	0.18	0.24	0.85
p-Diethylbenzene	0.10	0.37	0.30	0.38	0.76
1-Undecene	ND	ND	ND	ND	ND
n-Undecane	0.36	0.95	1.91	1.83	2.25
1-Dodecene	ND	ND	ND	ND	ND
n-Dodecane	0.16	0.72	0.82	0.88	0.67
1-Tridecene	ND	ND	ND	ND	0.05
n-Tridecane	0.06	0.37	0.21	0.29	0.19
TNMOC (w/ unknowns)	81.87	354.16	344.73	375.09	1174.35
TNMOC (speciated)	66.06	306.09	287.57	316.37	697.34

SNMOC WEEKLY REPORT
SITE CODE: NWNJ
All concentrations reported in ppbC

Sample No.:	10024	10176	10417	10557	10668	10703
Sampling Date:	7/15/97	7/21/97	8/1/97	8/7/97	8/13/97	8/19/97
Analysis Date:	8/7/97	8/19/97	8/24/97	9/13/97	9/13/97	9/13/97
Ethylene	18.30	22.68	11.55	12.30	7.80	10.86
Acetylene	12.69	11.88	9.01	13.06	5.68	8.80
Ethane	29.64	25.99	21.84	20.81	6.90	13.17
Propylene	7.46	10.69	7.68	5.16	3.01	5.66
Propane	24.48	29.69	100.42	44.23	13.27	19.85
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	7.81	11.54	5.90	6.40	3.14	12.47
Isobutene/1-Butene	6.21	7.34	5.79	5.09	4.86	9.19
1,3-Butadiene	0.44	0.85	0.60	0.41	0.29	0.65
n-Butane	9.90	14.25	6.90	6.75	6.20	9.53
trans-2-Butene	0.74	0.76	0.67	0.72	0.79	1.61
cis-2-Butene	0.80	0.72	0.78	0.71	0.77	1.51
3-Methyl-1-butene	0.38	0.38	0.27	0.32	0.26	0.39
Isopentane	23.30	23.74	20.83	17.95	16.44	48.32
1-Pentene	0.69	0.59	0.69	0.73	0.44	1.72
2-Methyl-1-butene	1.19	1.11	1.08	1.11	0.96	2.23
n-Pentane	8.62	9.16	5.73	6.40	4.99	20.16
Isoprene	2.17	1.60	1.64	1.92	0.41	1.51
trans-2-Pentene	1.90	2.75	1.06	2.06	1.21	3.17
cis-2-Pentene	0.71	0.79	0.70	0.67	0.67	1.76
2-Methyl-2-butene	1.21	1.71	1.32	1.25	1.37	5.57
2,2-Dimethylbutane	2.12	2.89	1.06	1.39	1.50	2.24
Cyclopentene	0.25	0.30	0.25	0.25	0.31	0.55
4-Methyl-1-pentene	0.23	0.19	0.20	0.13	0.11	2.99
Cyclopentane	1.47	1.81	1.02	1.16	0.87	2.13
2,3-Dimethylbutane	2.51	2.33	1.95	2.04	1.47	2.94
2-Methylpentane	6.25	5.87	4.86	5.49	4.00	15.43
3-Methylpentane	8.77	6.36	6.21	5.07	3.83	7.75
2-Methyl-1-pentene	0.27	0.20	0.24	0.26	0.24	0.69
1-Hexene	0.33	0.50	0.29	0.27	0.25	0.48
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.64	3.78	3.12	4.33	2.27	32.98
trans-2-Hexene	0.23	0.26	0.58	0.74	0.22	0.90
cis-2-Hexene	0.17	0.20	0.17	0.17	0.15	0.50
Methylcyclopentane	2.97	2.90	2.39	2.49	1.79	7.77
2,4-Dimethylpentane	1.50	1.43	1.28	1.44	0.94	2.02
Benzene	6.68	6.03	4.84	4.94	3.45	6.81
Cyclohexane	1.21	1.44	1.01	1.09	0.73	3.87
2-Methylhexane	5.36	5.24	4.83	4.29	3.55	6.69
2,3-Dimethylpentane	3.66	3.28	3.03	2.62	1.77	3.65

SNMOC WEEKLY REPORT
SITE CODE: NWNJ
All concentrations reported in ppbC

Sample No.:	10024	10176	10417	10557	10668	10703
Sampling Date:	7/15/97	7/21/97	8/1/97	8/7/97	8/13/97	8/19/97
Analysis Date:	8/7/97	8/19/97	8/24/97	9/13/97	9/13/97	9/13/97
3-Methylhexane	3.28	3.37	2.39	2.66	1.67	7.96
1-Heptene	0.63	0.31	ND	0.47	0.39	0.64
2,2,4-Trimethylpentane	5.99	5.25	4.56	4.65	2.61	5.09
n-Heptane	2.21	2.12	1.65	2.18	1.17	5.00
Methylcyclohexane	1.54	1.66	1.25	1.24	1.00	36.66
2,2,3-Trimethylpentane	1.02	1.04	0.80	0.79	0.48	1.26
2,3,4-Trimethylpentane	2.02	2.12	1.70	1.70	1.15	2.10
Toluene	24.76	16.04	19.97	23.44	8.81	215.22
2-Methylheptane	1.18	0.97	0.94	1.16	0.74	2.28
3-Methylheptane	1.20	1.02	0.95	1.07	0.73	2.00
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	1.91	1.02	1.09	1.80	1.01	2.64
Ethylbenzene	4.41	2.39	2.99	3.60	1.82	16.73
m-Xylene/p-Xylene	12.84	8.41	9.50	11.11	6.32	60.78
Styrene	0.68	0.62	0.93	0.57	0.30	10.40
o-Xylene	4.33	3.01	3.59	3.85	2.22	24.23
1-Nonene	0.22	0.14	0.53	0.15	0.12	0.47
n-Nonane	1.19	0.89	1.51	1.40	0.59	3.67
Isopropylbenzene	0.22	0.21	0.33	0.24	0.17	0.87
a-Pinene	1.18	0.79	2.66	1.65	0.29	13.80
n-Propylbenzene	0.71	0.49	0.82	0.92	0.50	3.36
m-Ethyltoluene	1.85	2.13	1.92	3.07	1.72	11.63
p-Ethyltoluene	1.28	1.14	1.47	2.05	1.13	6.86
1,3,5-Trimethylbenzene	1.42	1.30	1.47	2.17	1.15	6.55
o-Ethyltoluene	0.92	0.79	1.17	1.37	0.80	4.47
b-Pinene	0.22	0.12	1.15	0.29	ND	5.39
1,2,4-Trimethylbenzene	3.01	2.58	2.92	4.96	3.05	19.21
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	1.25	1.95	1.80	2.51	0.47	93.82
1,2,3-Trimethylbenzene	0.49	0.60	0.28	1.51	0.85	4.62
m-Diethylbenzene	ND	0.05	0.13	0.23	0.24	0.60
p-Diethylbenzene	0.30	0.22	0.40	0.38	0.29	1.80
1-Undecene	ND	0.36	0.13	ND	ND	ND
n-Undecane	1.25	5.16	1.44	1.84	1.00	389.20
1-Dodecene	0.56	0.62	0.33	ND	ND	ND
n-Dodecane	0.50	2.99	0.36	0.88	0.85	375.05
1-Tridecene	ND	ND	ND	ND	ND	0.17
n-Tridecane	0.13	0.47	0.13	0.23	0.47	76.43
TNMOC (w/ unknowns)	370.25	350.05	369.76	370.27	204.02	2042.83
TNMOC (speciated)	291.95	295.52	315.07	272.35	151.02	1689.51

SNMOC WEEKLY REPORT
SITE CODE: NWNJ
All concentrations reported in ppbC

Sample No.:	10958	11013D1	11013R1		11014D2	11014R2		11309
Sampling Date:	8/25/97	8/27/97	8/27/97		8/27/97	8/27/97		9/12/97
Analysis Date:	9/13/97	9/17/97	9/17/97		9/17/97	9/17/97		10/29/97
Ethylene	23.37	23.70	22.52		23.63	20.37		13.87
Acetylene	11.88	13.62	13.54		13.54	13.21		13.69
Ethane	43.05	23.24	1.67	a	23.64	1.12	a	1.41
Propylene	13.87	13.55	13.11		13.44	12.93		9.27
Propane	40.25	23.50	21.82		23.55	19.44		17.07
Propyne	ND	ND	ND		ND	ND		ND
Isobutane	11.84	11.46	11.35		11.24	11.04		7.36
Isobutene/1-Butene	13.10	9.12	9.04		9.16	9.05		7.65
1,3-Butadiene	0.78	1.15	1.03		1.08	1.10		1.06
n-Butane	12.42	13.10	13.01		12.96	12.90		8.60
trans-2-Butene	1.74	1.37	1.39		0.89	1.39		1.51
cis-2-Butene	1.49	1.34	1.24		1.30	1.24		1.15
3-Methyl-1-butene	0.47	0.50	0.51		0.49	0.48		0.38
Isopentane	30.53	30.24	30.06		29.85	32.97		22.26
1-Pentene	1.10	1.10	1.12		1.30	1.14		0.98
2-Methyl-1-butene	1.89	1.68	1.69		1.68	1.68		1.39
n-Pentane	10.80	11.77	11.77		11.84	11.69		7.73
Isoprene	5.68	0.86	0.91		3.35	0.91		0.76
trans-2-Pentene	3.53	1.91	3.65		1.72	3.43		1.64
cis-2-Pentene	1.22	1.12	1.11		1.10	1.13		0.97
2-Methyl-2-butene	3.06	2.72	2.56		2.51	2.64		2.15
2,2-Dimethylbutane	2.51	2.21	2.18		2.51	2.19		1.31
Cyclopentene	0.55	0.48	0.47		0.50	0.56		0.36
4-Methyl-1-pentene	0.17	0.11	0.19		0.15	0.20		0.32
Cyclopentane	1.76	1.73	1.57		2.09	1.54		1.03
2,3-Dimethylbutane	3.16	3.25	3.24		3.04	3.16		4.09
2-Methylpentane	15.96	23.55	23.97		17.94	14.87		7.07
3-Methylpentane	6.92	6.49	6.69		6.44	6.61		4.31
2-Methyl-1-pentene	0.51	0.37	0.39		0.37	0.40		0.35
1-Hexene	0.46	0.50	0.52		0.55	0.49		0.38
2-Ethyl-1-butene	ND	ND	ND		ND	ND		ND
n-Hexane	5.47	6.71	6.68		6.79	6.91		ND
trans-2-Hexene	1.66	1.12	1.30		1.14	1.40		0.94
cis-2-Hexene	0.30	0.26	0.27		0.25	0.27		0.19
Methylcyclopentane	3.61	3.57	3.55		3.56	3.53		2.84
2,4-Dimethylpentane	2.10	1.97	2.08		2.00	2.00		1.45
Benzene	7.93	7.73	8.03		7.90	7.68		6.62
Cyclohexane	1.22	1.49	1.31		1.81	1.30		1.20
2-Methylhexane	5.51	5.66	5.46		6.08	5.36		3.62
2,3-Dimethylpentane	3.73	3.49	3.64		4.31	3.49		1.99

SNMOC WEEKLY REPORT
SITE CODE: NWNJ
All concentrations reported in ppbC

Sample No.:	10958	11013D1	11013R1	11014D2	11014R2	11309
Sampling Date:	8/25/97	8/27/97	8/27/97	8/27/97	8/27/97	9/12/97
Analysis Date:	9/13/97	9/17/97	9/17/97	9/17/97	9/17/97	10/29/97
3-Methylhexane	4.36	4.69	5.28	4.86	4.75	3.65
1-Heptene	0.53	0.51	0.68	0.50	0.52	ND
2,2,4-Trimethylpentane	8.01	7.39	7.39	7.44	6.79	5.61
n-Heptane	3.10	3.15	3.29	2.53	3.41	2.24
Methylcyclohexane	1.86	2.12	2.19	2.09	2.09	1.72
2,2,3-Trimethylpentane	1.35	1.24	1.30	1.29	1.27	1.07
2,3,4-Trimethylpentane	2.90	2.73	2.76	2.66	2.72	2.09
Toluene	32.70	28.10	28.52	27.45	28.19	22.41
2-Methylheptane	1.60	1.65	1.69	1.64	1.64	1.14
3-Methylheptane	1.60	1.57	1.66	1.60	1.69	1.20
1-Octene	ND	ND	ND	ND	ND	ND
n-Octane	1.96	3.11	3.10	3.04	3.05	2.63
Ethylbenzene	5.36	4.77	5.02	4.42	4.92	4.95
m-Xylene/p-Xylene	17.09	15.83	16.18	15.36	15.99	15.48
Styrene	1.08	0.77	0.88	0.79	0.86	1.10
o-Xylene	5.97	5.42	5.67	5.30	5.54	6.67
1-Nonene	0.24	0.24	0.28	0.26	0.26	ND
n-Nonane	2.26	1.82	1.92	1.85	2.13	ND
Isopropylbenzene	0.35	0.55	0.62	0.57	0.60	0.72
a-Pinene	2.67	0.62	0.72	0.71	0.70	1.34
n-Propylbenzene	1.33	1.14	1.25	1.12	1.20	1.57
m-Ethyltoluene	4.57	4.03	4.25	4.05	4.19	4.50
p-Ethyltoluene	2.79	2.67	2.80	2.72	2.79	2.01
1,3,5-Trimethylbenzene	3.08	2.94	2.98	3.02	2.98	2.22
o-Ethyltoluene	2.11	1.76	1.85	1.86	1.83	1.97
b-Pinene	0.60	0.08	0.06	0.06	0.27	0.39
1,2,4-Trimethylbenzene	7.36	8.62	9.08	8.61	9.90	1.08
1-Decene	ND	ND	ND	ND	ND	ND
n-Decane	3.82	2.41	2.72	2.67	3.01	0.98
1,2,3-Trimethylbenzene	1.94	1.82	1.90	2.20	2.02	1.96
m-Diethylbenzene	0.42	0.31	0.53	0.35	0.61	0.60
p-Diethylbenzene	0.55	0.39	0.57	0.52	0.63	0.59
1-Undecene	0.49	0.31	0.28	0.19	0.32	ND
n-Undecane	3.05	1.98	2.35	2.45	2.75	1.34
1-Dodecene	ND	ND	ND	ND	ND	ND
n-Dodecane	1.77	1.26	1.54	1.79	2.03	1.48
1-Tridecene	ND	ND	ND	ND	ND	0.07
n-Tridecane	0.51	0.48	0.68	0.62	0.67	0.18
TNMOC (w/ unknowns)	520.67	445.79	442.34	483.33	449.49	372.99
TNMOC (speciated)	416.28	374.25	356.60	372.29	344.11	253.94

a-Because of instrument flow problems, Ethane results for samples analyzed on 9/19/97 are questionable.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9434	DLTX 9438	DLTX 9450
SAMPLE DATE	6/2/97	6/3/97	6/4/97
ANALYSIS DATE	7/21/97	7/21/97	7/21/97
FILE NAME	K/LGT010	K/LGT011	K/LGT012
UNITS	ppbv	ppbv	ppbv
ACETYLENE	6.72	2.43	2.63
PROPYLENE	2.69	0.86	0.83
CHLOROMETHANE	0.60	0.47	0.88
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.42	0.07 U	ND
BROMOMETHANE	ND	0.07 U	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.36	0.23	0.18
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.17	0.13	0.14
BENZENE	1.70	0.63	0.60
CARBON TETRACHLORIDE	0.09	0.08	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	0.28	0.23	0.08
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	3.51	2.10	1.79
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.20 U	0.13 U	0.14 U
TETRACHLOROETHYLENE	0.09 U	0.14 U	0.06 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.65	0.23	0.33
m,p - XYLENE	2.00	0.64	1.11
BROMOFORM	ND	ND	ND
STYRENE	0.14	0.07 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.91	0.36	0.47
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	0.08 U	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.
* = Vacuum Criteria Exceeded
# = Sample Voided in Field

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9459	DLTX 9466	DLTX 9486
SAMPLE DATE	6/5/97	6/6/97	6/9/97
ANALYSIS DATE	7/21/97	7/21/97	7/22/97
FILE NAME	K/LG%007	K/LGU005	K/LGU012
UNITS	ppbv	ppbv	ppbv
ACETYLENE	2.35	5.52	6.76
PROPYLENE	0.79	1.38	2.02
CHLOROMETHANE	0.42	0.56	0.93
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.01 U	0.13	0.27
BROMOMETHANE	ND	ND	0.08 U
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.12	0.24	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.11	0.09	0.72
BENZENE	0.60	0.98	1.56
CARBON TETRACHLORIDE	0.07	0.08	0.14
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.18
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.66	1.76	3.97
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.15 U	0.10 U	0.27
TETRACHLOROETHYLENE	0.10 U	0.06 U	0.31
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.38	0.29	0.78
m,p - XYLENE	1.33	0.91	2.54
BROMOFORM	ND	ND	ND
STYRENE	ND	0.06	0.10
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.48	0.43	1.01
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	0.06 U
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.
* = Vacuum Criteria Exceeded
# = Sample Voided in Field

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9493	DLTX 9532	DLTX 9528
SAMPLE DATE	6/10/97	6/11/97	6/12/97
ANALYSIS DATE	7/22/97	7/22/97	7/22/97
FILE NAME	K/LGU011	K/LGU014	K/LGV005
UNITS	ppbv	ppbv	ppbv
ACETYLENE	2.57	7.22	2.19
PROPYLENE	0.81	2.52	0.90
CHLOROMETHANE	0.53	0.65	0.58
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.07 U	0.27	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.17	1.92	0.17
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	0.03 U	0.09	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.15	0.24	0.12
BENZENE	0.60	1.57	0.61
CARBON TETRACHLORIDE	0.08	0.09	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.65	6.78	1.40
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.08 U	0.39	0.08 U
TETRACHLOROETHYLENE	0.15 U	0.20 U	0.04 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.28	0.67	0.24
m,p - XYLENE	0.96	2.06	0.77
BROMOFORM	ND	ND	ND
STYRENE	ND	0.09 U	0.10
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.41	0.96	0.33
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	0.07 U	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.
* = Vacuum Criteria Exceeded
# = Sample Voided in Field

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9546	DLTX 9543	DLTX 9562
SAMPLE DATE	6/13/97	6/16/97	6/17/97
ANALYSIS DATE	7/21/97	7/23/97	7/23/97
FILE NAME	K/LGU009	K/LGV012	K/LGV013
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.19	0.99	1.26
PROPYLENE	0.44	0.43	0.49
CHLOROMETHANE	0.79	1.43	0.60
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.04 U	0.01 U	0.08 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.11	0.14
BENZENE	0.32	0.55	0.33
CARBON TETRACHLORIDE	0.09	0.07	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	0.92	0.59	0.82
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.03 U	ND	0.10 U
TETRACHLOROETHYLENE	ND	ND	0.04 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.10 U	0.08 U	0.12
m,p - XYLENE	0.28	0.26	0.34
BROMOFORM	ND	ND	ND
STYRENE	0.03 U	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.13	0.12	0.16
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.
* = Vacuum Criteria Exceeded
# = Sample Voided in Field

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9564	DLTX 9577	DLTX 9590
SAMPLE DATE	6/18/97	6/19/97	6/20/97
ANALYSIS DATE	7/23/97	7/23/97	7/24/97
FILE NAME	K/LGV016	K/LGV020	K/LGW016
UNITS	ppbv	ppbv	ppbv
ACETYLENE	#	6.78	4.29
PROPYLENE	#	1.24	0.78
CHLOROMETHANE	#	0.68	0.71
VINYL CHLORIDE	#	ND	ND
1,3-BUTADIENE	#	0.13	ND
BROMOMETHANE	#	ND	ND
CHLOROETHANE	#	ND	ND
METHYLENE CHLORIDE	#	0.11	0.05 U
trans - 1,2 - DICHLOROETHYLENE	#	ND	ND
1,1 - DICHLOROETHANE	#	ND	ND
CHLOROPRENE	#	ND	ND
BROMOCHLOROMETHANE	#	ND	ND
CHLOROFORM	#	0.04 U	ND
1,2 - DICHLOROETHANE	#	ND	ND
1,1,1 - TRICHLOROETHANE	#	0.11	0.10
BENZENE	#	0.91	0.60
CARBON TETRACHLORIDE	#	0.09	0.07
1,2 - DICHLOROPROPANE	#	ND	ND
BROMODICHLOROMETHANE	#	ND	ND
TRICHLOROETHYLENE	#	ND	ND
cis - 1,3 - DICHLOROPROPENE	#	ND	ND
trans - 1,3 - DICHLOROPROPENE	#	ND	ND
1,1,2 - TRICHLOROETHANE	#	ND	ND
TOLUENE	#	2.27	1.44
DIBROMOCHLOROMETHANE	#	ND	ND
N-OCTANE	#	0.10 U	0.06 U
TETRACHLOROETHYLENE	#	0.04 U	0.02 U
CHLOROBENZENE	#	ND	ND
ETHYLBENZENE	#	0.35	0.24
m,p - XYLENE	#	1.03	0.72
BROMOFORM	#	ND	ND
STYRENE	#	0.29	0.19
1,1,2,2 - TETRACHLOROETHANE	#	ND	ND
o - XYLENE	#	0.49	0.33
m - DICHLOROBENZENE	#	ND	ND
p - DICHLOROBENZENE	#	ND	ND
o - DICHLOROBENZENE	#	ND	ND

U = Less than the detection limit.
* = Vacuum Criteria Exceeded
# = Sample Voided in Field

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9594	DLTX 9593	DLTX 9677
SAMPLE DATE	6/23/97	6/24/97	6/25/97
ANALYSIS DATE	7/24/97	7/24/97	7/23/97
FILE NAME	K/LGW010	K/LGW009	K/LGW004
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.45	2.08	5.11
PROPYLENE	0.99	0.64	2.46
CHLOROMETHANE	0.57	0.62	0.64
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.07 U	ND	0.26
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	ND	0.07 U	0.47
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	0.04 U
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	0.08	0.18
BENZENE	0.42	0.40	1.22
CARBON TETRACHLORIDE	0.08	0.08	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	0.07	ND	0.03 U
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	0.85	0.63	3.05
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.06 U	0.03 U	0.14 U
TETRACHLOROETHYLENE	ND	ND	0.16 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.30	0.09 U	0.56
m,p - XYLENE	1.02	0.28	1.81
BROMOFORM	ND	ND	ND
STYRENE	0.11	ND	0.13
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.44	0.14	0.82
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

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* = Vacuum Criteria Exceeded
# = Sample Voided in Field

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX	DLTX 9689	DLTX 9691
SAMPLE DATE	6/26/97	6/27/97	6/30/97
ANALYSIS DATE		7/25/97	7/25/97
FILE NAME		K/LGX011	K/LGX010
UNITS	ppbv	ppbv	ppbv
ACETYLENE	*	5.12	1.74
PROPYLENE	*	1.59	0.78
CHLOROMETHANE	*	0.76	0.55
VINYL CHLORIDE	*	ND	ND
1,3-BUTADIENE	*	0.06 U	ND
BROMOMETHANE	*	ND	ND
CHLOROETHANE	*	ND	ND
METHYLENE CHLORIDE	*	0.14	ND
trans - 1,2 - DICHLOROETHYLENE	*	ND	ND
1,1 - DICHLOROETHANE	*	ND	ND
CHLOROPRENE	*	ND	ND
BROMOCHLOROMETHANE	*	ND	ND
CHLOROFORM	*	0.03 U	ND
1,2 - DICHLOROETHANE	*	ND	ND
1,1,1 - TRICHLOROETHANE	*	0.10	0.07
BENZENE	*	0.87	0.46
CARBON TETRACHLORIDE	*	0.07	0.07
1,2 - DICHLOROPROPANE	*	ND	ND
BROMODICHLOROMETHANE	*	ND	ND
TRICHLOROETHYLENE	*	ND	ND
cis - 1,3 - DICHLOROPROPENE	*	ND	ND
trans - 1,3 - DICHLOROPROPENE	*	ND	ND
1,1,2 - TRICHLOROETHANE	*	ND	ND
TOLUENE	*	1.81	0.83
DIBROMOCHLOROMETHANE	*	ND	ND
N-OCTANE	*	0.09 U	0.03 U
TETRACHLOROETHYLENE	*	0.10 U	ND
CHLOROBENZENE	*	ND	ND
ETHYLBENZENE	*	0.25	0.13
m,p - XYLENE	*	0.81	0.39
BROMOFORM	*	ND	ND
STYRENE	*	0.16	ND
1,1,2,2 - TETRACHLOROETHANE	*	ND	ND
o - XYLENE	*	0.40	0.20
m - DICHLOROBENZENE	*	ND	ND
p - DICHLOROBENZENE	*	ND	ND
o - DICHLOROBENZENE	*	ND	ND

U = Less than the detection limit.
* = Vacuum Criteria Exceeded
# = Sample Voided in Field

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9696	DLTX 9704	DLTX 9820
SAMPLE DATE	7/1/97	7/2/97	7/3/97
ANALYSIS DATE	7/24/97	7/28/97	8/1/97
FILE NAME	L7GX008	L7G!006	L7G%011
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.15	1.73	1.01
PROPYLENE	0.53	0.75	0.44
CHLOROMETHANE	0.61	0.56	0.50
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	0.04 U	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.03 U	0.06 U	0.01 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.08	0.07
BENZENE	0.32	0.47	0.32
CARBON TETRACHLORIDE	0.07	0.08	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	0.72	0.85	0.73
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.02 U	ND	ND
TETRACHLOROETHYLENE	ND	0.05 U	ND
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.10 U	0.17	0.09 U
m,p - XYLENE	0.28	0.56	0.27
BROMOFORM	ND	ND	ND
STYRENE	ND	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.13	0.25	0.11
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9837	DLTX 9835	DLTX 9915
SAMPLE DATE	7/7/97	7/8/97	7/9/97
ANALYSIS DATE	7/31/97	7/31/97	8/1/97
FILE NAME	L7G%009	L7G%008	L7G%014
UNITS	ppbv	ppbv	ppbv
ACETYLENE	8.17	4.75	4.87
PROPYLENE	0.73	0.75	0.78
CHLOROMETHANE	0.60	0.66	0.51
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.04 U	0.01 U	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	ND	0.03 U	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.06	0.06
BENZENE	0.66	0.51	0.72
CARBON TETRACHLORIDE	0.07	0.07	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.26	1.07	1.77
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.04 U	0.05 U	0.06 U
TETRACHLOROETHYLENE	ND	ND	0.03 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.21	0.18	0.20
m,p - XYLENE	0.65	0.53	0.58
BROMOFORM	ND	ND	ND
STYRENE	ND	0.13	0.17
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.26	0.25	0.26
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 9914		DLTX 10049D1		DLTX 10049R1	
SAMPLE DATE	7/10/97		7/11/97		7/11/97	
ANALYSIS DATE	8/31/97#		7/28/97		7/30/97	
FILE NAME	L7H#035		L7G!008		L7G$007	
UNITS	ppbv		ppbv		ppbv	
ACETYLENE	1.02		1.21		1.65	
PROPYLENE	0.54		0.62		0.68	
CHLOROMETHANE	0.28		0.66		0.69	
VINYL CHLORIDE	ND		ND		ND	
1,3-BUTADIENE	0.03	U	ND		ND	
BROMOMETHANE	ND		ND		ND	
CHLOROETHANE	ND		ND		ND	
METHYLENE CHLORIDE	0.07	U	0.11		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND	
CHLOROPRENE	ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND	
CHLOROFORM	ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.11		0.13		0.08	
BENZENE	0.47		0.40		0.36	
CARBON TETRACHLORIDE	0.07		0.90		0.05	
1,2 - DICHLOROPROPANE	ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND	
cis - 1,3 - DICHLOROPROPENE	ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND	
TOLUENE	1.12		1.52		1.60	
DIBROMOCHLOROMETHANE	ND		ND		ND	
N-OCTANE	0.04	U	0.07	U	0.06	U
TETRACHLOROETHYLENE	0.02	U	0.06	U	0.05	U
CHLOROBENZENE	ND		ND		ND	
ETHYLBENZENE	0.17		0.19		0.16	
m,p - XYLENE	0.43		0.52		0.48	
BROMOFORM	ND		ND		ND	
STYRENE	0.08	U	0.16		0.11	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND	
o - XYLENE	0.25		0.23		0.23	
m - DICHLOROBENZENE	ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND	

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10050D2	DLTX 10050R2	DLTX 9977
SAMPLE DATE	7/11/97	7/11/97	7/14/97
ANALYSIS DATE	7/28/97	7/30/97	8/8/97
FILE NAME	L7G!009	L7G$008	L7HG014
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.21	1.52	2.61
PROPYLENE	0.55	0.61	0.93
CHLOROMETHANE	0.55	0.59	0.54
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	ND	0.09
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.07 U	0.04 U	0.21
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.11	0.09	0.07
BENZENE	0.39	0.34	0.58
CARBON TETRACHLORIDE	0.06	0.06	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.44	1.45	1.50
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.06 U	0.06 U	0.07 U
TETRACHLOROETHYLENE	0.05 U	0.05 U	ND
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.16	0.14	0.20
m,p - XYLENE	0.46	0.43	0.57
BROMOFORM	ND	ND	ND
STYRENE	0.10	0.09 U	0.27
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.22	0.21	ND
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10028	DLTX 10041	DLTX 10047D1
SAMPLE DATE	7/15/97	7/16/97	7/17/97
ANALYSIS DATE	8/7/97	8/8/97	7/29/97
FILE NAME	L7HG010	L7HG016	L7G!016
UNITS	ppbv	ppbv	ppbv
ACETYLENE	6.23	9.42	10.06
PROPYLENE	1.58	1.62	1.46
CHLOROMETHANE	0.47	0.54	0.56
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.17	0.22	0.11
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.20	0.11	0.27
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	0.09	0.09
BENZENE	1.04	1.12	0.97
CARBON TETRACHLORIDE	0.07	0.07	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	0.04	ND	0.04
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	2.70	3.11	2.38
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.13 U	0.12 U	0.10 U
TETRACHLOROETHYLENE	0.12 U	0.09 U	0.07 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.39	0.62	0.47
m,p - XYLENE	1.19	2.04	1.62
BROMOFORM	ND	ND	ND
STYRENE	0.25	0.34	0.25
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.52	0.83	0.66
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10047R1	DLTX 10048D2	DLTX 10048R2
SAMPLE DATE	7/17/97	7/17/97	7/17/97
ANALYSIS DATE	7/31/97	7/29/97	7/31/97
FILE NAME	L7G$015	L7G!017	L7G$016
UNITS	ppbv	ppbv	ppbv
ACETYLENE	10.95	10.33	11.08
PROPYLENE	1.49	1.39	1.53
CHLOROMETHANE	0.61	0.57	0.58
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.09	0.11	0.11
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.24	0.29	0.25
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.08	0.09
BENZENE	0.87	1.00	0.87
CARBON TETRACHLORIDE	0.06	0.07	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	0.02 U	0.03 U	0.02 U
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	2.34	2.51	2.34
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.12 U	0.12 U	0.12 U
TETRACHLOROETHYLENE	0.07 U	0.07 U	0.06 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.46	0.48	0.45
m,p - XYLENE	1.51	1.59	1.49
BROMOFORM	ND	ND	ND
STYRENE	0.25	0.24	0.26
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.65	0.62	0.63
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10046	DLTX 10179	DLTX 10181
SAMPLE DATE	7/18/97	7/21/97	7/22/97
ANALYSIS DATE	8/7/97	8/8/97	8/8/97
FILE NAME	L7HG008	L7HH007	L7HH008
UNITS	ppbv	ppbv	ppbv
ACETYLENE	4.89	1.53	1.47
PROPYLENE	0.97	0.64	0.55
CHLOROMETHANE	0.52	0.64	0.65
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.13	0.10	0.16
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	0.09	0.10
BENZENE	0.79	0.46	0.40
CARBON TETRACHLORIDE	0.08	0.06	0.06
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	2.37	1.10	1.32
DIBROMOCHLOROMETHANE	ND	ND	0.04 U
N-OCTANE	0.10 U	0.05 U	0.21 U
TETRACHLOROETHYLENE	0.04 U	0.07 U	ND
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.42	0.17	0.18
m,p - XYLENE	1.33	0.51	0.53
BROMOFORM	ND	ND	ND
STYRENE	0.46	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.52	0.23	0.21
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10259D1	DLTX 10259R1	DLTX 10260D2
SAMPLE DATE	7/23/97	7/23/97	7/23/97
ANALYSIS DATE	8/20/97	8/20/97	8/20/97
FILE NAME	L7HR012	L7HR024	L7HR013
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.66	1.18	1.93
PROPYLENE	1.08	1.13	1.31
CHLOROMETHANE	0.59	0.60	0.69
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.10	0.07 U	0.13
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.80	0.75	0.91
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.15	0.15	0.17
BENZENE	0.67	0.59	0.72
CARBON TETRACHLORIDE	0.08	0.07	0.10
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	3.12	3.21	3.41
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.12 U	0.12 U	0.12 U
TETRACHLOROETHYLENE	0.06 U	0.05 U	0.06 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.35	0.36	0.40
m,p - XYLENE	1.17	1.16	1.22
BROMOFORM	ND	ND	ND
STYRENE	0.09	0.09	0.10
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.50	0.50	0.51
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10260R2	DLTX 10293	DLTX 10294
SAMPLE DATE	7/23/97	7/24/97	7/25/97
ANALYSIS DATE	8/20/97	8/8/97	8/8/97
FILE NAME	L7HR025	L7HH012	L7HH013
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.16	9.81	5.50
PROPYLENE	1.07	1.35	1.08
CHLOROMETHANE	0.54	0.63	0.54
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.06 U	0.13	0.05 U
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.78	0.07 U	0.06 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.14	0.08	0.08
BENZENE	0.66	0.87	0.77
CARBON TETRACHLORIDE	0.07	0.06	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	3.33	2.42	1.92
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.12 U	0.09 U	0.10 U
TETRACHLOROETHYLENE	0.06 U	0.07 U	0.07 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.42	0.42	0.33
m,p - XYLENE	1.25	1.31	1.13
BROMOFORM	ND	ND	ND
STYRENE	0.11	0.22	0.35
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.54	0.57	0.48
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10305	DLTX 10315D1	DLTX 10315R1
SAMPLE DATE	7/28/97	7/29/97	7/29/97
ANALYSIS DATE	8/9/97	8/20/97	8/20/97
FILE NAME	L7HH020	L7HR016	L7HS006
UNITS	ppbv	ppbv	ppbv
ACETYLENE	7.36	4.54	6.37
PROPYLENE	1.52	0.98	1.00
CHLOROMETHANE	0.58	0.49	0.48
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.18	0.06 U	0.05 U
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.42	0.02 U	0.03 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.07	0.07
BENZENE	0.95	0.72	0.70
CARBON TETRACHLORIDE	0.06	0.08	0.09
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	2.80	1.89	2.03
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.11 U	0.06 U	0.07 U
TETRACHLOROETHYLENE	0.07 U	ND	ND
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.39	0.30	0.32
m,p - XYLENE	1.10	0.96	1.01
BROMOFORM	ND	ND	ND
STYRENE	0.13	0.10	0.12
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.51	0.39	0.44
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10316D2	DLTX 10316R2	DLTX 10367
SAMPLE DATE	7/29/97	7/29/97	7/30/97
ANALYSIS DATE	8/20/97	8/20/97	
FILE NAME	L7HR017	L7HS007	
UNITS	ppbv	ppbv	ppbv
ACETYLENE	4.10	2.81	0.77
PROPYLENE	0.98	1.00	0.59
CHLOROMETHANE	0.46	0.50	0.58
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.07 U	0.04 U	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.03 U	0.04 U	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.07	0.16
BENZENE	0.74	0.71	0.44
CARBON TETRACHLORIDE	0.09	0.08	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.90	1.90	1.42
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.08 U	0.09 U	0.10 U
TETRACHLOROETHYLENE	ND	ND	0.16 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.32	0.30	0.29
m,p - XYLENE	0.97	0.99	1.03
BROMOFORM	ND	ND	ND
STYRENE	0.11	0.10	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.42	0.42	0.39
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10419	
SAMPLE DATE	7/31/97	
ANALYSIS DATE	8/23/97	
FILE NAME	L7HV021	
UNITS	ppbv	
ACETYLENE	0.78	
PROPYLENE	0.42	
CHLOROMETHANE	0.61	
VINYL CHLORIDE	ND	
1,3-BUTADIENE	ND	
BROMOMETHANE	ND	
CHLOROETHANE	ND	
METHYLENE CHLORIDE	0.06	U
trans - 1,2 - DICHLOROETHYLENE	ND	
1,1 - DICHLOROETHANE	ND	
CHLOROPRENE	ND	
BROMOCHLOROMETHANE	ND	
CHLOROFORM	ND	
1,2 - DICHLOROETHANE	ND	
1,1,1 - TRICHLOROETHANE	0.10	
BENZENE	0.45	
CARBON TETRACHLORIDE	0.06	
1,2 - DICHLOROPROPANE	ND	
BROMODICHLOROMETHANE	ND	
TRICHLOROETHYLENE	0.24	
cis - 1,3 - DICHLOROPROPENE	ND	
trans - 1,3 - DICHLOROPROPENE	ND	
1,1,2 - TRICHLOROETHANE	ND	
TOLUENE	1.36	
DIBROMOCHLOROMETHANE	ND	
N-OCTANE	0.06	U
TETRACHLOROETHYLENE	0.07	U
CHLOROBENZENE	ND	
ETHYLBENZENE	0.18	
m,p - XYLENE	0.51	
BROMOFORM	ND	
STYRENE	ND	
1,1,2,2 - TETRACHLOROETHANE	ND	
o - XYLENE	0.29	
m - DICHLOROBENZENE	ND	
p - DICHLOROBENZENE	ND	
o - DICHLOROBENZENE	ND	

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10382	DLTX 10543D1	DLTX 10543R1
SAMPLE DATE	8/1/97	8/4/97	8/4/97
ANALYSIS DATE	8/23/97	8/26/97	8/26/97
FILE NAME	L7HV016	L7HY015	L7HZ010
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.48	5.09	5.11
PROPYLENE	0.72	0.90	0.59
CHLOROMETHANE	0.40	0.46	0.45
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	0.08 U	0.09
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.09	0.13	0.12
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.10	0.09	0.11
BENZENE	0.59	0.97	0.85
CARBON TETRACHLORIDE	0.07	0.07	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	0.08	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.31	2.05	2.00
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.06 U	0.08 U	0.11 U
TETRACHLOROETHYLENE	0.09 U	0.05 U	0.07 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.20	0.28	0.31
m,p - XYLENE	0.54	0.79	0.84
BROMOFORM	ND	ND	ND
STYRENE	ND	0.05 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.27	0.38	0.43
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10544D2	DLTX 10544R2	DLTX 10520
SAMPLE DATE	8/4/97	8/4/97	8/5/97
ANALYSIS DATE	8/26/97	8/26/97	8/24/97
FILE NAME	L7HY016	L7HZ011	L7HW008
UNITS	ppbv	ppbv	ppbv
ACETYLENE	5.10	5.14	2.85
PROPYLENE	0.80	0.62	1.40
CHLOROMETHANE	0.52	0.42	0.51
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.08 U	0.05 U	0.18
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.11	0.12	0.63
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.12	0.10	0.35
BENZENE	0.90	0.94	1.26
CARBON TETRACHLORIDE	0.08	0.07	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.08
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.90	2.01	4.82
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.07 U	0.11 U	0.20 U
TETRACHLOROETHYLENE	0.06 U	0.05 U	0.58
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.28	0.29	0.55
m,p - XYLENE	0.72	0.74	1.56
BROMOFORM	ND	ND	ND
STYRENE	ND	ND	0.09 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.36	0.36	0.81
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10514	DLTX 10566	DLTX 10569
SAMPLE DATE	8/6/97	8/7/97	8/8/97
ANALYSIS DATE	9/26/97	8/30/97	8/30/97
FILE NAME	L7IZ004	L7H#023	L7H#026
UNITS	ppbv	ppbv	ppbv
ACETYLENE	2.86	0.69	0.84
PROPYLENE	0.83	0.18	0.46
CHLOROMETHANE	0.42	0.28	0.18
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.14	ND	0.06 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.11	0.09	0.08
BENZENE	0.59	0.35	0.31
CARBON TETRACHLORIDE	0.07	0.07	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	0.43	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.85	0.48	0.73
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.10 U	0.03 U	0.03 U
TETRACHLOROETHYLENE	0.07 U	ND	0.03 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.23	0.15	0.13
m,p - XYLENE	0.71	0.45	0.35
BROMOFORM	ND	ND	ND
STYRENE	0.05 U	0.05 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.31	0.27	0.19
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10573		DLTX 10670		DLTX 10671	
SAMPLE DATE	8/11/97		8/12/97		8/13/97	
ANALYSIS DATE	8/31/97		9/2/97		9/2/97	
FILE NAME	L7H#004		L7IB009		L7ID014	
UNITS	ppbv		ppbv		ppbv	
ACETYLENE	0.87		1.13		3.17	
PROPYLENE	0.59		0.55		0.69	
CHLOROMETHANE	0.32		0.25		0.51	
VINYL CHLORIDE	ND		ND		ND	
1,3-BUTADIENE	0.03	U	0.03	U	ND	
BROMOMETHANE	ND		ND		ND	
CHLOROETHANE	ND		ND		ND	
METHYLENE CHLORIDE	0.01	U	ND		0.17	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND	
CHLOROPRENE	ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND	
CHLOROFORM	ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.09		0.11		0.08	
BENZENE	0.46		0.52		0.64	
CARBON TETRACHLORIDE	0.07		0.09		0.08	
1,2 - DICHLOROPROPANE	ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND	
cis - 1,3 - DICHLOROPROPENE	ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND	
TOLUENE	0.88		1.14		1.36	
DIBROMOCHLOROMETHANE	ND		ND		ND	
N-OCTANE	0.05	U	0.06	U	0.08	U
TETRACHLOROETHYLENE	0.01	U	0.03	U	0.05	U
CHLOROBENZENE	ND		ND		ND	
ETHYLBENZENE	0.16		0.25		0.23	
m,p - XYLENE	0.45		0.74		0.63	
BROMOFORM	ND		ND		ND	
STYRENE	0.06	U	0.05	U	0.10	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND	
o - XYLENE	0.25		0.38		0.33	
m - DICHLOROBENZENE	ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND	

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10673	DLTX 10683D1	DLTX 10683R1
SAMPLE DATE	8/14/97	8/15/97	8/15/97
ANALYSIS DATE	9/3/97	8/26/97	8/27/97
FILE NAME	L7IB019	L7HY017	L7HZ012
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.10	0.79	0.87
PROPYLENE	0.59	0.25	0.14
CHLOROMETHANE	0.40	0.41	0.49
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.20	ND	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.11
BENZENE	0.43	0.29	0.44
CARBON TETRACHLORIDE	0.07	0.07	0.10
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	1.25	0.58	0.62
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.07 U	ND	0.03 U
TETRACHLOROETHYLENE	0.11 U	ND	ND
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.21	0.08	0.10
m,p - XYLENE	0.61	0.20	0.27
BROMOFORM	ND	ND	ND
STYRENE	0.06 U	ND	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.33	0.10	0.14
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10682D2	DLTX 10682R2	DLTX 10695
SAMPLE DATE	8/15/97	8/15/97	8/18/97
ANALYSIS DATE	8/26/97	8/27/97	9/3/97
FILE NAME	L7HY018	L7HZ013	L7IB022
UNITS	ppbv	ppbv	ppbv
ACETYLENE	0.78	0.72	1.44
PROPYLENE	0.25	0.16	0.80
CHLOROMETHANE	0.43	0.42	0.37
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	ND	0.04 U
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.06	0.06
BENZENE	0.28	0.30	0.65
CARBON TETRACHLORIDE	0.07	0.07	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	0.58	0.55	0.90
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	ND	ND	0.05 U
TETRACHLOROETHYLENE	ND	ND	0.03 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.08	0.09	0.16
m,p - XYLENE	0.21	0.20	0.42
BROMOFORM	ND	ND	ND
STYRENE	ND	ND	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.10	0.12	0.22
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10712	DLTX 10851	DLTX 10862D1
SAMPLE DATE	8/19/97	8/20/97	8/21/97
ANALYSIS DATE	9/3/97	9/3/97	9/9/97
FILE NAME	L7IC004	L7IC010	L7II007
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.12	4.13	3.07
PROPYLENE	0.46	1.54	1.31
CHLOROMETHANE	0.28	0.32	0.44
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	0.19	0.17
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.15	0.09	0.23
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.11	0.16
BENZENE	0.32	0.99	0.96
CARBON TETRACHLORIDE	0.06	0.08	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	0.05	0.40
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	0.72	2.50	2.97
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.05 U	0.11 U	0.66
TETRACHLOROETHYLENE	ND	0.08 U	0.23
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.16	0.55	0.99
m,p - XYLENE	0.45	1.60	4.06
BROMOFORM	ND	ND	ND
STYRENE	0.07 U	0.22	0.22
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.24	0.81	1.30
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	0.01 U	0.06 U
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10862R1	DLTX 10863D2	DLTX 10863R2
SAMPLE DATE	8/21/97	8/21/97	8/21/97
ANALYSIS DATE	9/10/97	9/9/97	9/11/97
FILE NAME	L7IJ011	L7II008	L7IJ012
UNITS	ppbv	ppbv	ppbv
ACETYLENE	3.44	4.09	3.34
PROPYLENE	1.43	1.47	1.40
CHLOROMETHANE	0.58	0.57	0.54
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.19	0.17	0.16
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.25	0.26	0.24
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.18	0.18	0.15
BENZENE	1.06	1.03	1.01
CARBON TETRACHLORIDE	0.08	0.09	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	0.40	0.42	0.38
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	3.02	3.39	3.33
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.68	0.71	0.71
TETRACHLOROETHYLENE	0.23	0.24	0.24
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	1.04	1.03	1.07
m,p - XYLENE	4.02	4.26	4.14
BROMOFORM	ND	ND	ND
STYRENE	0.23	0.26	0.26
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	1.30	1.41	1.42
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	0.06 U	0.06 U	0.06 U
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10861		DLTX 10908		DLTX 10955	
SAMPLE DATE	8/22/97		8/25/97		8/26/97	
ANALYSIS DATE	9/4/97		9/4/97		9/4/97	
FILE NAME	L7IC014		L7IC017		L7IC021	
UNITS	ppbv		ppbv		ppbv	
ACETYLENE	7.16		5.26		10.99	
PROPYLENE	1.36		1.14		1.36	
CHLOROMETHANE	0.24		0.20		0.42	
VINYL CHLORIDE	ND		ND		ND	
1,3-BUTADIENE	0.07	U	0.06	U	0.15	
BROMOMETHANE	ND		ND		ND	
CHLOROETHANE	ND		ND		ND	
METHYLENE CHLORIDE	0.06	U	ND		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND	
CHLOROPRENE	ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND	
CHLOROFORM	ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.10		0.11		0.10	
BENZENE	1.02		0.97		1.14	
CARBON TETRACHLORIDE	0.07		0.08		0.09	
1,2 - DICHLOROPROPANE	ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND	
TRICHLOROETHYLENE	0.04		ND		0.04	
cis - 1,3 - DICHLOROPROPENE	ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND	
TOLUENE	2.38		2.23		2.63	
DIBROMOCHLOROMETHANE	ND		ND		ND	
N-OCTANE	0.13	U	0.10	U	0.14	U
TETRACHLOROETHYLENE	0.10	U	0.80	U	0.07	U
CHLOROBENZENE	ND		ND		ND	
ETHYLBENZENE	0.37		0.58		0.47	
m,p - XYLENE	1.06		1.62		1.34	
BROMOFORM	ND		ND		ND	
STYRENE	0.63		0.08	U	0.28	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND	
o - XYLENE	0.56		0.79		0.68	
m - DICHLOROBENZENE	ND		ND		ND	
p - DICHLOROBENZENE	0.03	U	0.02	U	0.03	U
o - DICHLOROBENZENE	ND		ND		ND	

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10961D1	DLTX 10961R1	DLTX 10962D2
SAMPLE DATE	8/27/97	8/27/97	8/27/97
ANALYSIS DATE	9/10/97	9/11/97	9/10/97
FILE NAME	L7II011	L7IJ015	L7II012
UNITS	ppbv	ppbv	ppbv
ACETYLENE	4.89	4.50	4.48
PROPYLENE	1.32	1.30	1.32
CHLOROMETHANE	0.48	0.51	0.50
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.14	0.10	0.11
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.13	0.10	0.13
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	0.09	0.09
BENZENE	0.96	0.93	0.91
CARBON TETRACHLORIDE	0.07	0.08	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	2.50	2.40	2.36
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.13 U	0.11 U	0.11 U
TETRACHLOROETHYLENE	0.80 U	0.07 U	0.08 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.65	0.64	0.64
m,p - XYLENE	2.03	2.10	2.02
BROMOFORM	ND	ND	ND
STYRENE	0.09 U	0.10	0.10
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.87	0.87	0.84
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	0.02 U	0.02	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 10962R2	DLTX 11017	DLTX 11018
SAMPLE DATE	8/27/97	8/28/97	8/29/97
ANALYSIS DATE	9/11/97	9/4/97	9/5/97
FILE NAME	L7IJ016	L7ID011	L7ID012
UNITS	ppbv	ppbv	ppbv
ACETYLENE	4.31	11.29	25.70
PROPYLENE	1.48	1.44	1.55
CHLOROMETHANE	0.44	0.25	0.28
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	0.11	0.17	0.17
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.12	0.22	0.08 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	0.13	0.12
BENZENE	0.98	1.23	1.20
CARBON TETRACHLORIDE	0.07	0.09	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	2.41	4.00	3.13
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.13 U	0.18 U	0.14 U
TETRACHLOROETHYLENE	0.08 U	0.12 U	0.12 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.69	0.89	0.81
m,p - XYLENE	2.15	2.65	2.37
BROMOFORM	ND	ND	ND
STYRENE	0.11	0.42	0.23
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.88	1.21	1.09
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	0.03 U	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

1997 SNMOC (SPECIATED NON-METHANE ORGANIC COMPOUNDS) - URBAN TOXICS OPTION REPORT

SAMPLE SITE #	DLTX 11118	DLTX 11125	DLTX 11192
SAMPLE DATE	9/4/97	9/5/97	9/8/97
ANALYSIS DATE	9/17/97	9/17/97	9/17/97
FILE NAME	L7IP012	L7IP014	L7IP021
UNITS	ppbv	ppbv	ppbv
ACETYLENE	1.24	2.73	2.76
PROPYLENE	0.32	1.16	0.81
CHLOROMETHANE	0.50	0.54	0.64
VINYL CHLORIDE	ND	ND	ND
1,3-BUTADIENE	ND	ND	0.03 U
BROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
METHYLENE CHLORIDE	0.04 U	0.14	0.06 U
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND
CHLOROPRENE	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND
CHLOROFORM	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.36	0.09	0.10
BENZENE	0.35	0.64	0.63
CARBON TETRACHLORIDE	0.07	0.07	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND
TRICHLOROETHYLENE	0.61	0.04	ND
cis - 1,3 - DICHLOROPROPENE	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND
TOLUENE	0.87	1.47	1.20
DIBROMOCHLOROMETHANE	ND	ND	ND
N-OCTANE	0.04 U	0.11 U	0.07 U
TETRACHLOROETHYLENE	0.06 U	0.05 U	0.10 U
CHLOROBENZENE	ND	ND	ND
ETHYLBENZENE	0.12	0.18	0.22
m,p - XYLENE	0.33	0.57	0.65
BROMOFORM	ND	ND	ND
STYRENE	0.03 U	0.09 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND
o - XYLENE	0.16	0.26	0.31
m - DICHLOROBENZENE	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND

U = Less than the detection limit.

* = Vacuum Criteria Exceeded