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1996 Nonmethane Organic Compounds (NMOC) And Speciated Nonmethane Organic Compounds (SNMOC) Monitoring Program

1996 Nonmethane Organic Compound (NMOC) and Speciated Nonmethane Organic Compound (SNMOC) Monitoring Program

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Prepared for:

Kathy Weant and Neil J. Berg, Jr.
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Prepared by:

Eastern Research Group, Inc.
110 Hartwell Avenue
Lexington, MA 02173

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TABLE OF CONTENTS

Page

List of Figures vii
List of Tables ix
List of Abbreviations xi
Abstract xiii

1.0 Introduction 1-1

2.0 The 1996 NMOC/SNMOC Monitoring Program 2-1

2.1 Monitoring Locations 2-1
2.2 Selection of Compounds 2-2
2.3 Monitoring Schedules 2-2
2.4 Sampling and Analytical Methods 2-3

2.4.1 Total NMOC 2-4
2.4.2 SNMOC 2-5
2.4.3 VOCs 2-6
2.4.4 Carbonyls 2-7

3.0 Data Analysis Methodology 3-1

3.1 Data Summary Parameters 3-1

3.1.1 Prevalence 3-1
3.1.2 Concentration Range 3-2
3.1.3 Central Tendency (Long-Term Averages) 3-3
3.1.4 Variability 3-4

3.2 Analyses and Interpretations 3-5

3.2.1 Spatial Variations 3-5

3.2.1.1 Emission Inventories 3-5
3.2.1.2 Local Meteorology 3-6
3.2.1.3 Composition of Air Samples 3-7
3.2.1.4 Ozone Formation Potential 3-8

3.2.2 Temporal Variations 3-9

3.3 Data Quality Parameters 3-9

3.3.1 Completeness 3-9
3.3.2 Precision 3-10
3.3.3 Accuracy 3-11

4.0 Analysis of Total NMOC Monitoring Results 4-1

4.1 Data Summary Tables 4-1
4.2 Spatial Variations 4-2

4.2.1 Emission Inventories 4-2
4.2.2 Local Meteorology 4-4
4.2.3 Other Factors 4-5

4.3 Temporal Variations 4-6
4.4 Data Quality Parameters 4-7
4.5 Summary 4-8

5.0 Analysis of SNMOC Monitoring Results 5-1

5.1 Data Summary Tables 5-1
5.2 Spatial Variations 5-4

5.2.1 Emission Inventories 5-4
5.2.2 Local Meteorology 5-6

5.2.2.1 Wind Speed and Wind Direction 5-6
5.2.2.2 Temperature 5-7

5.2.3 Composition of Air Samples 5-9

5.2.3.1 Aromatic, Olefinic, and Paraffinic Compounds 5-9
5.2.3.2 Isoprene 5-10
5.2.3.3 BTEX Concentration Ratios 5-11

5.2.4 Data Correlations 5-11
5.2.5 Age of Air Mass 5-13
5.2.6 Ozone Formation Potential 5-14

5.3 Temporal Variations 5-15
5.4 Data Quality Parameters 5-17

5.5 Summary 5-17

6.0 Analysis of VOC Monitoring Results 6-1

6.1 Data Summary Tables 6-1
6.2 Spatial Variations 6-2

6.2.1 Impact of Industrial Emission Sources 6-3
6.2.2 Data Correlations 6-4

6.3 Data Quality Parameters 6-5
6.4 Summary 6-6

7.0 Analysis of Carbonyl Monitoring Results 7-1

7.1 Data Summary Tables 7-1
7.2 Spatial Variations 7-2

7.2.1 Impact of Emission Sources 7-2
7.2.2 Data Correlations 7-4

7.3 Data Quality Parameters 7-5
7.4 Summary 7-6

8.0 Conclusions and Recommendations 8-1

8.1 Conclusions 8-1
8.2 Recommendations 8-4

9.0 References 9-1

LIST OF FIGURES

2-1 Locations of the 1996 NMOC/SNMOC Monitoring Stations 2-8

4-1 Facilities in the Vicinity of the Bountiful, Utah (SL1U) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 4-9
4-2 Facilities in the Vicinity of the Long Island, New York (LINY) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 4-10
4-3 Facilities in the Vicinity of the Newark, New Jersey (NWNJ) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 4-11
4-4 Facilities in the Vicinity of the Plainfield, New Jersey (P2NJ) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 4-12
4-5 Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the John F. Kennedy Airport (near the Long Island Monitoring Station) 4-13
4-6 Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Newark International Airport (near the Newark and Plainfield Monitoring Stations) 4-14
4-7 Time Sequences for the 1996 Total NMOC Monitoring Data 4-15
4-8 Monthly Geometric Mean Concentrations of Total NMOC for Selected Monitoring Locations (1988 to 1996, Summer Months Only) 4-16

5-1 Geometric Mean Concentrations of Total Identified SNMOC Compounds . . 5-19
5-2 Facilities in the Vicinity of the Tarrant City, Alabama (B1AL) and Pinson, Alabama (B2AL) Monitoring Stations That Reported Air Releases of VOCs or Carbonyls to TRI 5-20
5-3 Facilities in the Vicinity of the Helena, Alabama (B3AL) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 5-21
5-4 Facilities in the Vicinity of the Denver, Colorado (CAMP), Denver, Colorado (WELBY), and Rocky Flats, Colorado (RF-N) Monitoring Stations That Reported Air Releases of VOCs or Carbonyls to TRI 5-22
5-5 Facilities in the Vicinity of the Fort Worth, Texas (CAMS13) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 5-23
5-6 Facilities in the Vicinity of the Dallas, Texas (DLTX) and Dallas, Texas (CAMS5) Monitoring Stations That Reported Air Releases of VOCs or Carbonyls to TRI 5-24
5-7 Facilities in the Vicinity of the Juarez, Mexico (JUMX) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 5-25
5-8 Summary of NET Emissions Data for SNMOC Monitoring Locations 5-26
5-9 Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Birmingham Municipal Airport (near the Helena, Pinson, and Tarrant City Monitoring Stations) 5-27

5-10 Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Dallas-Fort Worth Regional Airport (near the Dallas and Fort Worth Monitoring Stations) 5-28
5-11 Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Denver International Airport (near the Denver and Rocky Flats Monitoring Stations) 5-29
5-12 Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the El Paso International Airport (near the Juarez Monitoring Station) 5-30
5-13 Correlations Between Temperature and Concentration of Total Identified SNMOCs 5-31
5-14 Breakdown of Total SNMOCs by Paraffins, Olefins, and Aromatics 5-32
5-15 Spatial Variations in Concentrations of Isoprene and in Percentage of Total Identified SNMOCs Consisting of Isoprene 5-33
5-16 BTEX Concentration Ratios at the SNMOC Monitoring Stations 5-34
5-17 Ratios of Geometric Mean Concentrations of Benzene and *m,p*-Xylene to Toluene at Selected Monitoring Stations 5-35
5-18 Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Tarrant City, Alabama (B1AL) Monitoring Station . . . 5-36
5-19 Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Denver, Colorado (WELBY) Monitoring Station 5-37
5-20 Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Dallas, Texas (DLTX) Monitoring Station 5-38
5-21 Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Juarez, Mexico (JUMX) Monitoring Station 5-39
5-22 Long-Term Trends in Ambient Air Concentrations of Propane and Propylene in the Vicinity of Birmingham, Alabama 5-40

7-1 Facilities in the Vicinity of the Cape Elizabeth, Maine (MNE) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI 7-7
7-2 Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Portland International Airport (near the Cape Elizabeth Monitoring Station) 7-8

LIST OF TABLES

1-1 Organization of the 1996 NMOC/SNMOC Summary Report 1-3

2-1 Site Descriptions for the 1996 NMOC/SNMOC Monitoring Stations 2-9
2-2 Monitoring Options Selected During the 1996 NMOC/SNMOC Program . . . 2-10
2-3 Sampling Schedules Implemented During the 1996 NMOC/SNMOC Program 2-11
2-4 Summary of Sampling and Analytical Methods 2-12
2-5 SNMOC Detection Limits 2-13
2-6 VOC Detection Limits 2-14
2-7 Carbonyl Detection Limits 2-15

3-1 Maximum Incremental Reactivities (MIRs) for SNMOC compounds 3-12
3-2 Summary of Historical Monitoring Data Available for the 1996 NMOC/SNMOC Monitoring Locations 3-13

4-1 Summary Statistics for Concentrations of Total NMOC 4-17
4-2 Summary of NET Inventory VOC Emissions Data for the NMOC Monitoring Stations 4-18
4-3 Summary of Correlations Between NMOC Concentrations and Ambient Temperature 4-19
4-4 Correlation of Daily NMOC Measurements Between Pairs of Monitoring Locations 4-20
4-5 Data Quality Parameters for Total NMOC Measurements 4-21

5-1 Summary of Geometric Mean Concentrations of SNMOCs 5-41
5-2 Pairs of Compounds With Pearson Correlation Coefficients Greater Than 0.90 5-45
5-3 Abbreviations Used in Figures of Ozone Indices (Figures 5-18 through 5-21) 5-46
5-4 Completeness of SNMOC Monitoring 5-47
5-5 Data Quality Parameters for SNMOC Measurements 5-48

6-1 Summary Statistics for VOC Concentrations Measured at Tarrant City, Alabama (B1AL) 6-7
6-2 Summary Statistics for VOC Concentrations Measured at Pinson, Alabama (B2AL) 6-9
6-3 Summary Statistics for VOC Concentrations Measured at Helena, Alabama (B3AL) 6-11
6-4 Summary Statistics for VOC Concentrations Measured at Denver, Colorado (CAMP) 6-13

6-5 Summary Statistics for VOC Concentrations Measured at Denver, Colorado (WELBY) 6-15
6-6 Summary Statistics for VOC Concentrations Measured at Newark, New Jersey (NWNJ) 6-17
6-7 Summary Statistics for VOC Concentrations Measured at Plainfield, New Jersey (P2NJ) 6-19
6-8 Summary of Prevalence of VOCs 6-21
6-9 Summary of VOC Geometric Mean Concentrations 6-22
6-10 Comparison of Geometric Mean Concentrations of Selected VOCs With Total Air Releases Reported by Facilities Within a 10-Mile Radius of NMOC/SNMOC Monitoring Stations 6-23
6-11 Summary of NET Emissions Data for the VOC Monitoring Locations 6-25
6-12 Pairs of Chemicals With Pearson Correlation Coefficients Greater Than 0.85 6-26
6-13 Data Quality Parameters for VOC Measurements 6-27

7-1 Summary Statistics for Carbonyl Concentrations Measured at Denver, Colorado (CAMP) 7-9
7-2 Summary Statistics for Carbonyl Concentrations Measured at Dallas, Texas (CAMS5) 7-10
7-3 Summary Statistics for Carbonyl Concentrations Measured at Fort Worth, Texas (CAMS13) 7-11
7-4 Summary Statistics for Carbonyl Concentrations Measured at Dallas, Texas (DLTX) 7-12
7-5 Summary Statistics for Carbonyl Concentrations Measured at Cape Elizabeth, Maine (MNE) 7-13
7-6 Summary Statistics for Carbonyl Concentrations Measured at Newark, New Jersey (NWNJ) 7-14
7-7 Summary Statistics for Carbonyl Concentrations Measured at Plainfield, New Jersey (P2NJ) 7-15
7-8 Summary Statistics for Carbonyl Concentrations Measured at Denver, Colorado (WELBY) 7-16
7-9 Summary of Prevalence and Geometric Mean Concentrations for Carbonyls . 7-17
7-10 Comparison of Geometric Mean Concentrations of Selected Carbonyls With Total Air Releases Reported by Facilities Within a 10-Mile Radius of NMOC/SNMOC Monitoring Stations 7-18
7-11 Summary of NET Emissions Data for the Carbonyl Monitoring Locations . . . 7-19
7-12 Pairs of Carbonyls With Pearson Correlation Coefficients Greater Than 0.70 . 7-20
7-13 Data Quality Parameters for Carbonyl Measurements 7-21

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
EPCRA	Emergency Planning and Community Right-to-Know Act
FID	flame ionization detection
GC	gas chromatography
HPLC	high-performance liquid chromatography
MSD	mass selective detection
ND	non-detect
NET	National Emission Trends
OTAG	Ozone Transport Assessment Group
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
total NMOC	total nonmethane organic compounds
TRI	Toxic Release Inventory
UV	ultraviolet
VOC	volatile organic compound

Monitoring Stations

B1AL	Tarrant City, Alabama
B2AL	Pinson, Alabama
B3AL	Helena, Alabama
CAMP	Denver, Colorado (1)
CAMS5	Dallas, Texas (1)
CAMS13	Fort Worth, Texas
DLTX	Dallas, Texas (2)
JUMX	Juarez, Mexico
LINY	Long Island, New York
MNE	Cape Elizabeth, Maine
NWNJ	Newark, New Jersey
P2NJ	Plainfield, New Jersey
RF-N	Rocky Flats, Colorado
SL1U	Bountiful, Utah
WELBY	Denver, Colorado (2)

ABSTRACT

The Nonmethane Organic Compound (NMOC)/Speciated Nonmethane Organic Compound (SNMOC) monitoring program is designed to characterize the magnitude and composition of air pollution in areas that are not in attainment with the National Ambient Air Quality Standard (NAAQS) for ozone. In particular, the program measures concentrations of four different categories of air pollutants that contribute to a series of photochemical reactions known to form ozone. The 1996 monitoring program collected ambient air samples at 15 locations across the country. Samples were collected from 6:00 to 9:00 AM, because some regional air quality models require concentrations over this time frame as a critical input. The data indicate the following general trends and patterns in ambient air quality:

Total nonmethane organic compounds (NMOC). Geometric mean ambient air concentrations of NMOC measured at four monitoring stations during the summer of 1996 ranged from 0.29 to 0.41 ppmC. No individual concentration was higher than 1.72 ppmC or lower than 0.069 ppmC. The monitoring data indicate that levels of NMOC are affected by several factors, including, but not limited to, nearby emission sources, local meteorology, and proximity to large mountain ranges.

Speciated nonmethane organic compounds (SNMOC). Ambient air concentrations of SNMOCs varied significantly among the 13 monitoring stations that measured these compounds. Despite this variability, emission inventory data suggest that emissions from industrial, motor vehicle, and natural sources all contribute to the levels of hydrocarbons detected in the air. Correlation analyses and relative concentrations of selected aromatic compounds provide compelling evidence that motor vehicle emissions account for a large proportion of the air concentrations of these compounds. Relative amounts of isoprene detected in the air samples suggest that emissions from natural sources do not have significant impacts on levels of air pollution measured between 6:00 and 9:00 AM. The monitoring data also indicate that air masses sampled at rural locations tend to be "older" (e.g., transported over longer distances) than air masses sampled in urban centers. Further analyses suggest that highly reactive compounds with relatively low ambient air concentrations, such as 1,2,4-trimethylbenzene and propylene, exhibit a stronger potential to form ozone than less reactive compounds with relatively high ambient air concentrations, such as isopentane and propane.

Volatile organic compounds (VOC). At the seven monitoring stations that collected samples for VOC analysis, ambient air concentrations of acetylene, propylene, and toluene were consistently greater than 1 ppbv. Several other compounds were detected in a majority of the samples, but at lower levels. Statistical analyses found that ambient air concentrations of several hydrocarbons were highly correlated across all seven stations, suggesting that selected hydrocarbons may originate from emission sources common to all urban environments.

Carbonyl compounds. At the eight monitoring stations that collected samples for carbonyl analysis, ambient air concentrations of acetaldehyde, acetone, and formaldehyde were notably higher than concentrations of the 13 other carbonyls identified by the analytical method. Emission inventory data suggest that releases of carbonyls from large industrial facilities do not explain spatial variations in the ambient air concentrations of carbonyls and that ambient levels of carbonyls appear to be highest in areas with relatively high releases of total VOCs.

Although the NMOC/SNMOC monitoring program generates large volumes of air quality data, the trends and patterns identified for selected monitoring locations may not necessarily apply to air quality in other urban environments. Further, because many factors in addition to ambient levels of hydrocarbons influence the complex series of photochemical reactions that form ozone, interested readers should supplement the findings of this report with additional considerations (such as ambient levels of nitrogen oxides) to gain a more complete picture of ambient air quality.

1.0 Introduction

This report summarizes ambient air monitoring data collected during the summer of 1996 in 15 different cities as part of the Nonmethane Organic Compound (NMOC)/Speciated Nonmethane Organic Compound (SNMOC) monitoring program. Initiated by the U.S. Environmental Protection Agency (EPA) in 1987, the NMOC/SNMOC monitoring program is designed to characterize the composition and magnitude of air pollution in regions that are not in attainment with the National Ambient Air Quality Standard (NAAQS) for ozone. Since 1987, several state environmental agencies have participated in this program by installing air monitoring stations that measure ambient levels of compounds that are known to affect ozone formation processes. During the 1996 NMOC/SNMOC program, monitoring stations measured some combination of the following four categories of compounds: total nonmethane organic compounds (total NMOC), speciated nonmethane organic compounds (SNMOC), volatile organic compounds (VOCs), and carbonyls. This report summarizes and interprets all ambient air monitoring data that were collected during the 1996 NMOC/SNMOC monitoring program.

The data summaries in this report present a concise but thorough overview of the large volume of monitoring data collected during this program. These summaries may be particularly useful to state and local environmental agencies developing policies to reduce ozone concentrations in order to meet NAAQS attainment levels. The SNMOC data relate to these policy efforts because photochemical reactions involving various hydrocarbon compounds (known as "ozone precursors") and nitrogen oxides produce ozone in the lower atmosphere. State agencies typically use regional atmospheric dispersion models to simulate the ozone formation processes, and most of these models require ambient air concentrations of speciated hydrocarbons, or SNMOC data, as a critical input. Accordingly, environmental scientists can use the monitoring data in this report to forecast trends and patterns in ambient air concentrations of ozone. To facilitate these forecasting efforts, this report summarizes all monitoring data collected during the NMOC/SNMOC program. For additional reference, these monitoring data also will be available on the Air Quality Subsystem (AQS) of the Aerometric Information and Retrieval System (AIRS), an electronic database maintained by EPA.

In addition to summarizing the NMOC/SNMOC monitoring data, this report also identifies and analyzes several trends and patterns in the composition of air pollution sampled at the various monitoring stations. The data analyses attempt to correlate measured air concentrations to many factors known to affect air quality, such as emissions from industrial sources, emissions from motor vehicles, and fluctuations in local meteorology. These correlations indicate the extent to which specific emission sources may contribute to measured concentrations, and such information should prove invaluable to state agencies when they prioritize their pollution prevention efforts. The data analyses also investigate temporal and spatial variations in the composition of the air samples to provide additional context for the monitoring data.

Although extensive, these analyses consider only selected trends and patterns in NMOC/SNMOC monitoring data. More comprehensive evaluations of the data may identify subtle, site-specific trends not considered in this report. Further, this report does not address many factors (such as ambient levels of nitrogen oxides and solar radiation) known to affect ozone formation processes. Therefore, even though this report thoroughly characterizes the large volume of NMOC/SNMOC monitoring data, additional analyses should be performed to fully appreciate the atmospheric chemistry affecting the ambient air quality at the monitoring stations.

This report is organized into eight sections. Table 1-1 highlights 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, VOCs, and carbonyls. All figures and table cited in the text appear at the end of their respective sections (figures first, followed by tables).

Table 1-1
Organization of the 1996 NMOC/SNMOC Summary Report

Report Section	Section Title	Overview of Contents
2	The 1996 NMOC/SNMOC Program	This section provides background information on sampling locations; lists air monitoring options and sampling schedules implemented at these locations; characterizes the sampling and analytical methods used to measure ambient air concentrations; and indicates the completeness of the air monitoring data set.
3	Data Analysis Methodology	This section presents the methodology used to interpret the ambient air monitoring data; lists several categories of sources known to emit hydrocarbons, VOCs, and carbonyls; 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, VOCs, and carbonyls; summarize the monitoring data and identify trends and patterns in ambient air concentrations; 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 pollution prevention 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, VOCs, and carbonyls.
9	References	This section lists the references cited throughout this summary report.

2.0 The 1996 NMOC/SNMOC Monitoring Program

This section orients the reader to the scope of the 1996 NMOC/SNMOC monitoring program and provides essential background information for understanding and appreciating the data interpretations presented throughout this report. The 1996 NMOC/SNMOC monitoring program consisted of 15 monitoring stations that collected 3-hour integrated samples of ambient air according to site-specific schedules from June 1 to September 30, 1996. The monitoring options selected for a given site determined whether the samples were then analyzed for total NMOC, SNMOC, VOCs, carbonyls, or some combination of these categories. The following sections discuss in greater detail the monitoring locations, selection of compounds, 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 agencies also must contribute to the overall monitoring costs.

In 1996, the NMOC/SNMOC monitoring program consisted of 15 different ambient air monitoring stations. Figure 2-1 shows the locations of these stations and gives the alphanumeric codes assigned to each station for purposes of tracking air samples from the field to the laboratory. With the exception of the Juarez, Mexico, station, none of the monitoring stations shown in Figure 2-1 moved during the course of the 3-month monitoring program. The station in Juarez was moved approximately 100 meters halfway through the monitoring program to avoid being influenced by emissions from a construction site.

In addition to the alphanumeric codes, each location also has a unique 9-digit "AIRS Code" for purposes of logging and indexing site descriptions and monitoring results in EPA's AIRS database. Table 2-1 lists the alphanumeric codes, the AIRS codes, and relevant AIRS site description data for each location. The table indicates that the 15 monitoring stations are located in areas of varying land use (agricultural, commercial, industrial, and residential) and population density (rural, suburban, and urban). Sections 4 through 7 of this report discuss the extent to which these and other site-specific factors influence the composition and magnitude of air pollution measured during the program.

2.2 Selection of Compounds

The agencies that sponsored monitoring stations also decided whether their respective stations should measure total NMOC, SNMOC, VOCs, carbonyls, or some combination thereof. Table 2-2 indicates the compounds selected for monitoring at each of the 15 stations. Every station except for Cape Elizabeth, Maine, collected samples for either the total NMOC or SNMOC compound categories—the two categories most commonly used as inputs to ozone forecasting models. The bulk of the analyses and interpretations in this report, therefore, focus on these two compound categories. Section 2.3 indicates how frequently the compounds were measured at each site, and Section 2.4 lists the compounds identified under the four different monitoring options.

2.3 Monitoring Schedules

In addition to selecting compounds for monitoring, the agencies that sponsor NMOC/SNMOC monitoring locations also determine the schedules for collecting ambient air samples. Depending on the data needs and funding status of the sponsoring agency, the sampling frequency for this program can range from daily to biweekly samples. Table 2-3 summarizes the sampling frequencies implemented at the 15 participating locations. As the table shows, the sampling schedules vary significantly across the different compound categories, however, there are some common scheduling trends:

- All stations that measured NMOC concentrations implemented daily sampling schedules.
- All stations that measured VOC concentrations collected fewer than 10 samples.
- All stations that measured carbonyl concentrations collected fewer than 20 samples.

Section 3.2 indicates how the varying sampling frequencies affect the data analyses presented in Sections 4 through 7.

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 AM, standard time.
- Sampling is performed only between June 1 and September 30, but generally not on holidays (Independence Day and Labor Day).
- 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 AM and 9:00 AM as a critical 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

The sampling and analytical methods selected for ambient air monitoring studies largely influence the validity of the monitoring results. During the 1996 NMOC/SNMOC program, four different sampling and analytical methods were used to measure ambient air concentrations of

total NMOC, SNMOC, VOCs, and carbonyls. EPA has thoroughly tested each of these methods, and field engineers for the 1996 NMOC/SNMOC monitoring program strictly followed the documented procedures for properly implementing them. The following subsections highlight salient features of the four sampling and analytical methods and also indicate how these features may influence the data interpretations presented in Sections 4 through 7. For quick reference, Table 2-4 summarizes the general attributes (detection limits, units of measurement, etc.) of the four different 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. These samples are analyzed by first concentrating all nonmethane organic compounds in the ambient sample in a cryogenic trap and then determining the total amount of NMOC collected in the trap using flame ionization detection (FID). This analytical method makes no attempt to distinguish different hydrocarbon species; rather, the analysis measures only the *total* amount of nonmethane hydrocarbons in the air sample, or total NMOC. Further, FIDs determine only the number of carbon atoms in a given sample, thus limiting the units of measurement to parts per billion on a carbon basis (ppbC) (see sidebar, "The Importance of Units of Measurement").

Although the estimated detection limit for measuring ambient air concentrations of total NMOC according to this method is approximately 5 ppbC (see sidebar, "Appreciating Detection Limits"), all the NMOC samples collected during the 1996 SNMOC program had concentrations significantly greater than this level. For reference, the estimated detection limit for total NMOC and the detection limits for the other three compound categories considered in this report were all determined according to EPA guidance in "Definition and Procedure for the Determination of the Method Detection Limit" (FR, 1984).

The Importance of Units of Measurement

Units of measurement express results of scientific analyses in standard formats that can be appreciated and understood by all audiences. The units of measurement 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, air concentrations are typically expressed 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 employed by EPA (USEPA, 1988, 1989) and other air monitoring researchers in 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, a concentration of benzene (C_6H_6) of 6.0 ppbC by definition also equals a concentration of benzene of 1.0 ppbv. This example shows that failure to consider the subtle differences in units of measurement may result in significant misinterpretations of ambient air monitoring results. Therefore, data analysts must pay particular attention to the units of measurement when interpreting the monitoring results in this report or when comparing these 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 is based on collecting ambient air in passivated stainless steel canisters and concentrating the collected hydrocarbons using cryogenic traps. Unlike the NMOC approach, however, the SNMOC analytical method requires concentrated samples to pass through gas chromatography (GC) columns prior to being measured with the FID. With this additional step, the SNMOC analytical method separates the individual hydrocarbon species prior to detection, thus enabling the FID to measure ambient air concentrations of *individual* hydrocarbon species. The GC column used during the 1996 NMOC/SNMOC program could distinguish up to 80

Appreciating Detection Limits

The detection limit of an analytical method plays an important role in interpreting the corresponding ambient air monitoring data. By definition, these detection limits represent the lowest concentrations at which laboratory equipment can *reliably* quantify concentrations of selected compounds to a specific confidence level. Therefore, when samples contain concentrations of compounds at levels below their respective detection limits, multiple analyses of the same sample may lead to a wide range of results, including highly variable concentrations and "non-detect" observations. Accordingly, data analysts must exercise extreme caution when analyzing ambient air monitoring data with many observations at levels near or below estimated detection limits. Because some of the compounds in the SNMOC, VOC, and carbonyl data sets have numerous "non-detect" results, the significance of appreciating detection limits is revisited throughout this report.

different hydrocarbons in a given sample. Table 2-5 lists these compounds along with their detection limits. Despite the numerous compounds that can be identified using this method, the analytical method for measuring SNMOC focuses primarily on C_2 through C_{12} hydrocarbons and does not address many other compounds commonly found in ambient air, such as carbonyls and halogenated hydrocarbons. Accordingly, for a given sample, the sum of concentrations of speciated compounds in a typical SNMOC analysis will always be lower than the total NMOC concentration measured using method TO-12, as decribed in Section 2.4.1.

Like the NMOC concentrations, the SNMOC concentrations also are expressed in units of ppbC—a convention typically followed for measurements involving FIDs. As noted in "The Importance of Units of Measurement" sidebar, these SNMOC concentrations can easily be converted to other units typically used to quantify ambient air concentrations, such as parts per billion on a volume basis (ppbv) or micrograms per cubic meter ($\mu g/m^3$). This report follows the standard convention of reporting SNMOC concentrations in units of ppbC.

2.4.3 VOCs

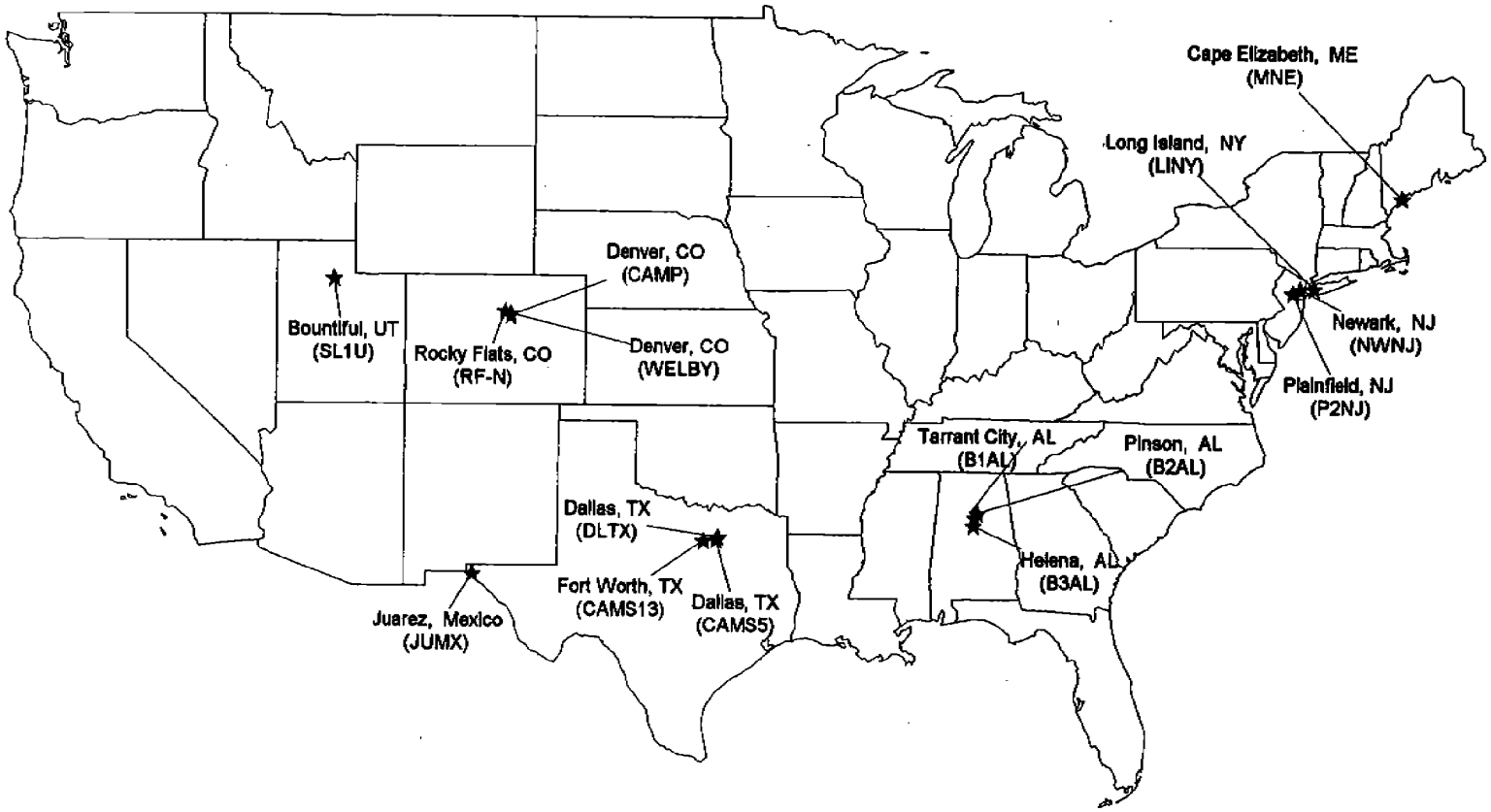
Ambient air concentrations of selected VOCs were measured using EPA Compendium Method TO-14 (USEPA, 1984a). This method follows the same protocol for sampling ambient air as the NMOC and SNMOC methods: the sampling apparatus delivers an integrated volume of

ambient air into a passivated stainless steel canister. During analysis, the air from the canisters 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 cannot be measured using the other sampling and analytical methods (such as halogentated hydrocarbons). Table 2-6 lists these 38 compounds along with their respective detection limits. All concentrations of VOCs are reported in units of ppbv.

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 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 1996 NMOC/SNMOC Monitoring Stations



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

Table 2-1
Site Descriptions for the 1996 NMOC/SNMOC Monitoring Stations

1996 NMOC/ SNMOC Site Code	AIRS Site Code	Location	AIRS Site Descriptions [a]	
			Land Use	Population Density
B1AL	01-073-6002	Tarrant City, AL	residential	suburban
B2AL	01-073-5002	Pinson, AL	residential	rural
B3AL	01-117-0004	Helena, AL	agricultural	rural
CAMP	08-031-0002	Denver, CO	commercial	urban
CAMS5	48-113-0045	Dallas, TX	residential	urban
CAMS13	48-439-1002	Fort Worth, TX	commercial	urban
DLTX	48-113-0069	Dallas, TX	commercial	urban
JUMX	80-006-0001	Juarez, Mexico	commercial	urban
LINY	36-059-0005	Long Island, NY	commercial	suburban
MNE	23-005-2003	Cape Elizabeth, ME	residential	rural
NWNJ	34-013-0011	Newark, NJ	industrial	urban
P2NJ	34-039-5001	Plainfield, NJ	residential	suburban
SL1U	49-011-0001	Bountiful, UT	commercial	suburban
RF-N	08-059-0006	Rocky Flats, CO	industrial	rural
WELBY	08-001-3001	Denver, CO	agricultural	rural

[a] Data in these columns indicate the land use and population density in the immediate vicinity of the monitoring stations.

Table 2-2
Monitoring Options Selected During the 1996 NMOC/SNMOC Program

ERG Site Code	Monitoring Location	Monitoring Options Selected			
		NMOC	SNMOC	VOC	Carbonyl
B1AL	Tarrant City, AL		✓	✓	
B2AL	Pinson, AL		✓	✓	
B3AL	Helena, AL		✓	✓	
CAMP	Denver (1), CO		✓	✓	✓
CAMS5	Dallas (1), TX		✓		✓
CAMS13	Fort Worth, TX		✓		✓
DLTX	Dallas (2), TX		✓		✓
JUMX	Juarez, Mexico		✓		
LINY	Long Island, NY	✓			
MNE	Cape Elizabeth, ME				✓
NWNJ	Newark, NJ	✓	✓	✓	✓
P2NJ	Plainfield, NJ	✓	✓	✓	✓
RF-N	Rocky Flats, CO		✓		
SL1U	Bountiful, UT	✓	✓		
WELBY	Denver (2), CO		✓	✓	✓

Table 2-3
Sampling Schedules Implemented During the 1996 NMOC/SNMOC Program

Monitoring Option	Monitoring Location	Sampling Schedules
NMOC	Bountiful, UT Long Island, NY Newark, NJ Plainfield, NJ	All sites, except Bountiful, UT, sampled NMOC every weekday of the monitoring program; Bountiful, UT, collected samples daily from June 21 to September 30, 1996.
SNMOC	Dallas (1), TX Dallas (2), TX Fort Worth, TX Helena, AL Newark, NJ Pinson, AL Plainfield, NJ Tarrant City, AL	Sites sampled SNMOC every weekday of the monitoring program.
	Juarez, Mexico	Site sampled SNMOC every weekday of the monitoring program, except from July 25 through August 4, 1996, when the monitoring station was relocated.
	Denver (1), CO Denver (2), CO	Sites sampled SNMOC every other weekday from July 10 through September 18, 1996.
	Bountiful, UT Rocky Flats, CO	Sites collected between 5 and 10 SNMOC samples over the course of the entire program.
VOC	Denver (1), CO Denver (2), CO Helena, AL Newark, NJ Pinson, AL Plainfield, NJ Tarrant City, AL	Sites collected between 5 and 10 VOC samples over the course of the entire program.
Carbonyl	Dallas (1), TX Dallas (2), TX Denver (1), CO Denver (2), CO Fort Worth, TX Newark, NJ Plainfield, NJ	Sites collected between 5 and 10 carbonyl samples over the course of the entire program.
	Cape Elizabeth, ME	Site collected 20 carbonyl samples as a special study.

Notes: Unless otherwise noted, "the entire program" refers to June 1 through September 30, 1996. "Samples" in this table refers to unique sampling dates. Samples that were collected in duplicate or analyzed in replicate are treated in this table as one unique sample.

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	Gas chromatography with mass selective detection and flame ionization detection	High-performance liquid chromatography with ultraviolet detection
Output of analysis	Concentration of the total amount of non-methane 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 reports concentrations of 80 different compounds for each sample. The method cannot differentiate acetylene from ethane, isobutene from 1-butene, and *m*-xylene from *p*-xylene. Therefore, a single concentration is reported for these pairs.
[c] The VOC analytical method reports concentrations of 37 different compounds 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 reports concentrations of 13 different compounds 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/Ethane	0.62	Methylcyclohexane	3.72
Benzene	2.13	Methylcyclopentane	2.13
1,3-Butadiene	0.20	2-Methylheptane	4.73
n-Butane	0.20	3-Methylheptane	4.73
cis-2-Butene	0.20	2-Methylhexane	3.72
trans-2-Butene	0.20	3-Methylhexane	3.72
Cyclohexane	2.13	2-Methylpentane	2.13
Cyclopentane	0.37	3-Methylpentane	2.13
Cyclopentene	0.37	2-Methyl-1-Pentene	2.13
n-Decane	4.60	4-Methyl-1-Pentene	2.13
1-Decene	4.60	*n*-Nonane	4.60
m-Diethylbenzene	4.60	1-Nonene	4.60
p-Diethylbenzene	4.60	*n*-Octane	4.73
2,2-Dimethylbutane	2.13	1-Octene	4.73
2,3-Dimethylbutane	2.13	*n*-Pentane	0.37
2,3-Dimethylpentane	3.72	1-Pentene	0.37
2,4-Dimethylpentane	3.72	*cis*-2-Pentene	0.37
n-Dodecane	4.60	*trans*-2-Pentene	0.37
1-Dodecene	4.60	*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
3-Methyl-1-Butene	0.37		

Reference: FR,1984.

Table 2-6
VOC Detection Limits

Compound	Detection Limit (ppbv)
Acetylene	0.12
Benzene	0.24
Bromochloromethane	0.07
Bromodichloromethane	0.09
Bromoform	0.08
Bromomethane	0.18
1,3-Butadiene	0.15
Carbon tetrachloride	0.07
Chlorobenzene	0.06
Chloroethane	0.18
Chloroform	0.06
Chloromethane	0.39
Chloroprene	0.05
Dibromochloromethane	0.05
m-Dichlorobenzene	0.07
o-Dichlorobenzene	0.08
p-Dichlorobenzene	0.06
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	0.08
Methylene chloride	0.16
n-Octane	0.05
Propylene	0.09
Styrene	0.08
1,1,2,2-Tetrachloroethane	0.16
Tetrachloroethylene	0.03
Toluene	0.04
1,1,1-Trichloroethane	0.33
1,1,2-Trichloroethane	0.05
Trichloroethylene	0.05
Vinyl chloride	0.11
m,p-Xylene	0.11
o-Xylene	0.06

Reference: FR,1984

Table 2-7
Carbonyl Detection Limits

Compound	Detection Limit (ppbv)		
	500 liter sample volume	1,000 liter sample volume	1,500 liter sample volume
Acetaldehyde	0.01	0.004	0.003
Acetone	0.01	0.004	0.003
Acrolein	0.01	0.004	0.003
Benzaldehyde	0.03	0.01	0.01
Butyr/Isobutyraldehyde	0.01	0.004	0.003
Crotonaldehyde	0.02	0.01	0.01
2,5-Dimethylbenzaldehyde	0.02	0.01	0.01
Formaldehyde	0.01	0.005	0.003
Hexanaldehyde	0.01	0.003	0.002
Isovaleraldehyde	0.01	0.01	0.005
Propionaldehyde	0.01	0.004	0.003
Tolualdehydes	0.10	0.05	0.03
Valeraldehyde	0.01	0.01	0.005

Note: The carbonyl detection limit varies with the volume of ambient air drawn through the sampling apparatus. Although the target sample volume for carbonyl monitoring was 1,000 liters, the sample volumes observed during this program ranged from roughly 500 to 1,500 liters. In the statistical analyses, the documented sample volume was used to identify the corresponding detection limit.

Reference: FR, 1984.

3.0 Data Analysis Methodology

This section presents the data analysis methodology used to summarize and interpret the ambient air monitoring data collected during the 1996 NMOC/SNMOC program. This methodology consists of three different approaches for identifying notable trends and patterns in the monitoring data:

- *Data summary parameters* provide a succinct overview of the monitoring data;
- *Analyses and interpretations* identify significant spatial variations, temporal variations, and statistical correlations; and
- *Data quality parameters* comment on the validity of the interpretations.

The remainder of this section describes in detail how each of these approaches can assist in providing perspective on the 1996 monitoring data. Sections 4 through 7 then use this methodology to thoroughly analyze the NMOC, SNMOC, VOC, and carbonyl monitoring data.

3.1 Data Summary Parameters

No single parameter can completely characterize the results of extensive environmental monitoring studies. Further, listing the results of every sample generally does not provide a meaningful overview of monitoring results. To most efficiently summarize the 1996 NMOC/SNMOC monitoring data, this report uses four basic data summary parameters: prevalence, concentration range, central tendency, and variability. The following subsections define these parameters and explain how they characterize air monitoring data. Sections 4 through 7 then present these summary parameters in a series of tables, one for each monitoring location, to provide a complete but succinct overview of the corresponding monitoring data.

3.1.1 Prevalence

The *prevalence* of air monitoring data refers to the frequency with which compounds, or group of compounds, are detected in ambient air samples. For a given compound, prevalence is typically expressed as the percentage of sampling events in which the compound is detected. For

example, a compound detected in 15 of 20 samples would have a prevalence of 75 percent (15 divided by 20).

Prevalence data are primarily used to give perspective to the validity of data interpretations. Because sampling and analytical methods cannot reliably quantify concentrations of compounds at levels below detection limits, it is important to consider prevalence whenever making conclusions based on ambient air monitoring. For example, long-term averages and statistical correlations for a compound must be interpreted with caution when the prevalence for the compound suggests that a majority of samples were non-detects. Sections 5, 6, and 7 revisit this issue.

As a final note, a prevalence of zero does not necessarily indicate that a compound is not present in ambient air. Rather, compounds with a prevalence of zero may be present in the air, but at levels below the sensitivity of the sampling and analytical methods used in the program.

3.1.2 Concentration Range

For a given compound, the *concentration range* of ambient air monitoring data refers to the span of concentration data, from lowest to highest. The data summary tables in Sections 4 through 7 characterize these ranges by presenting, for every compound, the lowest and the highest concentrations measured at each monitoring station. Because the National Ambient Air Quality Standard (NAAQS) for ozone regulates "peak" or "excursion" levels of ozone in air pollution, the concentration range—particularly the magnitude of the highest concentrations—may be an important factor to consider when examining causes of ozone nonattainment episodes.

The concentration ranges in this report characterize only 3-hour average concentrations collected between June 1 and September 30, 1996. Ambient air concentrations of hydrocarbons, VOCs, and carbonyls may rise to higher levels during other times of day and other times of year.

Nonetheless, the concentration ranges presented in Sections 4 through 7 indicate the span of ambient air quality expected to occur during the summer months.

3.1.3 Central Tendency (Long-Term Averages)

The *central tendency* of air monitoring data gives a sense of long-term average ambient air concentrations. Such data are of particular use to state and local agencies because many regulatory standards and health guidelines are based on central tendency concentrations, such as annual averages, rather than maximum or peak concentrations. Further, analyzing central tendencies may indicate how levels of air pollution change over the longer term. The following paragraphs review different approaches for estimating central tendencies and explain how this report presents central tendency results.

Ambient air monitoring reports generally use medians, arithmetic means, and geometric means to characterize central tendencies for distributions of concentrations. Despite their common use, however, these three parameters may have significantly different values for the same distribution of ambient air concentrations. By definition, medians and arithmetic means best represent central tendencies of normally distributed data, while geometric means best represent central tendencies of lognormally distributed data. Previous NMOC/SNMOC monitoring efforts (ERG, 1996) and other EPA monitoring programs (ERG, 1997) have indicated that ambient air monitoring data typically fit lognormal distributions better than normal distributions, thus suggesting that geometric means characterize central tendencies better than medians and arithmetic means. Nonetheless, Sections 4 through 7 of this report present the median, arithmetic mean, and geometric mean concentrations for every compound to enable the reader to compare central tendencies for the 1996 NMOC/SNMOC monitoring results with central tendencies reported in other studies.

All three central tendency parameters were calculated by first manipulating the data to assign numerical values to all non-detects, duplicate sampling events, and replicate laboratory analyses. Consistent with previous NMOC/SNMOC monitoring efforts (ERG, 1996) and

recommended approaches for conducting risk assessments involving environmental monitoring data (USEPA, 1989), this study assigns each non-detect observation a concentration equal to one-half the detection limit. Further, the results of all duplicate sampling events and replicate laboratory analyses are averaged such that only one concentration was considered for each sampling date. These data manipulation conventions have significant impact on the calculated central tendencies only for compounds detected in a minority of the samples.

The central tendencies in this report are based only on ambient air concentrations sampled between June 1 and September 30, 1996. Because concentrations for many compounds are known to decrease during the colder winter months (ERG, 1997), the reader must use caution when comparing the central tendencies indicated by the NMOC/SNMOC monitoring program to central tendencies indicated by *annual* air monitoring efforts.

3.1.4 Variability

Data *variability* refers to the spread of data observations about their central tendency value. Variability in ambient air monitoring data indicates the extent to which concentrations of certain compounds fluctuate with time. Such information may be useful to researchers who study how changes in emission rates and meteorological conditions affect ambient air quality.

This report characterizes data variability using two common statistical parameters: the standard deviation and the coefficient of variation. By definition, low standard deviations indicate distributions with most observations clustered about the central tendency value, and high standard deviations indicate distributions with greater variability and numerous outlier observations. Because the magnitude of the standard deviation varies with the magnitude of the central tendency, the standard deviation generally cannot be used to compare the variability of one data set to the variability of another. The coefficient of variation, on the other hand, expresses the standard deviation as a percentage of the arithmetic mean and, therefore, indicates variability on a uniform scale that can be readily compared across data distributions for different sites and

compounds. Sections 4 through 7 further discuss how these variability parameters relate to the 1996 NMOC/SNMOC air monitoring data.

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 the composition and magnitude of air pollution vary from one monitoring location to the next and from one calendar year to the next. These spatial and temporal variations may ultimately help state and local agencies identify specific emission sources that contribute most significantly to ozone formation processes. The following subsections describe the methods used to identify and interpret the spatial and temporal variations in the 1996 NMOC/SNMOC monitoring results.

3.2.1 Spatial Variations

Many different factors affect the levels of air pollution observed at a given location. These factors include, but are not limited to, proximity to industrial, motor vehicle, and natural emission sources; local meteorological conditions; and nearby geographic features, such as mountain ranges. To make sense of spatial variations in ambient air quality, this report considers how these and other factors affect the 1996 NMOC/SNMOC monitoring data. The following paragraphs outline the methodology used in Sections 4 through 7 to address spatial variations.

3.2.1.1 Emission Inventories

Compounds found in ambient air samples generally originate from emission sources or from photochemical reactions involving other air pollutants that produce compounds in the atmosphere. To evaluate the significance of emission sources on air quality, this report uses two national emission inventories to provide a context for the monitoring data:

- *Toxic Release Inventory (TRI)*. This report uses TRI data to assess the extent to which emissions from selected industrial facilities affect ambient air quality. As required by Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA), industrial facilities that meet certain application criteria must

submit to EPA reports documenting their releases of hazardous chemicals to air, soil, and water. These reporting requirements currently do not apply to several industries known to emit large quantities of compounds (e.g., electric utilities) and do not address all of the compounds considered in the NMOC/SNMOC monitoring program. This report considers only TRI data from reporting year 1994, the most current data available.

- *National Emissions Trends (NET) Inventory.* This report uses the NET inventory to interpret the impact of chemical emissions on levels of air pollution. Compiled from emission inventories developed by EPA, state agencies, and selected federal research initiatives, the NET inventory is a composite national inventory that characterizes emissions not only from industrial sources, but also from motor vehicle and natural sources. The NET inventory does not provide compound-specific emissions data, but rather reports emissions for certain groups of pollutants, like VOCs and particulate matter. These emissions are reported as aggregate amounts at the county level. This report considers only NET inventory data from 1990, the most current data available.

Although their accuracy is not known, the TRI and NET inventories provide insight into the composition and magnitude of local air pollution. Sections 4 through 7 consider, as appropriate, the TRI or NET emissions data when interpreting spatial variations in ambient air quality.

3.2.1.2 Local Meteorology

Local meteorological conditions largely determine how rapidly photochemical reactions consume and produce airborne pollutants as well as how efficiently emissions disperse by convection and diffusion. Although a detailed atmospheric dispersion modeling analysis for every monitoring location is beyond the scope of the current work, this report does consider how general trends in local meteorological conditions might explain certain patterns in the NMOC/SNMOC monitoring data. In particular, Sections 4 through 7 examine how temperature, wind speed, and wind direction might influence the magnitude of air pollution measured at each monitoring location. In these analyses, wind data are summarized using windroses, or diagrams indicating the statistical distribution of wind speeds and directions. All meteorological data considered in this report were collected between June 1 and September 30, 1996, at

meteorological stations that are near corresponding NMOC/SNMOC monitoring stations and that submit daily summary reports to the National Climatic Data Center (NCDC).

Sections 4 through 7 do not address meteorological parameters, such as mixing heights and upper atmosphere wind patterns, that may affect *long-range* transport of ozone or ozone precursors. Although these additional parameters were not readily available at the writing of this report, state and local agencies should consider such indicators of long-range transport when developing and implementing ozone control strategies.

3.2.1.3 Composition of Air Samples

Like the *magnitude* of air pollution, the *composition* also varies from one location to the next. The following discussion explains how understanding the composition of air pollution plays an important role in understanding and appreciating the sources that contribute to levels of air pollution:

- *Composition of paraffins, olefins, and aromatics.* This analysis breaks the overall NMOC/SNMOC monitoring results into contributions from paraffinic, olefinic, and aromatic compounds. As discussed in greater detail in Section 3.2.1.4, current research shows that olefinic and aromatic compounds are significantly more reactive in air than paraffinic compounds. If state and local environmental agencies knew the relative abundances of these three classes of hydrocarbons, they could better focus air pollution prevention policies specifically on compound categories that have the greatest impact on air quality.

- *Composition of isoprene and other naturally occurring compounds.* This analysis indicates how the composition of isoprene—the compound most widely emitted from natural sources (Sonoma, 1996)—varies from one monitoring location to the next. These compositions clearly indicate whether emissions from natural sources significantly affect ambient air quality. By using data correlation techniques, this analysis also identifies compounds other than isoprene that are emitted in large quantities from natural sources.

- *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. This group of aromatic hydrocarbons is

commonly referred to as BTEX compounds. Because a previous ambient air monitoring study of the impact of motor vehicle emissions on ambient air quality reported relatively constant concentration ratios for these compounds (Conner, Lonneman, Seila, 1995), this report uses BTEX ratios as an indicator of the extent to which emissions from motor vehicles affect ambient air concentrations at the NMOC/SNMOC monitoring stations.

Because the total NMOC monitoring method does not measure composition and because the VOC and carbonyl options do not include enough samples for a statistically significant analysis of composition, this report uses only the SNMOC monitoring results to analyze trends in the composition of air pollution. When using SNMOC data, however, it is important to note that "composition" indicates only the relative magnitude of a given compound among the 80 different C_2 through C_{12} hydrocarbon species identified in each SNMOC sample. Because the SNMOC analytical method does not identify every compound in ambient air samples, the "compositions" in these analyses are not necessarily equivalent to actual compositions present in ambient air.

3.2.1.4 Ozone Formation Potential

To highlight the relevance of SNMOC monitoring data to ozone control strategies, this report indicates how state and local environmental agencies can use the air quality data to predict the ozone formation potential of ambient air. Using an approach recently published in the scientific literature (Carter, 1994), this analysis uses the "maximum incremental reactivity" (MIR) of each SNMOC compound to identify compounds that have the greatest potential for forming ozone in the atmosphere. These MIRs (shown in Table 3-1) quantify the relative increase in atmospheric ozone levels expected to occur following incremental increases in ambient air concentrations of selected compounds. Accordingly, for two compounds with the same ambient concentration, the compound with the higher MIR has more pronounced impacts on ozone levels than the compound with the lower MIR. Because the compounds considered in this report generally have different concentrations, however, this report uses an "ozone index" to compare ozone formation potentials for the different pollutants. This ozone index is defined as the product of the concentration of a given compound and its corresponding MIR. Sections 5 and 6 use these MIRs to relate SNMOC and VOC monitoring results to ozone formation processes.

3.2.2 Temporal Variations

The following discussion presents the techniques used in Sections 4 through 7 to understand the significance of temporal variations in the SNMOC monitoring data. Local and state environmental agencies should be particularly interested in these variations because they may indicate the impact of air pollution control initiatives on long-term trends in air pollution. Because the monitoring stations sample ambient air only from 6:00 to 9:00 AM 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 (see Table 3-2), the monitoring data also can be used to evaluate how air quality changes over longer time scales.

Whether considering monthly or annual variations, Sections 4 through 7 of this report examine time sequences only for geometric mean concentrations. As noted in Section 3.1.3, geometric mean concentrations characterize central tendencies of air monitoring data and therefore best indicate how *overall* levels of air pollution vary with time. These time sequences identify statistically significant changes in levels of air pollution over the long term.

3.3 Data Quality Parameters

The validity of conclusions suggested by ambient air monitoring data is ultimately limited by the validity of the individual monitoring measurements. To characterize the quality of the 1996 NMOC/SNMOC monitoring measurements, Sections 4 through 7 review the completeness, precision, and accuracy of the corresponding sampling and analytical methods. The following paragraphs discuss the significance of these data quality parameters.

3.3.1 Completeness

The *completeness* of ambient air monitoring programs refers to the fraction of attempted sampling events that result in either quantified concentrations or non-detects. Due to a variety of sampling or analytical errors, not all the samples for the various monitoring options were collected

and analyzed as scheduled. Sections 4 and 5 present completeness data for those monitoring locations that collected NMOC or SNMOC samples on a regular basis; Sections 6 and 7 do not present completeness results because the VOC and carbonyl monitoring options involved collecting and analyzing a fixed number of samples (generally, fewer than 10) according to schedules specified by the sponsoring agency. Although completeness data do not quantify how precisely or accurately the monitoring methods measure ambient concentrations, 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.

3.3.2 Precision

Precision refers to the mutual agreement between independent measurements performed according to identical protocols and procedures. In the context of ambient air monitoring, precision measures the variability observed upon duplicate collection or repeated analysis of ambient air samples. The presence of random errors inherent to the sampling and analytical methods listed in Section 2.4 ultimately determines the magnitude of the corresponding method precision. This report compares concentrations generated during replicate analyses to quantify "analytical precision" and concentrations generated by duplicate samples to quantify "sampling precision." For any pair of duplicate samples or replicate analyses, this report quantifies precision by computing a relative percent difference (RPD):

$$RPD = \frac{|X_1 - X_2|}{X}$$

Where: X_1 and X_2 are ambient air concentrations of the same compound determined from replicate analyses or duplicate samples; and X is the arithmetic mean of X_1 and X_2. As shown in the equation, pairs of observations with low variability have lower RPDs (and better precision), and pairs of observations with high variability have higher RPDs (and poorer precision).

Based on the individual RPDs, overall estimates of method precision were calculated as follows: (1) program average analytical precision was determined by averaging the RPDs for each replicate analysis; and (2) program average sampling precision was determined by averaging the RPDs

for each duplicate sample. Sections 4 through 7 discuss the significance of these results for the four corresponding monitoring methods.

3.3.3 Accuracy

Accuracy indicates the extent to which experimental measurements 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. The accuracy of air monitoring efforts typically is evaluated using external audit approaches, such as analyzing audit samples or standards of known concentration. Although no external audit samples were provided during the 1996 NMOC/SNMOC program, all field sampling staff and laboratory analysts strictly followed established quality control and quality assurance guidelines to ensure that all samples were collected and analyzed according to the specifications of the respective monitoring methods. Sections 4 through 7 reiterate this assessment of the accuracy.

Table 3-1
Maximum Incremental Reactivities (MIRs) for SNMOC compounds

Compound	MIR (mole ozone/mole compound)	Compound	MIR (mole ozone/mole compound)
Acetylene/Ethane	0.14/0.08	Methylcyclohexane	0.53
Benzene	0.11	Methylcyclopentane	0.82
1,3-Butadiene	NA	2-Methylheptane	0.29
n-Butane	0.31	3-Methylheptane	0.29
cis-2-Butene	2.92	2-Methylhexane	0.32
trans-2-Butene	2.92	3-Methylhexane	0.42
Cyclohexane	0.37	2-Methylpentane	0.45
Cyclopentane	0.70	3-Methylpentane	NA
Cyclopentene	2.19	2-Methyl-1-Pentene	NA
n-Decane	0.17	4-Methyl-1-Pentene	1.29
1-Decene	NA	*n*-Nonane	NA
m-Diethylbenzene	NA	1-Nonene	NA
p-Diethylbenzene	NA	*n*-Octane	0.18
2,2-Dimethylbutane	0.25	1-Octene	NA
2,3-Dimethylbutane	0.32	*n*-Pentane	0.31
2,3-Dimethylpentane	0.39	1-Pentene	1.81
2,4-Dimethylpentane	0.45	*cis*-2-Pentene	2.57
n-Dodecane	NA	*trans*-2-Pentene	2.57
1-Dodecene	NA	*a*-Pinene	NA
2-Ethyl-1-Butene	NA	*b*-Pinene	NA
Ethylbenzene	0.75	Propane	0.15
Ethylene	2.16	*n*-Propylbenzene	0.58
m-Ethyltoluene	NA	Propylene	2.75
o-Ethyltoluene	NA	Propyne	NA
p-Ethyltoluene	NA	Styrene	NA
n-Heptane	0.24	Toluene	0.74
1-Heptene	NA	*n*-Tridecane	NA
n-Hexane	0.29	1-Tridecene	NA
1-Hexene	NA	1,2,3-Trimethylbenzene	2.60
cis-2-Hexene	1.96	1,2,4-Trimethylbenzene	2.45
trans-2-Hexene	1.96	1,3,5-Trimethylbenzene	2.81
Isobutane	0.37	2,2,3-Trimethylpentane	NA
Isobutene/1-Butene	2.6	2,2,4-Trimethylpentane	0.28
Isopentane	0.41	2,3,4-Trimethylpentane	0.48
Isoprene	2.58	*n*-Undecane	0.12
Isopropylbenzene	0.60	1-Undecene	NA
2-Methyl-1-Butene	NA	*m,p*-Xylene	2.05
2-Methyl-2-Butene	1.87	*o*-Xylene	NA
3-Methyl-1-Butene	NA		

Reference: USEPA, 1996.
Note: Compounds with MIR of "NA" do not have a maximum incremental reactivity listed in the reference.

Table 3-2
Summary of Historical Monitoring Data Available for the 1996 NMOC/SNMOC Monitoring Locations

NMOC/ SNMOC Site Code	Location	NMOC/SNMOC Monitoring History								
		1988	1989	1990	1991	1992	1993	1994	1995	1996
B1AL	Tarrant City, AL					✓	✓	✓	✓	✓
B2AL	Pinson, AL					✓	✓	✓	✓	✓
B3AL	Helena, AL					✓	✓	✓	✓	✓
CAMP	Denver, CO									✓
CAMS5	Dallas, TX									✓
CAMS13	Fort Worth, TX					✓	✓	✓	✓	✓
DLTX	Dallas, TX		✓				✓		✓	✓
JUMX	Juarez, Mexico				✓	✓	✓		✓	✓
LINY	Long Island, NY			✓	✓	✓	✓	✓	✓	✓
MNE	Cape Elizabeth, ME									✓
NWNJ	Newark, NJ	✓	✓	✓	✓	✓	✓	✓	✓	✓
P2NJ	Plainfield, NJ	✓	✓	✓	✓	✓	✓	✓	✓	✓
SL1U	Bountiful, UT					✓				✓
RF-N	Rocky Flats, CO									✓
WELBY	Denver, CO									✓

Note: Check marks indicate that the station participated in some option (total NMOC, SNMOC, VOC, or carbonyl) of the NMOC/SNMOC monitoring program during the noted year.

4.0 Analysis of Total NMOC Monitoring Results

This section summarizes and analyzes the total NMOC monitoring data collected during the 1996 NMOC/SNMOC program. As noted in Section 2.4.1, the total NMOC sampling and analytical method measures levels of a wide range of organic compounds—paraffins, olefins, aromatics, oxygenates, and halogenated hydrocarbons—that are commonly found in emissions from industrial facilities, motor vehicles, and natural sources. In short, the total NMOC monitoring results characterize *overall* levels of air pollution at a given monitoring station. The following discussion uses the data analysis methodology presented in Section 3 to identify and interpret noteworthy trends in the NMOC monitoring data. For quick reference, Section 4.5 reviews the most significant findings.

4.1 Data Summary Tables

Using the data summary parameters discussed in Section 3.1, Table 4-1 efficiently summarizes the total NMOC monitoring results collected at the four stations that selected this monitoring option. The following observations are immediately apparent upon review of Table 4-1:

- *Prevalence.* All the total NMOC concentrations were measured at levels well above the estimated method detection limit of 0.005 ppmC (or 5 ppbC). Accordingly, the variability known to result when concentrations approach their detection limits should have little effect on the total NMOC measurements.

- *Concentration range.* With one exception, the lowest total NMOC concentrations shown in Table 4-1 are comparable across all four stations. At the Newark monitoring station, however, the lowest concentration was nearly 50 percent higher than the lowest values observed at the other sites. This difference indicates that ambient air in the Newark area may have higher baseline levels of total NMOC.

  Again with one exception, the highest total NMOC concentrations are comparable across the monitoring stations. At the Long Island monitoring station, the highest concentration was significantly lower than those measured at the other stations. This difference suggests that air pollution "episodes" in 1996 near the Long Island station were not as severe as those near the other sites.

- *Central tendency.* The geometric mean concentrations for total NMOC at the Bountiful, Newark, and Plainfield monitoring stations are all within 5 percent of 0.40 ppmC, while the geometric mean concentration at the Long Island station, 0.29 ppmC, is more than 25 percent lower. The difference suggests that overall levels of air pollution near the Long Island station are consistently lower than the levels observed at the other three stations.

- *Variability.* The standard deviations in total NMOC concentrations are all on the same order of magnitude as their corresponding geometric mean—a trend suggesting that levels of NMOC in ambient air vary significantly throughout the summer months. The coefficients of variation are all within 10 percent of 0.60, indicating that no one monitoring station has notably higher or lower variability than the others.

The following analyses of spatial variations, temporal variations, and data quality parameters provide additional context for the NMOC air quality trends indicated by the data summary tables.

4.2 Spatial Variations

To explain why total NMOC concentrations vary from one monitoring location to the next, the following paragraphs assess the extent to which nearby emission sources, local meteorological conditions, and geographical features affect ambient air quality at the four monitoring stations that measured NMOC.

4.2.1 Emission Inventories

Both the TRI and NET emission inventories are useful tools for interpreting spatial variations in total NMOC concentrations. To identify potential correlations between TRI emissions data and ambient air quality, Figures 4-1 through 4-4 show, for the immediate vicinity of each NMOC monitoring station, locations of industrial facilities that reported air releases of organic compounds to TRI. These maps clearly indicate that the area surrounding the Newark monitoring station has many more industrial facilities than the areas surrounding the other three monitoring stations. Although this distinction may explain why baseline levels of NMOC

concentrations at Newark were significantly greater than those observed at other locations, the TRI data do not adequately explain why geometric mean concentrations at the Bountiful and Plainfield sites are nearly equal to those at the Newark site.

To consider emission sources other than those subject to TRI reporting requirements, Table 4-2 summarizes NET inventory data that characterize VOC emissions from sources in counties immediately surrounding the four NMOC monitoring stations. The table indicates NET emissions data from three source categories: mobile sources (primarily emissions from motor vehicles), point sources (generally emissions documented for certain stack releases, such as at power plants), and area sources (emissions from natural sources and other industrial facilities). The emissions data for each station are the sum of the NET emissions reported for counties with boundaries that intersect a 15-mile radius drawn around each monitoring station. For quick comparison of emissions data, Table 4-2 also assigns ranks to the four monitoring stations based on the corresponding NET emissions levels. Like the TRI data, the NET inventory data also clearly indicate that the highest levels of overall emissions occur in areas immediately surrounding the Newark monitoring station, which again may explain elevated baseline NMOC concentrations at this site. On the other hand, the NET inventory data cannot explain some trends indicated by the data summary parameters:

- Total emissions in the vicinity of the Bountiful site are significantly lower than the emissions near the other sites, but the geometric mean NMOC concentration at Bountiful is relatively high.

- Total emissions in the vicinity of Plainfield, the site with the highest geometric mean concentration of NMOC, rank third among the four NMOC monitoring stations.

- Total emissions in the vicinity of the Long Island station are reported as second highest, even though the corresponding geometric mean concentration of total NMOC is relatively low.

Therefore, even though the TRI and NET emissions inventories explain the elevated total NMOC concentrations measured at Newark, these sources alone cannot account for the trends in air quality observed at the other three sites. The remaining analyses of spatial and temporal variations (particularly Sections 4.2.3 and 4.3), however, help resolve these apparent contradictions.

4.2.2 Local Meteorology

To evaluate the extent to which local meteorological conditions affect the atmospheric dispersion of emissions, this section provides qualitative and quantitative analyses of the correlations between the NMOC data and selected meteorological parameters. The windroses in Figures 4-5 and 4-6, for example, indicate the direction *from which* the prevailing wind blew during the summer of 1996 in the vicinity of the Long Island, Newark, and Plainfield monitoring stations. Wind speed and wind direction data were not readily available from NCDC for the Bountiful site. Two important observations can be inferred from these windroses:

- Winds near the Long Island station during the 1996 monitoring program blew primarily from south to north. The map of this area (see Figure 4-2) indicates that only one major industrial source and no interstate highways are located to the south of the station. In fact, the Atlantic Ocean (which clearly has minimal emissions) is located just over 10 miles south of the monitoring station. Therefore, the lower NMOC concentrations measured at Long Island may result from prevailing winds blowing from directions with few or no emission sources.

- During the summer of 1996, winds near the Newark and Plainfield monitoring stations came primarily from the northwest, the west, the southwest, the south, and the northeast. This observation is particularly significant, as the Plainfield monitoring station is located nearly 20 miles southwest of the Newark monitoring station. Accordingly, the frequent southwesterly winds have the potential to transport emissions from the immediate vicinity of the Plainfield site to Newark, and the frequent northeasterly winds to transport emissions from Newark to Plainfield. Section 4.3 provides a quantitative analysis of how emissions from one area may affect the air quality of the other.

In addition to wind speed and wind direction, local temperatures also influence the nature and magnitude of air pollution. Whereas wind patterns primarily affect atmospheric dispersion, temperature has a stronger impact on the magnitude of emissions. For example, evaporative losses of organic compounds from industrial operations generally increase with temperature. To assess the extent to which temperature affects air quality, this study uses Pearson correlation coefficients to quantify correlations between daily average temperature (as indicated by the NCDC meteorological data) and the daily NMOC measurements. For reference, these coefficients measure the degree of correlation between two variables as follows: two variables with perfectly "negative" relationships (e.g., when one variable increases by a certain amount, the other decreases by the same amount) have Pearson correlation coefficients of -1; and two variables with perfectly "positive" relationships have Pearson correlation coefficients of 1. Table 4-3 summarizes the correlation coefficients between temperature and NMOC concentrations for all four monitoring sites. These coefficients suggest weak, but statistically significant, correlations between temperature and NMOC monitoring data at the Newark and Bountiful sites, and no correlations at the Long Island and Plainfield sites. With only four observations of the temperature-NMOC correlations, however, it is impossible to determine whether the presence or absence of correlations indicates a more widespread trend.

4.2.3 Other Factors

Although proximity to emission sources and patterns in local meteorology largely determine levels of air pollution at particular locations, additional factors, such as proximity to mountain ranges, may also strongly influence ambient air quality. For instance, the Long Island, Newark, and Plainfield sites are all located in relatively flat areas with nearby terrain features generally no greater than 500 feet above the elevation of the monitoring station. The Bountiful site, however, is located at the base of the Wasatch Mountains, which have some peaks well over 2,000 feet higher than the elevation of the monitoring station. When mixing heights do not exceed the elevation of these mountains, the terrain may essentially trap emissions from nearby sources in the lowest levels of the atmosphere. Accordingly, even low levels of emissions at this site may be incapable of dispersing as rapidly as at the other monitoring locations. This

observation probably explains why geometric mean NMOC concentrations measured at Bountiful are as high as those measured at other stations, despite the lower level of emissions indicated in Table 4-2.

4.3 Temporal Variations

This section considers both short-term and long-term variations in NMOC concentrations. To indicate short-term changes that took place during the 1996 monitoring program, Figure 4-7 presents time sequences indicating every measurement taken at all four NMOC monitoring stations during the summer of 1996. These time sequences clearly demonstrate, for all monitoring stations, significant variations in total NMOC concentrations from one day to the next, in addition to the following site-specific trends:

- Concentrations of total NMOC at the Long Island station were significantly higher in September than in the other summer months. In fact, the geometric mean NMOC concentration for all samples collected in September (0.51 ppmC) is more than twice as high as the geometric mean concentration for all samples collected in the other months (0.21 ppmC). Because emissions from industry and motor vehicles are not expected to dramatically increase during the late summer months, the increase in NMOC concentrations may be explained by changing meteorological patterns. Although the NCDC meteorological data collected near the Long Island station suggest that winds during September have a strong northerly component (as opposed to primarily out of the south, as indicated by Figure 4-5), not enough observations are available to determine whether changing wind patterns account for the notable increase in NMOC concentrations at this site. More detailed analyses of site-specific data are necessary to resolve this issue.

- The time sequences shown in Figure 4-7 for the Newark and Plainfield sites have many similar features, including several peak concentrations reported on the same days. To quantify such similarities, a Pearson correlation matrix was calculated to determine whether any pairs of sites have highly correlated monitoring data. As shown in Table 4-4, the Pearson coefficients show a strong positive correlation between NMOC concentrations measured at Newark and those measured at Plainfield, with all other pairs of monitoring stations showing weak, if any, correlations. The high level of correlation between Newark and Plainfield helps reaffirm the hypothesis raised in Section 4.2.2: to a certain extent, emissions sources near Newark affect the air quality at Plainfield, and vice versa.

Like temporal variations over the short term, changes in NMOC over longer time frames provide additional insight into the nature and magnitude of levels of air pollution. Figure 4-8 shows how total NMOC concentrations measured at the Long Island, Newark, and Plainfield monitoring stations have changed from one summer month to the next since 1988. As shown in Table 3-2, the Bountiful monitoring station has participated in only one other year of NMOC monitoring and therefore has insufficient data for evaluating long-term trends. Although Figure 4-8 indicates that geometric mean concentrations of NMOC at the Newark monitoring station have decreased slightly over the past 9 years, similar long-term trends for the Long Island and Plainfield stations are not immediately apparent. The cause of the slight decrease in the Newark area can be determined only by a more detailed review of annual changes in emission inventories and in local meteorological patterns. Conclusive evidence of long-term trends at the other stations, however, can be determined only by continuing to collect and analyze NMOC samples for several more years.

4.4 Data Quality Parameters

Table 4-5 presents data quality parameters for the 1996 NMOC monitoring data. These data indicate that all stations have completeness fractions greater than 90 percent, with an overall program completeness of 94 percent. These high fractions suggest that efficient management and oversight of the 1996 NMOC monitoring stations helped minimize errors in field sampling and laboratory analysis and, therefore, the number of invalid samples. Table 4-5 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 with great precision. As noted in Section 3, the accuracy of these measurements cannot be quantified, as no audit samples were provided during the 1996 NMOC/SNMOC program. Nonetheless, as evidenced by the low variability (high precision) of the NMOC measurements, the field sampling teams and analytical lab personnel strictly adhered to the NMOC monitoring methodology. Therefore, the corresponding data are assumed to accurately represent actual NMOC levels in the ambient air.

4.5 Summary

At the four stations that measured NMOC concentrations during the summer of 1996, geometric mean concentrations ranged from 0.29 to 0.41 ppmC, with no individual concentration lower than 0.069 ppmC or higher than 1.72 ppmC. The analyses and interpretations in this section suggest that many different factors affect the levels of air pollution. Although emissions data offer a convenient explanation for some of the air quality observations (e.g., the elevated baseline levels at Newark), these data alone cannot explain every trend in the NMOC monitoring data. Only by considering many additional factors, such as local meteorology, geographical features, and long-range transport, can the NMOC monitoring results be analyzed properly.

Figure 4-1
Facilities in the Vicinity of the Bountiful, Utah (SL1U) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

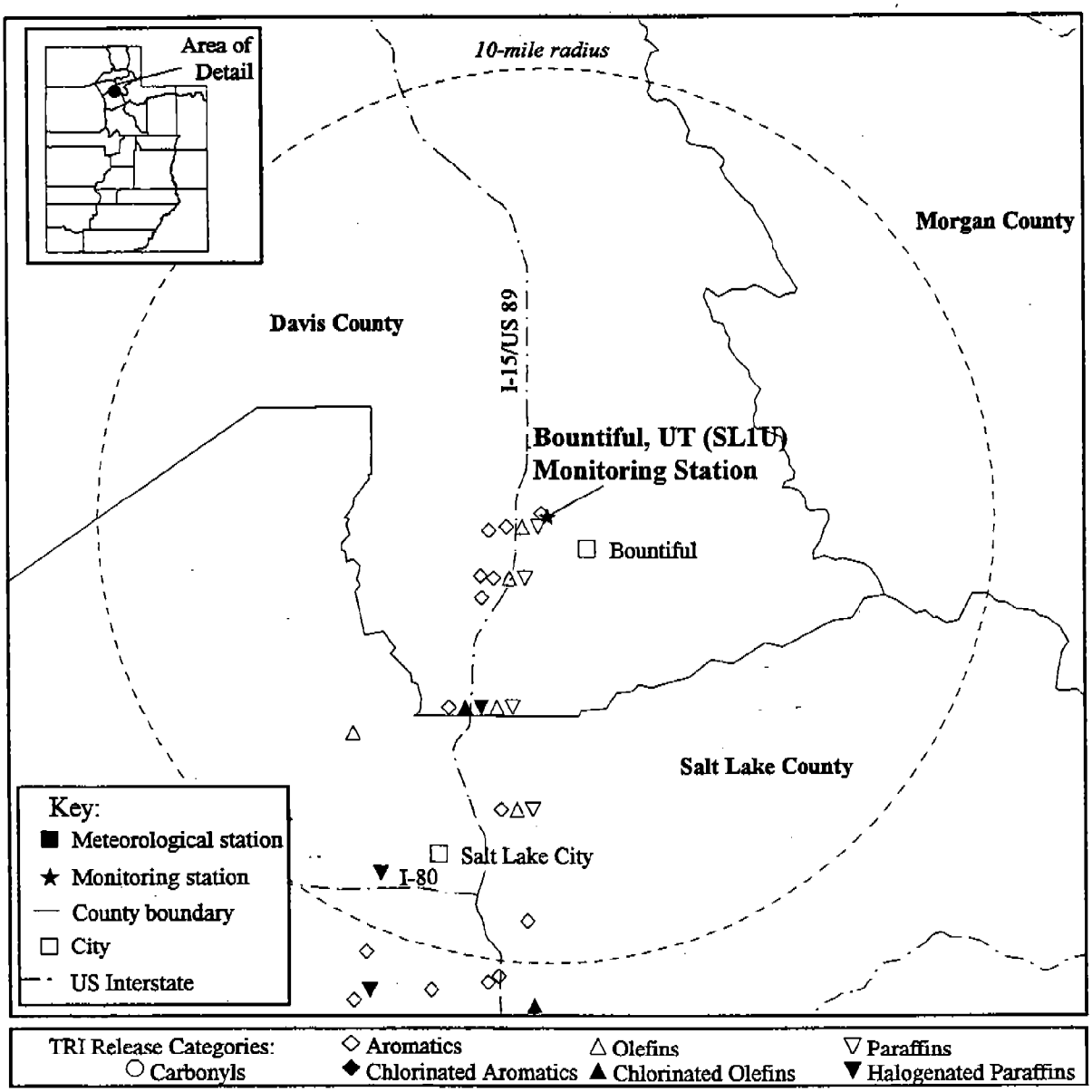


Figure 4-2
Facilities in the Vicinity of the Long Island, New York (LINY) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

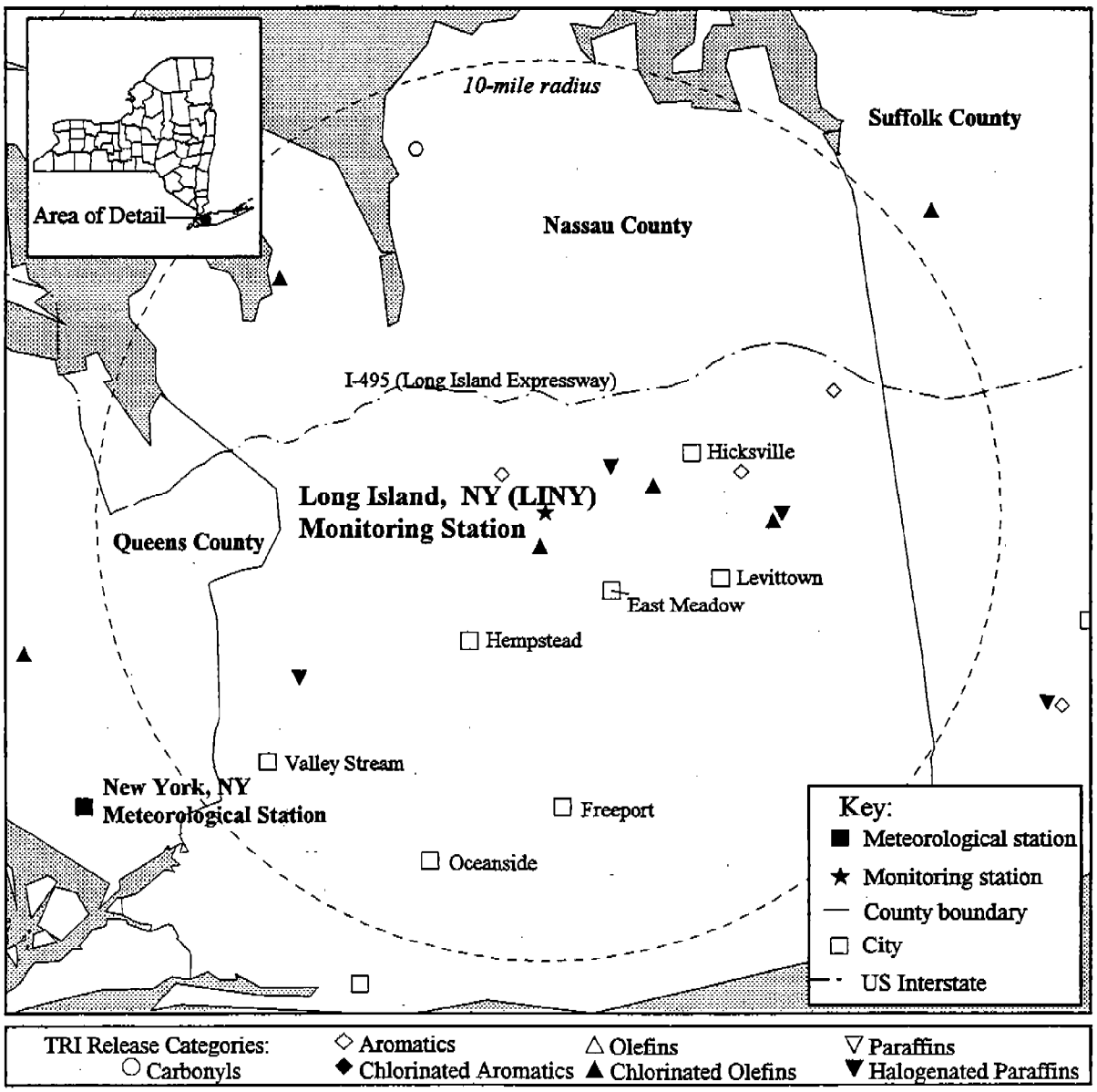


Figure 4-3
Facilities in the Vicinity of the Newark, New Jersey (NWNJ) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

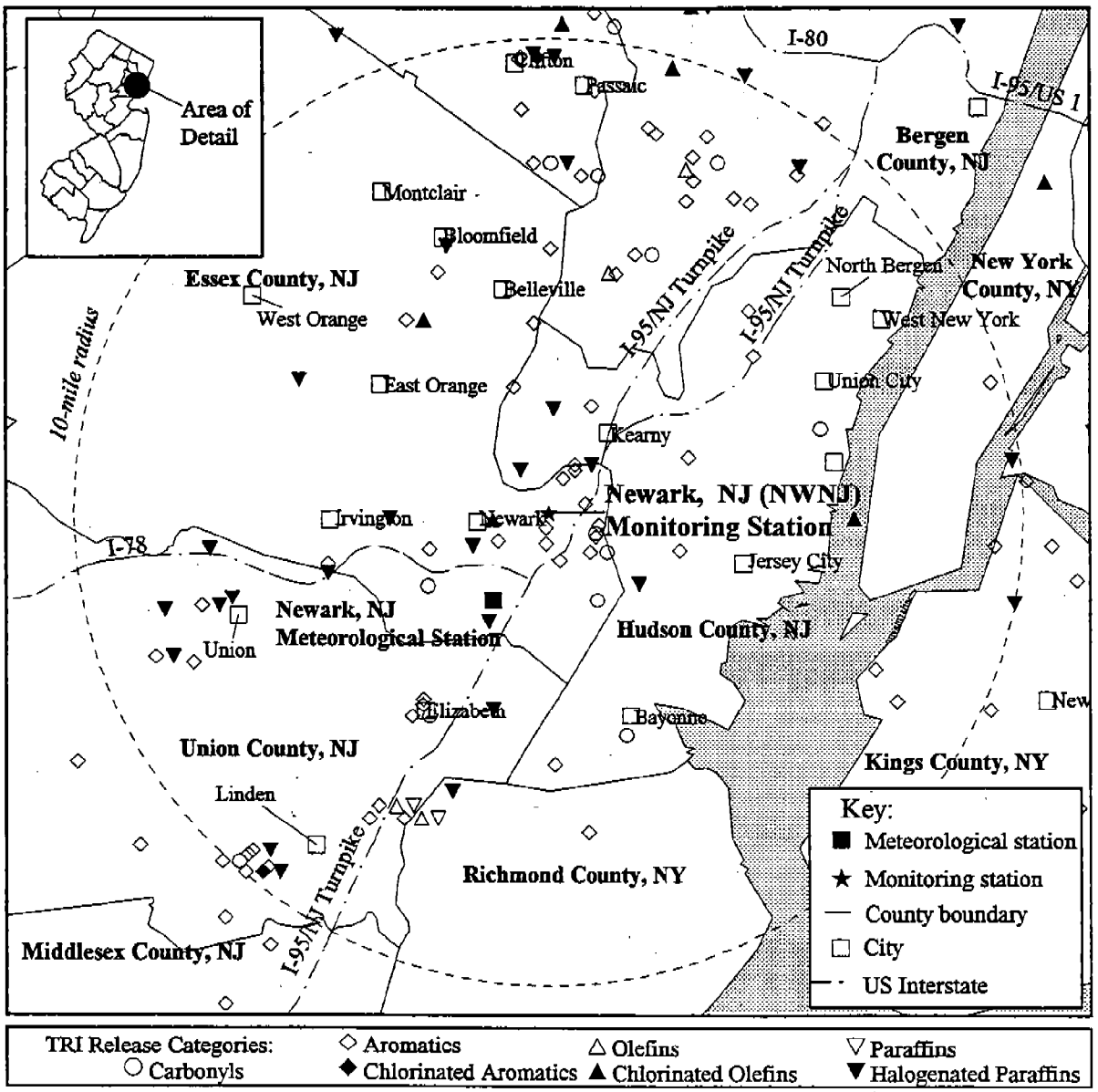


Figure 4-4
Facilities in the Vicinity of the Plainfield, New Jersey (P2NJ) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

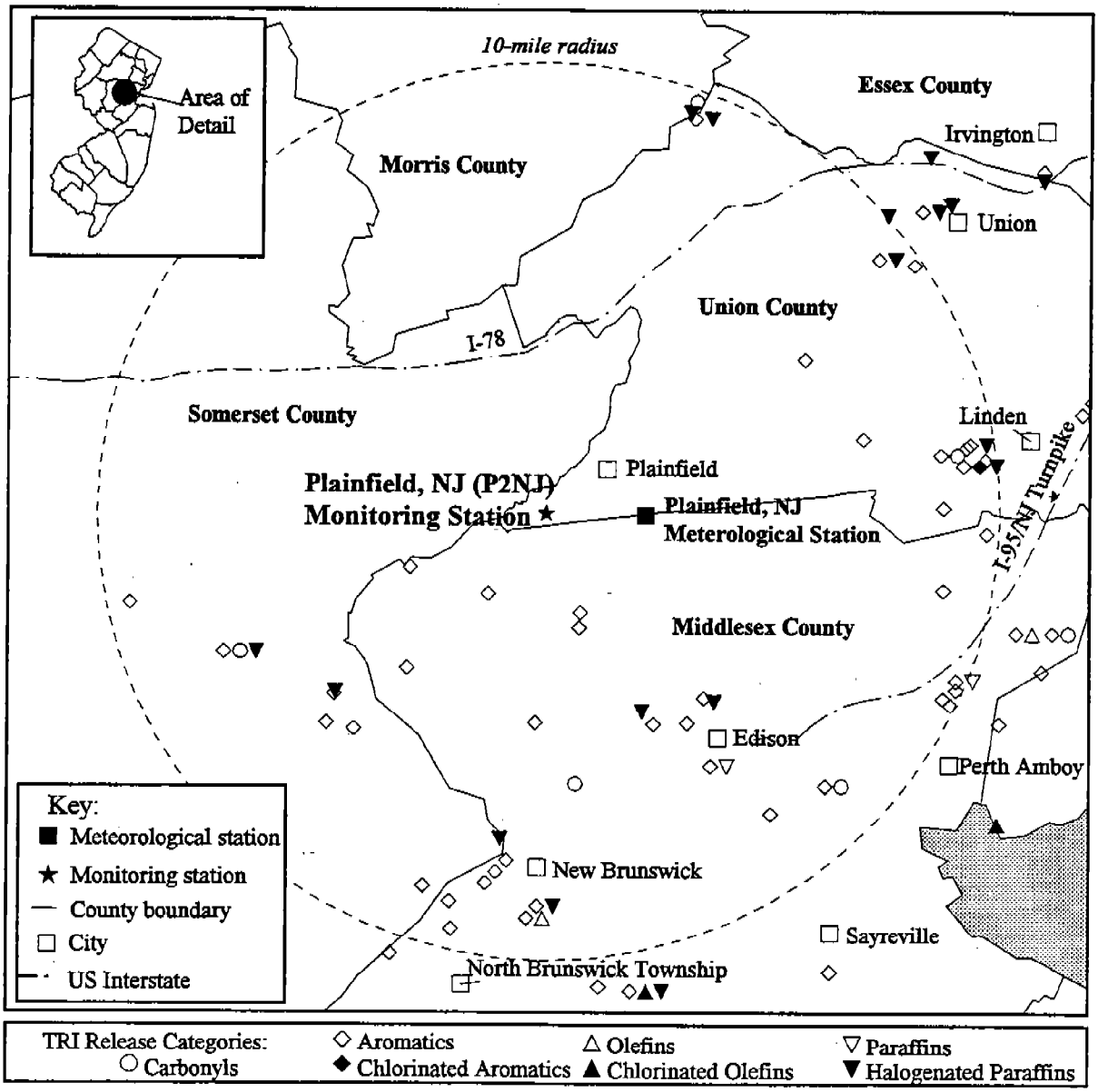
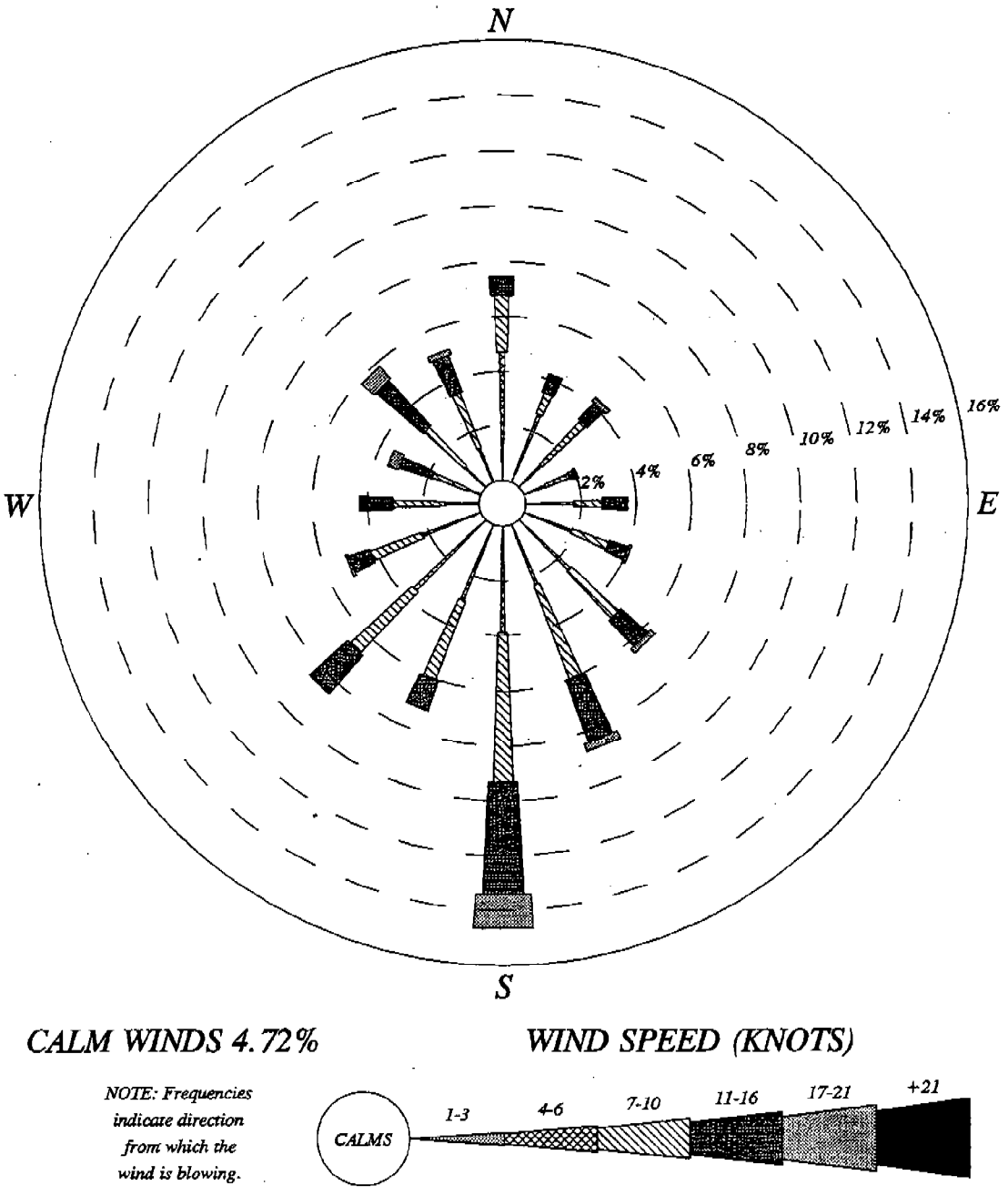
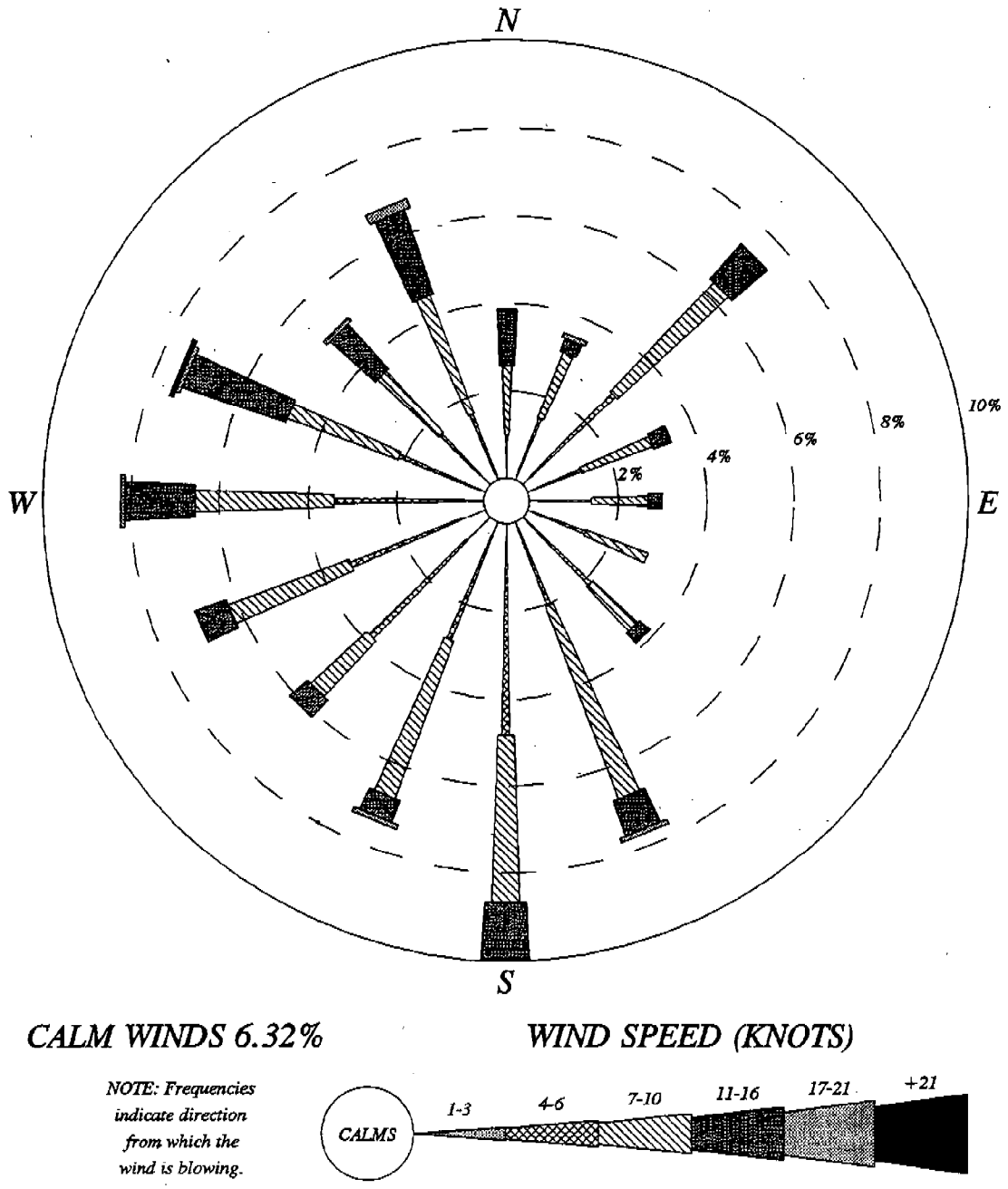


Figure 4-5
Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the John F. Kennedy Airport (near the Long Island Monitoring Station)



Source: Data provided by the National Climatic Data Center.

Figure 4-6
Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Newark International Airport (near the Newark and Plainfield Monitoring Stations)



Source: Data provided by the National Climatic Data Center.

Figure 4-7
Time Sequences for the 1996 Total NMOC Monitoring Data

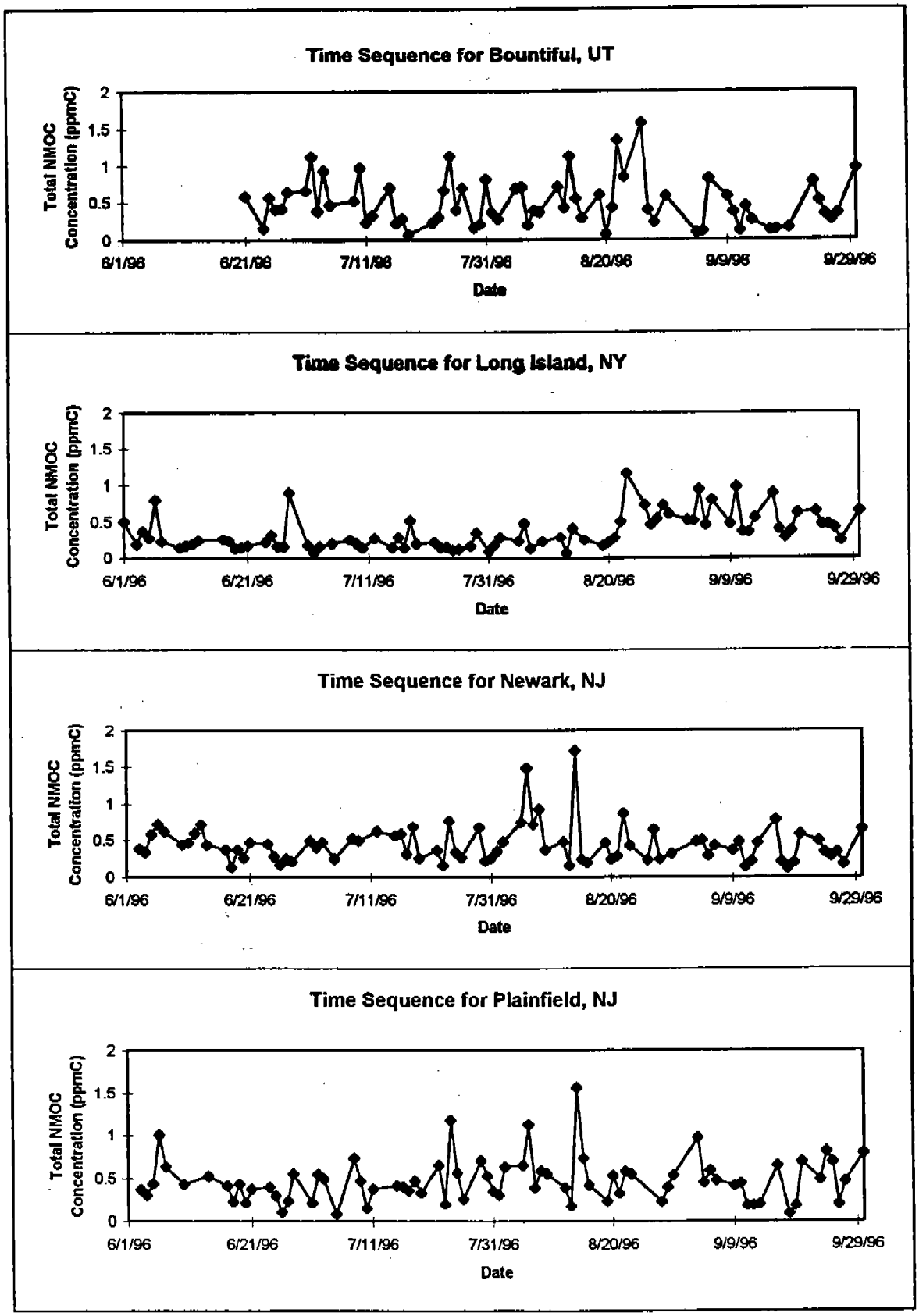
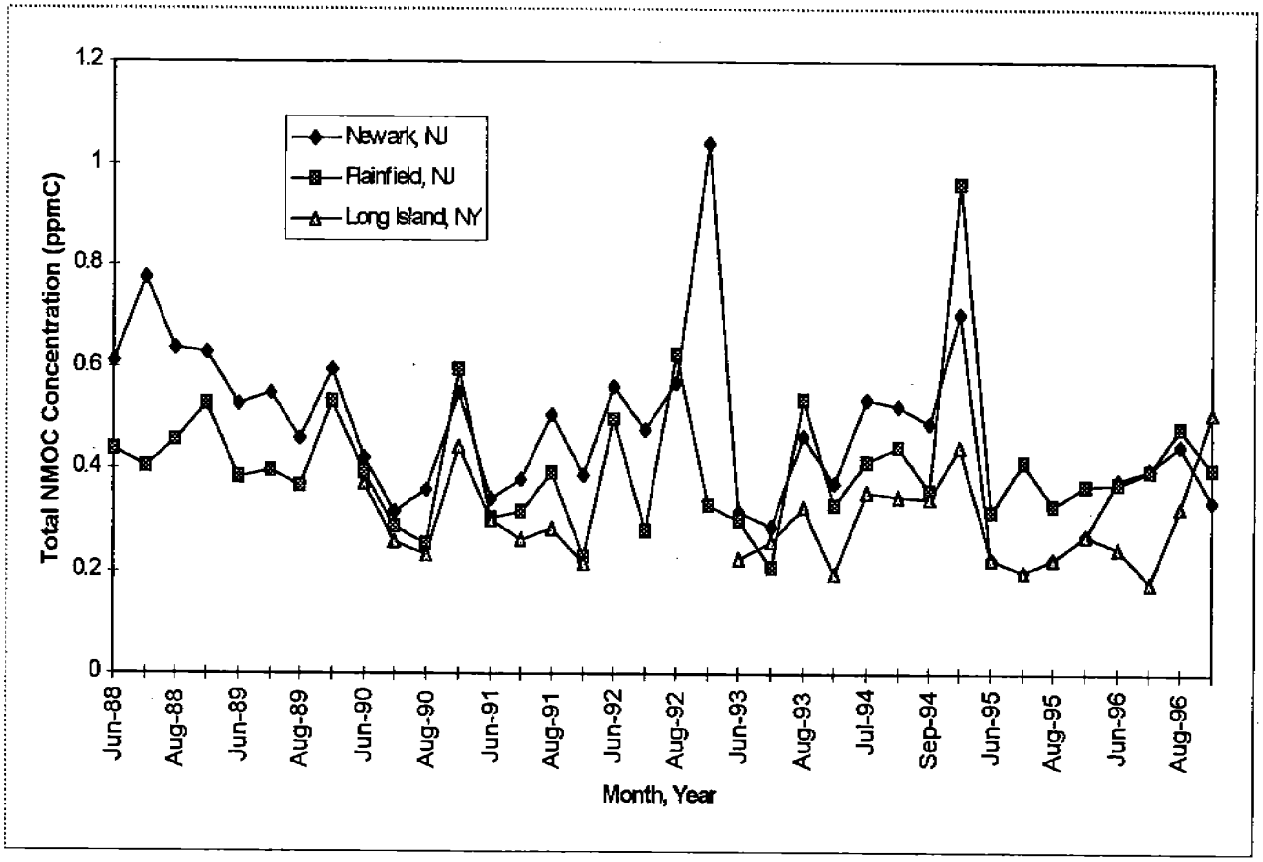


Figure 4-8
Monthly Geometric Mean Concentrations of Total NMOC for Selected Monitoring Locations (1988 to 1996, Summer Months Only)



Note: The Long Island monitoring station first measured NMOC concentrations in 1990.

Table 4-1
Summary Statistics for Concentrations of Total NMOC

Monitoring Station	Prevalence of Total NMOC in Ambient Air		Range of Total NMOC Concentrations		Central Tendency of Total NMOC Concentrations			Variability in Total NMOC Concentrations	
	Number of non-detects	Frequency of detections	Lowest (ppmC)	Highest (ppmC)	Median (ppmC)	Arithmetic Mean (ppmC)	Geometric Mean (ppmC)	Standard Deviation (ppmC)	Coefficient of Variation
Bountiful, UT	0	100%	0.072	1.577	0.412	0.498	0.399	0.322	0.65
Long Island, NY	0	100%	0.069	1.160	0.271	0.357	0.290	0.240	0.67
Newark, NJ	0	100%	0.120	1.723	0.401	0.448	0.389	0.264	0.59
Plainfield, NJ	0	100%	0.082	1.565	0.437	0.475	0.410	0.259	0.54

Note: Refer to Table 4-5 for the number of total NMOC samples collected at each of the four monitoring stations.

Table 4-2
Summary of NET Inventory VOC Emissions Data for the NMOC Monitoring Stations

Monitoring Station	Central Tendency		Mobile Source Emissions		Point Source Emissions		Area Source Emissions	
	Geometric Mean Concentration (ppmC)	Rank	VOCs (tons/year)	Rank	VOCs (tons/year)	Rank	VOCs (tons/year)	Rank
Plainfield, NJ	0.410	1	39,096	3	45,349	2	46,441	3
Bountiful, UT	0.399	2	24,583	4	4,483	4	34,254	4
Newark, NJ	0.389	3	95,715	1	46,644	1	124,137	1
Long Island, NY	0.290	4	55,659	2	14,359	3	95,640	2

Notes: Refer to Section 4.2.1 for details on how the NET emissions data were calculated for each monitoring station.
Emissions from motor vehicles primarily account for the mobile source emissions; emissions from stack releases, particularly from power plants, account for the point source emissions; and emissions from all other industrial facilities and natural sources comprise the area source emissions.

Table 4-3
Summary of Correlations Between NMOC Concentrations and Ambient Temperature

Monitoring Station	Pearson Correlation Coefficient Between NMOC Samples and Daily Temperature Readings	Is the Pearson Correlation Coefficient Significant to the Level of 10 Percent?
Bountiful, UT	0.190	Yes
Long Island, NY	0.001	No
Newark, NJ	0.245	Yes
Plainfield, NJ	0.027	No

Table 4-4
Correlation of Daily NMOC Measurements Between Pairs of Monitoring Locations

Matrix of Pearson Correlation Coefficients		Monitoring Location #1			
		Bountiful, UT	Long Island, NY	Newark, NJ	Plainfield, NJ
Monitoring Location #2	Bountiful, UT	NA	0.110	0.281	0.281
	Long Island, NY	0.110	NA	0.137	0.275
	Newark, NJ	0.281	0.137	NA	0.690
	Plainfield, NJ	0.281	0.275	0.690	NA

Note: Shaded cells indicate pairs of monitoring stations exhibiting strongest correlations in total NMOC measurements.

Table 4-5
Data Quality Parameters for Total NMOC Measurements

Monitoring Station	Completeness Data			Analytical Precision (RPD)	Sampling Precision (RPD)
	Number of Sampling Events Attempted	Number of Sampling Events Completed	Completeness		
Bountiful, UT	72	66	92 %	9.7 %	12.0 %
Long Island, NY	87	82	94 %	9.8 %	9.7 %
Newark, NJ	84	81	96 %	11.0 %	8.9 %
Plainfield, NJ	84	77	92 %	5.4 %	5.5 %
Overall Program	327	306	94 %	9.0 %	9.0 %

Notes: Refer to Section 3.3 for further information on the data quality parameters.
The Bountiful, UT, station has significantly fewer samples because the site was not operating until June 21, 1996.

5.0 Analysis of SNMOC Monitoring Results

This section summarizes the SNMOC ambient air monitoring data collected during the 1996 NMOC/SNMOC program. As noted in Section 2.4.2, the SNMOC sampling and analytical method currently measures ambient air concentrations of 80 different hydrocarbons, thus providing detailed information on both the magnitude and the composition of hydrocarbons in air pollution. With 13 monitoring stations each collecting up to 80 SNMOC samples (and each sample analyzed for 80 hydrocarbons), this monitoring option generates an extremely large volume of air quality data. Accordingly, listing the individual SNMOC observations would offer little insight into notable trends and patterns in air quality. Rather, this section uses the systematic data analysis methodology presented in Section 3 to provide a succinct, organized, and comprehensive summary of the SNMOC monitoring data. For those interested in further evaluating the monitoring results, all concentrations measured under this option are loaded on the Aerometric Information Retrieval System (AIRS), an electronic database maintained by EPA.

5.1 Data Summary Tables

Using the data summary parameters defined in Section 3.3.1, the following discussion provides a brief overview of the SNMOC monitoring data. These summary parameters are useful for identifying those compounds with highest prevalence, concentrations, and central tendencies.

- *Prevalence.* Of the 80 hydrocarbons identified by the SNMOC sampling and analytical method, 75 were detected in more than 75 percent of the total SNMOC samples collected during the program. This high prevalence indicates that a wide range of hydrocarbons is ubiquitous in air pollution in the vicinity of the selected monitoring stations. As the exceptions, 2-ethyl-1-butene was detected in 9 percent of the samples, propyne in 15 percent of the samples, and 1-hexene in 46 percent of the samples. The central tendencies for these three compounds may be biased by the significant number of non-detects.

- *Concentration range*. As expected, some SNMOC compounds have much broader concentration ranges than others. For example, the highest concentration of propyne measured during the 1996 program was 1.15 ppbC, while the highest concentration of toluene was 377.54 ppbC. To give a sense of the hydrocarbons with the most noticeable peaks, the following list presents compounds that had

concentrations exceeding 100 ppbC in at least one sample during the SNMOC program:

Acetylene/Ethane	2-Methylpentane
n-Butane	*n*-Pentane
Isobutane/1-Butene	Propane
n-Dodecane	Propylene
1-Dodecene	Toluene
n-Hexane	*n*-Undecane
Isopentane	*m,p*-Xylene

- *Central tendency.* Table 5-1 shows the geometric mean concentrations for every SNMOC compound, classified by monitoring station. Due to the high prevalence of SNMOC compounds, these geometric means should accurately represent central tendency concentrations. In some cases, geometric mean concentrations are lower than their corresponding detection limits, as the SNMOC sampling and analytical method is capable of estimating concentrations at levels below the detection limits shown in Table 2-5. To assess the validity of these measurements, Section 5.4 comments on the accuracy and precision of the SNMOC sampling and analytical method.

Like the highest concentrations, the geometric mean concentrations exhibit great variability among the different SNMOC compounds. To make sense of the large volume of data in Table 5-1, a three-step ranking scheme was developed to identify compounds with relatively high geometric mean concentrations at all sites:

(1) The SNMOC compounds at every station were first assigned a "compound rank" based on the magnitude of their geometric mean concentrations. For example, the compound with the highest geometric mean concentration at a given station was assigned a compound rank of one, the compound with the second highest geometric mean a compound rank of two, and so on.

(2) The compound ranks were then averaged across all sites to determine a "program average rank" for each SNMOC compound. In this way, compounds with relatively high geometric mean concentrations at all stations had program average ranks closer to 1, while compounds with lower geometric mean concentrations had averages closer to 78.

(3) Finally, the program average ranks were sorted to determine which compounds had consistently higher geometric mean concentrations at all sites.

According to this simple ranking scheme, the following 15 compounds (shown in order of increasing program average rank) have relatively higher geometric mean concentrations at the 13 SNMOC monitoring stations:

(1) Toluene
(2) Acetylene/Ethane
(3) Isopentane
(4) Propane
(5) *n*-Butane
(6) *m,p*-Xylene
(7) 2-Methylpentane
(8) Ethylene
(9) *n*-Pentane
(10) Benzene
(11) 1,2,4-Trimethylbenzene
(12) *n*-Hexane
(13) Propylene
(14) 2,2,4-Trimethylpentane
(15) 3-Methylpentane

Thus, toluene consistently has higher geometric mean concentrations at the monitoring stations than the 79 other SNMOC compounds, followed by acetylene/ethane, and so on. However, these ranks may be misleading for two reasons: (1) the ranks are based on concentrations reported in units of ppbC and therefore may be slightly biased to compounds having more carbon atoms (see sidebar in Section 2.4); and (2) compounds with higher geometric means do not necessarily have the most pronounced impact on ozone formation potential (see Section 5.2.4).

- *Variability*. With some exceptions, coefficients of variation for over 75 percent of the SNMOC compounds measured at each monitoring station were less than 1, indicating that the magnitude of ambient air concentrations typically is within one standard deviation of the corresponding arithmetic mean. At the Juarez and Dallas monitoring stations, however, nearly half the SNMOC compounds have coefficients of variation greater than 1. Thus, the magnitude of air pollution in these areas fluctuates more significantly than in the vicinity of the other monitoring stations. Further investigation may indicate how fluctuating levels of ambient hydrocarbons affect the frequency and severity of ozone episodes.

Although these data summary parameters identify compounds most prevalent in ambient air, they do not explain why the magnitude of concentrations varies among the different SNMOC monitoring stations or how levels of air pollution change with time. The following sections address these issues.

5.2 Spatial Variations

As an overview of spatial variations, Figure 5-1 compares geometric mean concentrations of "total identified SNMOC compounds" at the 13 SNMOC monitoring stations. Total identified SNMOC compounds include all compounds that elute from the GC column during analysis of SNMOC samples, including compounds that the sampling apparatus collects but the analytical method cannot identify. This concentration of total identified compounds should approximately equal the concentration that would have been determined using the total NMOC sampling and analytical method (see Section 4). The summary of total identified SNMOC compounds in Figure 5-1 suggests relatively higher ambient air concentrations of hydrocarbons in the Newark, Denver (except Rocky Flats), and Juarez areas; moderately high concentrations in the Dallas and Salt Lake City areas; and relatively lower concentrations in the Birmingham area. The following analyses offer additional insight into these general spatial variations.

5.2.1 Emission Inventories

This section uses TRI and NET emissions data to interpret spatial variations in ambient air concentrations of SNMOCs. Theses analyses group the 13 SNMOC monitoring stations into six metropolitan areas: Birmingham, Dallas, Denver, Juarez, Newark, and Salt Lake City. Because the TRI and NET inventories do not account for emission sources in Mexico, this section uses emissions data for El Paso, Texas, as a rough estimate of the total air releases in the vicinity of the Juarez monitoring station.

To evaluate how emissions from industrial facilities affect the measured concentrations of SNMOCs, Figures 5-2 through 5-7 show locations of the SNMOC monitoring stations and nearby industrial facilities that reported air releases of organic compounds to TRI. Figures 4-1 and 4-3 show this information for the Salt Lake City and Newark areas, respectively. Not surprisingly, the number of industrial emission sources varies significantly from one metropolitan area to the next. These variations are consistent with some general trends in the SNMOC monitoring data:

- *Fewest industrial emission sources near the B2AL, B3AL, and RF-N monitoring stations.* Of the 13 SNMOC monitoring stations, only 2 in the vicinity of Birmingham (B2AL and B3AL) and 1 in the vicinity of Denver (RF-N) were located less than 10 miles from fewer than 10 industrial facilities that reported air releases to TRI. As shown in Figure 5-1, these 3 monitoring stations also measured relatively lower ambient air concentrations of SNMOCs than the other 10 stations.

- *Most industrial emission sources in the Newark area.* As shown in Figure 4-3, the Newark metropolitan area clearly has the highest density of industrial facilities that report air releases of organic compounds to TRI. Similarly, Figure 5-1 indicates that the ambient air in the vicinity of Newark had relatively higher air concentrations of SNMOCs than most of the other monitoring stations.

Despite these consistencies, the TRI data cannot explain several notable trends in the SNMOC results, such as the relatively high concentrations in the Denver area. As shown in greater detail in Sections 6 and 7, the TRI data also cannot account for spatial variations observed in ambient air concentrations of specific compounds. Accordingly, the absence of strong correlations between the TRI emissions data and SNMOC monitoring data suggests that hydrocarbons in the ambient air do not originate primarily from industrial sources or that TRI emissions data do not accurately represent emissions from industrial sources.

To supplement the analysis of TRI emissions data, Figure 5-8 summarizes NET emissions data for the six metropolitan areas with SNMOC monitoring stations. By considering motor vehicle, natural, and industrial emissions data, the NET inventory offers a more comprehensive account of total levels of emissions for a given area. Like the TRI data, the NET emissions data only confirm the observations of higher levels of emissions near Newark and lower levels near Birmingham, but cannot explain other trends, such as the relatively higher concentrations of SNMOCs near Denver. The NET inventory does, however, suggest that emissions of hydrocarbons from motor vehicles in urban areas are typically just as high as total emissions from industrial point sources and area sources. Provided these data are accurate, emissions from both industrial facilities and motor vehicles are expected to contribute to the hydrocarbons detected in

the SNMOC samples. Section 5.2.3.3 offers additional evidence that emissions from motor vehicles strongly influence ambient air concentrations of selected hydrocarbons.

5.2.2 Local Meteorology

Local meteorological conditions strongly affect two mechanisms critical to ambient air quality: photochemical reactivity and atmospheric dispersion. This section focuses on how wind speed, wind direction, and temperature influence these mechanisms and the corresponding air concentrations measured at the SNMOC monitoring stations. Because detailed air dispersion analyses are beyond the scope of this work, this section does not consider how other meteorological parameters (such as cloud cover, mixing heights, and solar radiation) affect air quality.

5.2.2.1 Wind Speed and Wind Direction

The windroses in Figures 5-9 through 5-12 summarize the statistical distribution of wind speeds and wind directions measured during the summer of 1996 at NCDC meteorological stations in Birmingham, Dallas, Denver, and El Paso. Following standard conventions for reporting meteorological data, the wind directions shown in these figures indicate the directions from which winds were blowing. The prevailing wind patterns in these four metropolitan areas relate to the SNMOC monitoring data as follows:

- *Birmingham (Figure 5-9).* During the 1996 monitoring program, winds in Birmingham blew most frequently from the north and northeast, and least frequently from the southwest. Accordingly, emissions from sources in the Birmingham area during the summer of 1996 likely had more pronounced impacts on air quality in areas to the south and the southwest of the corresponding source. This observation may explain, in part, why ambient air concentrations of total SNMOCs measured at Helena (B3AL, roughly 15 miles south of Birmingham) were 15 percent higher than those measured at Pinson (B2AL, roughly 15 miles northeast of Birmingham).

- *Dallas (Figure 5-10).* Winds in Dallas during the summer of 1996 blew primarily from south to north and from southeast to northwest. These prevailing winds suggest that an emission source located south or southeast of the CAMS5,

CAMS13, and DLTX monitoring stations has a stronger impact on measured concentrations than an emission source (of equal magnitude) located to the north or northwest of these stations. Further, as shown in Figures 5-5 and 5-6, the prevailing winds blow from downtown Fort Worth and downtown Dallas directly toward the CAMS13 and CAMS5 monitoring stations, respectively. Accordingly, levels of air pollution at these locations may be affected by the morning rush-hour commute to these urban centers.

- *Denver (Figure 5-11).* During the 1996 monitoring program, winds in Denver blew most frequently from southwest to northeast. This pattern offers some insight into why ambient air concentrations measured at the CAMP and WELBY monitoring stations were nearly three times greater than concentrations measured at the RF-N monitoring station (see Figure 5-1). For instance, both the CAMP and WELBY stations are located northeast of major interstate highways, several industrial sources meeting the TRI reporting requirements, and many suburbs with high populations. The RF-N station, on the other hand, is located northeast of the base of the Rocky Mountains, with substantially fewer emission sources. Examining land use and emission sources upwind of these three stations, therefore, helps explain corresponding differences in air quality.

- *El Paso (Figure 5-12).* With limited information available on emission sources in the vicinity of the Juarez monitoring station, it is difficult to assess how the prevailing northerly and southwesterly winds in this region affect local air quality. Nonetheless, the windrose in Figure 5-12 indicates that prevailing winds blow both from the Juarez area toward El Paso and vice versa.

Although prevailing wind patterns may explain general trends in air quality, research into air pollution generally relies on sophisticated dispersion modeling analyses to quantify how fluctuating wind directions and wind speeds influence air pollution. As noted earlier, such analyses are beyond the scope of this report.

5.2.2.2 Temperature

To understand how temperature relates to ambient air quality, Pearson correlation coefficients were calculated to determine whether levels of air pollution tend to increase or decrease with daily average temperature. Because the statistical significance of these calculations decreases with decreasing number of observations, the correlation coefficients were calculated only for monitoring stations that collected more than 30 SNMOC samples. Figure 5-13 shows

how concentrations of total identified SNMOCs correlated with daily average temperatures at the nine monitoring stations that met this criterion. With two exceptions, the levels of hydrocarbons in air pollution showed weak, but statistically significant, negative correlations with ambient temperature. These weak correlations indicate a very slight tendency for ambient levels of hydrocarbons to be lower on days with higher ambient temperature. Increased photochemical reactivity that consumes hydrocarbons may explain this slight negative correlation, but this hypothesis can be confirmed only by considering other factors known to affect photochemical reactions, such as cloud cover and humidity.

At the JUMX and WELBY monitoring stations, however, the Pearson correlation coefficients show relatively strong and statistically significant positive relationships between temperature and concentrations of total identified SNMOCs. Accordingly, levels of hydrocarbons measured at these stations show a relatively strong tendency toward being higher on warmer days than on cooler days. Because levels of motor vehicle traffic generally do not increase significantly from one summer weekday to the next (regardless of ambient temperature), this temperature dependence probably does not result from variations in motor vehicle emissions. The results for the WELBY station are especially peculiar, as ambient air concentrations measured at the CAMP station, less than 5 miles away, show very weak relationships to temperature. Site-specific analyses of emission sources in the vicinity of the JUMX and WELBY monitoring stations may help explain this distinct temperature dependence. Even though the correlation coefficients presented in Figure 5-13 are statistically significant, further statistical analyses of additional monitoring data collected at these sites also should be analyzed to confirm the unique effects of temperature.

Although Pearson correlation coefficients between concentrations of individual SNMOC compounds and temperature generally varied in sign and magnitude across the monitoring stations, isoprene, a compound typically associated with emissions from natural sources, had strong, positive correlations with temperature at all 13 SNMOC monitoring stations. This observation is consistent with the findings of many emission models that predict a strong

dependence of biogenic emissions on ambient temperature (Sonoma, 1996). The consistent correlations between temperature and ambient levels of isoprene indicate that emissions from natural sources affect the ambient air quality at all the SNMOC monitoring locations. Section 5.2.3 presents additional analyses of the impact of biogenic emissions on ambient air quality.

5.2.3 Composition of Air Samples

This section examines spatial variations in the composition of ambient air concentrations of SNMOCs as a means for understanding the extent to which specific emission sources affect ambient air quality. The analyses first focus on relative contributions of aromatic, olefinic, and paraffinic compounds to ambient air quality, then examine contributions of isoprene to overall levels of air pollution, and finally consider concentration ratios of BTEX compounds.

5.2.3.1 Aromatic, Olefinic, and Paraffinic Compounds

Figure 5-14 breaks the total identified SNMOCs measured at each monitoring station into contributions from aromatic, olefinic, and paraffinic compounds. These concentrations do not, however, represent the actual composition of hydrocarbons because the SNMOC analytical method cannot identify every hydrocarbon in ambient air and it is not known whether the unidentified compounds are primarily aromatic, olefinic, or paraffinic compounds. Nonetheless, the data in Figure 5-14 qualitatively indicate the relative contribution of these three chemical categories to overall levels of hydrocarbons in air pollution. As shown in the figure and discussed below, the contributions of the different hydrocarbon categories do not vary significantly among the monitoring stations:

- *Aromatic compounds* accounted for between 30 and 40 percent (on a ppbC basis) of the concentration of total identified SNMOCs measured at each station. Of the 19 aromatic compounds identified by the SNMOC analytical method, toluene, *m,p*-xylene, and benzene generally had the highest ambient air concentrations and made up roughly 50 to 60 percent of the total aromatic compounds detected at the stations.

- *Olefinic compounds* accounted for between 15 and 25 percent (on a ppbC basis) of the concentration of total identified SNMOCs measured at each station. Of the 29 olefinic compounds detected during analysis, ethylene and propylene consistently had highest geometric mean concentrations and typically comprised between 20 and 40 percent of the total olefinic compounds. It should be noted, however, that acetylene, an olefinic compound known to have relatively high ambient air concentrations, was not considered in this analysis, as the SNMOC analytical method could not differentiate acetylene from ethane.

- *Paraffinic compounds* contributed between 40 and 55 percent (on a ppbC basis) of the total identified SNMOCs. Isopentane, propane, and *n*-butane, the three paraffins with highest geometric mean concentrations, generally accounted for between 30 and 40 percent of the paraffins identified at the 13 SNMOC monitoring stations. Ethane also contributed significantly to total levels of paraffins, but the exact contribution is impossible to determine, as the SNMOC analytical method could not differentiate ethane from acetylene.

To supplement this summary of the composition of air samples, Sections 5.2.5 and 5.2.6 analyze how the composition data can be used to predict the ozone formation potential of air masses and to estimate the age of air masses sampled at the SNMOC monitoring stations.

5.2.3.2 Isoprene

As the most abundant hydrocarbon in biogenic emissions, isoprene is typically used to assess the effect of biogenic emission sources on air quality. Figure 5-15 shows the magnitude and composition of geometric mean air concentrations of isoprene measured at the 13 SNMOC monitoring stations. The figure indicates that the magnitude of geometric mean concentrations of isoprene ranges from less than 0.5 ppbC to greater than 2.5 ppbC. The relative abundance of isoprene, however, shows much less variability, with air samples collected in areas other than Birmingham consistently containing approximately 0.5 percent isoprene (on a ppbC basis). At the monitoring stations in Birmingham, the contribution of isoprene to total SNMOCs ranges from 1 to 2.5 percent. The distinctly different relative abundances indicate that biogenic emissions have a stronger impact on air quality in Birmingham than in the other metropolitan areas considered. Although biogenic sources emit many hydrocarbons in addition to isoprene (see Section 5.2.4), the composition data in Figure 5-15 indicate that biogenic emissions account for only a small

proportion of the total hydrocarbons in ambient air between 6:00 and 9:00 AM, the sampling period adopted during this program. Because air concentrations of isoprene increase significantly with ambient temperature (see Section 5.2.2.2), however, the relative abundances shown in Figure 5-15 may understate the composition of isoprene observed during other times of the day.

5.2.3.3 BTEX Concentration Ratios

Figure 5-16 displays the BTEX concentration ratios for the SNMOC monitoring stations and indicates that, with some exceptions, the concentration profiles for these compounds do not differ significantly from one monitoring location to the next. At the Bountiful (SL1U), Juarez (JUMX), and Plainfield (P2NJ) monitoring stations, however, the ratio of toluene concentrations to ethylbenzene concentrations is noticeably higher than at the other monitoring stations. Because the other BTEX ratios at these three stations are similar to the ratios at the other stations, the pronounced toluene:ethylbenzene ratios apparently result from relatively higher ambient air concentrations of toluene (as opposed to relatively lower concentrations of ethylbenzene). Further research into emission sources near these three sites may identify the source of stronger toluene emissions.

Despite this exception, the BTEX profiles shown in the figure are very similar in shape and in magnitude to profiles measured in a recent roadside air monitoring effort (Conner, Lonnerman, Seila, 1995). The similarities between the profiles for the SNMOC monitoring stations and the referenced roadside profile strongly suggest that emissions from motor vehicles contribute significantly to the ambient levels of aromatic hydrocarbons measured during the program.

5.2.4 Data Correlations

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 noted in Section 4, highly correlated ambient air concentrations for a pair of compounds suggest that both compounds originate from similar emission sources. Following this

principle, the paragraphs below describe in further detail two separate correlation analyses performed on the SNMOC monitoring results.

Table 5-2 summarizes the strongest correlations observed among the 601 SNMOC samples collected during the 1996 program. Of the nearly 2,500 possible chemical pairings, only those pairs of compounds shown in Table 5-2 had Pearson correlation coefficients greater than 0.9, a level arbitrarily selected to identify the most highly correlated compounds. These chemical pairs consist primarily of compounds with very similar chemical structures, such as the xylene isomers and the ethyltoluene isomers. The notably strong correlations across six different metropolitan areas suggest that these pairs of compounds originate from the same categories of emission sources in most urban areas. As an example, recent methodologies for analyzing ambient air monitoring data suggest that mobile source emissions account for most of the xylene isomers detected in urban ambient air (USEPA, 1995), which is consistent with the highly correlated concentrations of these compounds at the SNMOC monitoring stations.

Pearson correlation coefficients also were examined to identify airborne pollutants emitted from biogenic sources. Because isoprene in ambient air largely originates from biogenic emissions (Sonoma, 1996), compounds having relatively strong positive correlations with isoprene should also originate from similar emission sources. The five compounds having strongest correlations with isoprene across the SNMOC monitoring stations (and their corresponding Pearson correlation coefficients) are α-pinene (0.42), β-pinene (0.23), cyclopentene (0.20), 2-methyl-1-pentene (0.18), and 1-decene (0.16). Because the predominant vegetation differs significantly in the six metropolitan areas considered, the magnitude of the correlations is noticeably weaker than the magnitude of correlations shown in Table 5-2. Nonetheless, these statistically significant correlation coefficients suggest trends in biogenic emissions consistent with other analyses of air monitoring data. For example, recent guidance for interpreting air monitoring data also suggests that plant species emit large quantities of 1-decene and the pinene isomers (Sonoma, 1996).

These analyses indicate how data correlations help identify subtle, but noteworthy, trends in large volumes of monitoring data. With ambient air concentrations of SNMOCs available for 80 compounds at 13 monitoring stations, many additional correlations can be analyzed. Interested readers can use the example as a basis for evaluating other data correlations.

5.2.5 Age of Air Mass

This section uses ratios of ambient air concentrations to evaluate air mass aging at selected SNMOC monitoring stations. Understanding the relative age of pollutants in ambient air can help state and local environmental agencies differentiate locations with air quality affected primarily by nearby emission sources from locations with air quality affected more by long-range transport of chemical emissions—an important distinction for identifying appropriate air pollution control strategies.

To assess air mass aging, Figure 5-17 compares ratios of concentrations of benzene, *m,p*-xylene, and toluene measured at metropolitan areas having at least three SNMOC monitoring stations. Of these compounds, xylene isomers are most reactive in ambient air, toluene has intermediate reactivity, and benzene is least reactive. Accordingly, as emissions of these compounds transport over long distances, the ratio of the concentration of xylene isomers to the concentration of toluene is expected to decrease (as xylene compounds react faster than toluene), and the ratio of concentrations of benzene to concentrations of toluene is expected to increase (as the toluene reacts faster than the benzene). These predictions relate to the data in Figure 5-17 as follows:

- *Birmingham*. The monitoring station at Tarrant City has a concentration ratio of benzene to toluene roughly 10 percent lower than the other Birmingham monitoring stations and a concentration ratio of *m,p*-xylene to toluene approximately 10 percent higher than the other stations. This pattern suggests that long-range transport of chemical emissions has a notably stronger impact on air quality at the Pinson (B2AL) and Helena (B3AL) monitoring stations than on air quality at the Tarrant City (B1AL) monitoring station.

- *Denver*. The monitoring stations within the city of Denver (CAMP and WELBY) have nearly equal ratios of concentrations of benzene to toluene and of *m,p*-xylene to toluene, suggesting little difference in air mass age between these locations. The ratio of concentrations of these aromatic compounds at the Rocky Flats monitoring station, however, indicates a relatively older air mass age than at the Denver monitoring stations: (1) the ratio of concentrations of benzene to toluene is 25 percent greater at Rocky Flats than at Denver, and (2) the ratio of concentrations of *m,p*-xylene to toluene is nearly 25 percent lower at Rocky Flats than at Denver.

- *Dallas*. The ratio of concentrations of benzene to toluene is nearly constant across the three SNMOC monitoring stations in Dallas. The ratio of *m,p*-xylene to toluene, however, is significantly higher at the DLTX monitoring station than at the other Dallas locations. Accordingly, long-range transport of hydrocarbons is expected to have relatively lower impacts on air quality at the DLTX monitoring station.

Comparing these air mass aging results to the maps of the three metropolitan areas suggests one uniform trend in the 1996 SNMOC monitoring results: long-range transport of chemical emissions tends to have relatively stronger impacts on air quality at locations surrounding metropolitan areas and relatively weaker impacts on air quality in urban centers. Although applicable to the three metropolitan areas considered in this analysis, this trend may not necessarily apply to every metropolitan area.

5.2.6 Ozone Formation Potential

This section analyzes chemical reactivity data to assess the ozone formation potential of air masses sampled at the SNMOC monitoring stations. Reactivity is an important consideration for ozone control strategies, as highly reactive compounds at relatively low concentrations may have more significant impacts on ozone formation than less reactive compounds at relatively high concentrations. To compare the ozone formation potential between the different SNMOC compounds, this reactivity analysis uses an "ozone index," defined here as the product of the geometric mean concentration of a given compound and its corresponding maximum incremental reactivity (MIR). Because MIRs estimate relative reactivities of compounds in ambient air, ozone indices essentially are reactivity-weighted ambient air concentrations.

Figures 5-18 through 5-21 summarize ozone indices for the 20 compounds with highest geometric mean concentrations measured at selected monitoring stations in the Birmingham, Dallas, Denver, and Juarez metropolitan areas. (Table 5-3 lists the abbreviations used in these figures.) For ease of interpretation, the compounds are shown in order of decreasing geometric mean concentration. Every ozone index plot clearly indicates that compounds with the highest potential for forming ozone are not necessarily the compounds with highest geometric mean concentrations. Despite the widely varying composition and magnitude of air quality between these metropolitan areas, six compounds have the highest ozone indices at each urban area: toluene, *m,p*-xylene, 1,2,4-trimethylbenzene, ethylene, and propylene. Accordingly, pollution control strategies that reduce emissions of these compounds may cause a greater reduction in ambient ozone levels than pollution control strategies that reduce emissions of other compounds.

Because this program samples ambient air only from 6:00 to 9:00 AM, the plots of ozone formation potential do not characterize chemical reactivity for all times of the day. For a more complete assessment of ozone formation potential, interested readers are encouraged to perform similar reactivity analyses on monitoring results collected during other times of the day.

5.3 Temporal Variations

This section presents a general analysis of how ambient air concentrations of SNMOCs change with time. As noted in Section 3.2.2, because SNMOC samples were collected between 6:00 and 9:00 AM during the summer months, the monitoring data are insufficient for evaluating diurnal or seasonal changes in ambient air quality. Accordingly, this analysis focuses only on how concentrations vary from one monitoring year to the next. Given the large volume of monitoring data available under this option, this section provides an example analysis of long-term changes in ambient air quality for only the Birmingham monitoring stations—the stations with the most SNMOC monitoring data available from previous participation in this program. Interested readers can use this analysis to examine long-term trends in other subsets of the SNMOC monitoring data.

As an example analysis, Figure 5-22 presents long-term trends in median ambient air concentrations of propane and propylene in the vicinity of Birmingham, Alabama. The figure does not consider geometric or arithmetic mean concentrations, as these parameters were not consistently reported over the last 5 years. As shown in the figure, ambient air concentrations of propane measured at the Birmingham stations in 1996 are roughly 30 percent lower than the corresponding concentrations measured in 1992. Although a significant decrease, this long-term trend does not necessarily translate into a substantial decrease in the ozone formation potential of the ambient air, as propane exhibits relatively low reactivity (see the MIRs in Table 3-1). To emphasize this point, Figure 5-22 also summarizes long-term trends in median ambient air concentrations of propylene, a compound assumed to be over 20 times more reactive than propane (see Table 3-1). These trends indicate that ambient levels of propylene have either remained relatively constant (B2AL and B3AL monitoring stations) or have significantly increased over the last 5 years (B1AL monitoring station). Accordingly, any marginal decrease in ozone formation as indicated by the long-term trends for propane appears to be offset by an increase in ozone formation as indicated by the higher concentrations of propylene, particularly for the B1AL monitoring station.

This example emphasizes several important factors to consider when evaluating trends in ambient air monitoring data over the long term. First, long-term average concentrations must be compared using consistent central tendency estimates (e.g., median, arithmetic mean, or geometric mean) and units of measurement. Second, long-term trends in SNMOC monitoring data should be interpreted along with chemical reactivity data to qualitatively evaluate how changes in air quality affect ozone formation processes. Finally, to identify the causes of the long-term trends, state and local environmental agencies also should consider the extent to which emission inventories and meteorological conditions changed over the same time frame. Only by considering such a wide range of contributing factors can researchers interpret the significance of long-term trends indicated by ambient air monitoring data.

5.4 Data Quality Parameters

To indicate the quality of the SNMOC monitoring data, Tables 5-4 and 5-5 summarize completeness and precision data, respectively, for the SNMOC measurements made during the 1996 program. The completeness data indicate that over 90 percent of the scheduled sampling events were successfully completed at most of the monitoring stations, and the program as a whole achieved 92 percent completeness. These high completeness figures suggest that the number of invalidated sampling events was minimized by data analysts collecting, handling, and analyzing air samples according to the guidelines of the SNMOC sampling method.

As an additional measure of data quality, the precision data in Table 5-5 show that ambient air concentrations of most SNMOC compounds measured during replicate analyses varied, on average, less than 40 percent (analytical precision) and that concentrations of most SNMOCs measured in duplicate samples generally varied by less than 60 percent (sampling precision). For reference, the SNMOC method documentation recommends bounds for analytical precision as less than 30 percent for compounds with concentrations greater than 2 ppbC and as less than 95 percent for compounds measured at lower levels (USEPA, 1989), but the method does not report reasonable bounds for sampling precision. The analytical precision estimates shown in Table 5-5 generally meet the data quality guidelines of the SNMOC sampling and analytical method, suggesting that laboratory analysts strictly followed the standard procedures for quantifying concentrations of hydrocarbons both precisely and accurately.

5.5 Summary

Not surprisingly, ambient air concentrations of speciated hydrocarbons exhibited great variability among the 13 monitoring stations that collected SNMOC samples during the summer of 1996. Use of a series of data analyses, however, helped to put the large volume of monitoring data into perspective. For instance, review of emission inventories suggests that emissions from industrial, motor vehicle, and natural emission sources all contribute significantly to hydrocarbons in ambient air. The composition of the SNMOC samples, particularly the BTEX concentration profiles, suggested that emissions from motor vehicles contribute significantly to ambient air

concentrations measured at every monitoring stations. Statistical analyses confirmed that ambient air concentrations of many pairs of aromatic hydrocarbons are highly correlated at every monitoring station, again suggesting that they originate from emission sources common to urban environments (e.g., motor vehicles). Additional analyses of correlations and composition offered insight into the relative age of the air masses and the relative contribution from natural emission sources.

Even though this section provides extensive analyses of the SNMOC monitoring data, the reader should note that these analyses are not comprehensive. Accordingly, regulators at environmental agencies and researchers are encouraged to conduct additional analyses to gain further insight into the nature and magnitude of air pollution in the vicinity of the SNMOC monitoring stations.

Figure 5-1
Geometric Mean Concentrations of Total Identified SNMOC Compounds

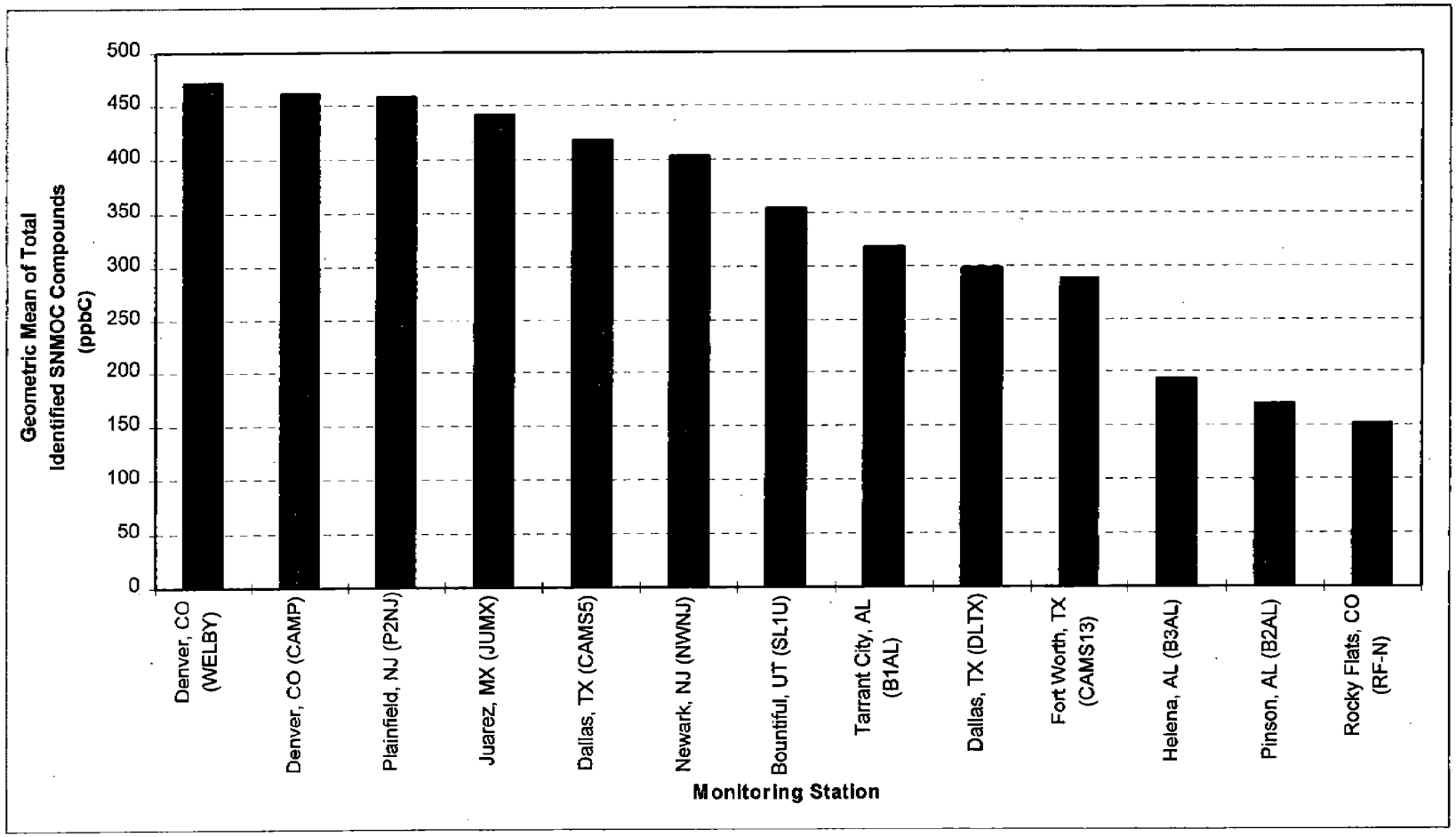


Figure 5-2
Facilities in the Vicinity of the Tarrant City, Alabama (B1AL) and Pinson, Alabama (B2AL) Monitoring Stations That Reported Air Releases of VOCs or Carbonyls to TRI

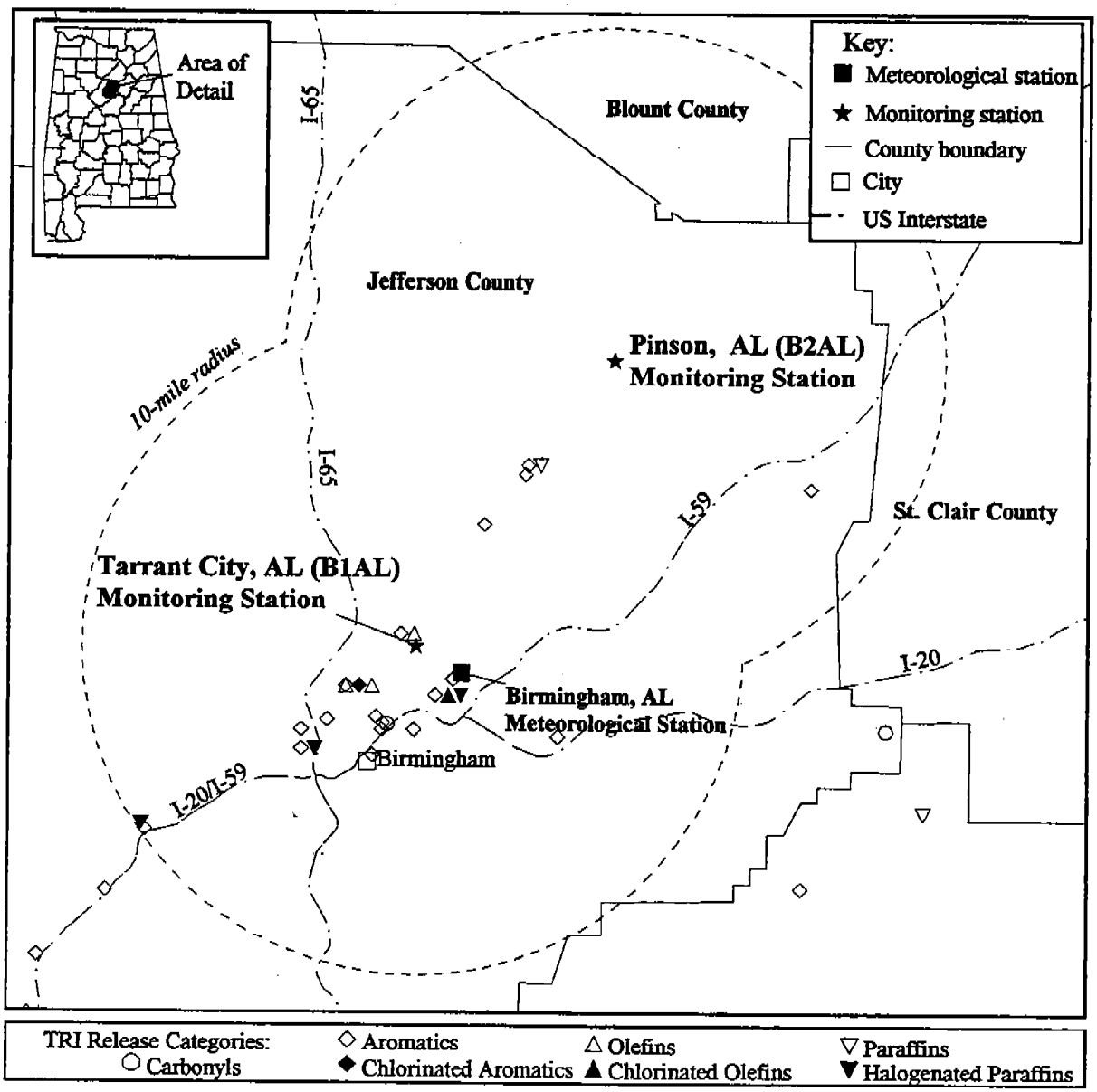


Figure 5-3
Facilities in the Vicinity of the Helena, Alabama (B3AL) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

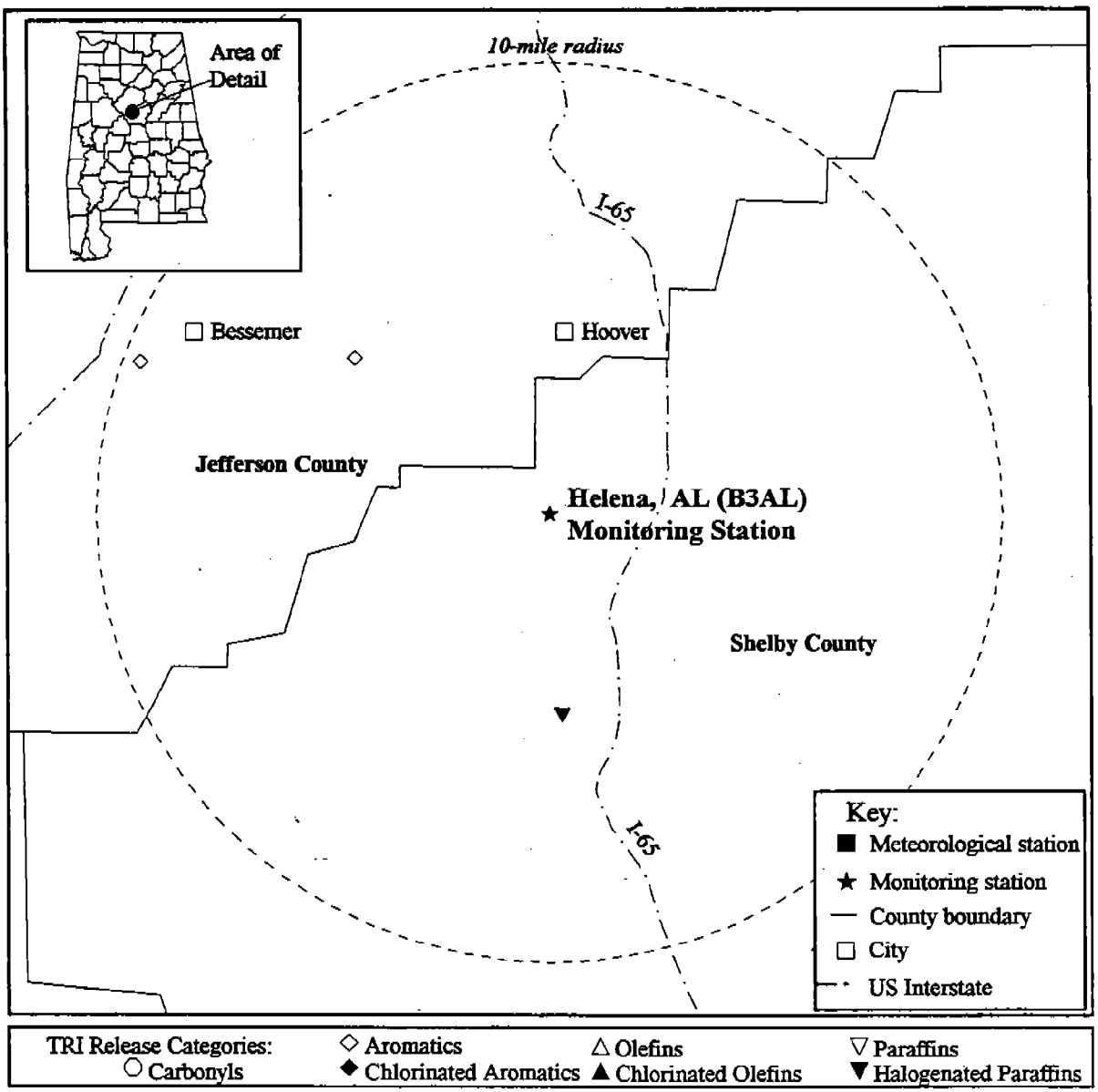


Figure 5-4
Facilities in the Vicinity of the Denver, Colorado (CAMP), Denver, Colorado (WELBY), and Rocky Flats, Colorado (RF-N) Monitoring Stations That Reported Air Releases of VOCs or Carbonyls to TRI

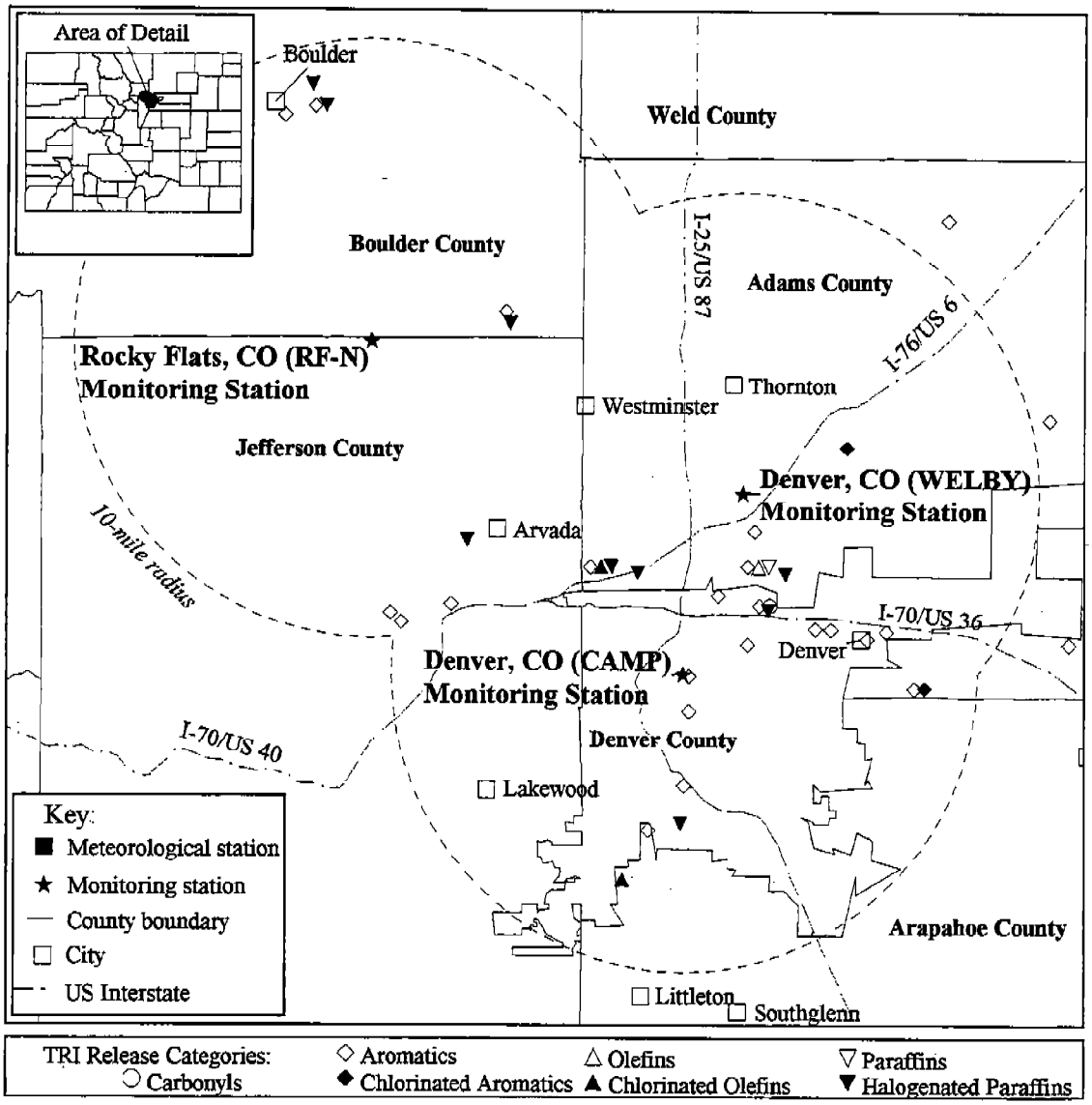


Figure 5-5
Facilities in the Vicinity of the Fort Worth, Texas (CAMS13) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

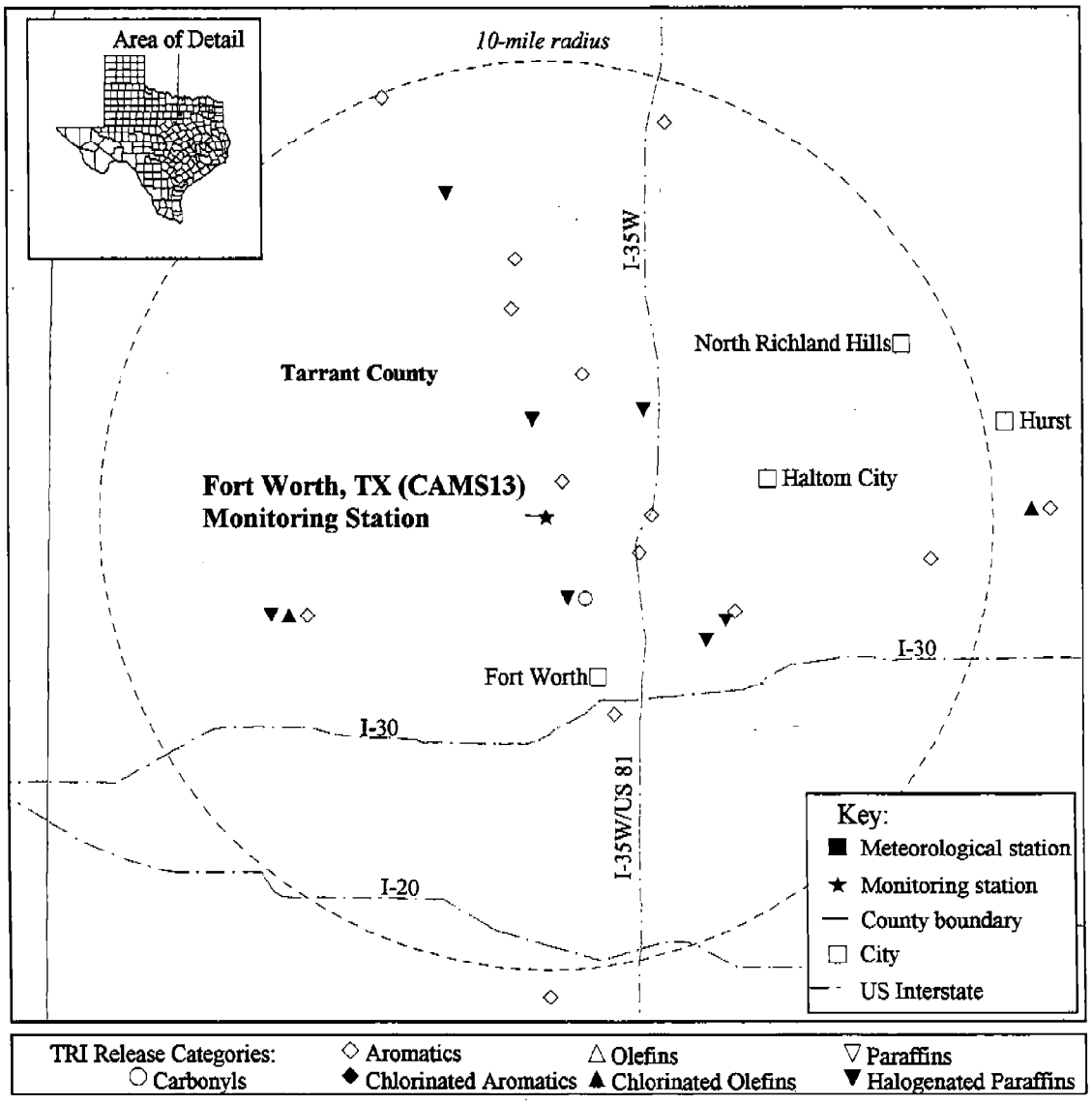


Figure 5-6
Facilities in the Vicinity of the Dallas, Texas (DLTX) and Dallas, Texas (CAMS5) Monitoring Stations That Reported Air Releases of VOCs or Carbonyls to TRI

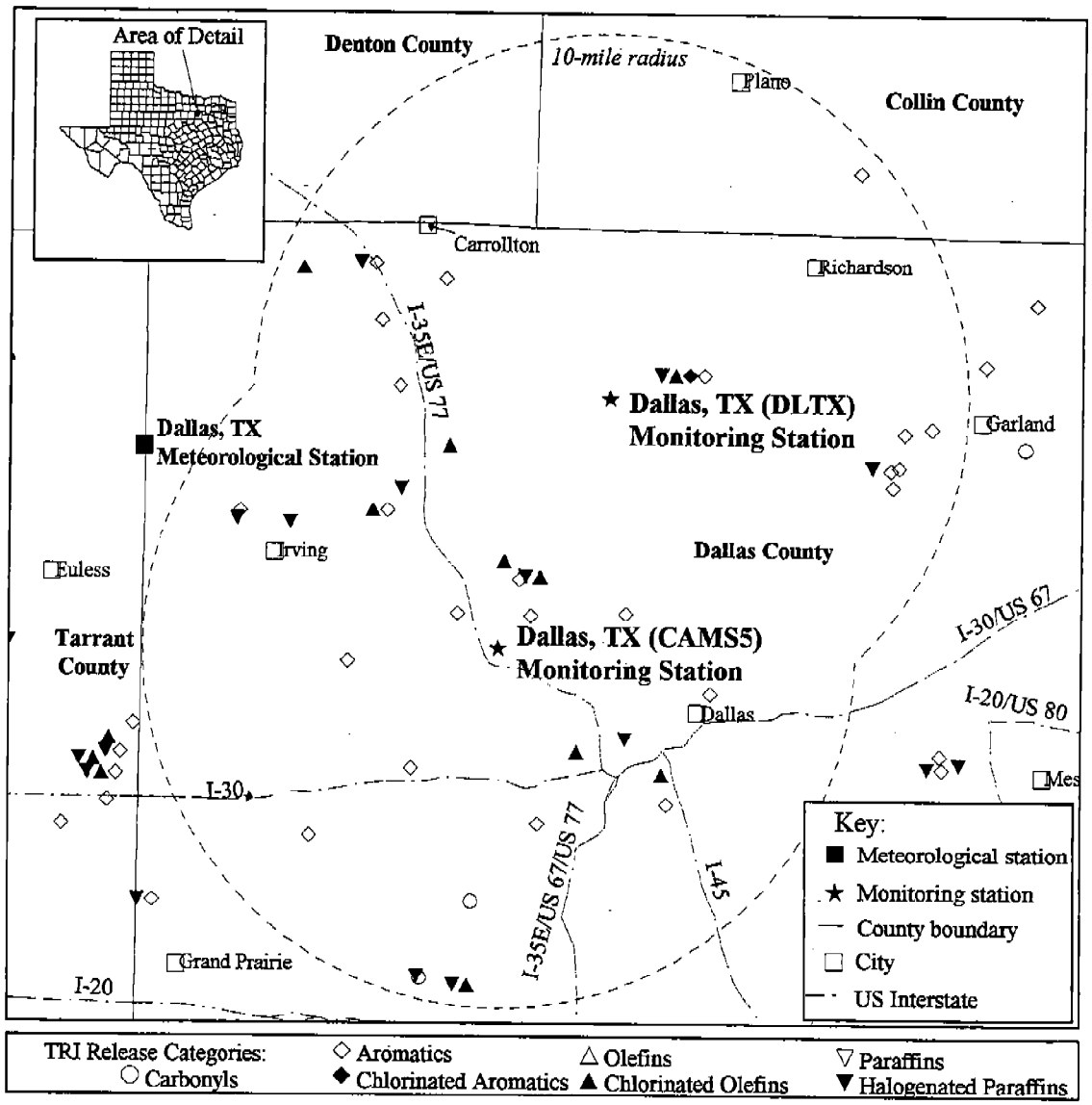


Figure 5-7
Facilities in the Vicinity of the Juarez, Mexico (JUMX) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

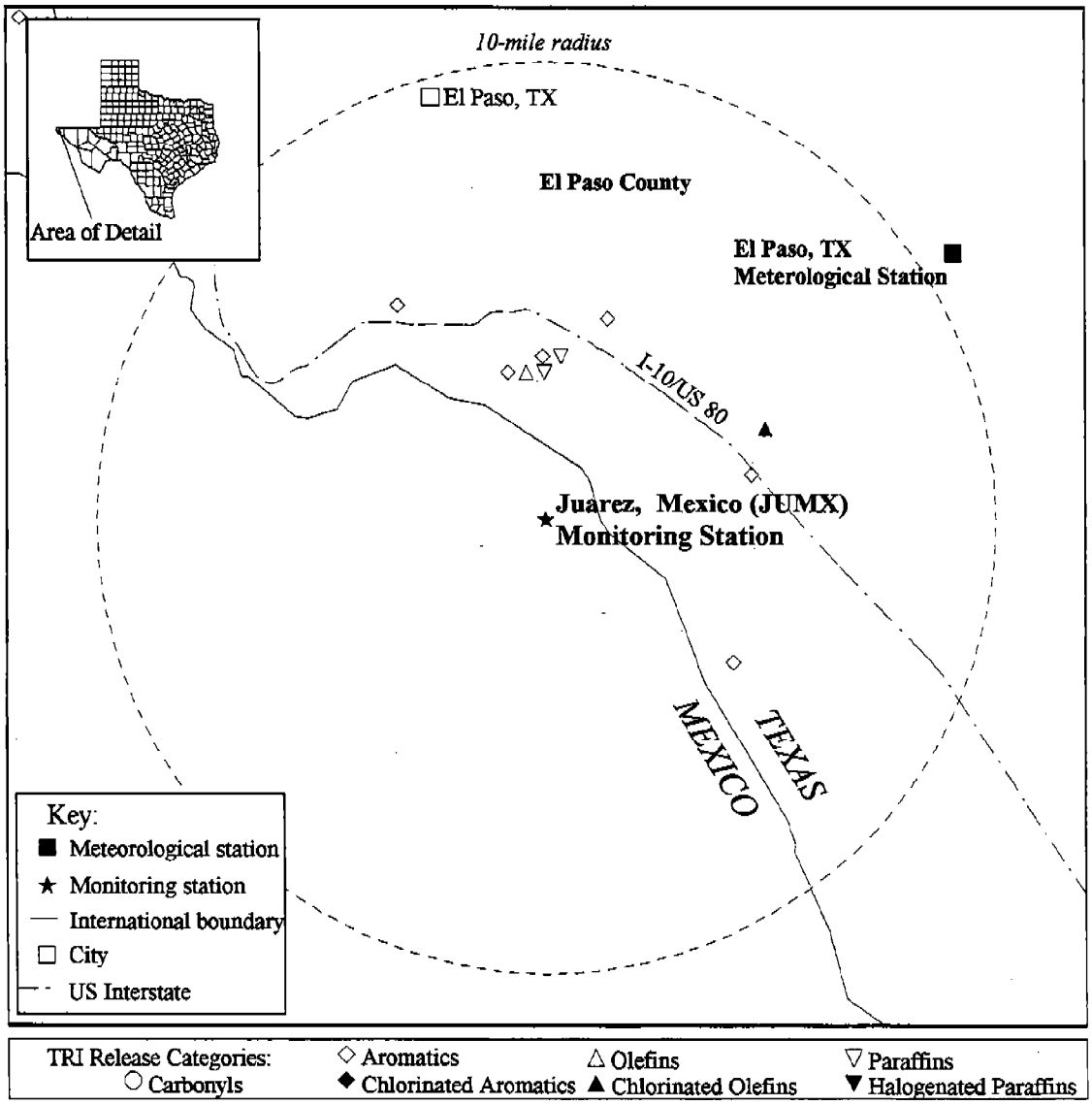
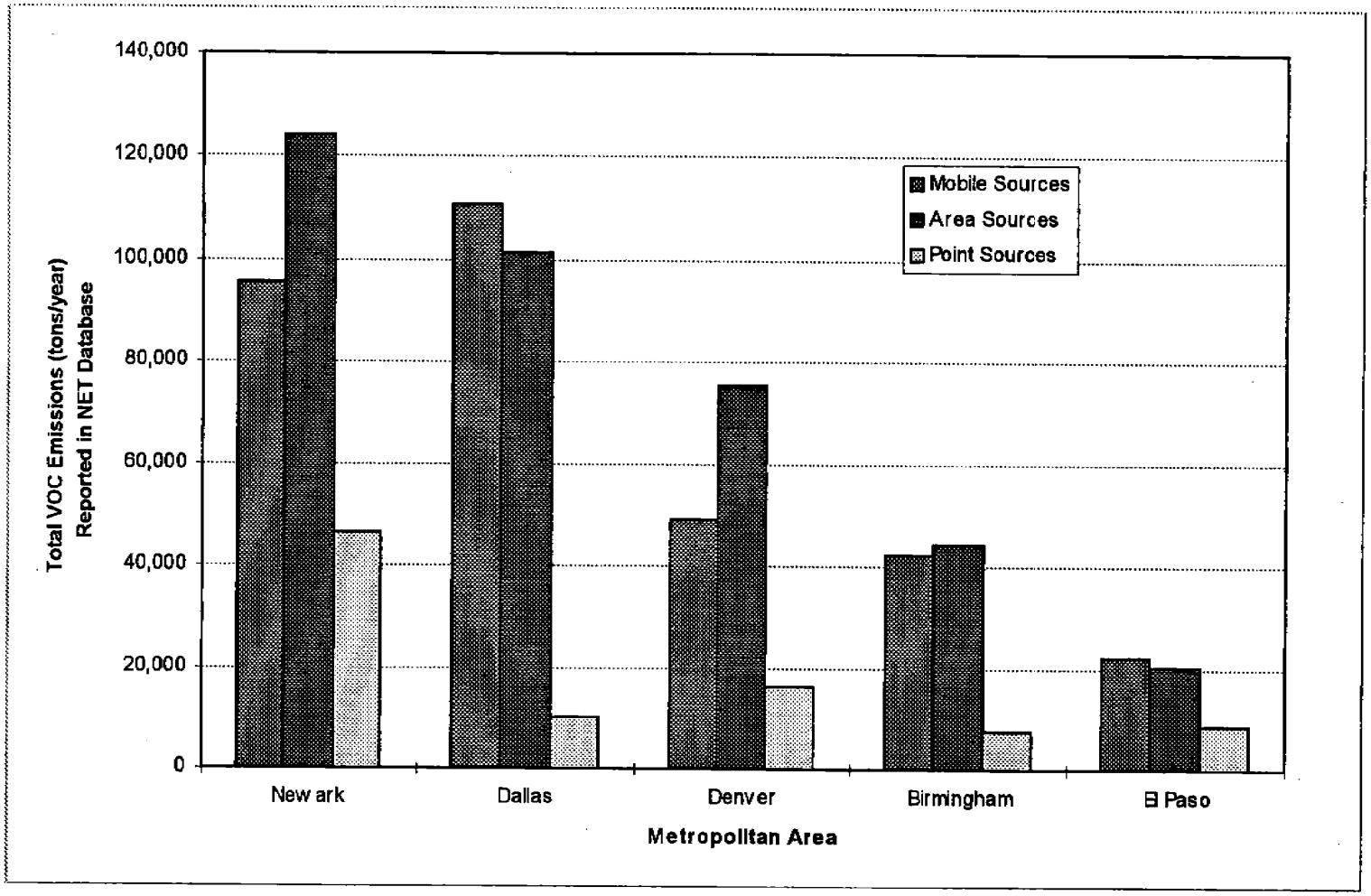
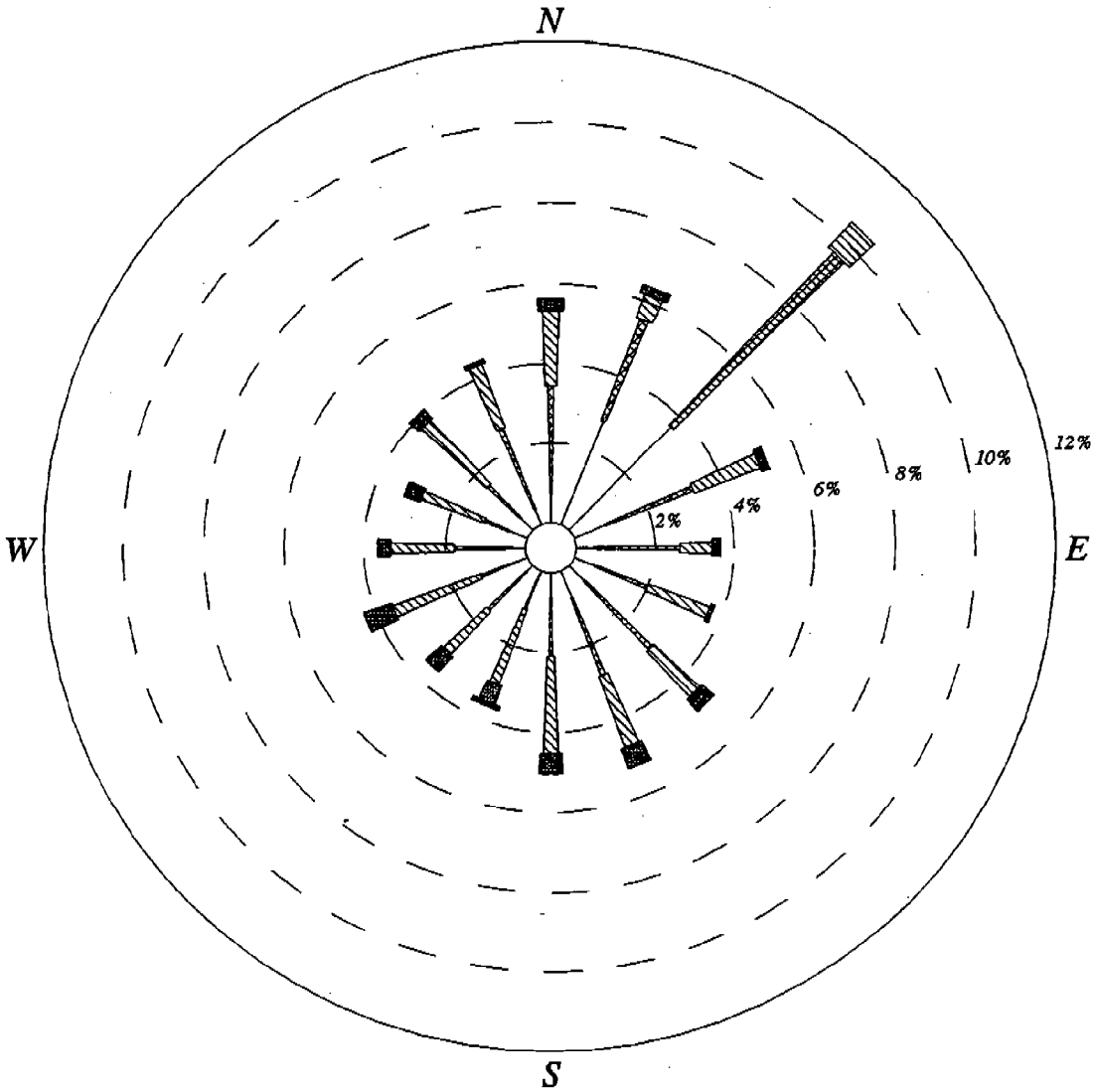


Figure 5-8
Summary of NET Emissions Data for SNMOC Monitoring Locations



Note: The NET database does not characterize emissions for locations in Mexico. Accordingly, the figure presents emissions inventory data for El Paso, Texas, a city less than 10 miles from the Juarez monitoring station. These emissions should be viewed as a lower bound estimate of the actual emissions in the vicinity of Juarez, Mexico.

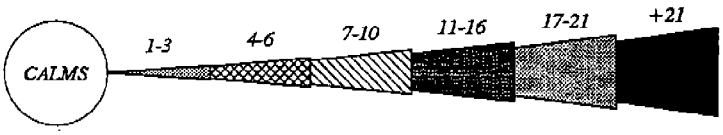
Figure 5-9
Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Birmingham Municipal Airport (near the Helena, Pinson, and Tarrant City Monitoring Stations)



CALM WINDS 22.80%

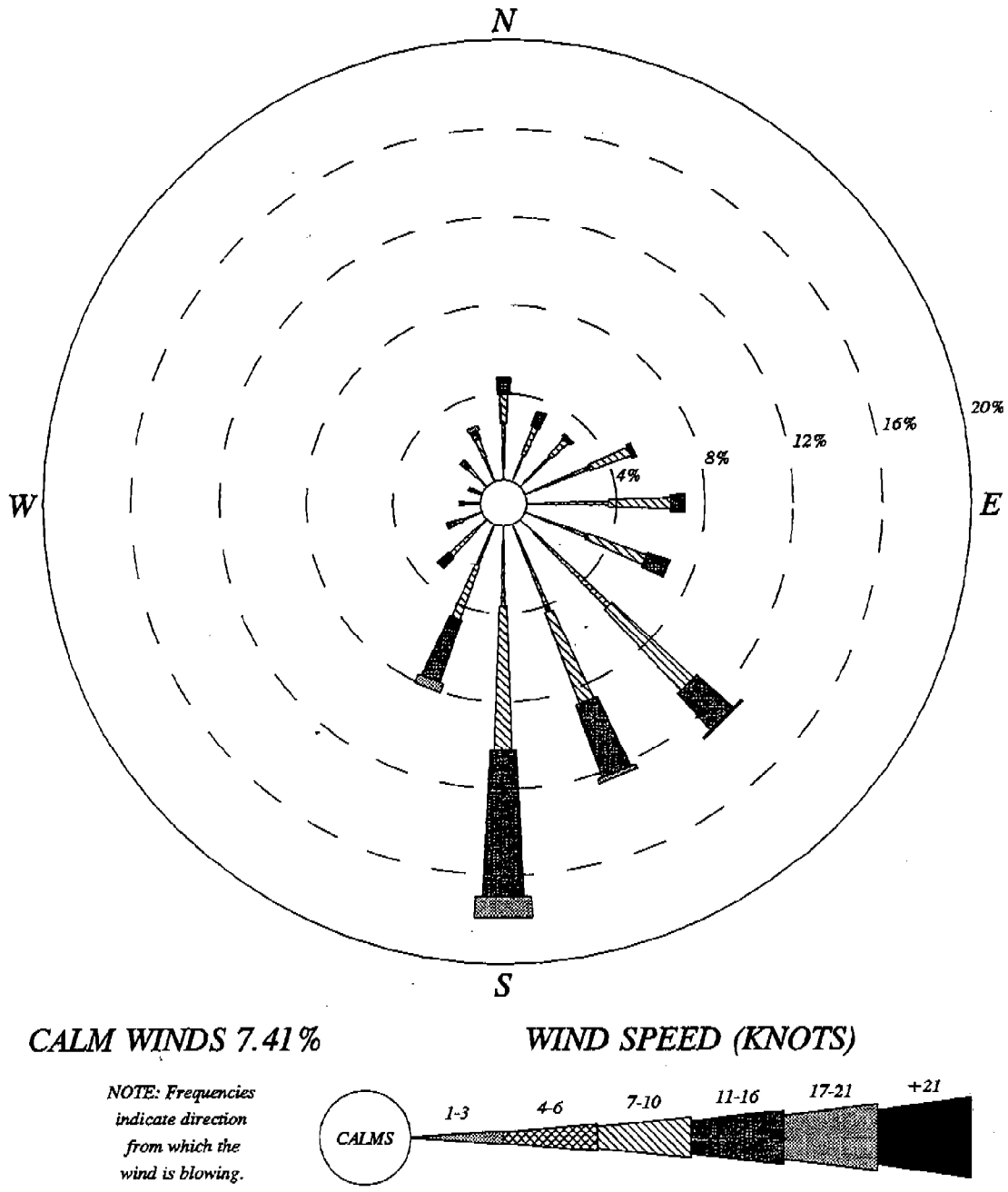
NOTE: Frequencies indicate direction from which the wind is blowing.

WIND SPEED (KNOTS)



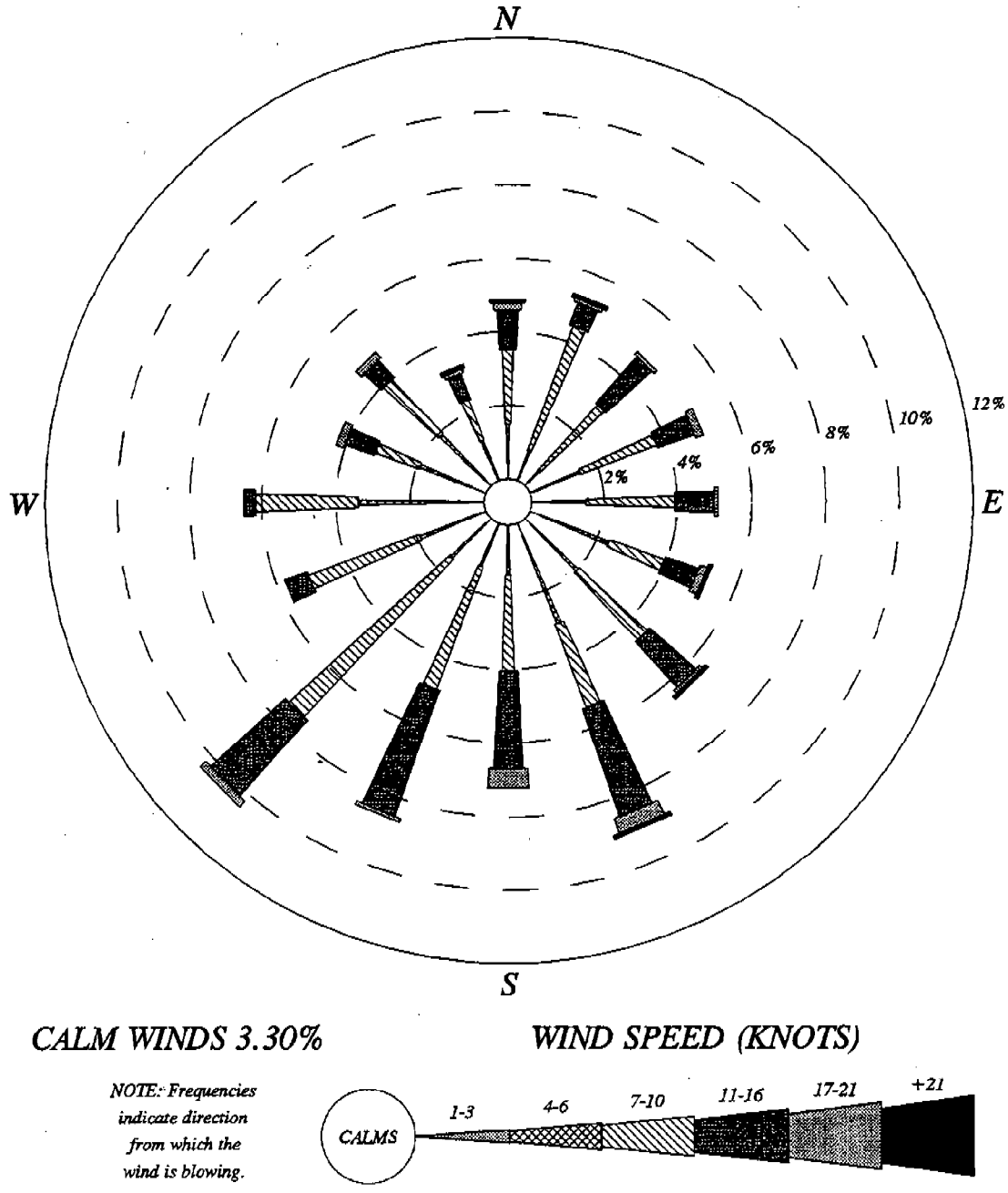
Source: Data provided by the National Climatic Data Center.

Figure 5-10
Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Dallas-Fort Worth Regional Airport (near the Dallas and Fort Worth Monitoring Stations)



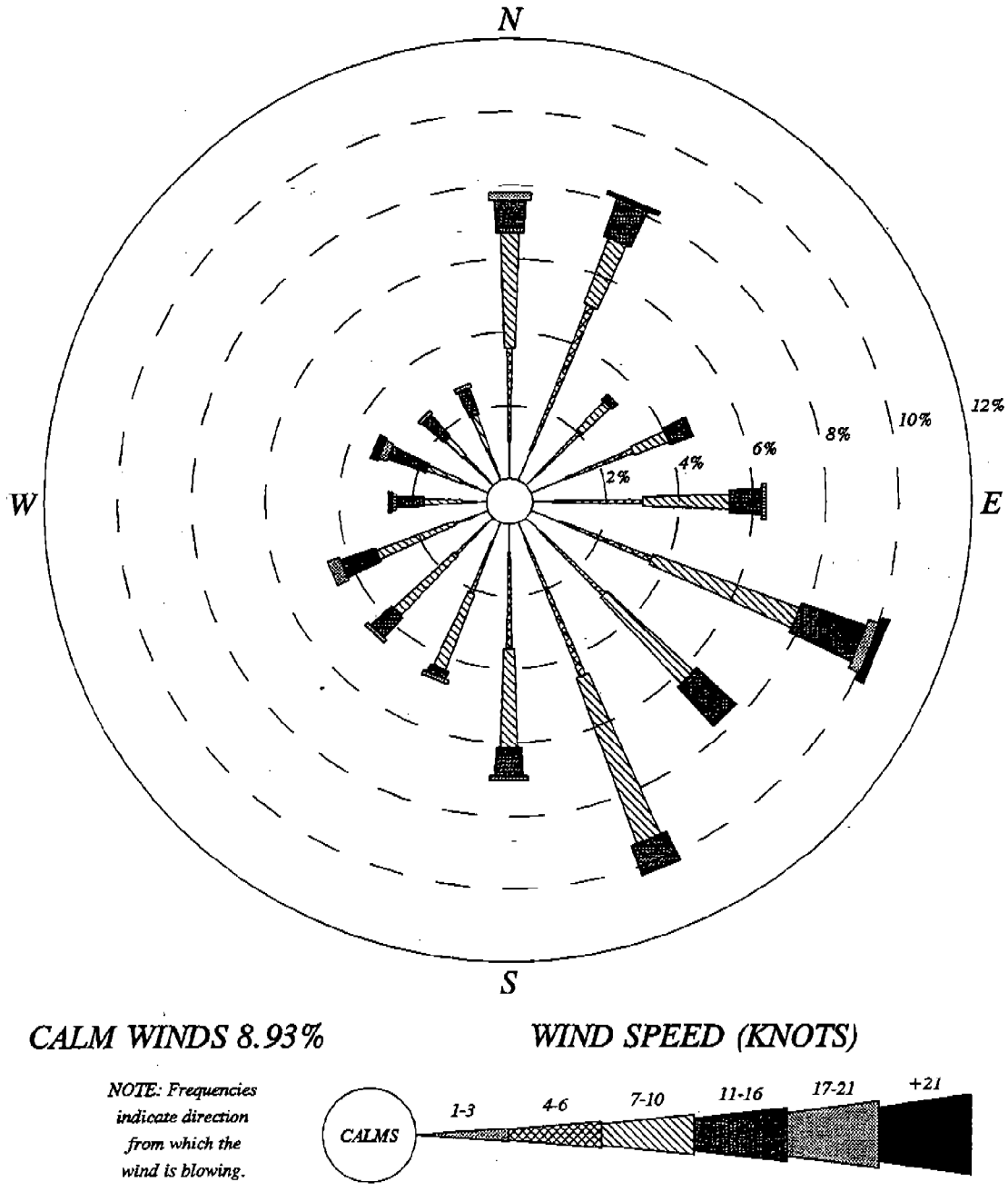
Source: Data provided by the National Climatic Data Center.

Figure 5-11
Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Denver International Airport (near the Denver and Rocky Flats Monitoring Stations)



Source: Data provided by the National Climatic Data Center.

Figure 5-12
Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the El Paso International Airport (near the Juarez Monitoring Station)



Source: Data provided by the National Climatic Data Center.

Figure 5-13
Correlations Between Temperature and Concentration of Total Identified SNMOCs

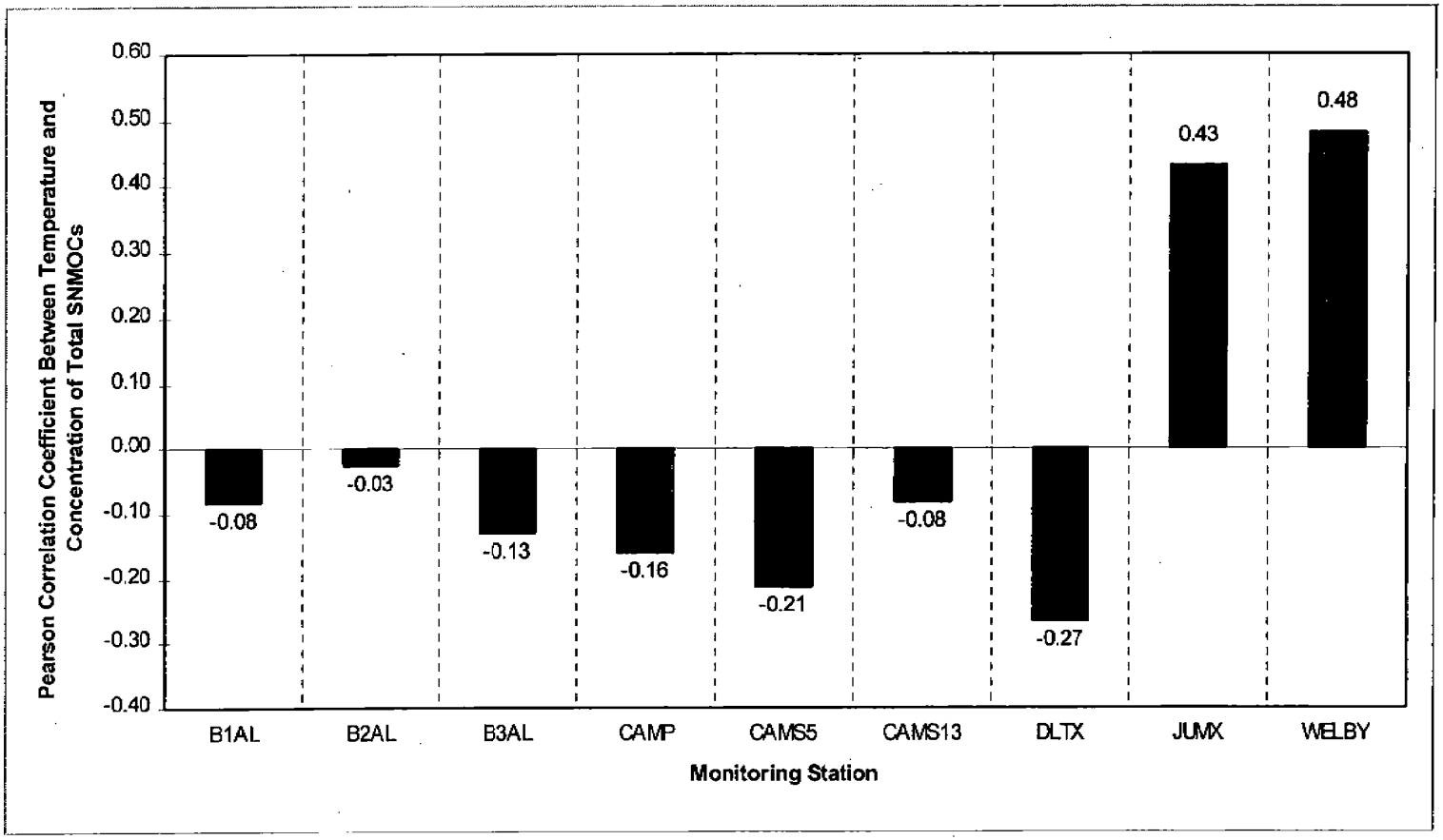
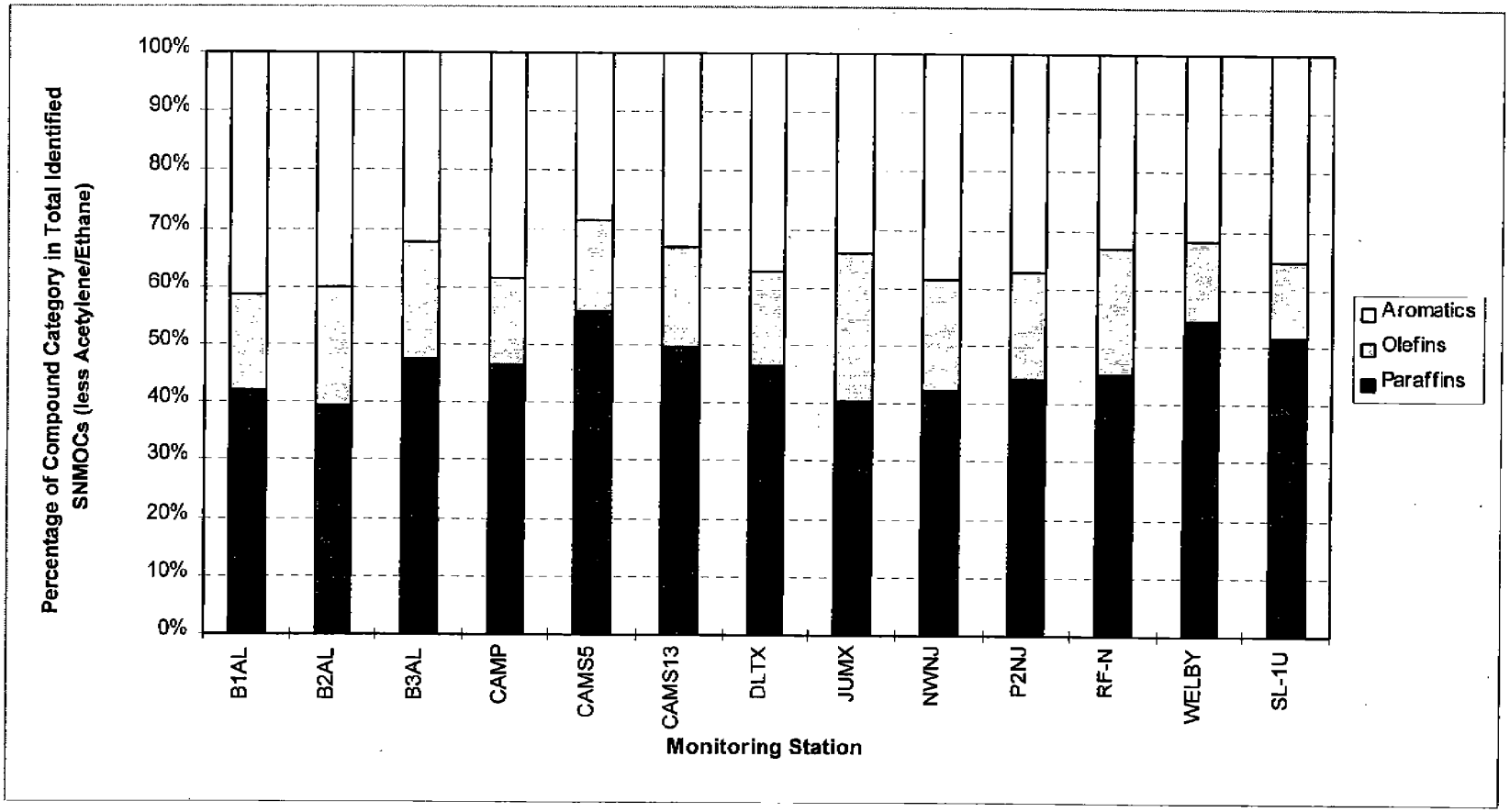


Figure 5-14
Breakdown of Total SNMOCs by Paraffins, Olefins, and Aromatics



Note: As described in Section 5.2.3.1, percentages do not account for concentrations of acetylene/ethane.

Figure 5-15
Spatial Variations in Concentrations of Isoprene and in Percentage of Total Identified SNMOCs Consisting of Isoprene

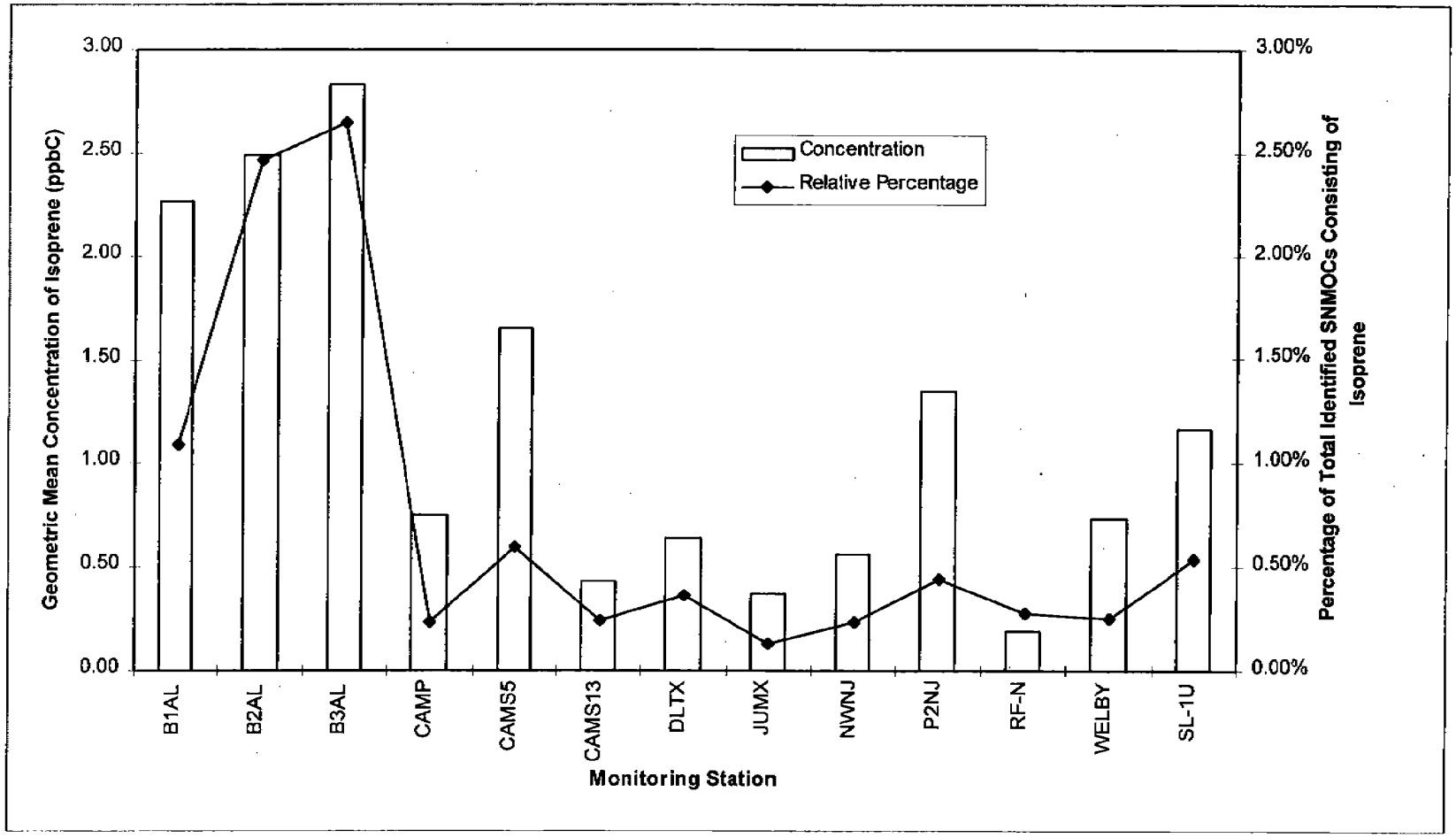


Figure 5-16
BTEX Concentration Ratios at the SNMOC Monitoring Stations

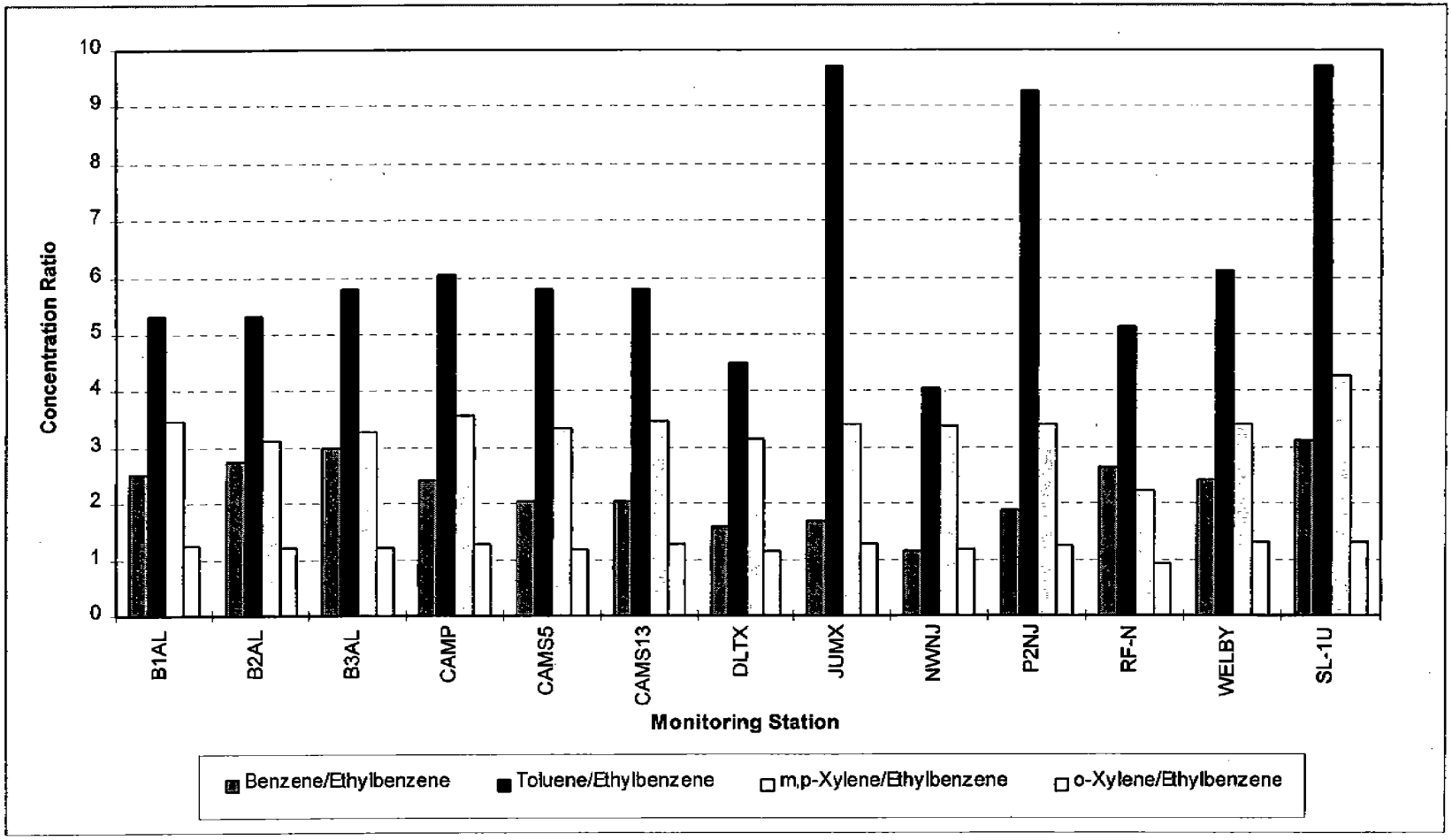


Figure 5-17
Ratios of Geometric Mean Concentrations of Benzene and *m,p*-Xylene to Toluene at Selected Monitoring Stations

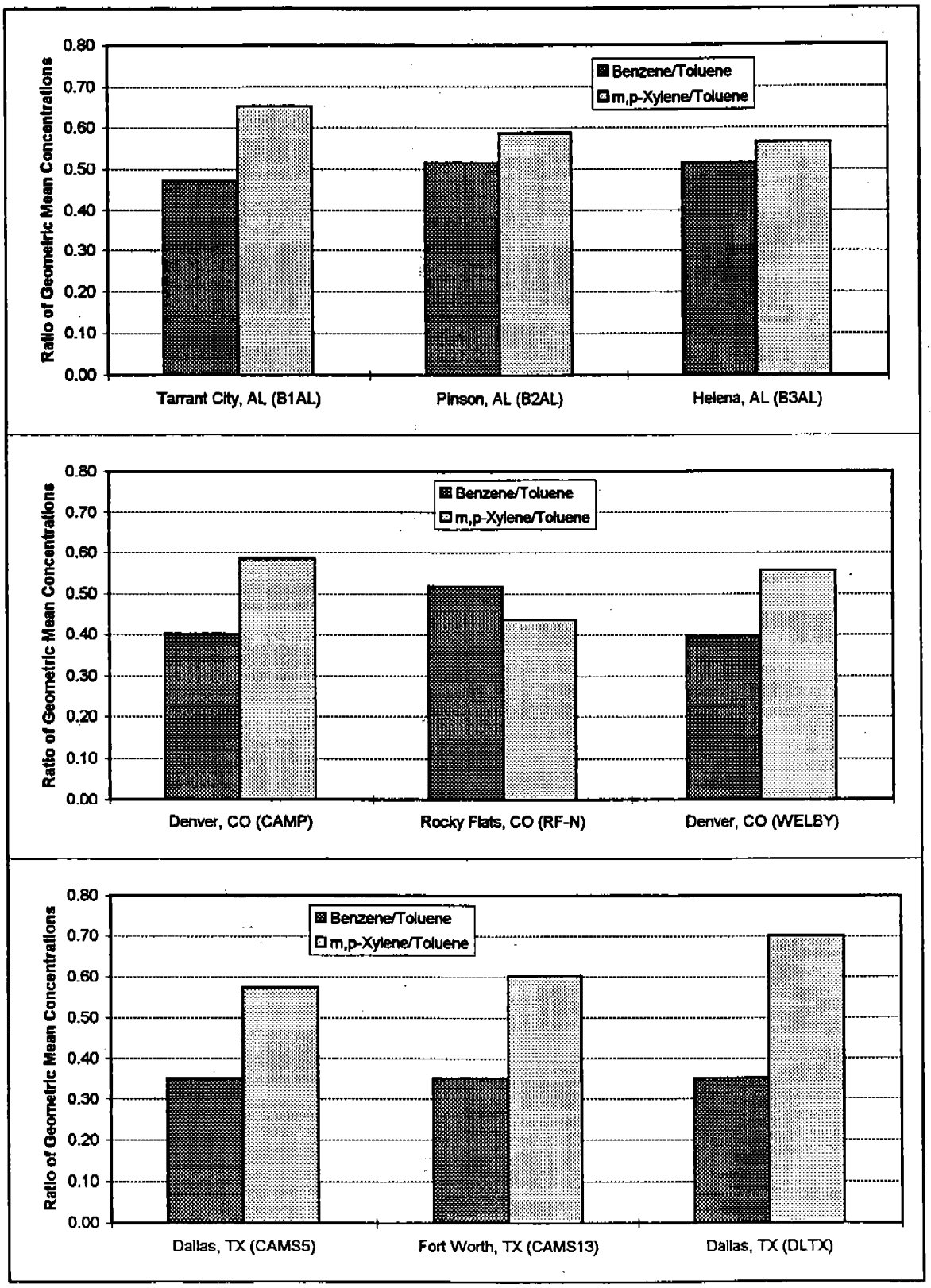
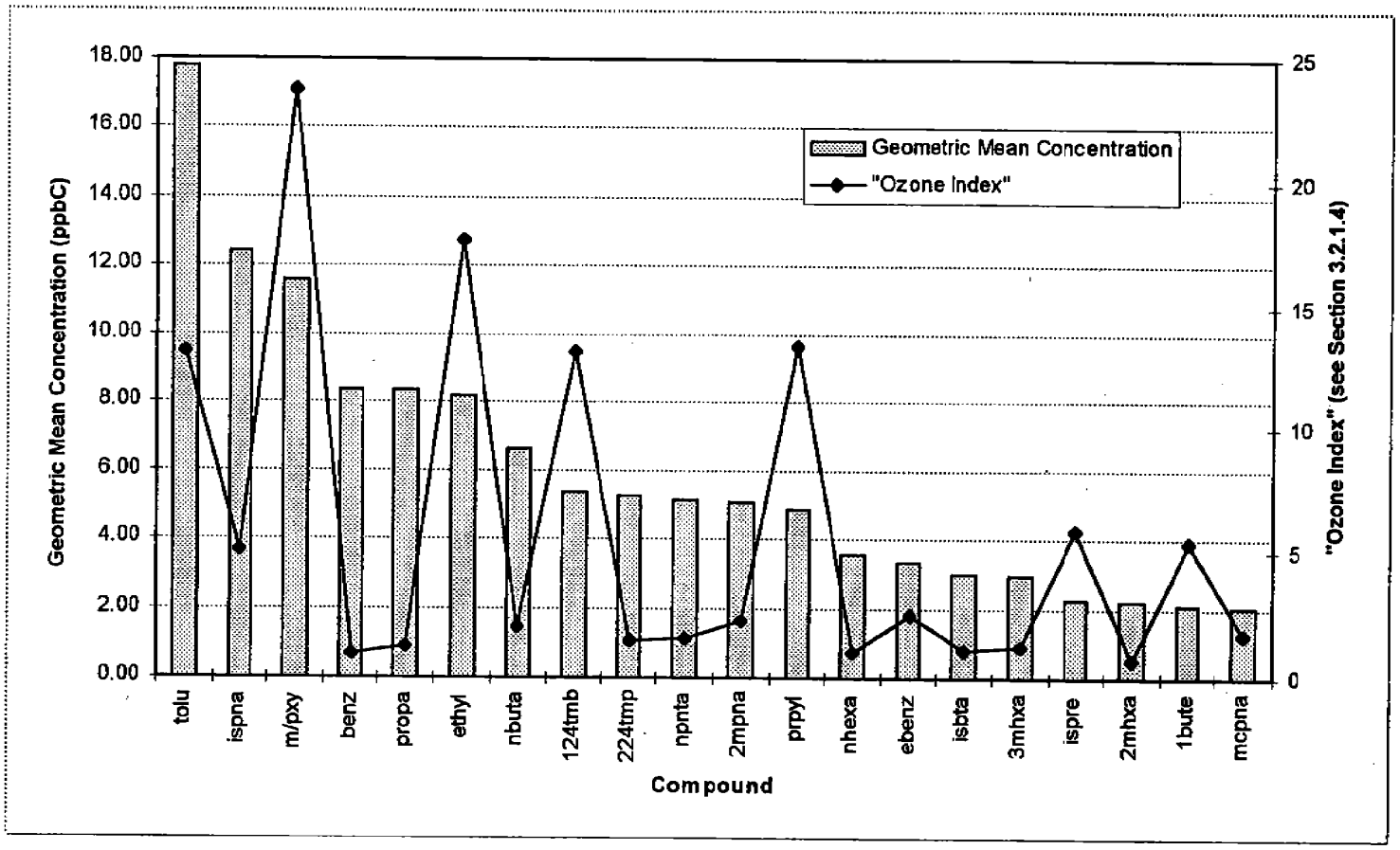
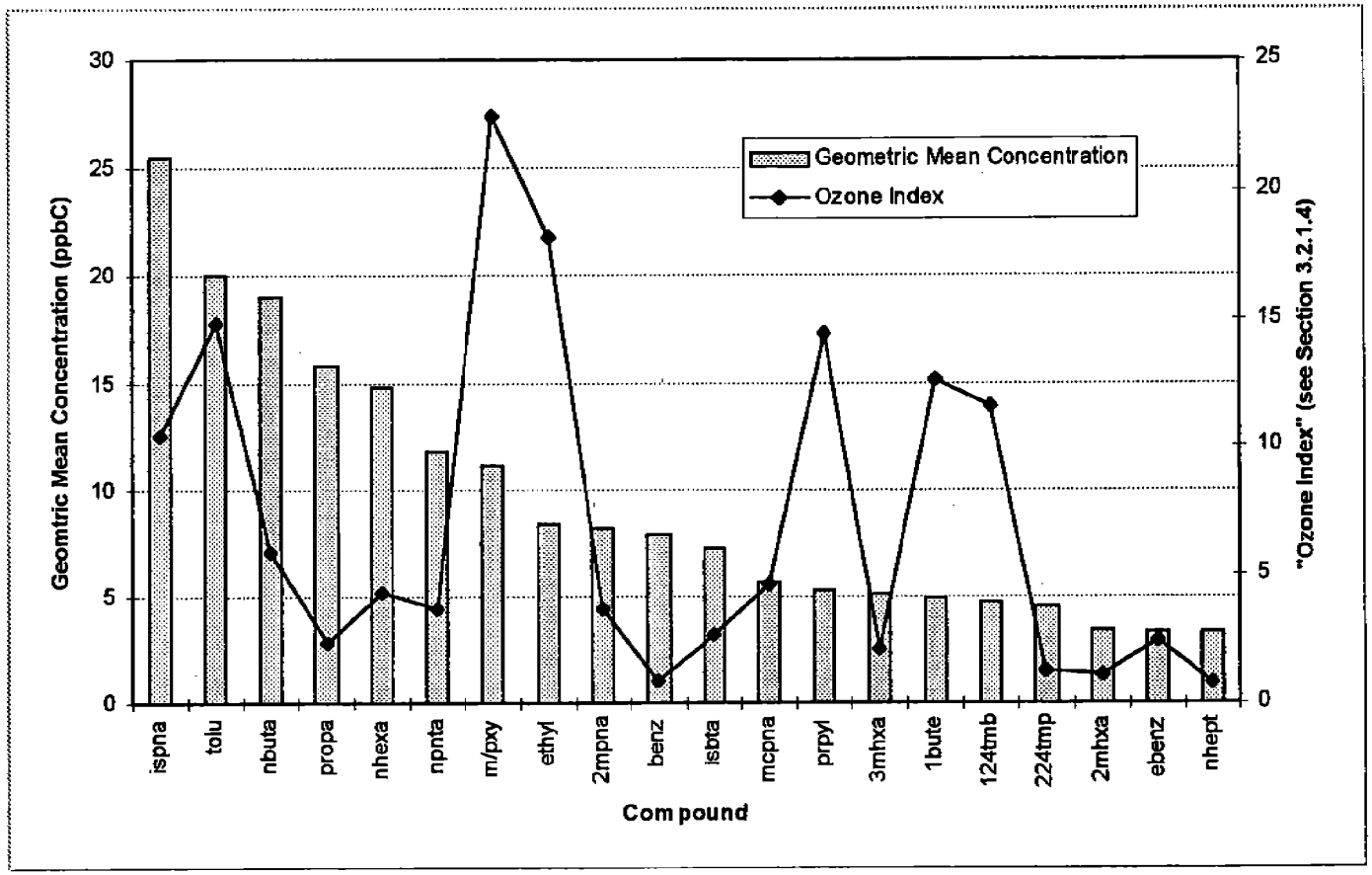


Figure 5-18
Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Tarrant City, Alabama (B1AL) Monitoring Station



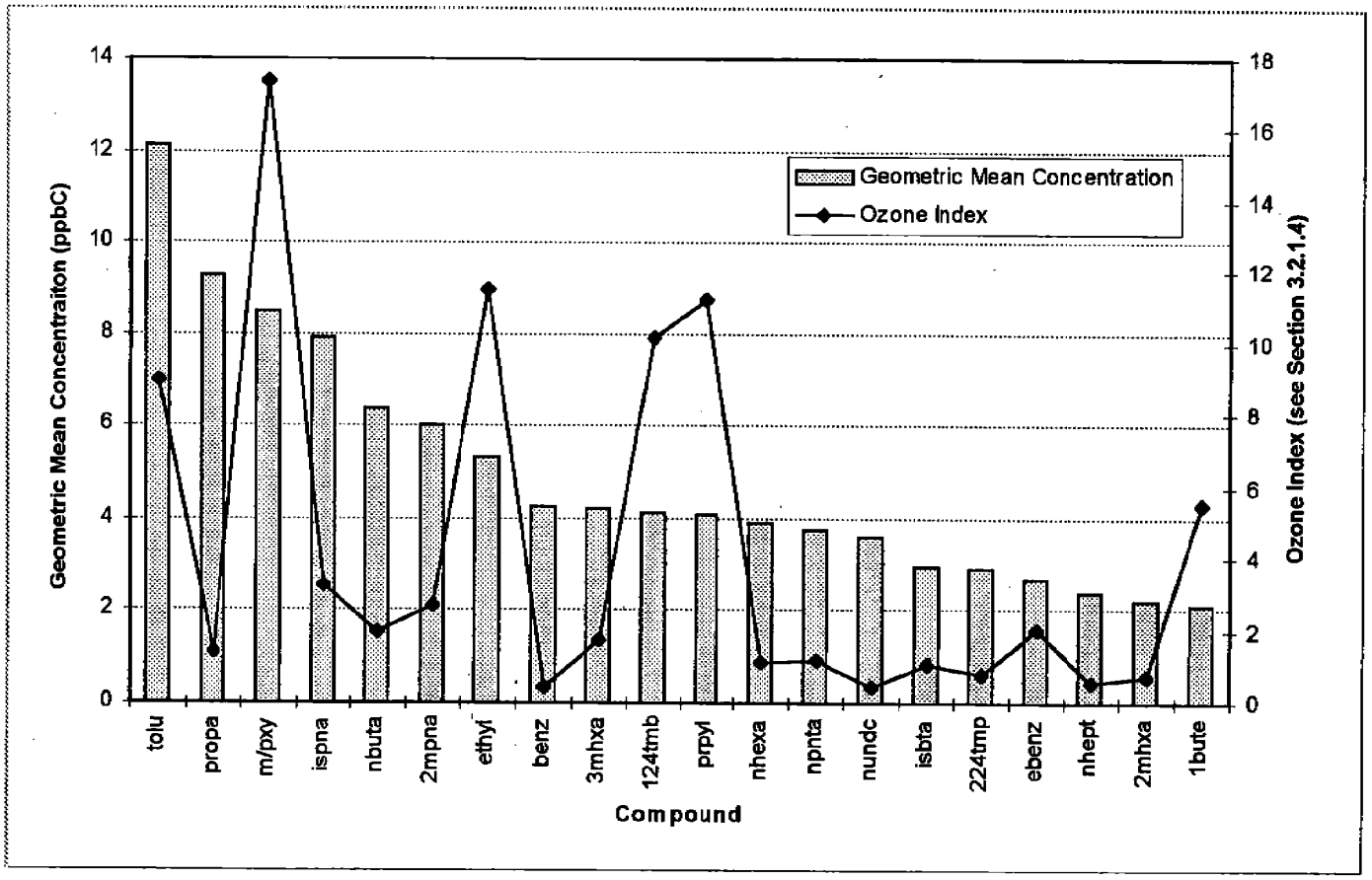
Note: Table 5-3 lists the abbreviations used for the compounds.

Figure 5-19
Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Denver, Colorado (WELBY) Monitoring Station



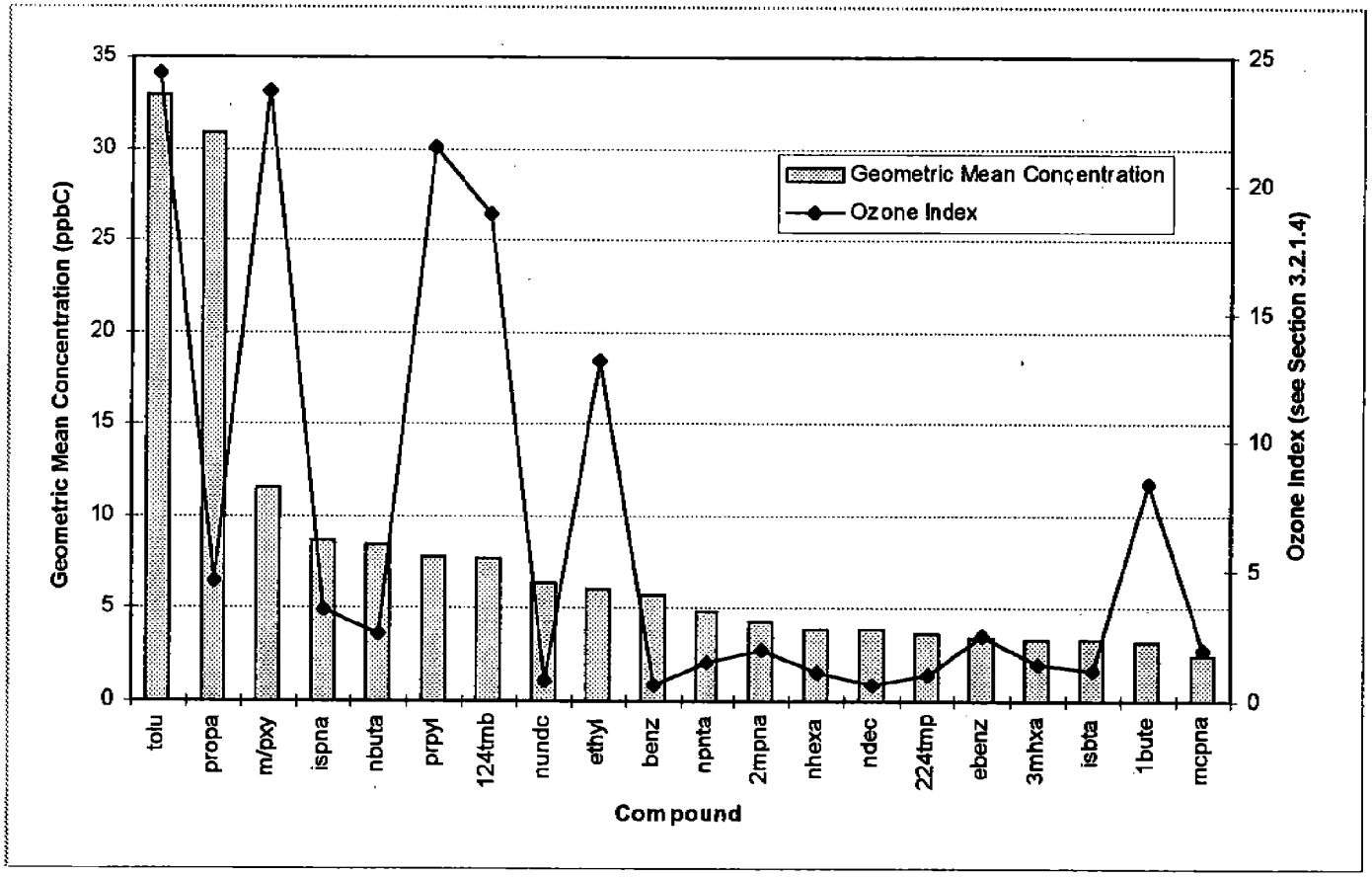
Note: Table 5-3 lists the abbreviations used for the compounds.

Figure 5-20
Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Dallas, Texas (DLTX) Monitoring Station



Note: Table 5-3 lists the abbreviations used for the compounds.

Figure 5-21
Ozone Indices for the 20 SNMOCs With Highest Geometric Mean Concentrations at the Juarez, Mexico (JUMX) Monitoring Station



Note: Table 5-3 lists the abbreviations used for the compounds.

Figure 5-22
Long-Term Trends in Ambient Air Concentrations of Propane and Propylene in the Vicinity of Birmingham, Alabama

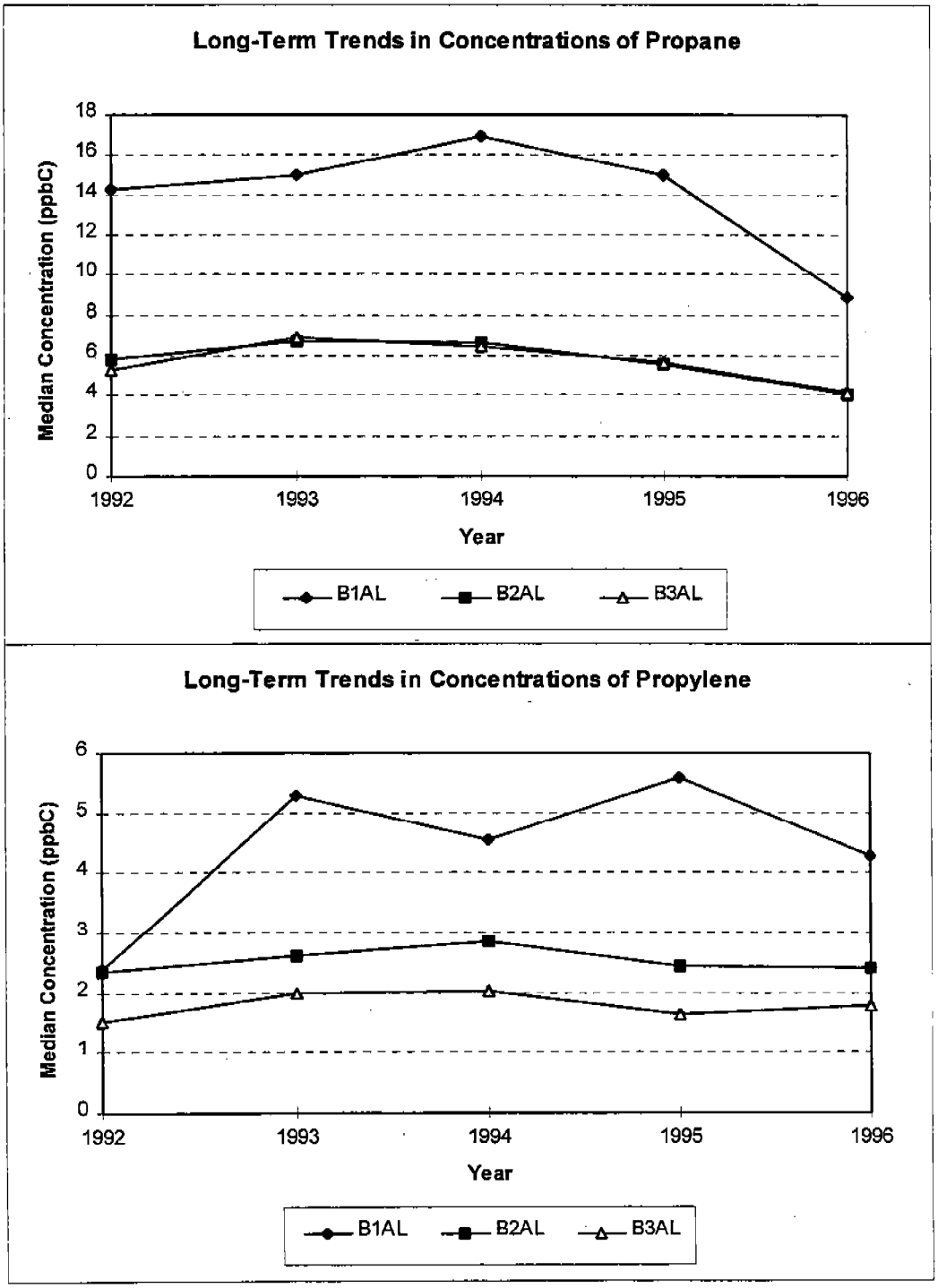


Table 5-1
Summary of Geometric Mean Concentrations of SNMOCs

Compound	Geometric Mean Concentration (ppbC) by Monitoring Station											
	B1AL	B2AL	B3AL	CAMP	CAMS5	CAMS13	DLTX	JUMX	NWNJ	P2NJ	RF-N	WELBY
Acetylene/Ethane	15.63	6.19	5.76	24.90	10.29	13.97	12.08	13.47	19.47	24.85	6.20	23.66
Benzene	8.36	3.91	3.21	11.87	6.98	4.12	4.26	5.74	5.39	7.16	1.29	7.94
1,3-Butadiene	0.41	0.24	0.16	0.61	0.21	0.22	0.39	0.29	0.41	0.48	0.10	0.31
n-butane	6.59	3.11	6.01	12.10	12.60	7.55	6.35	8.42	7.49	7.62	2.78	19.03
Isobutene/1-butene	2.08	1.15	1.78	3.52	2.51	3.26	2.12	3.23	5.68	6.77	1.94	4.85
cis-2-butene	0.34	0.14	0.23	0.73	0.85	0.32	0.19	0.25	0.84	0.96	0.10	0.64
trans-2-Butene	0.39	0.17	0.23	0.86	0.68	0.34	0.22	0.21	0.80	1.35	0.12	0.80
Cyclohexane	0.97	0.31	0.26	2.16	1.07	0.83	0.70	1.20	0.70	1.48	0.26	2.10
Cyclopentane	0.59	0.29	0.38	1.40	1.36	0.83	0.61	0.60	0.60	1.04	0.20	1.20
Cyclopentene	0.45	0.21	0.26	0.37	0.75	0.33	0.30	0.23	0.34	0.53	0.20	0.28
n-Decane	1.73	0.60	0.95	1.71	1.62	1.23	1.81	3.79	2.55	2.18	0.42	1.40
1-Decene	1.10	0.90	1.10	1.73	1.48	1.20	1.64	2.01	0.87	0.89	0.64	1.95
m-Diethylbenzene	1.10	0.55	0.39	1.55	0.91	0.70	1.19	0.97	1.49	1.38	0.50	1.10
p-Diethylbenzene	1.51	0.76	0.56	2.49	1.49	1.14	1.13	1.14	1.59	1.36	0.68	1.73
2,2-Dimethylbutane	0.88	0.51	0.64	1.41	1.63	1.00	0.81	0.49	1.03	1.50	0.32	1.09
2,3-Dimethylbutane	1.58	0.76	1.03	2.73	3.83	1.79	1.32	1.29	1.73	3.26	0.56	2.06
2,3-Dimethylpentane	1.14	0.52	0.54	2.89	1.31	0.89	0.75	2.07	1.53	2.07	0.30	2.00
2,4-Dimethylpentane	1.09	0.48	0.48	2.03	1.45	0.77	0.69	1.30	1.11	1.87	0.32	1.54
n-Dodecane	3.85	2.19	2.47	1.94	3.04	2.59	4.22	7.51	2.85	2.21	1.77	2.66
1-Dodecene	1.42	1.34	1.20	1.66	1.60	1.98	1.73	39.67	1.69	1.62	1.27	1.79
2-Ethyl-1-butene	1.06	0.96	0.99	1.07	0.98	0.96	0.98	1.03	1.07	1.07	1.07	0.99
Ethylbenzene	3.33	1.43	1.08	4.88	3.43	2.02	2.69	3.39	4.73	3.82	0.49	3.27
Ethylene	8.19	4.31	2.96	14.05	4.57	5.51	5.32	6.09	11.79	18.49	1.09	8.41

Table 5-1 (Continued)
Summary of Geometric Mean Concentrations of SNMOCs

Compound	Geometric Mean Concentration (ppbC) by Monitoring Station											
	B1AL	B2AL	B3AL	CAMP	CAMS5	CAMS13	DLTX	JUMX	NWNJ	P2NJ	RF-N	WELBY
m-Ethyltoluene	3.87	1.82	1.49	5.14	3.75	2.39	2.84	2.62	3.23	3.85	0.46	3.17
o-Ethyltoluene	1.73	0.78	0.70	2.03	1.54	1.07	1.27	1.33	1.51	2.12	0.24	1.36
p-Ethyltoluene	1.67	0.70	0.56	2.24	1.84	1.21	1.47	1.20	1.62	1.73	0.23	1.41
n-Heptane	1.73	0.71	0.68	4.20	3.50	2.21	2.37	1.91	1.88	2.73	0.42	3.25
1-Heptene	0.73	0.31	0.41	1.37	1.23	0.69	0.69	0.73	0.61	1.02	0.25	0.97
n-Hexane	3.58	1.53	1.59	10.03	9.59	5.05	3.93	3.79	3.13	9.94	1.07	14.79
1-Hexene	0.78	0.54	0.58	0.84	0.97	0.64	0.75	0.70	0.61	0.81	0.82	0.73
cis-2-Hexene	0.27	0.15	0.20	0.33	0.76	0.22	0.23	0.27	0.27	0.32	0.54	0.31
trans-2-Hexene	0.45	0.21	0.28	0.53	1.16	0.29	0.30	0.36	0.67	0.47	0.37	0.44
Isobutane	2.97	1.01	1.78	6.33	3.32	3.49	2.93	3.25	5.10	5.53	1.54	7.26
Isopentane	12.42	5.13	9.89	20.40	25.98	11.94	7.92	8.68	13.99	19.85	2.63	25.49
Isoprene	2.27	2.49	2.83	0.75	1.65	0.43	0.64	0.37	0.56	1.35	0.19	0.73
Isopropylbenzene	0.26	0.19	0.22	0.28	0.25	0.27	0.31	0.28	0.38	0.45	0.37	0.26
2-Methyl-1-butene	0.83	0.38	0.61	1.25	2.20	0.73	0.54	0.53	1.64	1.54	0.14	1.02
2-Methyl-1-pentene	0.57	0.30	0.39	0.62	1.10	0.42	0.42	0.43	0.63	0.71	0.20	0.45
4-Methyl-1-pentene	0.67	0.36	0.41	0.48	0.81	0.45	0.49	0.34	0.71	0.47	0.78	0.49
2-Methyl-2-butene	1.39	0.51	0.70	2.13	4.29	1.21	0.75	0.65	1.58	1.78	0.17	1.28
3-Methyl-1-butene	0.32	0.15	0.23	0.30	0.66	0.27	0.21	0.23	0.37	0.32	0.25	0.30
Methylcyclohexane	1.24	0.48	0.66	3.29	1.97	1.37	1.78	1.43	1.69	2.13	0.53	2.45
Methylcyclopentane	2.05	0.82	0.92	4.59	4.38	2.46	1.91	2.39	1.99	4.84	0.70	5.61
2-Methylheptane	0.84	0.36	0.35	1.94	1.24	0.96	0.73	0.87	1.18	1.30	0.25	1.34
1-Octene	0.74	0.41	0.37	2.04	0.92	0.74	0.75	0.73	1.01	1.20	0.29	1.36
2-Methylhexane	2.17	0.94	0.89	4.62	4.28	2.49	2.21	2.04	2.24	3.72	0.55	3.39

Table 5-1 (Continued)
Summary of Geometric Mean Concentrations of SNMOCs

Compound	Geometric Mean Concentration (ppbC) by Monitoring Station											
	B1AL	B2AL	B3AL	CAMP	CAMS5	CAMS13	DLTX	JUMX	NWNJ	P2NJ	RF-N	WELBY
3-Methylhexane	2.96	1.55	1.42	5.85	5.38	3.70	4.20	3.33	3.37	4.24	1.44	5.04
2-Methylpentane	5.09	2.46	2.68	10.21	22.62	7.98	5.99	4.31	10.14	9.34	2.50	8.22
3-Methylpentane	3.57	1.61	1.70	6.93	7.86	4.13	3.21	2.77	2.78	7.15	0.85	6.60
n-Nonane	1.18	0.41	0.50	1.19	0.88	0.68	0.97	1.01	1.41	1.11	0.47	0.96
1-Nonene	0.44	0.27	0.27	0.42	0.35	0.32	0.41	0.54	0.47	0.47	0.26	0.32
n-Octane	1.06	0.37	0.46	2.01	1.24	0.95	1.08	0.86	1.37	1.41	0.30	1.48
3-Methylheptane	0.75	0.28	0.31	0.67	0.59	0.49	0.43	0.54	0.60	0.72	0.12	0.47
n-Pentane	5.11	2.87	3.22	14.96	12.49	5.26	3.75	4.82	6.50	9.24	1.59	11.76
1-Pentene	0.75	0.31	0.44	0.80	1.69	0.51	0.42	0.45	0.98	0.87	0.15	1.42
cis-2-Pentene	0.67	0.25	0.36	0.92	2.08	0.47	0.36	0.42	0.64	0.81	0.13	0.71
trans-2-Pentene	1.18	0.39	0.68	1.62	3.83	0.91	0.66	0.78	1.60	1.77	0.16	1.29
a-Pinene	1.64	2.76	2.73	1.33	1.31	1.29	2.22	1.66	1.60	2.03	1.41	1.43
b-Pinene	1.71	2.22	2.28	0.83	0.73	0.99	1.71	1.87	1.17	0.93	1.64	0.90
Propane	8.36	3.98	4.18	12.43	7.61	9.19	9.28	30.85	12.41	15.62	4.75	15.84
n-Propylbenzene	1.02	0.46	0.44	1.49	1.06	0.75	0.86	1.27	0.97	1.08	0.27	1.10
Propylene	4.87	2.10	1.76	6.66	2.86	3.48	4.08	7.82	7.74	7.54	0.58	5.24
Propyne	0.18	0.16	0.16	0.17	0.17	0.17	0.16	0.17	0.16	0.16	0.16	0.16
Styrene	2.06	0.96	0.98	1.61	1.12	1.39	1.61	1.68	1.51	1.42	0.77	1.54
Toluene	17.75	7.61	6.25	29.58	19.86	11.70	12.12	32.94	19.14	35.34	2.48	20.00
n-Tridecane	2.14	1.37	1.74	1.82	1.86	1.43	2.44	2.58	1.82	1.11	1.05	1.51
1-Tridecene	0.47	0.41	0.42	0.57	0.45	0.48	0.42	1.66	0.37	0.38	0.54	0.51
1,2,3-Trimethylbenzene	1.32	0.72	0.76	1.53	1.69	1.15	1.37	1.43	1.37	1.65	0.90	1.48
1,2,4-Trimethylbenzene	5.38	2.26	1.89	7.32	5.17	3.77	4.14	7.72	5.55	5.34	2.45	4.73

Table 5-1 (Continued)
Summary of Geometric Mean Concentrations of SNMOCs

Compound	Geometric Mean Concentration (ppbC) by Monitoring Station											
	B1AL	B2AL	B3AL	CAMP	CAMS5	CAMS13	DLTX	JUMX	NWNJ	P2NJ	RF-N	WELBY
1,3,5-Trimethylbenzene	1.92	0.76	0.62	2.76	1.91	1.44	1.53	1.54	1.90	2.06	0.16	1.74
2,2,3-Trimethylpentane	1.12	0.46	0.51	1.44	1.13	0.80	0.72	0.80	1.22	1.25	0.18	0.98
2,2,4-Trimethylpentane	5.25	2.08	2.03	5.93	4.87	3.60	2.88	3.67	6.07	6.57	0.76	4.49
2,3,4-Trimethylpentane	2.02	0.81	0.64	1.88	1.75	1.21	1.04	1.40	1.77	2.31	0.31	1.23
n-Undecane	3.30	1.83	1.87	2.47	2.76	2.13	3.60	6.37	3.10	2.41	1.46	2.85
1-Undecene	2.01	1.58	1.51	2.24	1.95	4.04	3.46	2.36	2.54	2.15	2.14	2.60
m-Xylene/*p*-Xylene	11.59	4.47	3.53	17.34	11.42	7.05	8.49	11.55	16.00	13.00	1.08	11.13
o-Xylene	4.13	1.71	1.31	6.26	4.02	2.60	3.11	4.29	5.53	4.72	0.45	4.31

Table 5-2
Pairs of Compounds With Pearson Correlation Coefficients Greater Than 0.90
(Based on 601 SNMOC Samples)

Compounds		Pearson Correlation Coefficient
m,p-Xylene	*o*-Xylene	0.99
Ethylbenzene	*m,p*-Xylene	0.98
Ethylbenzene	*o*-Xylene	0.97
m-Ethyltoluene	*p*-Ethyltoluene	0.96
2,2,4-Trimethylpentane	2,3,4-Trimethylpentane	0.95
m-Ethyltoluene	1,3,5-Trimethylbenzene	0.95
p-Ethyltoluene	1,3,5-Trimethylbenzene	0.93
n-Undecane	*n*-Dodecane	0.93
trans-2-Butene	*cis*-2-Butene	0.92
m-Ethyltoluene	1,2,4-Trimethylbenzene	0.92
2-Methylhexane	*n*-Heptane	0.90

Table 5-3
Abbreviations Used in Figures of Ozone Indices
(Figures 5-18 through 5-21)

Abbreviation	Compound	Abbreviation	Compound
123tmb	1,2,3-Trimethylbenzene	cypne	Cyclopentene
124tmb	1,2,4-Trimethylbenzene	ebenz	Ethylbenzene
135tmb	1,3,5-Trimethylbenzene	ethyl	Ethylene
1bute	Isobutene/1-butene	isbta	Isobutane
1pnte	1-Pentene	ispbz	Isopropylbenzene
224tmp	2,2,4-Trimethylpentane	ispna	Isopentane
22dmb	2,2-Dimethylbutane	ispre	Isoprene
234tmp	2,3,4-Trimethylpentane	m/pxy	*m,p*-Xylene
23dmb	2,3-Dimethylbutane	mcpna	Methylcyclopentane
23dmp	2,3-Dimethylpentane	mcyhx	Methylcyclohexane
24dmp	2,4-Dimethylpentane	nbuta	*n*-Butane
2m2pne	2-Methyl-2-butene	ndec	*n*-Decane
2mhep	2-Methylheptane	nhept	*n*-Heptane
2mhxa	2-Methylhexane	nhexa	*n*-Hexane
2mpna	2-Methylpentane	noct	*n*-Octane
3mhep	3-Methylheptane	npbz	*n*-Propylbenzene
3mhxa	3-Methylhexane	npnta	*n*-Pentane
4mlpe	4-Methyl-1-pentene	nundc	*n*-Undecane
benz	Benzene	propa	Propane
c2bte	*cis*-2-butene	prpyl	Propylene
c2hex	*cis*-2-Hexene	t2bte	*trans*-2-Butene
c2pne	*cis*-2-Pentene	t2hex	*trans*-2-Hexene
cyhxa	Cyclohexane	t2pne	*trans*-2-Pentene
cypna	Cyclopentane	tolu	Toluene

Note: Abbreviations are listed only for compounds with MIR data shown in Table 3-1.

Table 5-4
Completeness of SNMOC Monitoring

Monitoring Station		Number of Sampling Events Attempted	Number of Sampling Events Completed	Completeness
Code	Location			
B1AL	Tarrant City, AL	83	75	90 %
B2AL	Pinson, AL	83	72	87 %
B3AL	Helena, AL	83	76	92 %
CAMP	Denver, CO	36	33	92 %
CAMS5	Dallas, TX	83	78	94 %
CAMS13	Fort Worth, TX	83	80	96 %
DLTX	Dallas, TX	83	78	94 %
JUMX	Juarez, MX	73	62	85 %
RF-N	Rocky Flats, CO	12	12	100 %
WELBY	Denver, CO	36	35	97 %
	Totals	655	601	92 %

Note: The monitoring stations at Bountiful, Newark, and Plainfield collected fewer than 10 SNMOC samples according to site-specific schedules and are not included in this review of completeness. Refer to Table 2-3 for a summary of the sampling schedules implemented at each station.

Table 5-5
Data Quality Parameters for SNMOC Measurements

Compound	Analytical Precision		Sampling Precision	
	RPD (%)	Number of Observations	RPD (%)	Number of Observations
Acetylene/Ethane	22	160	19	73
Benzene	7	166	12	74
1,3-Butadiene	33	110	32	44
n-Butane	10	154	9	67
cis-2-Butene	28	132	32	59
trans-2-Butene	27	78	37	45
Cyclohexane	14	162	24	73
Cyclopentane	26	108	24	49
Cyclopentene	39	122	67	54
n-Decane	22	166	36	74
1-Decene	19	152	53	64
m-Diethylbenzene	25	166	23	69
p-Diethylbenzene	20	158	26	71
2,2-Dimethylbutane	24	136	24	66
2,3-Dimethylbutane	28	124	25	55
2,3-Dimethylpentane	20	160	13	73
2,4-Dimethylpentane	16	156	27	69
n-Dodecane	65	166	132	75
1-Dodecene	27	168	40	74
2-Ethyl-1-Butene	---	0	---	0
Ethylbenzene	9	166	13	75
Ethylene	16	160	10	73
m-Ethyltoluene	9	166	8	74
o-Ethyltoluene	13	166	17	74
p-Ethyltoluene	13	162	11	72
n-Heptane	14	166	18	75
1-Heptene	20	164	36	68
n-Hexane	8	152	8	69
1-Hexene	25	30	11	18
cis-2-Hexene	32	124	59	56
trans-2-Hexene	28	132	20	59
Isobutane	20	154	17	70

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 "---."

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

Compound	Analytical Precision		Sampling Precision	
	RPD (%)	Number of Observations	RPD (%)	Number of Observations
Isobutene/1-Butene	16	148	15	62
Isopentane	7	120	11	56
Isoprene	15	94	11	52
Isopropylbenzene	34	130	31	61
2-Methyl-1-Butene	25	74	54	41
2-Methyl-2-Butene	24	128	25	58
3-Methyl-1-Butene	26	128	125	54
Methylcyclohexane	18	162	23	73
Methylcyclopentane	11	154	13	69
2-Methylheptane	23	160	29	71
3-Methylheptane	29	156	24	65
2-Methylhexane	12	164	16	74
3-Methylhexane	20	168	29	75
2-Methylpentane	17	144	18	65
3-Methylpentane	16	140	14	62
2-Methyl-1-Pentene	42	148	40	61
4-Methyl-1-Pentene	34	104	41	51
n-Nonane	22	166	21	74
1-Nonene	30	152	46	68
n-Octane	16	162	30	75
1-Octene	27	164	26	72
n-Pentane	8	90	9	49
1-Pentene	36	86	40	42
cis-2-Pentene	24	124	20	55
trans-2-Pentene	19	132	20	62
a-Pinene	31	164	31	74
b-Pinene	25	158	24	71
Propane	19	160	14	70
n-Propylbenzene	19	162	25	72
Propylene	30	160	25	71
Propyne	23	8	26	2
Styrene	16	166	19	74

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 "—."

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

Compound	Analytical Precision		Sampling Precision	
	RPD (%)	Number of Observations	RPD (%)	Number of Observations
Toluene	7	166	11	75
n-Tridecane	60	166	79	74
1-Tridecene	35	104	48	59
1,2,3-Trimethylbenzene	47	160	51	74
1,2,4-Trimethylbenzene	10	168	11	75
1,3,5-Trimethylbenzene	14	168	15	74
2,2,3-Trimethylpentane	18	164	28	73
2,2,4-Trimethylpentane	8	160	8	73
2,3,4-Trimethylpentane	21	164	36	74
n-Undecane	54	166	75	75
1-Undecene	27	168	43	75
m,p-Xylene	8	166	10	75
o-Xylene	8	166	9	74

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 "---."

6.0 Analysis of VOC Monitoring Results

This section summarizes the VOC ambient air monitoring data collected during the 1996 NMOC/SNMOC program. These VOC data are useful for evaluating ambient levels of halogenated hydrocarbons—a group of compounds that participates in photochemical reactions and that cannot be identified by the other SNMOC sampling and analytical methods. As noted in Section 2 of this report, only seven of the 1996 SNMOC stations monitored ambient levels of VOCs, and these stations each collected between five and ten VOC samples. Because this limited number of samples may bias a detailed statistical analysis, this section presents only a general overview of the VOC monitoring results and briefly discusses notable spatial variations. Trends or patterns indicated by these results, however, should be interpreted with caution until more extensive monitoring efforts can verify their validity.

6.1 Data Summary Tables

Using the data summary parameters discussed in Section 3.1, Tables 6-1 through 6-7 summarize the monitoring results for the seven stations that measured VOCs. These tables suggest several noteworthy trends:

- *Prevalence.* Table 6-8 provides an overview of the prevalence of VOCs during the NMOC/SNMOC program and indicates that the following VOCs were present in over 50 percent of the samples collected at more than half the monitoring stations:

Acetylene	*p*-Dichlorobenzene	Tetrachloroethylene
Benzene	Ethylbenzene	Toluene
1,3-Butadiene	Methylene chloride	1,1,1-Trichloroethane
Carbon tetrachloride	*n*-Octane	*m,p*-Xylene
Chloroform	Propylene	*o*-Xylene
Chloromethane	Styrene	

These compounds, therefore, are more prevalent in the ambient air surrounding the seven VOC monitoring stations than the other VOCs shown in Table 6-8. Because some compounds may be extremely reactive at levels below their detection limits, the prevalence summary should not be the only parameter considered when determining compounds of concern for ozone control strategies.

- *Concentration range.* The concentration ranges in Tables 6-1 through 6-7 indicate that only acetylene, propylene, styrene, toluene, and *m,p*-xylene have concentrations exceeding 5 ppbv at one or more monitoring stations. Figure 4-7, however, shows that the magnitude of air pollution varies significantly from one day to the next. With monitoring stations collecting as few as five VOC samples, it is very likely that the concentration ranges cited in the summary tables may understate the actual highest concentrations or overstate the actual lowest concentrations. Accordingly, these concentration ranges should be viewed only as qualitative estimates of the span of ambient air concentrations.

- *Central tendency.* Table 6-9 summarizes the central tendency data for the seven VOC monitoring stations. Of the 38 VOCs analyzed, 31 had geometric mean concentrations less than 1 ppbv at every station. Only acetylene, benzene, propylene, styrene, toluene, and *m,p*-xylene had geometric mean concentrations greater than 1 ppbv at one or more of the monitoring stations. Noting that most monitoring stations collected VOC samples roughly once every other week and that other EPA monitoring programs rely on biweekly sampling schedules to characterize ambient air quality (ERG, 1997), the geometric means for VOCs are not expected to be biased significantly by limited sample size.

- *Variability.* The coefficients of variation for most compounds were less than one at every monitoring station, suggesting that none of the VOCs exhibit significantly greater variability than any of the others.

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 6-9.

6.2 Spatial Variations

By analyzing trends in emission inventories and identifying correlations among concentrations of selected VOCs, the following paragraphs indicate how the magnitude and composition of VOCs in air pollution vary among the seven stations that monitored ambient levels of VOCs.

6.2.1 Impact of Industrial Emission Sources

To assess how emissions from industrial sources affect ambient air concentrations, Table 6-10 compares geometric mean concentrations of selected VOCs to total air releases reported to TRI by industrial facilities within 10 miles of the corresponding monitoring stations. This analysis considers only those compounds that were detected in at least 75 percent of the VOC samples and that are subject to the TRI reporting requirements. The 14 VOCs shown in Table 6-10 meet these criteria. For ease of interpretation, Table 6-10 presents emissions and air quality data in order of decreasing geometric mean concentration. These data indicate several notable trends:

- *Failure of TRI data to explain spatial variations.* Many VOCs have relatively high ambient concentrations in regions with little or no corresponding industrial emissions (e.g., styrene at the WELBY station), while many VOCs have relatively low concentrations in regions with relatively high emissions (e.g., styrene at the B3AL station). These discrepancies suggest that TRI data alone cannot adequately explain why ambient levels of VOCs vary from one monitoring station to the next and that additional factors must be considered when interpreting monitoring data for VOCs.

- *Relatively higher concentrations at the Denver and Newark sites than at the Alabama sites.* With one notable exception (see the next bullet item), the compounds shown in Table 6-10 consistently have higher air concentrations at the sites near Denver (CAMP, WELBY) and Newark (NWNJ, P2NJ) than at the sites near Birmingham (B1AL, B2AL, B3AL). To determine whether emissions from nonindustrial sources might explain this trend, Table 6-11 summarizes NET emissions data for these three metropolitan areas. Although the notably lower VOC emissions in the vicinity of Birmingham may explain the corresponding lower concentrations of VOCs, the emissions data cannot account for why ambient air concentrations in the Denver area are comparable to those in the Newark area. The close proximity of the Rocky Mountains to the Denver monitoring stations, however, may explain why ambient air concentrations in Denver are relatively high despite relatively low levels of emissions (refer to Section 4.2.3 for further discussion of the impact of terrain features on ambient air quality).

- *Higher concentrations of chloromethane at the Birmingham stations.* As an important exception to the previous observation, ambient air concentrations of chloromethane were generally higher at the Birmingham monitoring stations than at the Denver and Newark stations, even though the TRI emissions data do not

suggest significant sources of chloromethane in any of these areas. Sections 6.2.2 and 6.4 discuss this issue in further detail.

Although these analyses characterize spatial variations of selected VOCs observed at seven monitoring stations, the findings must not be applied to all urban environments. For example, the spatial variations suggest that ambient air concentrations of VOCs near Denver and Newark are relatively higher than those near Birmingham, but make no comparisons to the air quality in other urban areas. Therefore, further monitoring efforts are necessary to extend the findings of this section to other urban settings.

6.2.2 Data Correlations

Correlation analyses help identify subtle trends in large volumes of data and are used here to clarify further how emission sources affect ambient air quality. Because the statistical significance of correlation parameters decreases with decreasing number of observations, this analysis does not examine site-specific correlations. Rather, this analysis considers the 51 VOC samples collected during the 1996 NMOC/SNMOC program to determine how significantly the composition of VOCs in air pollution varies among the seven monitoring stations. For this analysis, Pearson correlation coefficients were calculated for only those compounds that were detected in over 75 percent of the VOC samples, since non-detect results may bias correlations. Table 6-12 summarizes the results of the correlation analysis. The following observations can be drawn from Table 6-12:

- *Strong correlations across all stations for certain hydrocarbons.* Eighteen pairs of compounds—all hydrocarbons—had statistically significant Pearson correlation coefficients greater than 0.85 across three different urban areas (Birmingham, Denver, and Newark). Therefore, ambient levels of these compounds likely originate from emission sources common to all urban environments, such as automobiles or combustion sources. Previous EPA monitoring efforts also have identified significant correlations among several of the compound pairs shown in Table 6-12 (ERG, 1997). It should be noted, however, that acetylene, a compound typically associated with motor vehicle emissions (Sonoma, 1996), did not have strong correlations with any other hydrocarbon.

- *Absence of strong correlations among halogenated hydrocarbons.* Even though the correlation analysis considered halogenated hydrocarbons, no strong correlations were observed. The lack of correlations among halogenated hydrocarbons or between hydrocarbons and halogenated hydrocarbons suggests that ambient levels of these two classes of compounds may originate from categories of emission sources unique to particular urban areas. Additional analyses of larger volumes of monitoring data are necessary to confirm this trend.

- *Consistently negative correlations between chloromethane and hydrocarbons.* Although the VOCs generally show weak to strong positive correlations with other compounds, chloromethane shows weak, but statistically significant, *negative* correlations with every hydrocarbon considered in this analysis. Stated differently, ambient levels of chloromethane tend to be lower when ambient levels of hydrocarbons are high, and vice versa. This observation is consistent with the elevated levels of chloromethane near Birmingham, where levels of hydrocarbons are relatively low (see Section 6.2.1). This negative correlation provides compelling evidence that photochemical reactions involving hydrocarbons may consume chloromethane, but further research is necessary to confirm this trend.

By considering air quality data from three different metropolitan areas, the correlation analysis addresses underlying trends in air quality that may apply to a wider range of geographic locations. Future monitoring efforts should consider similar correlation analyses to better understand how the complex composition of air pollution affects the formation of ozone.

6.3 Data Quality Parameters

Using the approach outlined in Section 3.3.2, Table 6-13 summarizes how precisely the sampling and analytical method for VOCs measures ambient air concentrations. During the 1996 program, seven VOC samples were collected in duplicate and then analyzed in replicate. Accordingly, the sampling precision and analytical precision data for VOCs are based on 7 and 14 observations, respectively. As with summaries of sampling and analytical precision performed for other EPA monitoring efforts (ERG, 1997), the precision calculations exclude all non-detect observations and therefore may consider fewer than the maximum number of observations.

The precision data in Table 6-13 indicate that, on average, the sampling and analytical method for VOCs introduces less than 30 percent variability when measuring ambient air

concentrations. This low variability suggests that field sampling teams and laboratory analysts strictly followed method specifications to minimize influences of random sampling or analytical errors. Accordingly, the monitoring data considered throughout this section are assumed to be of very high quality.

6.4 Summary

Although the composition of VOCs in air pollution naturally varies from one location to the next, the seven stations that measured VOCs during the 1996 NMOC/SNMOC program consistently measured acetylene, propylene, and toluene at levels greater than 1 ppbv. Further, 10 other VOCs were detected in over 75 percent of the samples collected at all seven stations. Additional similarities between these sites were identified by a correlation analysis, which suggested that many hydrocarbons exhibit strong positive correlations across all monitoring locations and that ambient levels of chloromethane tend to decrease as ambient levels of hydrocarbons increase. These observations provide compelling evidence that emission sources common to all urban environments contribute to elevated levels of certain hydrocarbons and that these hydrocarbons may consume chloromethane in photochemical reactions. As noted throughout this report, these trends can be explained only by considering a wide range of factors known to affect ambient air quality, such as emission sources, local meteorology, and nearby terrain.

Table 6-1
Summary Statistics for VOC Concentrations Measured at Tarrant City, Alabama (B1AL)
(Based on 8 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%**	**0.89**	**32.58**	**9.92**	**11.56**	**7.28**	**10.31**	**0.89**
Benzene	**1**	**88%**	**ND**	**3.63**	**1.02**	**1.46**	**0.78**	**1.45**	**0.99**
Bromochloromethane	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromodichloromethane	8	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromoform	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromomethane	8	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
1,3-Butadiene	**1**	**88%**	**ND**	**0.56**	**0.13**	**0.24**	**0.15**	**0.22**	**0.93**
Carbon tetrachloride	**0**	**100%**	**0.02**	**0.2**	**0.08**	**0.09**	**0,07**	**0.06**	**0.68**
Chlorobenzene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroethane	8	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
Chloroform	**3**	**63%**	**ND**	**0.25**	**0.05**	**0.07**	**0.05**	**0.08**	**1.10**
Chloromethane	**0**	**100%**	**0.38**	**1.23**	**0.56**	**0.68**	**0.63**	**0.31**	**0.45**
Chloroprene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Dibromochloromethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	6	25%	ND	0.04	0.04	0.03	0.03	0.01	0.28
o-Dichlorobenzene	6	25%	ND	0.04	0.04	0.04	0.03	0.01	0.30
***p*-Dichlorobenzene**	**3**	**63%**	**ND**	**0.12**	**0.05**	**0.06**	**0.05**	**0.04**	**0.65**
1,1-Dichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	8	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-1 (Continued)
Summary Statistics for VOC Concentrations Measured at Tarrant City, Alabama (B1AL)
(Based on 8 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	8	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	8	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.07**	**1.46**	**0.20**	**0.52**	**0.30**	**0.54**	**1.04**
Methylene chloride	**0**	**100%**	**0.07**	**0.47**	**0.25**	**0.26**	**0.22**	**0.15**	**0.59**
***n*-Octane**	**0**	**100%**	**0.02**	**0.41**	**0.14**	**0.16**	**0.09**	**0.15**	**0.92**
Propylene	**0**	**100%**	**0.21**	**4.57**	**1.17**	**1.91**	**1.22**	**1.69**	**0.88**
Styrene	**0**	**100%**	**0.01**	**6.93**	**0.54**	**2.00**	**0.54**	**2.81**	**1.40**
1,1,2,2-Tetrachloroethane	8	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**0**	**100%**	**0.02**	**0.24**	**0.06**	**0.08**	**0.06**	**0.07**	**0.88**
Toluene	**0**	**100%**	**0.27**	**6.07**	**2.82**	**2.99**	**1.68**	**2.63**	**0.88**
1,1,1-Trichloroethane	**0**	**100%**	**0.04**	**0.26**	**0.13**	**0.14**	**0.12**	**0.08**	**0.58**
1,1,2-Trichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	5	38%	ND	0.06	0.03	0.03	0.03	0.01	0.43
Vinyl chloride	8	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.25**	**6.12**	**1.07**	**2.07**	**1.15**	**2.15**	**1.04**
***o*-Xylene**	**0**	**100%**	**0.09**	**2.21**	**0.40**	**0.73**	**0.41**	**0.76**	**1.05**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-2
Summary Statistics for VOC Concentrations Measured at Pinson, Alabama (B2AL)
(Based on 8 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%**	**0.75**	**4.3**	**2.28**	**2.42**	**2.16**	**1.13**	**0.47**
Benzene	**0**	**100%**	**0.15**	**1.14**	**0.58**	**0.58**	**0.48**	**0.34**	**0.58**
Bromochloromethane	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromodichloromethane	8	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromoform	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromomethane	8	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
1,3-Butadiene	**1**	**88%**	**ND**	**0.17**	**0.07**	**0.09**	**0.08**	**0.04**	**0.43**
Carbon tetrachloride	**0**	**100%**	**0.02**	**0.18**	**0.10**	**0.11**	**0.09**	**0.05**	**0.49**
Chlorobenzene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroethane	8	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
Chloroform	4	50%	ND	0.05	0.04	0.04	0.04	0.01	0.27
Chloromethane	**0**	**100%**	**0.46**	**1.22**	**0.60**	**0.77**	**0.71**	**0.31**	**0.41**
Chloroprene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Dibromochloromethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	4	50%	ND	0.04	0.03	0.02	0.02	0.01	0.50
o-Dichlorobenzene	6	25%	ND	0.04	0.04	0.03	0.03	0.01	0.35
***p*-Dichlorobenzene**	**1**	**88%**	**ND**	**0.03**	**0.02**	**0.02**	**0.02**	**0.00**	**0.19**
1,1-Dichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	8	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-2 (Continued)
Summary Statistics for VOC Concentrations Measured at Pinson, Alabama (B2AL)
(Based on 8 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	8	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	8	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**1**	**88%**	**ND**	**0.23**	**0.14**	**0.13**	**0.11**	**0.07**	**0.52**
Methylene chloride	**0**	**100%**	**0.03**	**0.12**	**0.09**	**0.08**	**0.07**	**0.03**	**0.42**
***n*-Octane**	**0**	**100%**	**0.01**	**0.12**	**0.03**	**0.04**	**0.03**	**0.04**	**0.87**
Propylene	**1**	**88%**	**ND**	**1.14**	**0.75**	**0.66**	**0.51**	**0.33**	**0.50**
Styrene	**1**	**88%**	**ND**	**1.79**	**0.45**	**0.53**	**0.25**	**0.56**	**1.06**
1,1,2,2-Tetrachloroethane	8	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**1**	**88%**	**ND**	**0.03**	**0.02**	**0.02**	**0.02**	**0.01**	**0.35**
Toluene	**0**	**100%**	**0.17**	**1.93**	**1.00**	**1.00**	**0.81**	**0.57**	**0.57**
1,1,1-Trichloroethane	**0**	**100%**	**0.05**	**0.16**	**0.12**	**0.12**	**0.11**	**0.03**	**0.27**
1,1,2-Trichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	7	13%	ND	0.03	0.03	0.03	0.03	0.00	0.05
Vinyl chloride	8	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.17**	**1.06**	**0.55**	**0.57**	**0.49**	**0.30**	**0.52**
***o*-Xylene**	**0**	**100%**	**0.06**	**0.37**	**0.20**	**0.21**	**0.18**	**0.10**	**0.50**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-3
Summary Statistics for VOC Concentrations Measured at Helena, Alabama (B3AL)
(Based on 8 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%**	**0.81**	**4.53**	**2.74**	**2.84**	**2.54**	**1.25**	**0.44**
Benzene	**0**	**100%**	**0.06**	**1.06**	**0.38**	**0.46**	**0.31**	**0.36**	**0.79**
Bromochloromethane	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromodichloromethane	8	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromoform	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromomethane	8	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
1,3-Butadiene	4	50%	ND	0.17	0.08	0.09	0.08	0.05	0.54
Carbon tetrachloride	**0**	**100%**	**0.02**	**0.18**	**0.10**	**0.10**	**0.08**	**0.06**	**0.58**
Chlorobenzene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroethane	8	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
Chloroform	**1**	**88%**	**ND**	**0.1**	**0.05**	**0.05**	**0.05**	**0.02**	**0.48**
Chloromethane	**0**	**100%**	**0.44**	**1.25**	**0.64**	**0.74**	**0.70**	**0.27**	**0.37**
Chloroprene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Dibromochloromethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	7	13%	ND	0.04	0.04	0.03	0.03	0.00	0.06
o-Dichlorobenzene	7	13%	ND	0.04	0.04	0.04	0.04	0.00	0.07
***p*-Dichlorobenzene**	**3**	**63%**	**ND**	**0.03**	**0.02**	**0.02**	**0.02**	**0.00**	**0.21**
1,1-Dichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	8	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-3 (Continued)
Summary Statistics for VOC Concentrations Measured at Helena, Alabama (B3AL)
(Based on 8 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	7	13%	ND	0.11	0.11	0.10	0.08	0.04	0.36
1,2-Dichloropropane	8	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**1**	**88%**	**ND**	**0.34**	**0.08**	**0.13**	**0.08**	**0.12**	**0.96**
Methylene chloride	**0**	**100%**	**0.05**	**0.22**	**0.09**	**0.10**	**0.09**	**0.06**	**0.62**
***n*-Octane**	**1**	**88%**	**ND**	**0.07**	**0.03**	**0.03**	**0.03**	**0.02**	**0.67**
Propylene	**0**	**100%**	**0.13**	**1.32**	**0.40**	**0.59**	**0.43**	**0.46**	**0.79**
Styrene	**2**	**75%**	**ND**	**0.93**	**0.47**	**0.41**	**0.18**	**0.36**	**0.88**
1,1,2,2-Tetrachloroethane	8	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**1**	**88%**	**ND**	**0.35**	**0.11**	**0.15**	**0.09**	**0.13**	**0.90**
Toluene	**0**	**100%**	**0.11**	**2.44**	**0.61**	**0.91**	**0.56**	**0.84**	**0.92**
1,1,1-Trichloroethane	**0**	**100%**	**0.03**	**0.27**	**0.14**	**0.15**	**0.12**	**0.09**	**0.59**
1,1,2-Trichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Vinyl chloride	8	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.10**	**1.20**	**0.33**	**0.46**	**0.33**	**0.40**	**0.87**
***o*-Xylene**	**1**	**88%**	**ND**	**0.42**	**0.11**	**0.16**	**0.11**	**0.14**	**0.88**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-4
Summary Statistics for VOC Concentrations Measured at Denver, Colorado (CAMP)
(Based on 5 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%**	**1.77**	**16.63**	**9.25**	**8.86**	**7.07**	**5.48**	**0.62**
Benzene	**0**	**100%**	**0.41**	**3.57**	**2.14**	**2.06**	**1.66**	**1.19**	**0.58**
Bromochloromethane	5	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromodichloromethane	5	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromoform	4	20%	ND	0.04	0.04	0.04	0.03	0.01	0.25
Bromomethane	4	20%	ND	0.09	0.09	0.09	0.09	0.00	0.05
1,3-Butadiene	**1**	**80%**	**ND**	**0.61**	**0.34**	**0.34**	**0.27**	**0.22**	**0.63**
Carbon tetrachloride	**0**	**100%**	**0.08**	**0.10**	**0.10**	**0.09**	**0.09**	**0.01**	**0.10**
Chlorobenzene	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroethane	5	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
Chloroform	**0**	**100%**	**0.03**	**0.10**	**0.05**	**0.06**	**0.05**	**0.03**	**0.48**
Chloromethane	**0**	**100%**	**0.49**	**0.60**	**0.52**	**0.53**	**0.53**	**0.04**	**0.08**
Chloroprene	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Dibromochloromethane	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	4	20%	ND	0.04	0.04	0.03	0.03	0.01	0.37
o-Dichlorobenzene	3	40%	ND	0.04	0.04	0.03	0.03	0.01	0.47
***p*-Dichlorobenzene**	**1**	**80%**	**ND**	**0.10**	**0.05**	**0.06**	**0.06**	**0.03**	**0.44**
1,1-Dichloroethane	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	5	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-4 (Continued)
Summary Statistics for VOC Concentrations Measured at Denver, Colorado (CAMP)
(Based on 5 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	5	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	5	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	5	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.12**	**1.05**	**0.63**	**0.60**	**0.49**	**0.34**	**0.57**
Methylene chloride	**0**	**100%**	**0.10**	**0.47**	**0.39**	**0.35**	**0.31**	**0.15**	**0.43**
***n*-Octane**	**0**	**100%**	**0.07**	**0.42**	**0.31**	**0.26**	**0.22**	**0.13**	**0.51**
Propylene	**0**	**100%**	**0.46**	**4.66**	**2.61**	**2.56**	**2.00**	**1.60**	**0.62**
Styrene	**0**	**100%**	**0.16**	**1.79**	**1.21**	**1.00**	**0.77**	**0.62**	**0.62**
1,1,2,2-Tetrachloroethane	5	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**0**	**100%**	**0.13**	**0.40**	**0.14**	**0.19**	**0.17**	**0.12**	**0.61**
Toluene	**0**	**100%**	**1.03**	**7.67**	**4.75**	**4.52**	**3.77**	**2.42**	**0.54**
1,1,1-Trichloroethane	**0**	**100%**	**0.14**	**0.30**	**0.19**	**0.20**	**0.19**	**0.07**	**0.33**
1,1,2-Trichloroethane	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	**1**	**80%**	**ND**	**0.06**	**0.04**	**0.04**	**0.04**	**0.02**	**0.46**
Vinyl chloride	5	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.46**	**3.85**	**2.39**	**2.25**	**1.83**	**1.26**	**0.56**
***o*-Xylene**	**0**	**100%**	**0.15**	**1.32**	**0.94**	**0.79**	**0.63**	**0.44**	**0.56**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-5
Summary Statistics for VOC Concentrations Measured at Denver, Colorado (WELBY)
(Based on 5 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%**	**3.09**	**19.59**	**7.73**	**9.24**	**7.71**	**6.31**	**0.68**
Benzene	**0**	**100%**	**0.99**	**4.73**	**2.31**	**2.43**	**2.14**	**1.41**	**0.58**
Bromochloromethane	4	20%	ND	0.11	0.04	0.05	0.04	0.03	0.67
Bromodichloromethane	4	20%	ND	0.16	0.05	0.07	0.06	0.05	0.76
Bromoform	5	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromomethane	5	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
1,3-Butadiene	**0**	**100%**	**0.15**	**0.76**	**0.24**	**0.36**	**0.31**	**0.25**	**0.68**
Carbon tetrachloride	**0**	**100%**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.00**	**0.02**
Chlorobenzene	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroethane	5	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
Chloroform	**1**	**80%**	**ND**	**0.14**	**0.11**	**0.09**	**0.08**	**0.04**	**0.49**
Chloromethane	**0**	**100%**	**0.55**	**0.63**	**0.62**	**0.60**	**0.60**	**0.04**	**0.07**
Chloroprene	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Dibromochloromethane	4	20%	ND	0.06	0.03	0.03	0.03	0.02	0.49
m-Dichlorobenzene	5	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
o-Dichlorobenzene	5	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
***p*-Dichlorobenzene**	**0**	**100%**	**0.05**	**0.21**	**0.05**	**0.09**	**0.07**	**0.07**	**0.81**
1,1-Dichloroethane	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	5	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-5 (Continued)
Summary Statistics for VOC Concentrations Measured at Denver, Colorado (WELBY)
(Based on 5 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	5	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	5	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	5	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.22**	**1.44**	**0.70**	**0.71**	**0.60**	**0.45**	**0.64**
Methylene chloride	**0**	**100%**	**0.27**	**0.73**	**0.49**	**0.52**	**0.49**	**0.19**	**0.36**
***n*-Octane**	**0**	**100%**	**0.09**	**0.56**	**0.25**	**0.28**	**0.24**	**0.17**	**0.61**
Propylene	**0**	**100%**	**1.54**	**5.87**	**2.45**	**3.07**	**2.76**	**1.68**	**0.55**
Styrene	**0**	**100%**	**0.61**	**2.71**	**1.43**	**1.74**	**1.52**	**0.89**	**0.51**
1,1,2,2-Tetrachloroethane	5	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**0**	**100%**	**0.06**	**0.17**	**0.10**	**0.11**	**0.10**	**0.04**	**0.41**
Toluene	**0**	**100%**	**1.79**	**10.11**	**5.55**	**5.38**	**4.64**	**3.09**	**0.57**
1,1,1-Trichloroethane	**0**	**100%**	**0.69**	**0.96**	**0.86**	**0.82**	**0.81**	**0.12**	**0.15**
1,1,2-Trichloroethane	5	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	**1**	**80%**	**ND**	**0.08**	**0.04**	**0.04**	**0.04**	**0.02**	**0.54**
Vinyl chloride	5	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.81**	**5.27**	**2.53**	**2.60**	**2.18**	**1.67**	**0.64**
***o*-Xylene**	**0**	**100%**	**0.27**	**1.79**	**1.08**	**0.99**	**0.84**	**0.56**	**0.56**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-6
Summary Statistics for VOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 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%**	**1.10**	**13.24**	**3.67**	**5.44**	**4.12**	**4.23**	**0.78**
Benzene	**0**	**100%**	**0.34**	**2.18**	**0.49**	**0.90**	**0.70**	**0.67**	**0.75**
Bromochloromethane	9	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromodichloromethane	9	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromoform	9	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromomethane	8	11%	ND	0.09	0.09	0.09	0.09	0.00	0.02
1,3-Butadiene	**1**	**89%**	**ND**	**0.56**	**0.08**	**0.17**	**0.12**	**0.17**	**0.99**
Carbon tetrachloride	**0**	**100%**	**0.10**	**0.18**	**0.10**	**0.12**	**0.11**	**0.03**	**0.26**
Chlorobenzene	8	11%	ND	0.22	0.03	0.05	0.04	0.06	1.22
Chloroethane	8	11%	ND	0.10	0.09	0.09	0.09	0.00	0.02
Chloroform	**4**	**56%**	**ND**	**0.16**	**0.06**	**0.07**	**0.06**	**0.05**	**0.67**
Chloromethane	**0**	**100%**	**0.45**	**1.46**	**0.62**	**0.73**	**0.68**	**0.32**	**0.44**
Chloroprene	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Dibromochloromethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	8	11%	ND	0.04	0.04	0.03	0.03	0.01	0.15
o-Dichlorobenzene	7	22%	ND	0.04	0.04	0.04	0.03	0.01	0.29
***p*-Dichlorobenzene**	**1**	**89%**	**ND**	**0.39**	**0.17**	**0.14**	**0.09**	**0.12**	**0.85**
1,1-Dichloroethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	9	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-6 (Continued)
Summary Statistics for VOC Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 9 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	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%**	**0.15**	**1.74**	**0.32**	**0.57**	**0.43**	**0.51**	**0.90**
Methylene chloride	**0**	**100%**	**0.22**	**2.65**	**0.68**	**0.88**	**0.68**	**0.73**	**0.83**
***n*-Octane**	**0**	**100%**	**0.04**	**0.64**	**0.14**	**0.22**	**0.15**	**0.19**	**0.89**
Propylene	**1**	**89%**	**ND**	**10.31**	**1.47**	**2.76**	**1.42**	**3.15**	**1.14**
Styrene	**0**	**100%**	**0.07**	**2.86**	**0.57**	**0.77**	**0.42**	**0.88**	**1.15**
1,1,2,2-Tetrachloroethane	9	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**0**	**100%**	**0.02**	**0.43**	**0.16**	**0.16**	**0.13**	**0.12**	**0.72**
Toluene	**0**	**100%**	**0.96**	**10.53**	**1.95**	**3.19**	**2.34**	**3.03**	**0.95**
1,1,1-Trichloroethane	**0**	**100%**	**0.19**	**0.91**	**0.37**	**0.45**	**0.38**	**0.28**	**0.62**
1,1,2-Trichloroethane	9	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	**3**	**67%**	**ND**	**0.23**	**0.03**	**0.06**	**0.04**	**0.07**	**1.23**
Vinyl chloride	9	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**1.01**	**5.94**	**1.84**	**2.24**	**1.88**	**1.61**	**0.72**
***o*-Xylene**	**0**	**100%**	**0.32**	**1.85**	**0.65**	**0.71**	**0.60**	**0.50**	**0.70**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-7
Summary Statistics for VOC Concentrations Measured at Plainfield, New Jersey (P2NJ)
(Based on 8 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%**	**2.01**	**11.21**	**5.60**	**5.50**	**4.83**	**2.91**	**0.53**
Benzene	**0**	**100%**	**0.31**	**2.51**	**0.96**	**1.18**	**0.94**	**0.80**	**0.68**
Bromochloromethane	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromodichloromethane	8	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Bromoform	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromomethane	6	25%	ND	0.09	0.09	0.08	0.07	0.02	0.31
1,3-Butadiene	**0**	**100%**	**0.05**	**0.71**	**0.25**	**0.29**	**0.20**	**0.23**	**0.82**
Carbon tetrachloride	**0**	**100%**	**0.09**	**0.20**	**0.10**	**0.12**	**0.11**	**0.04**	**0.36**
Chlorobenzene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Chloroethane	8	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
Chloroform	**2**	**75%**	**ND**	**0.16**	**0.06**	**0.06**	**0.05**	**0.04**	**0.67**
Chloromethane	**0**	**100%**	**0.46**	**1.17**	**0.61**	**0.70**	**0.67**	**0.25**	**0.35**
Chloroprene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Dibromochloromethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
m-Dichlorobenzene	7	13%	ND	0.04	0.04	0.03	0.03	0.01	0.28
o-Dichlorobenzene	6	25%	ND	0.08	0.04	0.04	0.04	0.02	0.43
***p*-Dichlorobenzene**	**1**	**88%**	**ND**	**0.36**	**0.07**	**0.11**	**0.06**	**0.12**	**1.10**
1,1-Dichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	8	0%	ND	ND	0.13	0.13	0.13	0.00	0.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-7 (Continued)
Summary Statistics for VOC Concentrations Measured at Plainfield, New Jersey (P2NJ)
(Based on 8 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	8	0%	ND	ND	0.11	0.11	0.11	0.00	0.00
1,2-Dichloropropane	8	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,3-Dichloropropylene	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
trans-1,3-Dichloropropylene	8	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Ethylbenzene	**0**	**100%**	**0.16**	**0.93**	**0.43**	**0.40**	**0.34**	**0.26**	**0.64**
Methylene chloride	**0**	**100%**	**0.20**	**3.71**	**0.36**	**0.94**	**0.55**	**1.23**	**1.31**
***n*-Octane**	**0**	**100%**	**0.06**	**0.36**	**0.16**	**0.18**	**0.15**	**0.11**	**0.59**
Propylene	**0**	**100%**	**0.93**	**5.21**	**2.29**	**2.46**	**2.12**	**1.44**	**0.58**
Styrene	**0**	**100%**	**0.03**	**1.64**	**0.61**	**0.72**	**0.41**	**0.61**	**0.85**
1,1,2,2-Tetrachloroethane	8	0%	ND	ND	0.08	0.08	0.08	0.00	0.00
Tetrachloroethylene	**0**	**100%**	**0.06**	**0.40**	**0.11**	**0.16**	**0.13**	**0.12**	**0.75**
Toluene	**0**	**100%**	**1.35**	**12.92**	**3.62**	**5.01**	**4.08**	**3.64**	**0.73**
1,1,1-Trichloroethane	**0**	**100%**	**0.13**	**0.68**	**0.18**	**0.24**	**0.21**	**0.18**	**0.75**
1,1,2-Trichloroethane	8	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	5	38%	ND	0.17	0.03	0.05	0.03	0.05	1.07
Vinyl chloride	8	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
***m,p*-Xylene**	**0**	**100%**	**0.60**	**3.32**	**1.69**	**1.78**	**1.53**	**1.00**	**0.56**
***o*-Xylene**	**0**	**100%**	**0.21**	**1.15**	**0.59**	**0.63**	**0.54**	**0.36**	**0.56**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. Data for the other compounds should be interpreted with caution, since they may be influenced not only by limited sample size (see Section 6.0), but also by low prevalence (see Section 3.1.1).

Table 6-8
Summary of Prevalence of VOCs

Compound	Number of Monitoring Stations With Prevalence in the Listed Range			
	≤25 %	>25 %; ≤50 %	>50 %; ≤75 %	>75 %
Acetylene	0	0	0	7
Benzene	0	0	0	7
Bromochloromethane	7	0	0	0
Bromodichloromethane	7	0	0	0
Bromoform	7	0	0	0
Bromomethane	7	0	0	0
1,3-Butadiene	0	1	0	6
Carbon tetrachloride	0	0	0	7
Chlorobenzene	7	0	0	0
Chloroethane	7	0	0	0
Chloroform	0	1	3	3
Chloromethane	0	0	0	7
Chloroprene	7	0	0	0
Dibromochloromethane	7	0	0	0
m-Dichlorobenzene	6	1	0	0
o-Dichlorobenzene	6	1	0	0
p-Dichlorobenzene	0	0	2	5
1,1-Dichloroethane	7	0	0	0
1,2-Dichloroethane	7	0	0	0
trans-1,2-Dichloroethylene	7	0	0	0
1,2-Dichloropropane	7	0	0	0
cis-1,3-Dichloropropylene	7	0	0	0
trans-1,3-Dichloropropylene	7	0	0	0
Ethylbenzene	0	0	0	7
Methylene chloride	0	0	0	7
n-Octane	0	0	0	7
Propylene	0	0	0	7
Styrene	0	0	1	6
1,1,2,2-Tetrachloroethane	7	0	0	0
Tetrachloroethylene	0	0	0	7
Toluene	0	0	0	7
1,1,1-Trichloroethane	0	0	0	7
1,1,2-Trichloroethane	7	0	0	0
Trichloroethylene	2	2	1	2
Vinyl chloride	7	0	0	0
m,p-Xylene	0	0	0	7
o-Xylene	0	0	0	7

Note: Seven monitoring stations collected VOC samples.

Table 6-9
Summary of VOC Geometric Mean Concentrations

Compound	Number of Monitoring Stations With Geometric Mean Concentrations in Listed Range			
	<1 ppbv	≥1 ppbv; <2 ppbv	≥2 ppbv; <5 ppbv	≥5 ppbv
Acetylene	0	0	4	3
Benzene	5	1	1	0
Bromochloromethane	7	0	0	0
Bromodichloromethane	7	0	0	0
Bromoform	7	0	0	0
Bromomethane	7	0	0	0
1,3-Butadiene	7	0	0	0
Carbon tetrachloride	7	0	0	0
Chlorobenzene	7	0	0	0
Chloroethane	7	0	0	0
Chloroform	7	0	0	0
Chloromethane	7	0	0	0
Chloroprene	7	0	0	0
Dibromochloromethane	7	0	0	0
m-Dichlorobenzene	7	0	0	0
o-Dichlorobenzene	7	0	0	0
p-Dichlorobenzene	7	0	0	0
1,1-Dichloroethane	7	0	0	0
1,2-Dichloroethane	7	0	0	0
trans-1,2-Dichloroethylene	7	0	0	0
1,2-Dichloropropane	7	0	0	0
cis-1,3-Dichloropropylene	7	0	0	0
trans-1,3-Dichloropropylene	7	0	0	0
Ethylbenzene	7	0	0	0
Methylene chloride	7	0	0	0
n-Octane	7	0	0	0
Propylene	2	2	3	0
Styrene	6	1	0	0
1,1,2,2-Tetrachloroethane	7	0	0	0
Tetrachloroethylene	7	0	0	0
Toluene	2	1	4	0
1,1,1-Trichloroethane	7	0	0	0
1,1,2-Trichloroethane	7	0	0	0
Trichloroethylene	7	0	0	0
Vinyl chloride	7	0	0	0
m,p-Xylene	2	4	1	0
o-Xylene	7	0	0	0

Note: Seven monitoring stations collected VOC samples.

Table 6-10
Comparison of Geometric Mean Concentrations of Selected VOCs With Total Air Releases Reported by Facilities Within a 10-Mile Radius of NMOC/SNMOC Monitoring Stations

Benzene			1,3-Butadiene		
Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)
WELBY	2.14	25,760	WELBY	0.31	900
CAMP	1.66	25,760	CAMP	0.27	900
P2NJ	0.94	4,631	P2NJ	0.20	0
B1AL	0.78	34,961	B1AL	0.15	0
NWNJ	0.70	39,433	NWNJ	0.12	130
B2AL	0.48	0	B2AL	0.08	0
B3AL	0.31	0	B3AL	0.08	0

Chloromethane			1,4-Dichlorobenzene		
Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)
B2AL	0.71	0	NWNJ	0.09	422
B3AL	0.70	0	WELBY	0.07	0
NWNJ	0.68	250	CAMP	0.06	0
P2NJ	0.67	0	P2NJ	0.06	0
B1AL	0.63	0	B1AL	0.05	0
WELBY	0.60	0	B2AL	0.02	0
CAMP	0.53	0	B3AL	0.02	0

Ethylbenzene			Methylene Chloride		
Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)
WELBY	0.60	4,208	NWNJ	0.68	86,806
CAMP	0.49	4,208	P2NJ	0.55	42,602
NWNJ	0.43	44,552	WELBY	0.49	33,278
P2NJ	0.34	94,068	CAMP	0.31	48,056
B1AL	0.30	24,304	B1AL	0.22	745,000
B2AL	0.11	12,721	B3AL	0.09	0
B3AL	0.08	0	B2AL	0.07	0

Note: For ease of interpretation, the data for each compound are presented in order of decreasing geometric mean concentration.

Table 6-10 (Continued)
Comparison of Geometric Mean Concentrations of Selected VOCs With Total Air Releases Reported by Facilities Within a 10-Mile Radius of NMOC/SNMOC Monitoring Stations

Propylene			Styrene		
Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)
WELBY	2.76	69,550	WELBY	1.52	22
P2NJ	2.12	2,760	CAMP	0.77	3,722
CAMP	2.00	69,550	B1AL	0.54	2,232
NWNJ	1.42	75,220	NWNJ	0.42	848
B1AL	1.22	500	P2NJ	0.41	4,546
B2AL	0.51	0	B2AL	0.25	5
B3AL	0.43	0	B3AL	0.18	18,998

Tetrachloroethylene			Toluene		
Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)
CAMP	0.17	3	WELBY	4.64	189,554
NWNJ	0.13	2,759	P2NJ	4.08	618,832
P2NJ	0.13	0	CAMP	3.77	303,230
WELBY	0.10	3	NWNJ	2.34	284,625
B3AL	0.09	0	B1AL	1.68	228,676
B1AL	0.06	0	B2AL	0.81	3,830
B2AL	0.02	0	B3AL	0.56	14,606

1,1,1-Trichloroethane			Xylene (Mixed Isomers)		
Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)
WELBY	0.81	42,144	WELBY	3.02	65,625
NWNJ	0.38	277,459	NWNJ	2.48	329,637
P2NJ	0.21	38,596	CAMP	2.46	65,625
CAMP	0.19	42,144	P2NJ	2.07	639,747
B1AL	0.12	14,173	B1AL	1.56	571,445
B3AL	0.12	0	B2AL	0.67	90,108
B2AL	0.11	0	B3AL	0.44	2,500

Note: For ease of interpretation, the data for each compound are presented in order of decreasing geometric mean concentration.

Table 6-11
Summary of NET Emissions Data for the VOC Monitoring Locations

NET Emissions Category	Total VOC Emissions (tons/year) by Metropolitan Area		
	Birmingham (B1AL, B2AL, B3AL)	Denver (CAMP, WELBY)	Newark (NWNJ, P2NJ)
Area Sources	44,532	75,310	124,137
Mobile Sources	42,313	49,201	95,715
Point Sources	7,486	16,158	46,644
All Sources Combined	94,331	140,669	266,496

Note: As described in Section 4.2.1, the NET emissions data considered in this report are the sum of all emissions reported for counties with boundaries that intersect a 15-mile radius drawn around a particular metropolitan area.

Table 6-12
Pairs of Compounds With Pearson Correlation Coefficients Greater Than 0.85
(Based on 51 VOC Samples)

Compounds		Pearson Correlation Coefficient
m,p-Xylene	*o*-Xylene	0.99
m,p-Xylene	Ethylbenzene	0.98
o-Xylene	Ethylbenzene	0.96
Benzene	1,3-Butadiene	0.92
Benzene	*o*-Xylene	0.89
n-Octane	Toluene	0.89
n-Octane	*m,p*-Xylene	0.89
n-Octane	*o*-Xylene	0.89
Ethylbenzene	Propylene	0.89
Benzene	*n*-Octane	0.87
1,3-Butadiene	*o*-Xylene	0.87
m,p-Xylene	*n*-Octane	0.87
Benzene	*m,p*-Xylene	0.86
1,3-Butadiene	*n*-Octane	0.86
Propylene	*n*-Octane	0.86
Propylene	*m,p*-Xylene	0.86
1,3-Butadiene	Toluene	0.85
1,3-Butadiene	*m,p*-Xylene	0.85

Table 6-13
Data Quality Parameters for VOC Measurements

Compound	Analytical Precision		Sampling Precision	
	Relative Percent Difference	Number of Observations	Relative Percent Difference	Number of Observations
Acetylene	14 %	14	12 %	7
Benzene	4 %	14	6 %	7
Bromochloromethane	---	0	---	0
Bromodichloromethane	---	0	---	0
Bromoform	---	0	---	0
Bromomethane	22 %	2	24 %	1
1,3-Butadiene	4 %	10	16 %	4
Carbon tetrachloride	9 %	14	4 %	6
Chlorobenzene	9 %	2	2 %	2
Chloroethane	---	0	---	0
Chloroform	6 %	14	1 %	6
Chloromethane	7 %	14	10 %	6
Chloroprene	---	0	---	0
Dibromochloromethane	---	0	---	0
m-Dichlorobenzene	---	0	---	0
o-Dichlorobenzene	13 %	2	---	0
p-Dichlorobenzene	3 %	10	3 %	3
1,1-Dichloroethane	---	0	---	0
1,2-Dichloroethane	---	0	---	0
trans-1,2-Dichloroethylene	---	0	---	0
1,2-Dichloropropane	---	0	---	0
cis-1,3-Dichloropropylene	---	0	---	0
trans-1,3-Dichloropropylene	---	0	---	0
Ethylbenzene	5 %	14	3 %	7
Methylene chloride	20 %	14	27 %	6
n-Octane	6 %	12	1 %	6
Propylene	7 %	14	7 %	7
Styrene	8 %	14	9 %	6
1,1,2,2-Tetrachloroethane	---	0	---	0
Tetrachloroethylene	3 %	14	23 %	5
Toluene	4 %	14	7 %	6
1,1,1-Trichloroethane	10 %	14	10 %	7
1,1,2-Trichloroethane	---	0	---	0
Trichloroethylene	2 %	8	2 %	3
Vinyl chloride	---	0	---	0
m,p-Xylene	3 %	14	2 %	6
o-Xylene	8 %	14	2 %	6

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 "---."

7.0 Analysis of Carbonyl Monitoring Results

This section summarizes the carbonyl monitoring data collected during the 1996 NMOC/SNMOC program. The carbonyl sampling and analytical method currently measures concentrations of 15 aldehydes and one ketone (acetone). These compounds all participate, to a certain extent, in the complex series of photochemical reactions that produce ozone. Although a detailed review of atmospheric chemistry is beyond the scope of this work, the following analyses examine the carbonyl monitoring data and identify notable trends that may help researchers better understand how ambient levels of carbonyls affect air quality. Because most of the monitoring stations collected fewer than 12 carbonyl samples, however, this limited sample size may bias a detailed statistical analysis of the monitoring data, as was performed in Section 5 for the SNMOC samples. Accordingly, this section focuses on general summary parameters and significant spatial variations. All conclusions should be interpreted with caution until confirmed by more comprehensive monitoring efforts.

7.1 Data Summary Tables

Using the data summary parameters discussed in Section 3.1, Tables 7-1 through 7-8 summarize the monitoring results for the eight stations that measured carbonyls and indicate several trends consistent across every station:

- *Prevalence.* As shown in Table 7-9, which summarizes the prevalence and geometric mean concentrations of carbonyls, acetaldehyde, acetone, formaldehyde, and hexanaldehyde were detected in more than 75 percent of the samples at all stations, while isovaleraldehyde was detected in less than 25 percent of the samples at these stations. The other carbonyl species were prevalent between 25 and 75 percent.

- *Concentration range.* Even though limited sample size may prevent the concentration ranges of carbonyls from accurately characterizing the actual span of ambient air concentrations, the ranges shown in Tables 7-1 through 7-8 have several factors in common: acetaldehyde was detected at concentrations greater than 35 ppbv at seven of the eight stations; concentrations of acetone and formaldehyde consistently exceeded 5 ppbv; and, as discussed in greater detail in

Section 7.2.1, the Cape Elizabeth monitoring station had the lowest concentrations of carbonyls.

- *Central tendency.* As a measure of central tendency, Table 7-9 summarizes geometric mean concentrations for the carbonyls. With three exceptions, carbonyls have geometric mean concentrations less than 1 ppbv at every monitoring station. Acetone and formaldehyde have geometric mean concentrations greater than 2 ppbv at most stations, and acetaldehyde consistently has geometric mean concentrations greater than 5 ppbv.

- *Variability.* The coefficients of variation for carbonyls are all between 0 and 2, but nearly 90 percent of the coefficients of variation are less than 1. No compound consistently exhibits significantly greater variability than any of the others.

To supplement these general observations, the following sections evaluate spatial variations to identify additional trends in the carbonyl monitoring results and present data quality parameters to characterize the precision of the ambient air monitoring data.

7.2 Spatial Variations

To explain why ambient air concentrations of carbonyls vary from one monitoring location to the next, the following analyses use emission inventory data and correlation analyses to identify which emission sources most influence the composition and magnitude of carbonyls in air pollution.

7.2.1 Impact of Emission Sources

Using the same chemical selection criteria as in Section 6.2.1, Table 7-10 compares geometric mean concentrations for selected carbonyls to total air releases reported to TRI by industrial facilities. The table considers only those carbonyls that were detected in a majority of samples and that are subject to the TRI reporting requirements. For ease of interpretation, the data for each compound in Table 7-10 are presented in order of decreasing geometric mean concentration. In addition to showing that geometric mean concentrations of carbonyls vary significantly among the eight monitoring stations, Table 7-10 indicates additional notable observations:

- *Absence of correlations between TRI emissions data and ambient air concentrations of carbonyls.* Even though the geometric mean concentrations of carbonyls shown in Table 7-10 vary significantly across the eight monitoring stations, the TRI emissions data do not exhibit as pronounced variability and thus fail to explain why some stations have consistently higher concentrations than others. As an example, facilities in the immediate vicinity of the WELBY and MNE monitoring stations report less than 100 pounds of formaldehyde releases to TRI, yet the ambient concentrations of formaldehyde at these stations differ by an order of magnitude. Provided industrial facilities submit accurate emission estimates to TRI, Table 7-10 suggests that emissions from industrial facilities that meet the TRI reporting requirements do not account for the elevated levels of carbonyls found in ambient air—a hypothesis suggested by other EPA monitoring efforts (ERG, 1997).

- *Significantly higher geometric mean concentrations at the WELBY station.* Table 7-10 indicates that geometric mean concentrations of carbonyls measured at the WELBY monitoring station are significantly greater than those measured at the seven other monitoring stations, despite the virtual absence of air releases of carbonyls reported to TRI for the Denver area. The following paragraphs apply factors other than TRI emissions data to explain this trend.

- *Significantly lower geometric mean concentrations at the MNE station.* In addition to the relatively higher concentrations near Denver, Table 7-10 clearly shows consistently lower geometric mean concentrations of carbonyls measured at the Cape Elizabeth, Maine (MNE) monitoring station. As shown in Figure 7-1, the MNE monitoring station is located at the tip of a peninsula along the Atlantic seaboard, far removed from industrial sources meeting the TRI reporting requirements. Further, as the windrose in Figure 7-2 indicates, winds in the vicinity of the monitoring station blow primarily from the south and the east, with a smaller fraction of winds blowing from onshore. Although these factors may explain the relatively lower geometric mean concentrations, the following analysis examines potential impacts from other emission sources.

As noted in Section 3.2.1.1, the NET inventory data consider not only emission sources subject to the TRI reporting requirements, but also motor vehicles, natural emission sources, and a wider range of industrial emission sources. Accordingly, even though the NET data do not report air releases of specific compounds, they may account for air quality trends that the TRI data cannot explain. The NET inventory data shown in Table 7-11 for the four metropolitan areas with carbonyl monitoring stations indicate two significant findings. First, overall VOC emissions

in the vicinity of the Cape Elizabeth monitoring station are substantially lower than those in the vicinity of the other three metropolitan areas, probably explaining the relatively low concentrations of carbonyls measured in Maine. Second, overall VOC emissions in the vicinity of the Denver monitoring stations are notably lower than those reported in the vicinity of the Dallas and Newark stations, even though the Denver stations (particularly WELBY) have relatively high concentrations of carbonyls. As discussed in greater detail in Sections 4.2.3 and 6.2.1, the close proximity of the Rocky Mountains to the Denver monitoring stations may explain this apparent contradiction.

Even though the NET emissions data indicate some correlation between higher emissions of VOCs and elevated ambient air concentrations of carbonyls, these data do not indicate whether carbonyls in ambient air originate from emissions of carbonyls directly to the atmosphere or from products of photochemical reactions involving other VOCs that are emitted to the atmosphere. Statistical analyses of more extensive carbonyl monitoring efforts might resolve this important distinction.

7.2.2 Data Correlations

Using the same approach outlined in Section 6.2.2, a correlation analysis was performed on the eight carbonyls most prevalent in the ambient air surrounding the eight monitoring stations that collected carbonyl samples. Because the limited number of samples collected at each monitoring station precludes a site-specific analysis, correlations were calculated among all 86 carbonyl samples collected during the 1996 NMOC/SNMOC program. Accordingly, correlations indicated by these samples should suggest air quality trends common to the four geographic regions (Dallas, Denver, Newark, and Portland) that measured carbonyls.

Table 7-12 shows that of the 28 possible pairs of carbonyls, 7 had positive Pearson correlation coefficients greater than 0.70, a strong correlation level across the four different urban areas. The remaining pairs of carbonyls had significantly weaker, but generally positive, correlations. Although statistically significant, the correlations among the carbonyls are generally

not as strong (e.g., do not have as high Pearson correlation coefficients) as those for VOCs. These weaker correlations suggest that the highly correlated VOCs are more likely than carbonyls to originate from emission sources common to most urban environments. Additional analyses involving more extensive monitoring data or considering correlations between carbonyls and hydrocarbons are necessary to confirm this hypothesis.

7.3 Data Quality Parameters

Using the approach outlined in Section 3.3.2, Table 7-13 summarizes how precisely the sampling and analytical method for carbonyls measures ambient air concentrations. During the 1996 NMOC/SNMOC program, 7 duplicate carbonyl samples were collected and analyzed in replicate, providing a maximum of 7 observations for evaluating sampling precision and a maximum of 14 observations for estimating analytical precision. Following standard convention, non-detect results were not considered in the precision calculations. For compounds not detected in every duplicate sample or replicate analysis, therefore, the number of observations used to estimate precision is less than the corresponding maximum number of observations.

As shown in Table 7-13, the carbonyl sampling and analytical method used in this program quantifies concentrations to a high level of precision: replicate analyses of carbonyl samples generally result in concentrations that differ by less than 35 percent, and analyses of duplicate samples introduce variability of less than 55 percent. For reference, the carbonyl sampling and analytical method notes that analytical precision can vary up to 25 percent when measuring ambient air concentrations according to the method specifications (USEPA, 1984b), but the method does not indicate reasonable bounds for sampling precision. The analytical precision estimates shown in Table 7-13 generally meet this data quality guideline, which suggests that the laboratory analysts strictly followed the analytical procedures necessary for quantifying concentrations of carbonyls precisely and accurately.

7.4 Summary

Despite highly variable levels of carbonyls at the eight different monitoring stations, acetaldehyde, acetone, and formaldehyde were consistently observed at levels higher than the 13 other carbonyls identified by the sampling and analytical method. Although neither TRI emissions data nor statistical correlation analyses can explain the source of these carbonyls in ambient air, the NET emissions data suggest that ambient levels of carbonyls tend to be higher in regions with relatively high levels of overall VOC emissions. Because the NET inventory does not indicate emissions of specific compounds, the data are insufficient for determining whether carbonyls in ambient air originate primarily from emissions of carbonyls or from photochemical reactions involving hydrocarbons. This important issue may be resolved by considering more detailed emission inventories or examining correlations between large volumes of carbonyl and hydrocarbon monitoring data.

Figure 7-1
Facilities in the Vicinity of the Cape Elizabeth, Maine (MNE) Monitoring Station That Reported Air Releases of VOCs or Carbonyls to TRI

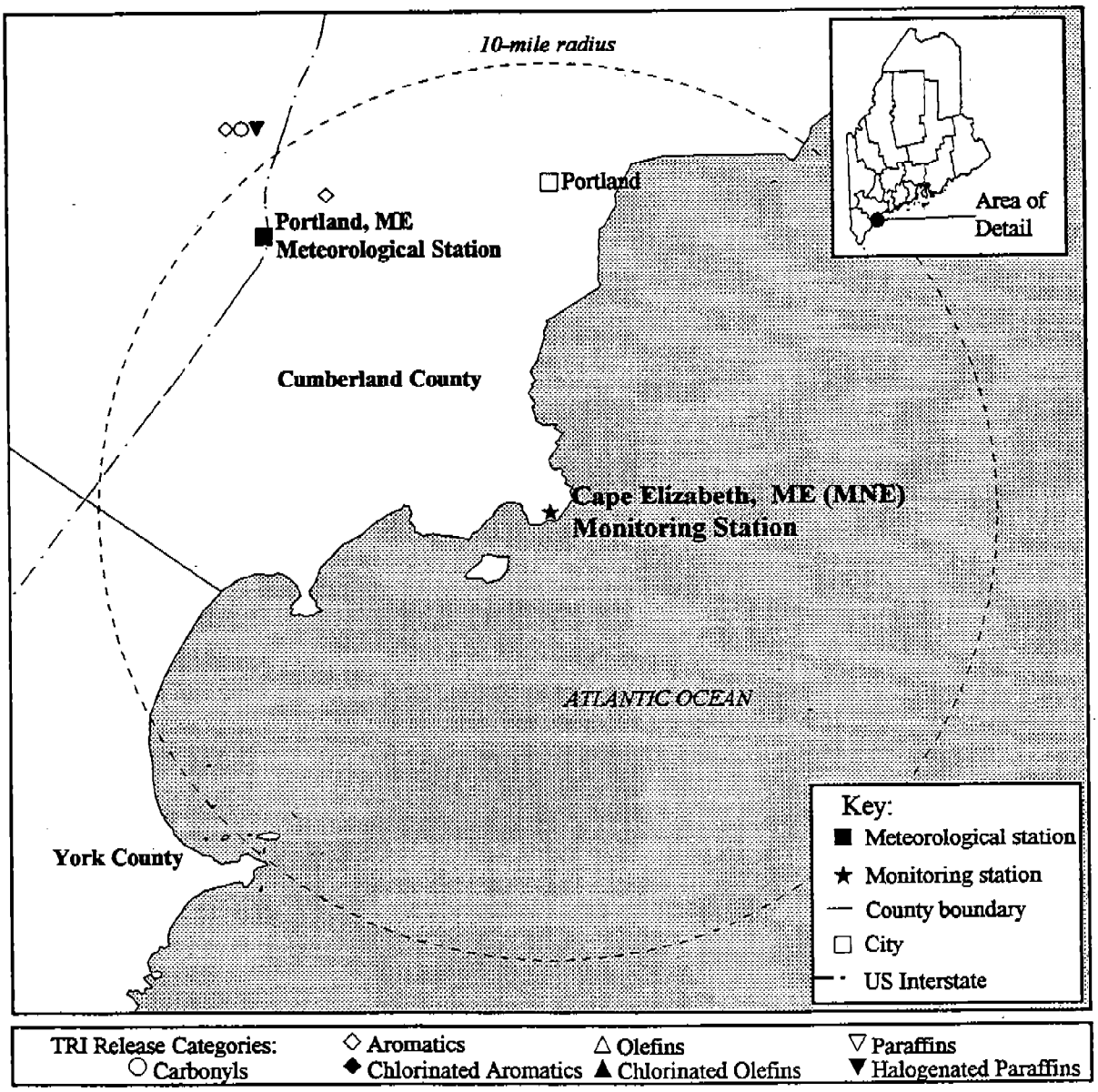
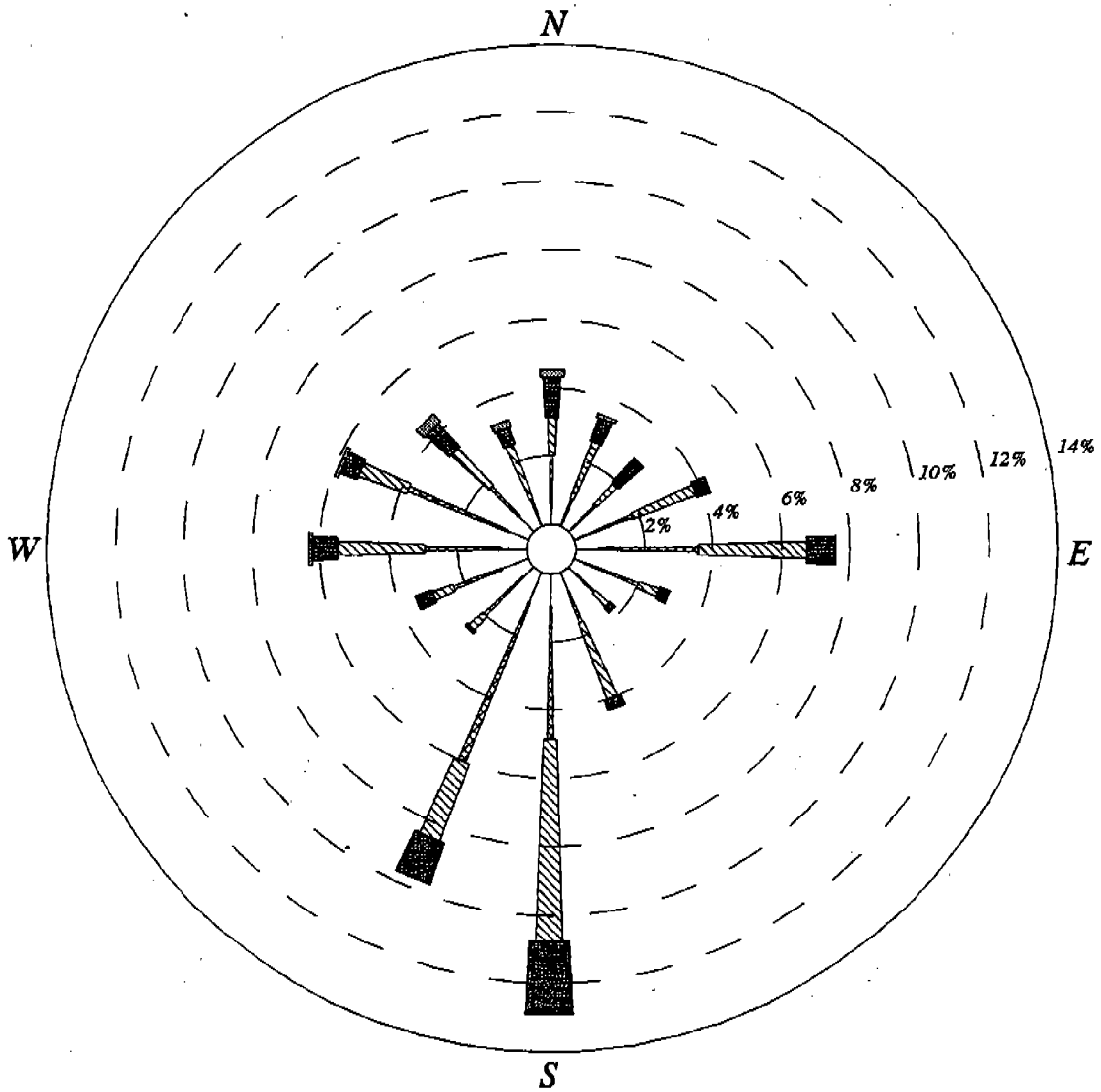


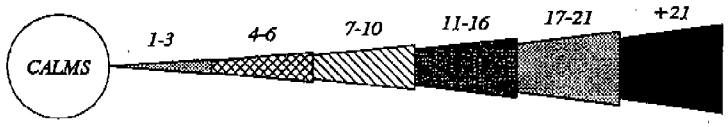
Figure 7-2
Windrose Generated From Meteorological Data Collected During the Summer of 1996 at the Portland International Airport (near the Cape Elizabeth Monitoring Station)



CALM WINDS 19.43%

WIND SPEED (KNOTS)

NOTE: Frequencies indicate direction from which the wind is blowing.



Source: Data provided by the National Climatic Data Center.

Table 7-1
Summary Statistics for Carbonyl Concentrations Measured at Denver, Colorado (CAMP)
(Based on 7 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%**	**1.93**	**40.52**	**16.09**	**20.26**	**12.98**	**16.38**	**0.81**
Acetone	**0**	**100%**	**0.33**	**8.28**	**5.00**	**4.41**	**2.83**	**2.99**	**0.68**
Acrolein	5	29%	ND	0.32	0.02	0.10	0.04	0.13	1.36
Benzaldehyde	**3**	**57%**	**ND**	**0.24**	**0.12**	**0.12**	**0.11**	**0.06**	**0.50**
Butyr/Isobutyraldehyde	**1**	**86%**	**ND**	**0.72**	**0.51**	**0.45**	**0.32**	**0.21**	**0.47**
Crotonaldehyde	**1**	**86%**	**ND**	**2.01**	**0.40**	**0.72**	**0.44**	**0.68**	**0.94**
2,5-Dimethylbenzaldehyde	4	43%	ND	0.21	0.06	0.11	0.10	0.07	0.62
Formaldehyde	**0**	**100%**	**3.19**	**5.56**	**4.24**	**4.26**	**4.20**	**0.75**	**0.18**
Hexanaldehyde	**0**	**100%**	**0.23**	**0.35**	**0.31**	**0.29**	**0.29**	**0.05**	**0.16**
Isovaleraldehyde	7	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Propionaldehyde	**2**	**71%**	**ND**	**0.57**	**0.30**	**0.29**	**0.16**	**0.20**	**0.71**
Tolualdehydes	**3**	**57%**	**ND**	**0.58**	**0.35**	**0.40**	**0.37**	**0.16**	**0.41**
Valeraldehyde	5	29%	ND	0.29	0.04	0.08	0.05	0.10	1.19

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-2
Summary Statistics for Carbonyl Concentrations Measured at Dallas, Texas (CAMS5)
(Based on 12 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	**1**	**92%**	**ND**	**61.67**	**33.84**	**27.44**	**11.95**	**21.93**	**0.80**
Acetone	**1**	**92%**	**ND**	**4.78**	**1.44**	**2.03**	**1.62**	**1.35**	**0.66**
Acrolein	9	25%	ND	0.54	0.02	0.09	0.04	0.16	1.70
Benzaldehyde	**5**	**58%**	**ND**	**0.37**	**0.16**	**0.15**	**0.13**	**0.09**	**0.59**
Butyr/Isobutyraldehyde	**4**	**67%**	**ND**	**1.85**	**0.45**	**0.44**	**0.21**	**0.51**	**1.15**
Crotonaldehyde	**3**	**75%**	**ND**	**1.88**	**0.36**	**0.46**	**0.30**	**0.49**	**1.06**
2,5-Dimethylbenzaldehyde	10	17%	ND	1.18	0.06	0.17	0.09	0.34	1.94
Formaldehyde	**1**	**92%**	**ND**	**4.50**	**3.02**	**2.71**	**2.33**	**1.24**	**0.46**
Hexanaldehyde	**1**	**92%**	**ND**	**0.34**	**0.23**	**0.24**	**0.23**	**0.06**	**0.25**
Isovaleraldehyde	9	25%	ND	0.24	0.04	0.08	0.06	0.08	1.04
Propionaldehyde	**2**	**83%**	**ND**	**0.56**	**0.23**	**0.24**	**0.15**	**0.17**	**0.73**
Tolualdehydes	12	0%	ND	ND	0.25	0.25	0.25	0.00	0.00
Valeraldehyde	8	33%	ND	0.48	0.04	0.12	0.07	0.14	1.20

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-3
Summary Statistics for Carbonyl Concentrations Measured at Fort Worth, Texas (CAMS13)
(Based on 12 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%**	**1.01**	**59.54**	**9.49**	**22.94**	**8.53**	**22.70**	**0.99**
Acetone	**0**	**100%**	**0.23**	**5.00**	**3.37**	**2.69**	**1.90**	**1.55**	**0.58**
Acrolein	8	33%	ND	0.39	0.02	0.10	0.04	0.12	1.23
Benzaldehyde	9	25%	ND	0.12	0.07	0.08	0.08	0.02	0.24
Butyr/Isobutyraldehyde	**1**	**92%**	**ND**	**0.65**	**0.47**	**0.44**	**0.37**	**0.18**	**0.41**
Crotonaldehyde	**1**	**92%**	**ND**	**0.46**	**0.27**	**0.28**	**0.23**	**0.11**	**0.41**
2,5-Dimethylbenzaldehyde	12	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Formaldehyde	**0**	**100%**	**1.21**	**6.69**	**2.51**	**3.08**	**2.36**	**1.79**	**0.58**
Hexanaldehyde	**1**	**92%**	**ND**	**0.29**	**0.24**	**0.21**	**0.18**	**0.08**	**0.36**
Isovaleraldehyde	12	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Propionaldehyde	**4**	**67%**	**ND**	**0.44**	**0.21**	**0.20**	**0.11**	**0.14**	**0.71**
Tolualdehydes	10	17%	ND	0.42	0.25	0.26	0.25	0.06	0.21
Valeraldehyde	**6**	**50%**	**ND**	**2.04**	**0.06**	**0.28**	**0.09**	**0.57**	**1.99**

ND = Non-detect
Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-4
Summary Statistics for Carbonyl Concentrations Measured at Dallas, Texas (DLTX)
(Based on 11 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%**	**4.10**	**57.42**	**28.13**	**33.07**	**27.34**	**16.95**	**0.51**
Acetone	**0**	**100%**	**1.33**	**8.92**	**3.16**	**3.35**	**2.86**	**2.19**	**1.08**
Acrolein	7	36%	ND	0.23	0.02	0.08	0.05	0.09	0.66
Benzaldehyde	7	36%	ND	0.28	0.07	0.11	0.09	0.07	0.50
Butyr/Isobutyraldehyde	**0**	**100%**	**0.30**	**1.24**	**0.52**	**0.59**	**0.53**	**0.30**	**0.32**
Crotonaldehyde	1	**91%**	**ND**	**0.71**	**0.43**	**0.43**	**0.41**	**0.14**	**0.50**
2,5-Dimethylbenzaldehyde	11	0%	ND	ND	0.06	0.06	0.06	0.00	0.47
Formaldehyde	**0**	**100%**	**1.98**	**8.00**	**3.52**	**3.72**	**3.43**	**1.73**	**0.63**
Hexanaldehyde	**0**	**100%**	**0.17**	**0.43**	**0.26**	**0.27**	**0.26**	**0.09**	**1.34**
Isovaleraldehyde	9	18%	ND	0.38	0.04	0.09	0.05	0.12	0.69
Propionaldehyde	1	**91%**	**ND**	**0.57**	**0.30**	**0.30**	**0.26**	**0.15**	**0.86**
Tolualdehydes	**5**	**55%**	**ND**	**1.40**	**0.25**	**0.47**	**0.37**	**0.40**	**0.32**
Valeraldehyde	**5**	**55%**	**ND**	**0.22**	**0.09**	**0.10**	**0.08**	**0.07**	**0.00**

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-5
Summary Statistics for Carbonyl Concentrations Measured at Cape Elizabeth, Maine (MNE)
(Based on 20 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%**	**0.12**	**0.55**	**0.38**	**0.37**	**0.33**	**0.14**	**0.39**
Acetone	**0**	**100%**	**0.11**	**0.48**	**0.26**	**0.27**	**0.25**	**0.11**	**0.42**
Acrolein	19	5%	ND	0.02	0.02	0.02	0.02	0.00	0.11
Benzaldehyde	**8**	**60%**	**ND**	**0.07**	**0.02**	**0.04**	**0.03**	**0.03**	**0.69**
Butyr/Isobutyraldehyde	**2**	**90%**	**ND**	**0.08**	**0.03**	**0.04**	**0.04**	**0.02**	**0.45**
Crotonaldehyde	**1**	**95%**	**ND**	**0.21**	**0.05**	**0.06**	**0.05**	**0.05**	**0.81**
2,5-Dimethylbenzaldehyde	19	5%	ND	0.06	0.06	0.06	0.06	0.01	0.15
Formaldehyde	**0**	**100%**	**0.43**	**1.47**	**0.84**	**0.85**	**0.79**	**0.34**	**0.40**
Hexanaldehyde	**1**	**95%**	**ND**	**0.07**	**0.02**	**0.03**	**0.03**	**0.02**	**0.50**
Isovaleraldehyde	17	15%	ND	0.04	0.04	0.03	0.03	0.01	0.23
Propionaldehyde	**0**	**100%**	**0.01**	**0.07**	**0.03**	**0.04**	**0.03**	**0.01**	**0.41**
Tolualdehydes	15	12%	ND	0.25	0.25	0.22	0.20	0.06	0.28
Valeraldehyde	15	25%	ND	0.04	0.04	0.03	0.02	0.01	0.47

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-6
Summary Statistics for Carbonyl Concentrations Measured at Newark, New Jersey (NWNJ)
(Based on 10 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%**	**0.69**	**62.40**	**11.82**	**23.14**	**10.43**	**23.73**	**1.03**
Acetone	**0**	**100%**	**1.10**	**6.64**	**3.23**	**3.52**	**2.98**	**1.93**	**0.55**
Acrolein	**5**	**50%**	**ND**	**0.42**	**0.07**	**0.13**	**0.07**	**0.14**	**1.04**
Benzaldehyde	**3**	**70%**	**ND**	**0.32**	**0.16**	**0.18**	**0.15**	**0.10**	**0.54**
Butyr/Isobutyraldehyde	**1**	**90%**	**ND**	**0.85**	**0.44**	**0.48**	**0.46**	**0.17**	**0.35**
Crotonaldehyde	**3**	**70%**	**ND**	**0.75**	**0.23**	**0.27**	**0.19**	**0.22**	**0.80**
2,5-Dimethylbenzaldehyde	10	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Formaldehyde	**0**	**100%**	**2.27**	**7.14**	**3.94**	**4.40**	**4.11**	**1.67**	**0.38**
Hexanaldehyde	**1**	**90%**	**ND**	**0.45**	**0.22**	**0.24**	**0.23**	**0.09**	**0.37**
Isovaleraldehyde	10	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Propionaldehyde	**3**	**70%**	**ND**	**0.84**	**0.15**	**0.22**	**0.11**	**0.26**	**1.16**
Tolualdehydes	**5**	**50%**	**ND**	**0.53**	**0.25**	**0.34**	**0.32**	**0.13**	**0.38**
Valeraldehyde	7	30%	ND	0.73	0.04	0.20	0.08	0.27	1.36

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-7
Summary Statistics for Carbonyl Concentrations Measured at Plainfield, New Jersey (P2NJ)
(Based on 7 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%**	**2.41**	**89.70**	**12.17**	**28.14**	**14.26**	**32.65**	**1.16**
Acetone	**0**	**100%**	**2.89**	**16.46**	**5.22**	**7.68**	**6.54**	**4.91**	**0.64**
Acrolein	7	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Benzaldehyde	6	14%	ND	0.27	0.07	0.10	0.09	0.08	0.08
Butyr/Isobutyraldehyde	**2**	**71%**	**ND**	**0.80**	**0.48**	**0.46**	**0.31**	**0.26**	**0.57**
Crotonaldehyde	**1**	**86%**	**ND**	**0.53**	**0.27**	**0.31**	**0.28**	**0.15**	**0.48**
2,5-Dimethylbenzaldehyde	7	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Formaldehyde	**0**	**100%**	**2.27**	**5.66**	**4.27**	**4.25**	**4.08**	**1.22**	**0.29**
Hexanaldehyde	**0**	**100%**	**0.20**	**0.49**	**0.22**	**0.26**	**0.24**	**0.12**	**0.45**
Isovaleraldehyde	6	14%	ND	0.11	0.04	0.05	0.04	0.03	0.62
Propionaldehyde	**3**	**57%**	**ND**	**0.64**	**0.15**	**0.21**	**0.11**	**0.23**	**1.12**
Tolualdehydes	6	14%	ND	0.75	0.25	0.33	0.30	0.21	0.63
Valeraldehyde	5	29%	ND	0.23	0.04	0.10	0.07	0.10	1.00

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-8
Summary Statistics for Carbonyl Concentrations Measured at Denver, Colorado (WELBY)
(Based on 7 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%**	**3.88**	**36.07**	**17.96**	**20.60**	**17.09**	**11.50**	**0.56**
Acetone	**0**	**100%**	**0.55**	**54.93**	**7.45**	**12.65**	**5.49**	**18.95**	**1.50**
Acrolein	5	29%	ND	0.56	0.02	0.14	0.05	0.21	1.54
Benzaldehyde	**2**	**71%**	**ND**	**0.41**	**0.12**	**0.15**	**0.12**	**0.12**	**0.79**
Butyr/Isobutyraldehyde	**0**	**100%**	**0.48**	**4.24**	**0.77**	**1.21**	**0.90**	**1.34**	**1.10**
Crotonaldehyde	**0**	**100%**	**0.34**	**1.71**	**0.69**	**0.89**	**0.77**	**0.52**	**0.58**
2,5-Dimethylbenzaldehyde	6	14%	ND	0.16	0.06	0.07	0.07	0.04	0.51
Formaldehyde	**0**	**100%**	**3.20**	**14.28**	**5.32**	**6.67**	**5.99**	**3.68**	**0.55**
Hexanaldehyde	**0**	**100%**	**0.31**	**0.87**	**0.51**	**0.54**	**0.52**	**0.17**	**0.31**
Isovaleraldehyde	6	14%	ND	0.13	0.04	0.05	0.04	0.03	0.72
Propionaldehyde	**0**	**100%**	**0.31**	**1.54**	**0.39**	**0.58**	**0.50**	**0.44**	**0.75**
Tolualdehydes	**2**	**71%**	**ND**	**0.99**	**0.26**	**0.45**	**0.36**	**0.33**	**0.73**
Valeraldehyde	5	29%	ND	0.45	0.04	0.11	0.06	0.16	1.42

ND = Non-detect

Note: Data for compounds detected in more than 50 percent of the samples are presented in bold text. 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 3.1.1).

Table 7-9
Summary of Prevalence and Geometric Mean Concentrations for Carbonyls

Compound	Number of Monitoring Stations With Prevalence in Listed Range				Number of Monitoring Stations With Geometric Mean Concentrations in Listed Range			
	≤25 %	>25 %; ≤50 %	>50 %; ≤75 %	>75 %	<1 ppbv	≥1 ppbv; <2 ppbv	≥2 ppbv; <5 ppbv	≥5 ppbv
Acetaldehyde	0	0	0	8	1	0	0	7
Acetone	0	0	0	8	1	2	3	2
Acrolein	3	5	0	0	8	0	0	0
Benzaldehyde	2	1	5	0	8	0	0	0
Butyr/Isobutyraldehyde	0	0	2	6	8	0	0	0
Crotonaldehyde	0	0	2	6	8	0	0	0
2,5-Dimethylbenzaldehyde	7	1	0	0	8	0	0	0
Formaldehyde	0	0	0	8	1	0	6	1
Hexanaldehyde	0	0	0	8	8	0	0	0
Isovaleraldehyde	8	0	0	0	8	0	0	0
Propionaldehyde	0	0	4	4	8	0	0	0
Tolualdehydes	4	1	3	0	8	0	0	0
Valeraldehyde	1	6	1	0	8	0	0	0

Table 7-10
Comparison of Geometric Mean Concentrations of Selected Carbonyls With Total Air Releases Reported by Facilities Within a 10-Mile Radius of NMOC/SNMOC Monitoring Stations

Formaldehyde			Butyr/Isobutyraldehyde			Propionaldehyde		
Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)	Station Code	Geometric Mean Concentration (ppbv)	Total Air Releases (lbs)
WELBY	5.99	54	WELBY	0.90	0	WELBY	0.50	0
CAMP	4.20	54	DLTX	0.53	0	DLTX	0.26	0
NWNJ	4.11	14,628	NWNJ	0.46	3,064	CAMP	0.16	0
P2NJ	4.08	6,514	CAMS13	0.37	0	CAMS5	0.15	0
DLTX	3.43	0	CAMP	0.32	0	NWNJ	0.11	3,307
CAMS13	2.36	1,056	P2NJ	0.31	0	P2NJ	0.11	0
CAMS5	2.33	1,687	CAMS5	0.21	0	CAMS13	0.11	0
MNE	0.79	0	MNE	0.04	0	MNE	0.03	0

Note: Acetaldehyde is detected in the majority of carbonyl samples, but none of the facilities located within 10 miles of the monitoring stations reported air releases. Isobutyraldehyde is not a Section 313 compound, so the total air releases for "butyr/isobutyraldehyde" are only releases reported for butyraldehyde.

Table 7-11
Summary of NET Emissions Data for the Carbonyl Monitoring Locations

NET Emissions Category	Total VOC Emissions (tons/year) by Metropolitan Area			
	Dallas (CAMS5, CAMS13, DLTX)	Denver (CAMP, WELBY)	Newark (NWNJ, P2NJ)	Portland, ME (MNE)
Area Sources	101,541	75,310	124,137	16,838
Mobile Sources	110,898	49,201	95,715	12,519
Point Sources	9,951	16,158	46,644	3,491
All Sources Combined	222,390	140,669	266,496	32,848

Note: As described in Section 4.2.1, the NET emissions data considered in this report are the sum of all emissions reported for counties with boundaries that intersect a 15-mile radius drawn around a particular metropolitan area.

Table 7-12
Pairs of Carbonyls With Pearson Correlation Coefficients Greater Than 0.70
(Based on 86 Carbonyl Samples)

Compounds		Pearson Correlation Coefficient
Formaldehyde	Hexanaldehyde	0.83
Acetone	Butyr/Isobutyraldehyde	0.82
Hexanaldehyde	Propionaldehyde	0.79
Formaldehyde	Acetone	0.75
Formaldehyde	Propionaldehyde	0.74
Benzaldehyde	Propionaldehyde	0.73
Formaldehyde	Butyr/Isobutyraldehyde	0.72

Table 7-13
Data Quality Parameters for Carbonyl Measurements

Compound	Analytical Precision		Sampling Precision	
	RPD	Number of Observations	RPD	Number of Observations
Acetaldehyde	3 %	14	54 %	7
Acetone	5 %	14	37 %	7
Acrolein	35 %	6	55 %	1
Benzaldehyde	12 %	6	55 %	3
Butyr/Isobutyraldehyde	9 %	14	20 %	3
Crotonaldehyde	12 %	12	34 %	6
2,5-Dimethylbenzaldehyde	---	0	---	0
Formaldehyde	3 %	14	20 %	7
Hexanaldehyde	19 %	14	20 %	5
Isovaleraldehyde	2 %	2	---	0
Propionaldehyde	14 %	14	26 %	7
Tolualdehydes	28 %	2	35 %	1
Valeraldehyde	20 %	10	45 %	4

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 "---."

8.0 Conclusions and Recommendations

Results of the NMOC/SNMOC ambient air monitoring program offer insight into the magnitude and composition of air pollution known to form ozone. The following discussion summarizes the main conclusions of this report and recommends how the NMOC/SNMOC monitoring program can be modified to characterize ambient air quality more thoroughly.

8.1 Conclusions

Although the presence of hydrocarbons in ambient air contributes to ozone formation processes, many additional factors (such as solar radiation and ambient levels of nitrogen oxides) also influence the complex series of photochemical reactions that produce ozone. Accordingly, the NMOC and SNMOC monitoring data do not provide enough information to fully characterize air pollution. Nonetheless, they suggest notable trends and patterns in ambient air quality that may have direct relevance to air pollution control strategies:

- *NMOC monitoring data (Section 4).* Ambient air concentrations of total NMOC measured during the summer of 1996 ranged from 0.069 ppmC to 1.723 ppmC. Geometric mean concentrations of NMOC did not vary significantly at the Bountiful, Utah (0.399 ppmC), Newark (0.389 ppmC), and Plainfield (0.410 ppmC) monitoring stations, but were notably lower at the Long Island (0.290 ppmC) monitoring station. High levels of emissions in the Newark metropolitan area were believed to account for the relatively high concentrations at Newark and Plainfield, and the close proximity of the Rocky Mountains may have resulted in the relatively high concentrations at Bountiful. The absence of significant nearby emission sources and prevailing winds blowing from the Atlantic Ocean may have accounted for the lower concentrations observed at Long Island. Statistical analyses found NMOC concentrations at Newark and Plainfield to be highly correlated, suggesting that air pollution from Newark may transport to Plainfield, and vice versa. Qualitative review of nearly 10 years of ambient air monitoring data indicate slight decreases in NMOC levels at Newark, but no apparent long-term trends at Plainfield or Long Island.

- *SNMOC monitoring data (Section 5).* Ambient air concentrations of 80 hydrocarbons varied significantly among the 13 monitoring stations that collected SNMOC samples. Toluene, acetylene/ethane, isopentane, propane, and *n*-butane were consistently measured at higher levels (on a ppbC basis) than the other compounds. In general, ambient levels of SNMOCs were relatively higher in the

Denver, Juarez, and Newark metropolitan areas; moderately high in the Dallas and Salt Lake City metropolitan areas; and relatively lower in the Birmingham metropolitan area. These spatial variations were more consistent with NET emission inventory data (which account for industrial, mobile, and natural sources) than with TRI emission inventory data (which account for only selected industrial sources), suggesting that mobile sources may produce a significant fraction of the SNMOCs detected in ambient air. The similarity of BTEX concentration profiles indicated by the SNMOC monitoring data to BTEX concentration profiles detected in previous roadside monitoring efforts supports the hypothesis that significant amounts of hydrocarbons in ambient air originate from motor vehicle emissions. Average compositions of isoprene, a compound typically used as a marker for emissions from natural sources, were generally below 1 percent at the SNMOC monitoring locations, indicating that natural emission sources have relatively minor impacts on ambient air concentrations measured at these locations between 6:00 and 9:00 AM.

Statistical analyses of the SNMOC monitoring data identified several subtle patterns in the air pollution measurements. For instance, ambient air concentrations of ethylbenzene, xylene isomers, and other aromatic compounds exhibited strong, positive correlations across all the monitoring stations, possibly indicating that these compounds originate from emission sources common to most urban environments (such as motor vehicles). Further, concentrations of isoprene had moderate correlations with pinene isomers, 2-methyl-1-pentene, cyclopentene, and 1-decene, suggesting that natural emission sources contribute significantly to ambient levels of these compounds. Correlation analyses with daily average temperature indicated that ambient air concentrations of hydrocarbons at most monitoring stations decreased as temperature increased, but this trend was not observed at two monitoring stations. Further research is necessary to understand the significance of these temperature correlations. Of the SNMOC compounds, ambient levels of isoprene measured at every monitoring station showed moderate to strong positive correlations with temperature, a trend consistent with emission models published in the scientific literature.

Reactivity of hydrocarbons in ambient air was qualitatively analyzed by considering the age and ozone formation potential of the air masses sampled at the SNMOC monitoring stations. Relative compositions of selected aromatic hydrocarbons indicated that air samples collected on the outskirts of metropolitan areas appeared to be "older" (e.g., transported over longer distances) than air samples collected in urban centers. Further analyses suggest that highly reactive compounds with relatively low ambient air concentrations, such as propylene and 1,2,4-trimethylbenzene, exhibit a stronger potential to form ozone than less reactive compounds with relatively high ambient air concentrations, such as isopentane and

propane. Additional research is necessary to determine how these observations apply to urban centers not considered during the 1996 program.

- *VOC monitoring data (Section 6)*. Seven monitoring stations each collected between 5 and 10 VOC samples. Although the limited sampling precluded a sophisticated statistical analysis, several trends were apparent in the VOC monitoring data. For example, of the 38 compounds identified by the VOC analytical methods, only acetylene, benzene, propylene, styrene, toluene, and *m,p*-xylene had geometric mean concentrations greater than 1 ppbv at one or more of the monitoring stations. Further, air concentrations of most VOCs were relatively higher in the Denver and Newark metropolitan areas than in the Birmingham metropolitan area. As a notable exception, chloromethane was consistently present at higher levels in Birmingham. Further examination revealed that chloromethane showed statistically significant negative correlations with most hydrocarbons, which means that ambient levels of chloromethane tend to be lower when ambient levels of hydrocarbons increase. This unique negative correlation may provide insight into the role of particular compounds in complex photochemical reactions. Statistical analyses for the remaining compounds indicated relatively strong correlations among aromatic hydrocarbons (consistent with findings from the SNMOC data) and notably weaker correlations among halogenated hydrocarbons. This distinction suggests that ambient levels of hydrocarbons may originate from emission sources common to all urban environments, while ambient levels of halogenated compounds may originate from site-specific emission sources. Further research is necessary to confirm this interpretation.

- *Carbonyl monitoring data (Section 7)*. Eight monitoring stations each collected between 7 and 20 carbonyl samples. This limited number of sampling events precluded detailed statistical analyses of the carbonyl monitoring data; however, the monitoring results yielded several important findings. For instance, of the 15 carbonyls identified by the analytical method, only acetaldehyde, acetone, and formaldehyde had geometric mean concentrations greater than 2 ppbv at most of the monitoring stations. Ambient levels of most carbonyls were highest at the WELBY monitoring station in Denver and were relatively high at the Newark and Dallas monitoring stations. At the station in Cape Elizabeth, Maine, however, ambient air concentrations of carbonyls were consistently over an order of magnitude lower than those observed at the WELBY monitoring station. Emissions of carbonyls loaded in the 1994 TRI database were completely uncorrelated with observed spatial variations in air quality, suggesting that emissions of carbonyls from industrial facilities account for a very small fraction of the carbonyls in ambient air. More extensive analyses of emissions inventory and air monitoring data are necessary to determine the primary source of carbonyls in ambient air.

Data quality parameters for all four sets of ambient air monitoring data indicate that sampling precision and analytical precision were within bounds typically recommended by the corresponding sampling and analytical methods and that over 90 percent of the scheduled sampling events were successfully executed. The low precision numbers and high completeness figures suggest that field sampling and laboratory analytical efforts were performed according to method specifications and that the corresponding monitoring data are of very high quality.

8.2 Recommendations

The 1996 NMOC/SNMOC monitoring data lead to a number of recommendations for future national ambient air monitoring efforts:

- *Develop standard conventions for interpreting air monitoring data.* The lack of consistent approaches to presenting and summarizing ambient air monitoring data makes comparisons between different air monitoring studies extremely difficult. For instance, monitoring studies may use different approaches to calculating central tendencies, treating non-detects, or considering duplicate samples. This diversity of approaches can complicate efforts to compare monitoring data from one study to the next. Accordingly, the feasibility of establishing standard approaches for analyzing and reporting air monitoring data should be investigated further.

- *Establish the combined SNMOC/VOC analytical method as the program norm.* To make best use of whole air canister samples, combined analysis of the 80 SNMOC and 38 VOC target compounds should be conducted on every sample. This combined analytical technique was evaluated for the 1997 NMOC/SNMOC program; providing sponsoring agencies much more extensive monitoring data with only marginal increases in program costs. The effects of this revision will be demonstrated in summary reports for subsequent NMOC/SNMOC programs.

- *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.

- *Revise sampling schedules to generate more useful monitoring data.* Although the current sampling schedules for the NMOC/SNMOC program generate monitoring data that are used as a critical input to regional air quality models, slight revisions to the monitoring schedules can provide greater insight into the nature and magnitude of air pollution that forms ozone. For example, weekend sampling would indicate how levels of air pollution change on days without commuter traffic. Further, a sampling option to periodically collect samples throughout a day (in addition to the sampling from 6:00 to 9:00 AM) would reveal significant diurnal profiles in contaminants of concern, most notably compounds originating from motor vehicle and natural emission sources. Such minor modifications to monitoring schedules can help state and local environmental agencies better understand how specific emission sources affect air quality.

9.0 References

Carter, 1994. "Development of Ozone Reactivity Scales for Volatile Organic Compounds." *Journal of the Air and Waste Management Association* 44: 881-899. 1994.

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

ERG, 1996. "1995 Non-Methane Organic Compounds and Speciated Non-Methane Organic Compounds Monitoring Programs." Eastern Research Group, Inc. Prepared for U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. December 1996.

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

FR, 1984. "Definition and Procedure for the Determination of the Method Detection Limit—Revision 1.1." *Federal Register* 49/209. October 26, 1984.

Sonoma, 1996. "PAMS Data Analysis Workshop: Illustrating the Use of PAMS Data to Support Ozone Control Programs." Sonoma Technology, Inc. Prepared for U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. October 1996.

TRI, 1994. 1994 Toxic Release Inventory Reporting. U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. (Data downloaded from the TOXNET system of the National Library of Medicine.) 1994.

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

USEPA, 1984a. "Determination of Volatile Organic Compounds (VOCs) in Ambient Air Using SUMMA® Passivated Canister Sampling and Gas Chromatographic Analysis." U.S. Environmental Protection Agency, Quality Assurance Division, Environmental Monitoring Systems Laboratory. June 1984.

USEPA, 1984b. "Determination of Formaldehyde in Ambient Air Using Adsorbent Cartridge Followed by High Performance Liquid Chromatography." U.S. Environmental Protection Agency, Quality Assurance Division, Environmental Moniotring Systems Laboratory. June 1984.

USEPA, 1988. "Method for the Determination of Non-Methane Organic Compounds (NMOC) in Ambient Air Using Cryogenic Preconcentration and Direct Flame Ionization Detection (PDFID)." U.S. Environmental Protection Agency, Quality Assurance Division, Environmental Moniotring Systems Laboratory. May 1988.

USEPA, 1989. "Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual (Part A)." Interim Final. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. December 1989.

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

USEPA, 1996. "Photochemical Assessment Monitoring Stations: 1996 Data Analysis Results Report." U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. October 1996.

1996 Nonmethane Organic Compound (NMOC) and Speciated Nonmethane Organic Compound (SNMOC) Monitoring Program

Appendix: Site-Specific Data

Final Report, Volume 2
EPA Contract No. 68-D3-0095
Delivery Order 09

Prepared for:

Kathy Weant and Neil J. Berg, Jr.
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Prepared by:

Eastern Research Group, Inc.
110 Hartwell Avenue
Lexington, MA 02173

November 1997

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
LINY	6145	6/1/96	774	JG	N		6/6/96	PS	N		0.503
LINY	6146	6/3/96	607	JG	N		6/6/96	PS	N		0.186
LINY	6147	6/4/96	678	JG	N		6/6/96	PS	N		0.370
LINY	6173	6/5/96	54	JG	N		6/7/96	PS	N		0.272
LINY	6174	6/6/96	869	JG	N		6/7/96	PS	N		0.801
LINY	6226	6/7/96	308	JG	N		6/12/96	PS	N		0.230
LINY	6218	6/10/96	52	JG	N		6/12/96	PS	N		0.139
LINY	6213	6/11/96	716	JG	N		6/12/96	PS	N		0.166
LINY	6246	6/12/96	N030	JG	N		6/13/96	PS	N		0.191
LINY	6279	6/13/96	648	JG	N		6/14/96	PS	N		0.238
LINY	6313	6/17/96	500	JG	N		6/18/96	PS	N		0.259
LINY	6361	6/18/96	150	JG	N		6/20/96	PS	N		0.237
LINY	6365	6/19/96	768	JG	N		6/20/96	PS	N		0.130
LINY	6387	6/20/96	607	JG	N		6/21/96	PS	N		0.144
LINY	6441	6/21/96	54	JG	Y	707	6/24/96	PS	Y	INITIAL	0.193
LINY	6443	6/21/96	707	JG	Y	54	6/24/96	PS	Y	INITIAL	0.176
LINY	6441	6/21/96	54	JG	Y	707	6/24/96	PS	Y	REPEAT	0.181
LINY	6443	6/21/96	707	JG	Y	54	6/24/96	PS	Y	REPEAT	0.136
LINY	6480	6/24/96	151	JG	N		6/25/96	PS	N		0.214
LINY	6502	6/25/96	833	JG	N		6/26/96	PS	N		0.319
LINY	6510	6/26/96	41	JG	N		6/27/96	PS	N		0.158
LINY	6525	6/27/96	661	JG	Y	400	6/28/96	PS	Y	INITIAL	0.191
LINY	6526	6/27/96	400	JG	Y	661	6/28/96	PS	Y	INITIAL	0.127
LINY	6525	6/27/96	661	JG	Y	400	6/28/96	PS	Y	REPEAT	0.155
LINY	6526	6/27/96	400	JG	Y	661	6/28/96	PS	Y	REPEAT	0.162
LINY	6593	6/28/96	302	JG	N		7/1/96	PS	N		0.899

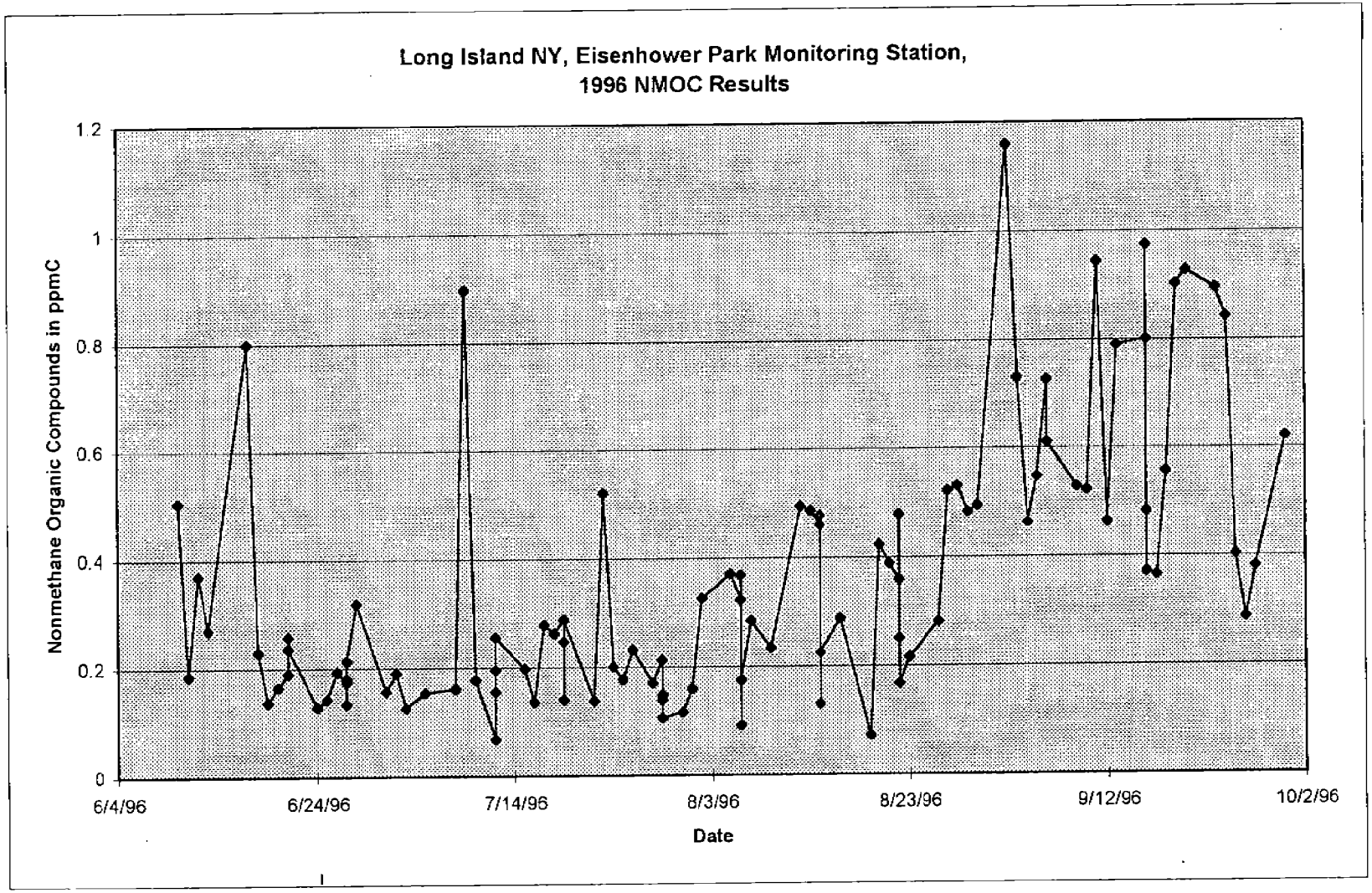
LINY-96

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
LINY	6612	7/1/96	887	JG	N		7/2/96	PS	N		0.178
LINY	6651	7/2/96	304	JG	N		7/3/96	PS	N		0.069
LINY	6668	7/3/96	815	JG	N		7/8/96	PS	N		0.156
LINY	6726	7/5/96	179	JG	N		7/8/96	PS	N		0.197
LINY	6737	7/8/96	833	JG	N		7/9/96	PS	N		0.256
LINY	6800	7/9/96	846	JG	N		7/11/96	PS	N		0.198
LINY	6798	7/10/96	719	JG	N		7/11/96	PS	N		0.138
LINY	6861	7/12/96	806	JG	Y	809	7/15/96	PS	Y	INITIAL	0.279
LINY	6862	7/12/96	809	JG	Y	806	7/15/96	PS	Y	INITIAL	0.263
LINY	6861	7/12/96	806	JG	Y	809	7/15/96	PS	Y	REPEAT	0.288
LINY	6862	7/12/96	809	JG	Y	806	7/15/96	PS	Y	REPEAT	0.248
LINY	6876	7/15/96	777	JG	N		7/16/96	PS	N		0.142
LINY	6903	7/16/96	198	JG	N		7/17/96	PS	N		0.288
LINY	6943	7/17/96	165	JG	N		7/18/96	PS	N		0.139
LINY	6984	7/18/96	73	JG	N		7/22/96	PS	N		0.520
LINY	6999	7/19/96	153	JG	Y	682	7/22/96	PS	Y	INITIAL	0.201
LINY	7002	7/19/96	682	JG	Y	153	7/22/96	PS	Y	INITIAL	0.178
LINY	6999	7/19/96	153	JG	Y	682	7/22/96	PS	Y	REPEAT	0.232
LINY	7002	7/19/96	682	JG	Y	153	7/22/96	PS	Y	REPEAT	0.172
LINY	7047	7/22/96	785	JG	N		7/23/96	PS	N		0.213
LINY	7049	7/23/96	676	JG	N		7/24/96	PS	N		0.141
LINY	7081	7/24/96	39	JG	N		7/25/96	PS	N		0.150
LINY	7086	7/25/96	880	JG	N		7/26/96	PS	N		0.107
LINY	7148	7/26/96	12	JG	N		7/29/96	PS	N		0.118
LINY	7197	7/28/96	158	JG	N		7/31/96	PS	N		0.161
LINY	7168	7/29/96	720	JG	Y	861	7/30/96	PS	Y	INITIAL	0.327
LINY	7198	7/29/96	861	JG	Y	720	7/30/96	PS	Y	INITIAL	0.370
LINY	7168	7/29/96	720	JG	Y	861	7/30/96	PS	Y	REPEAT	0.324
LINY	7198	7/29/96	861	JG	Y	720	7/30/96	PS	Y	REPEAT	0.369
LINY	7224	7/31/96	409	JG	N		8/1/96	PS	N		0.092

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
LINY	7270	8/1/96	844	JG	N		8/2/96	PS	N		0.176
LINY	7313	8/2/96	61	JG	N		8/5/96	PS	N		0.284
LINY	7314	8/5/96	773	JG	N		8/6/96	PS	N		0.234
LINY	7342	8/6/96	636	JG	Y	60	8/7/96	PS	Y	INITIAL	0.493
LINY	7375	8/6/96	60	JG	Y	636	8/7/96	PS	Y	INITIAL	0.486
LINY	7342	8/6/96	636	JG	Y	60	8/7/96	PS	Y	REPEAT	0.460
LINY	7375	8/6/96	60	JG	Y	636	8/7/96	PS	Y	REPEAT	0.477
LINY	7378	8/7/96	843	JG	N		8/8/96	PS	N		0.132
LINY	7426	8/9/96	146	JG	N		8/12/96	PS	N		0.226
LINY	7500	8/12/96	41	JG	N		8/13/96	PS	N		0.288
LINY	7550	8/13/96	403	JG	N		8/14/96	PS	N		0.073
LINY	7585	8/14/96	501	JG	Y	641	8/15/96	PS	Y	INITIAL	0.423
LINY	7586	8/14/96	641	JG	Y	501	8/15/96	PS	Y	INITIAL	0.388
LINY	7585	8/14/96	501	JG	Y	641	8/15/96	PS	Y	REPEAT	0.360
LINY	7586	8/14/96	641	JG	Y	501	8/15/96	PS	Y	REPEAT	0.478
LINY	7650	8/16/96	882	JG	N		8/19/96	PS	N		0.251
LINY	7676	8/19/96	R11	JG	N		8/20/96	PS	N		0.169
LINY	7692	8/20/96	784	JG	N		8/21/96	PS	N		0.216
LINY	7733	8/21/96	66	JG	N		8/22/96	PS	N		0.282
LINY	7779	8/22/96	9570	JG	Y	2081	8/23/96	PS	Y	INITIAL	0.521
LINY	7780	8/22/96	2081	JG	Y	9570	8/23/96	PS	Y	INITIAL	0.531
LINY	7779	8/22/96	9570	JG	Y	2081	8/23/96	PS	Y	REPEAT	0.482
LINY	7780	8/22/96	2081	JG	Y	9570	8/23/96	PS	Y	REPEAT	0.493
LINY	7791	8/23/96	192	JG	N		8/26/96	PS	N		1.160
LINY	7881	8/26/96	861	JG	N		8/27/96	PS	N		0.731
LINY	7884	8/27/96	631	JG	N		8/28/96	PS	N		0.462
LINY	7908	8/28/96	145	JG	N		8/29/96	PS	N		0.548
LINY	7942	8/29/96	656	JG	N		8/30/96	PS	N		0.728
LINY	8008	8/30/96	188	JG	N		9/4/96	PS	N		0.611

LINY-96

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
LINY	7994	9/2/96	83	JG	N		9/4/96	PS	N		0.528
LINY	8009	9/3/96	100	JG	N		9/4/96	PS	N		0.521
LINY	8066	9/4/96	920	JG	N		9/5/96	PS	N		0.944
LINY	8129	9/5/96	863	JG	N		9/9/96	PS	N		0.462
LINY	8132	9/6/96	670	JG	Y	631	9/9/96	PS	N		0.791
LINY	8133	9/6/96	631	JG	Y	670	9/9/96	PS	N		0.801
LINY	8165	9/9/96	796	JG	N		9/10/96	PS	N		0.482
LINY	8178	9/10/96	97	JG	N		9/11/96	PS	N		0.975
LINY	8205	9/11/96	181	JG	N		9/13/96	PS	N		0.371
LINY	8204	9/12/96	620	JG	N		9/13/96	PS	N		0.366
LINY	8230	9/13/96	690	JG	N		9/16/96	PS	N		0.556
LINY	8291	9/16/96	138	JG	Y	927	9/17/96	PS	Y	INITIAL	0.904
LINY	8292	9/16/96	927	JG	Y	138	9/17/96	PS	Y	INITIAL	0.928
LINY	8291	9/16/96	138	JG	Y	927	9/17/96	PS	Y	REPEAT	0.896
LINY	8292	9/16/96	927	JG	Y	138	9/17/96	PS	Y	REPEAT	0.844
LINY	8295	9/17/96	105	JG	N		9/18/96	PS	N		0.403
LINY	8319	9/18/96	166	JG	N		9/19/96	PS	N		0.287
LINY	8358	9/19/96	809	JG	N		9/23/96	PS	N		0.381
LINY	8359	9/20/96	790	JG	N		9/23/96	PS	N		0.620
LINY	8379	9/23/96	820	JG	N		9/24/96	PS	N		0.644
LINY	8396	9/24/96	107	JG	N		9/25/96	PS	N		0.465
LINY	8412	9/25/96	56	JG	N		9/26/96	PS	N		0.465
LINY	8433	9/26/96	901	JG	N		9/27/96	PS	N		0.415
LINY	8492	9/27/96	33	JG	N		10/1/96	PS	N		0.238
LINY	8509	9/30/96	870	JG	N		10/1/96	PS	N		0.650

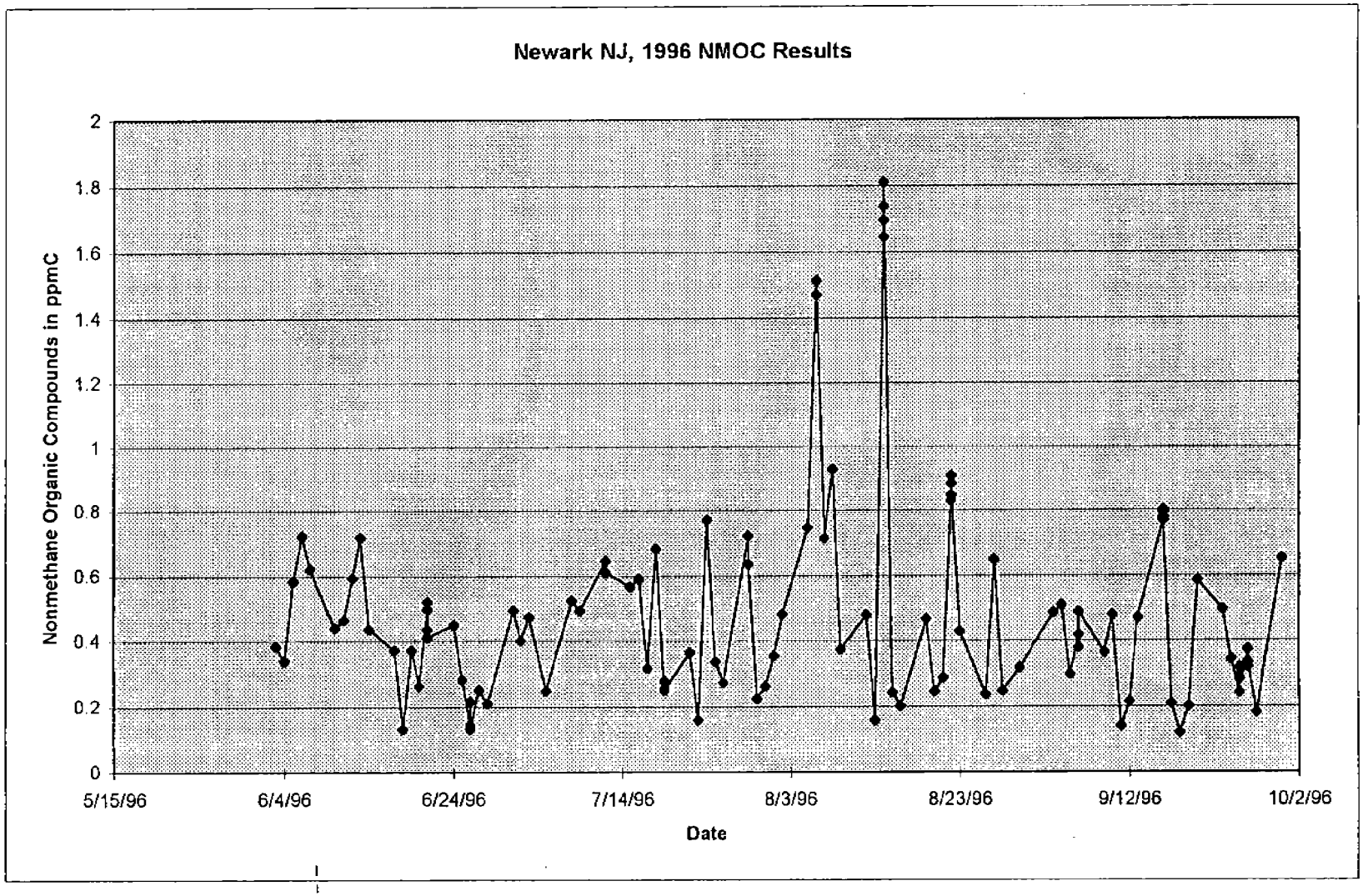

Long Island NY, Eisenhower Park Monitoring Station,
1996 NMOC Results
Nonmethane Organic Compounds in ppmC
1.2
1
0.8
0.6
0.4
0.2
0
6/4/96
6/24/96
7/14/96
8/3/96
8/23/96
9/12/96
10/2/96
Date

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
NWNJ	6176	6/3/96	702	DK	N		6/7/96	PS	N		0.385
NWNJ	6171	6/4/96	405	RB	N		6/7/96	PS	N		0.339
NWNJ	6175	6/5/96	99	RB	N		6/7/96	PS	N		0.586
NWNJ	6198	6/6/96	922	RB	N		6/11/96	PS	N		0.724
NWNJ	6197	6/7/96	916	RB	N		6/11/96	PS	N		0.623
NWNJ	6249	6/10/96	107	RB	N		6/13/96	PS	N		0.440
NWNJ	6240	6/11/96	126	RB	N		6/13/96	PS	N		0.465
NWNJ	6281	6/12/96	2006	RB	N		6/14/96	PS	N		0.595
NWNJ	6282	6/13/96	129	RB	N		6/14/96	PS	N		0.720
NWNJ	6303	6/14/96	868	RB	N		6/17/96	PS	N		0.438
NWNJ	6374	6/17/96	723	RB	N		6/20/96	PS	N		0.372
NWNJ	6368	6/18/96	303	DK	N		6/20/96	PS	N		0.133
NWNJ	6393	6/19/96	306	RB	N		6/21/96	PS	N		0.371
NWNJ	6385	6/20/96	658	RB	N		6/21/96	PS	N		0.264
NWNJ	6477	6/21/96	835	RB	Y	156	6/25/96	PS	Y	Initial	0.498
NWNJ	6478	6/21/96	156	RB	Y	835	6/25/96	PS	Y	Initial	0.521
NWNJ	6477	6/21/96	835	RB	Y	156	6/25/96	PS	Y	Repeat	0.435
NWNJ	6478	6/21/96	156	RB	Y	835	6/25/96	PS	Y	Repeat	0.411
NWNJ	6483	6/24/96	774	RB	N		6/26/96	PS	N		0.450
NWNJ	6481	6/25/96	859	RB	N		6/26/96	PS	N		0.283
NWNJ	6541	6/26/96	73	RB	Y	916	6/28/96	PS	N		0.143
NWNJ	6543	6/26/96	916	RB	Y	73	6/28/96	PS	Y	Initial	0.216
NWNJ	6543	6/26/96	916	RB	N		6/28/96	PS	Y	Repeat	0.132
NWNJ	6531	6/27/96	830	RB	N		6/28/96	PS	N		0.251
NWNJ	6648	6/28/96	122	RB	N		7/3/96	PS	N		0.211

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
NWNJ	6652	7/1/96	80	RB	N		7/3/96	PS	N		0.496
NWNJ	6657	7/2/96	848	DK	N		7/3/96	PS	N		0.401
NWNJ	6725	7/3/96	627	RB	N		7/8/96	PS	N		0.475
NWNJ	6723	7/5/96	894	RB	N		7/8/96	PS	N		0.249
NWNJ	6763	7/8/96	191	DK	N		7/10/96	PS	N		0.525
NWNJ	6810	7/9/96	712	RB	N		7/12/96	PS	N		0.494
NWNJ	6898	7/12/96	151	RB	Y	41	7/17/96	PS	N		0.648
NWNJ	6899	7/12/96	41	RB	Y	151	7/17/96	PS	Y	INITIAL	0.612
NWNJ	6899	7/12/96	41	RB	N		7/17/96	PS	Y	REPEAT	0.610
NWNJ	6919	7/15/96	717	RB	N		7/17/96	PS	N		0.567
NWNJ	6918	7/16/96	301	RB	N		7/17/96	PS	N		0.592
NWNJ	6996	7/17/96	797	RB	N		7/22/96	PS	N		0.317
NWNJ	6995	7/18/96	901	RB	N		7/22/96	PS	N		0.683
NWNJ	6986	7/19/96	621	RB	Y	886	7/22/96	PS	Y	INITIAL	0.253
NWNJ	6994	7/19/96	886	RB	Y	621	7/22/96	PS	Y	INITIAL	0.252
NWNJ	6986	7/19/96	621	RB	Y	886	7/22/96	PS	Y	REPEAT	0.279
NWNJ	6994	7/19/96	886	RB	Y	621	7/22/96	PS	Y	REPEAT	0.251
NWNJ	7066	7/22/96	28	RB	N		7/24/96	PS	N		0.364
NWNJ	7084	7/23/96	3581	RB	N		7/26/96	PS	N		0.159
NWNJ	7089	7/24/96	8	RB	N		7/26/96	PS	N		0.771
NWNJ	7149	7/25/96	146	RB	N		7/29/96	PS	N		0.337
NWNJ	7269	7/26/96	107	RB	N		8/2/96	PS	N		0.272
NWNJ	7210	7/29/96	831	RB	N		7/31/96	PS	Y	INITIAL	0.724
NWNJ	7210	7/29/96	831	RB	N		7/31/96	PS	Y	REPEAT	0.637
NWNJ	7256	7/30/96	652		N		8/2/96	PS	N		0.225
NWNJ	7257	7/31/96	924	RB	N		8/2/96	PS	N		0.263

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
NWNJ	7254	8/1/96	75	RB	N		8/2/96	PS	N		0.354
NWNJ	7315	8/2/96	777	RB	N		8/6/96	PS	N		0.482
NWNJ	7338	8/5/96	118	RB	N		8/8/96	PS	N		0.749
NWNJ	7390	8/6/96	726	RB	Y	639	8/8/96	PS	Y	INITIAL	1.514
NWNJ	7391	8/6/96	639	RB	Y	726	8/8/96	PS	N		1.471
NWNJ	7390	8/6/96	726	RB	N		8/8/96	PS	Y	REPEAT	1.471
NWNJ	7406	8/7/96	189	RB	N		8/9/96	PS	N		0.716
NWNJ	7402	8/8/96	302	RB	N		8/9/96	PS	N		0.930
NWNJ	7552	8/9/96	680	RB	N		8/14/96	PS	N		0.373
NWNJ	7486	8/12/96	14	RB	N		8/13/96	PS	N		0.479
NWNJ	7551	8/13/96	901	RB	N		8/14/96	PS	N		0.158
NWNJ	7635	8/14/96	840	RB	Y	929	8/16/96	PS	Y	INITIAL	1.647
NWNJ	7636	8/14/96	929	RB	Y	840	8/16/96	PS	Y	INITIAL	1.739
NWNJ	7635	8/14/96	840	RB	Y	929	8/16/96	PS	Y	REPEAT	1.696
NWNJ	7636	8/14/96	929	RB	Y	840	8/16/96	PS	Y	REPEAT	1.811
NWNJ	7651	8/15/96	32	RB	N		8/19/96	PS	N		0.243
NWNJ	7683	8/16/96	675	RB	N		8/20/96	PS	N		0.201
NWNJ	7693	8/19/96	7	RB	N		8/21/96	PS	N		0.467
NWNJ	7805	8/20/96	75	RB	N		8/26/96	PS	N		0.246
NWNJ	7790	8/21/96	148	RB	N		8/26/96	PS	N		0.287
NWNJ	7796	8/22/96	917	RB	Y	122	8/26/96	PS	Y	INITIAL	0.850
NWNJ	7797	8/22/96	122	RB	Y	917	8/26/96	PS	Y	INITIAL	0.911
NWNJ	7796	8/22/96	917	RB	Y	122	8/26/96	PS	Y	REPEAT	0.833
NWNJ	7797	8/22/96	122	RB	Y	917	8/26/96	PS	Y	REPEAT	0.885
NWNJ	7909	8/23/96	183	DK	N		8/29/96	PS	N		0.429
NWNJ	7887	8/26/96	305	RB	N		8/28/96	PS	N		0.236
NWNJ	7901	8/27/96	638	RB	N		8/29/96	PS	N		0.649
NWNJ	7941	8/28/96	153	RB	N		8/30/96	PS	N		0.247
NWNJ	8011	8/30/96	166	RB	N		9/4/96	PS	N		0.318

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
NWNJ	8142	9/3/96	899	RB	N		9/9/96	PS	N		0.486
NWNJ	8115	9/4/96	692	RB	N		9/9/96	PS	N		0.509
NWNJ	8138	9/5/96	171	RB	N		9/9/96	PS	N		0.298
NWNJ	8176	9/6/96	794	RB	Y	814	9/11/96	PS	N		0.417
NWNJ	8177	9/6/96	814	RB	Y	794	9/11/96	PS	Y	INITIAL	0.379
NWNJ	8177	9/6/96	814	RB	N		9/11/96	PS	Y	REPEAT	0.489
NWNJ	8164	9/9/96	49	RB	N		9/10/96	PS	N		0.364
NWNJ	8211	9/10/96	875	RB	N		9/13/96	PS	N		0.479
NWNJ	8212	9/11/96	636	RB	N		9/13/96	PS	N		0.141
NWNJ	8257	9/12/96	44	RB	N		9/17/96	PS	N		0.215
NWNJ	8260	9/13/96	186	RB	N		9/17/96	PS	N		0.469
NWNJ	8309	9/16/96	921	RB	Y	836	9/18/96	PS	Y	INITIAL	0.770
NWNJ	8310	9/16/96	836	RB	Y	921	9/18/96	PS	Y	INITIAL	0.803
NWNJ	8309	9/16/96	921	RB	Y	836	9/18/96	PS	Y	REPEAT	0.795
NWNJ	8310	9/16/96	836	RB	Y	921	9/18/96	PS	Y	REPEAT	0.780
NWNJ	8301	9/17/96	151	RB	N		9/18/96	PS	N		0.209
NWNJ	8395	9/18/96	52	RB	N		9/25/96	PS	N		0.120
NWNJ	8391	9/19/96	157	RB	N		9/25/96	PS	N		0.201
NWNJ	8385	9/20/96	869	RB	N		9/25/96	PS	N		0.585
NWNJ	8388	9/23/96	84	RB	N		9/25/96	PS	N		0.496
NWNJ	8383	9/24/96	2009	RB	N		9/25/96	PS	N		0.343
NWNJ	8457	9/25/96	707	RB	Y	715	9/27/96	PS	Y	INITIAL	0.242
NWNJ	8458	9/25/96	715	RB	Y	707	9/27/96	PS	Y	INITIAL	0.317
NWNJ	8457	9/25/96	707	RB	Y	715	9/27/96	PS	Y	REPEAT	0.287
NWNJ	8458	9/25/96	715	RB	Y	707	9/27/96	PS	Y	REPEAT	0.282
NWNJ	8490	9/26/96	917	RB	Y	785	9/30/96	PS	Y	INITIAL	0.327
NWNJ	8491	9/26/96	785	RB	Y	917	9/30/96	PS	Y	INITIAL	0.320
NWNJ	8490	9/26/96	917	RB	Y	785	9/30/96	PS	Y	REPEAT	0.373
NWNJ	8491	9/26/96	785	RB	Y	917	9/30/96	PS	Y	REPEAT	0.336
NWNJ	8478	9/27/96	838	RB	N		9/30/96	PS	N		0.181
NWNJ	8522	9/30/96	718	RB	N		10/3/96	PS	N		0.653


Newark NJ, 1996 NMOC Results
Nonmethane Organic Compounds in ppmC
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
5/15/96
6/4/96
6/24/96
7/14/96
8/3/96
8/23/96
9/12/96
10/2/96
Date

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
P2NJ	6172	6/3/96	38	DK	N		6/7/96	PS	N		0.373
P2NJ	6177	6/4/96	797	RB	N		6/7/96	PS	N		0.309
P2NJ	6167	6/5/96	100	RB	N		6/7/96	PS	N		0.437
P2NJ	6189	6/6/96	909	DK	N		6/10/96	PS	N		1.006
P2NJ	6199	6/7/96	112	DK	N		6/11/96	PS	N		0.640
P2NJ	6287	6/10/96	50	RB	N		6/14/96	PS	N		0.437
P2NJ	6302	6/14/96	856	DK	N		6/17/96	PS	N		0.526
P2NJ	6364	6/17/96	852	RB	N		6/20/96	PS	N		0.417
P2NJ	6475	6/18/96	801	DK	N		6/25/96	PS	N		0.237
P2NJ	6474	6/19/96	624	DK	N		6/25/96	PS	N		0.439
P2NJ	6532	6/20/96	175	DK	N		6/28/96	PS	N		0.222
P2NJ	6470	6/21/96	172	RB	Y	922	6/25/96	PS	Y	Initial	0.392
P2NJ	6471	6/21/96	922	RB	Y	172	6/25/96	PS	Y	Initial	0.402
P2NJ	6470	6/21/96	172	RB	Y	922	6/25/96	PS	Y	Repeat	0.366
P2NJ	6471	6/21/96	922	RB	Y	172	6/25/96	PS	Y	Repeat	0.366
P2NJ	6533	6/24/96	407	DK	N		6/28/96	PS	N		0.399
P2NJ	6539	6/25/96	882	DK	N		6/28/96	PS	N		0.303
P2NJ	6540	6/26/96	99	DK	N		6/28/96	PS	N		0.105
P2NJ	6542	6/27/96	703	DK	N		6/28/96	PS	N		0.242
P2NJ	6622	6/28/96	826	DK	N		7/3/96	PS	N		0.556

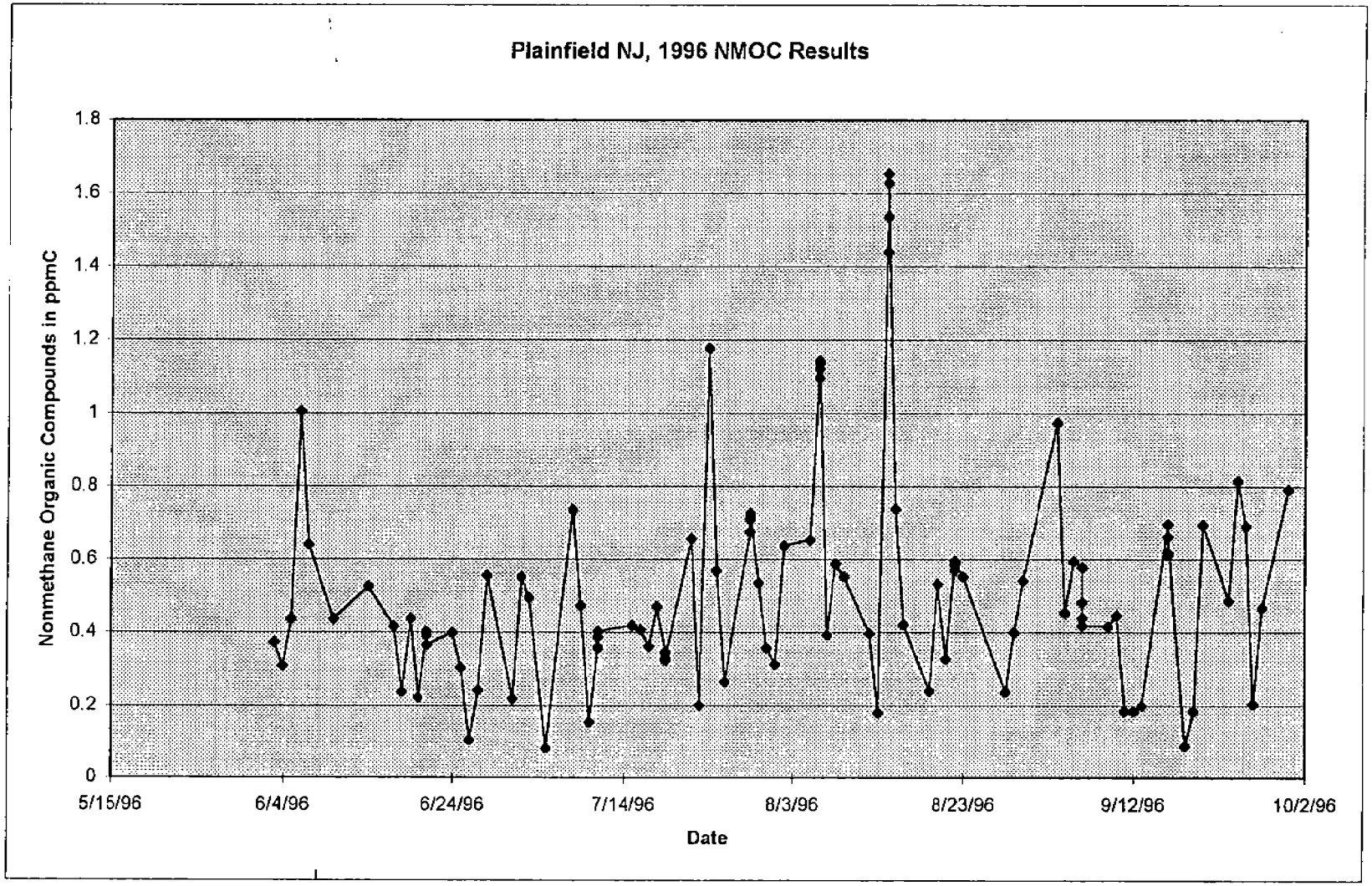
P2NJ-96

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
P2NJ	6662	7/1/96	854	DK	N		7/8/96	PS	N		0.220
P2NJ	6671	7/2/96	914	DK	N		7/8/96	PS	N		0.552
P2NJ	6721	7/3/96	769	DK	N		7/8/96	PS	N		0.495
P2NJ	6720	7/5/96	892	DK	N		7/8/96	PS	N		0.083
P2NJ	6748	7/8/96	673	DK	N		7/9/96	PS	N		0.735
P2NJ	6765	7/9/96	659	DK	N		7/10/96	PS	N		0.474
P2NJ	6793	7/10/96	32	DK	N		7/11/96	PS	N		0.156
P2NJ	6847	7/11/96	113	DK	Y	303	7/15/96	PS	Y	INITIAL	0.360
P2NJ	6848	7/11/96	303	DK	Y	113	7/15/96	PS	Y	INITIAL	0.388
P2NJ	6847	7/11/96	113	DK	Y	303	7/15/96	PS	Y	REPEAT	0.358
P2NJ	6848	7/11/96	303	DK	Y	113	7/15/96	PS	Y	REPEAT	0.403
P2NJ	6916	7/15/96	842	DK	N		7/17/96	PS	N		0.419
P2NJ	6924	7/16/96	66	DK	N		7/17/96	PS	N		0.407
P2NJ	6941	7/17/96	309	DK	N		7/18/96	PS	N		0.362
P2NJ	6967	7/18/96	627	DK			7/19/96	PS	N		0.471
P2NJ	6993	7/19/96	80	RB	Y	182	7/22/96	PS	Y	INITIAL	0.348
P2NJ	6997	7/19/96	182	RB	Y	80	7/22/96	PS	Y	INITIAL	0.343
P2NJ	6993	7/19/96	80	RB	Y	182	7/22/96	PS	Y	REPEAT	0.324
P2NJ	6997	7/19/96	182	RB	Y	80	7/22/96	PS	Y	REPEAT	0.330
P2NJ	7065	7/22/96	308	RB	N		7/24/96	PS	N		0.656
P2NJ	7087	7/23/96	83	RB	N		7/26/96	PS	N		0.201
P2NJ	7092	7/24/96	900	DK	N		7/26/96	PS	N		1.179
P2NJ	7143	7/25/96	30	DK	N		7/29/96	PS	N		0.568
P2NJ	7147	7/26/96	157	DK	N		7/29/96	PS	N		0.265
P2NJ	7208	7/29/96	926	DK	Y	115	7/31/96	PS	Y	INITIAL	0.676
P2NJ	7209	7/29/96	115	DK	Y	926	7/31/96	PS	Y	INITIAL	0.709
P2NJ	7208	7/29/96	926	DK	Y	115	7/31/96	PS	Y	REPEAT	0.716
P2NJ	7209	7/29/96	115	DK	Y	926	7/31/96	PS	Y	REPEAT	0.727
P2NJ	7200	7/30/96	A104666	DK	N		7/31/96	PS	N		0.535
P2NJ	7230	7/31/96	685	DK	N		8/1/96	PS	N		0.357

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
P2NJ	7271	8/1/96	82	DK	N		8/2/96	PS	N		0.313
P2NJ	7302	8/2/96	888	RB	N		8/5/96	PS	N		0.637
P2NJ	7341	8/5/96	6	DK	N		8/7/96	PS	N		0.653
P2NJ	7359	8/6/96	185	RB	Y	131	8/7/96	PS	Y	INITIAL	1.123
P2NJ	7360	8/6/96	131	RB	Y	185	8/7/96	PS	Y	INITIAL	1.097
P2NJ	7359	8/6/96	185	RB	Y	131	8/7/96	PS	Y	REPEAT	1.144
P2NJ	7360	8/6/96	131	RB	Y	185	8/7/96	PS	Y	REPEAT	1.139
P2NJ	7380	8/7/96	151	DK	N		8/8/96	PS	N		0.394
P2NJ	7416	8/8/96	918	DK	N		8/9/96	PS	N		0.586
P2NJ	7425	8/9/96	129	DK	N		8/12/96	PS	N		0.552
P2NJ	7492	8/12/96	107	DK	N		8/13/96	PS	N		0.397
P2NJ	7549	8/13/96	713	DK	N		8/14/96	PS	N		0.181
P2NJ	7578	8/14/96	890	DK	Y	86	8/15/96	PS	Y	INITIAL	1.537
P2NJ	7579	8/14/96	86	DK	Y	890	8/15/96	PS	Y	INITIAL	1.653
P2NJ	7578	8/14/96	890	DK	Y	86	8/15/96	PS	Y	REPEAT	1.440
P2NJ	7579	8/14/96	86	DK	Y	890	8/15/96	PS	Y	REPEAT	1.628
P2NJ	7613	8/15/96	698	DK	N		8/16/96	PS	N		0.738
P2NJ	7700	8/16/96	730	DK	N		8/21/96	PS	N		0.422
P2NJ	7695	8/19/96	71	DK	N		8/21/96	PS	N		0.240
P2NJ	7802	8/20/96	8	DK	N		8/26/96	PS	N		0.532
P2NJ	7801	8/21/96	182	DK	N		8/26/96	PS	N		0.327
P2NJ	7806	8/22/96	111	DK	Y	768	8/26/96	PS	Y	INITIAL	0.594
P2NJ	7807	8/22/96	768	DK	Y	111	8/26/96	PS	Y	INITIAL	0.584
P2NJ	7806	8/22/96	111	DK	Y	768	8/26/96	PS	Y	REPEAT	0.570
P2NJ	7807	8/22/96	768	DK	Y	111	8/26/96	PS	Y	REPEAT	0.591
P2NJ	7883	8/23/96	46	DK	N		8/28/96	PS	N		0.552
P2NJ	7902	8/28/96	706	DK	N		8/29/96	PS	N		0.238
P2NJ	7935	8/29/96	2003	DK	N		8/30/96	PS	N		0.401
P2NJ	7983	8/30/96	637	DK	N		9/3/96	PS	N		0.541

P2NJ-96

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
P2NJ	8013	9/3/96	785	DK	N		9/4/96	PS	N		0.975
P2NJ	8113	9/4/96	907	DK	N		9/9/96	PS	N		0.454
P2NJ	8114	9/5/96	876	DK	N		9/9/96	PS	N		0.594
P2NJ	8122	9/6/96	998	DK	Y	846	9/9/96	PS	Y	INITIAL	0.579
P2NJ	8123	9/6/96	846	DK	Y	998	9/9/96	PS	Y	INITIAL	0.440
P2NJ	8122	9/6/96	998	DK	Y	846	9/9/96	PS	Y	REPEAT	0.483
P2NJ	8123	9/6/96	846	DK	Y	998	9/9/96	PS	Y	REPEAT	0.419
P2NJ	8163	9/9/96	715	DK	N		9/10/96	PS	N		0.415
P2NJ	8179	9/10/96	854	DK	N		9/11/96	PS	N		0.445
P2NJ	8214	9/11/96	46	DK	N		9/13/96	PS	N		0.185
P2NJ	8209	9/12/96	156	DK	N		9/13/96	PS	N		0.185
P2NJ	8239	9/13/96	820	DK	N		9/16/96	PS	N		0.201
P2NJ	8289	9/16/96	122	DK	Y	183	9/17/96	PS	Y	INITIAL	0.697
P2NJ	8290	9/16/96	183	DK	Y	122	9/17/96	PS	Y	INITIAL	0.618
P2NJ	8289	9/16/96	122	DK	Y	183	9/17/96	PS	Y	REPEAT	0.612
P2NJ	8290	9/16/96	183	DK	Y	122	9/17/96	PS	Y	REPEAT	0.663
P2NJ	8332	9/18/96	662	DK	N		9/20/96	PS	N		0.089
P2NJ	8333	9/19/96	702	DK	N		9/20/96	PS	N		0.185
P2NJ	8393	9/20/96	46	DK	N		9/25/96	PS	N		0.695
P2NJ	8384	9/23/96	41	DK	N		9/25/96	PS	N		0.488
P2NJ	8387	9/24/96	39	DK	N		9/25/96	PS	N		0.815
P2NJ	8415	9/25/96	70	DK	N		9/26/96	PS	Y	INITIAL	0.692
P2NJ	8415	9/25/96	70	DK	N		9/26/96	PS	Y	REPEAT	0.692
P2NJ	8488	9/26/96	658	DK	N		9/30/96	PS	N		0.205
P2NJ	8486	9/27/96	770	DK	N		9/30/96	PS	N		0.467
P2NJ	8527	9/30/96	880	DK	N		10/3/96	PS	N		0.792


Plainfield NJ, 1996 NMOC Results
Nonmethane Organic Compounds in ppmC
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
5/15/96
6/4/96
6/24/96
7/14/96
8/3/96
8/23/96
9/12/96
10/2/96
Date

SL1U-96

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
SL1U	6439	6/21/96	111	KS	N		6/24/96	PS	N		0.585
SL1U	6493	6/24/96	75	KS	N		6/26/96	PS	N		0.153
SL1U	6508	6/25/96	401	KS	Y	640	6/26/96	PS	Y	Initial	0.576
SL1U	6509	6/25/96	640	KS	Y	401	6/26/96	PS	N		0.561
SL1U	6508	6/25/96	401	KS	N		6/26/96	PS	Y	Repeat	0.555
SL1U	6518	6/26/96	719	KS	N		6/27/96	PS	N		0.409
SL1U	6589	6/27/96	888	KS	N		7/1/96	PS	N		0.415
SL1U	6613	6/28/96	675	KS	N		7/2/96	PS	N		0.640

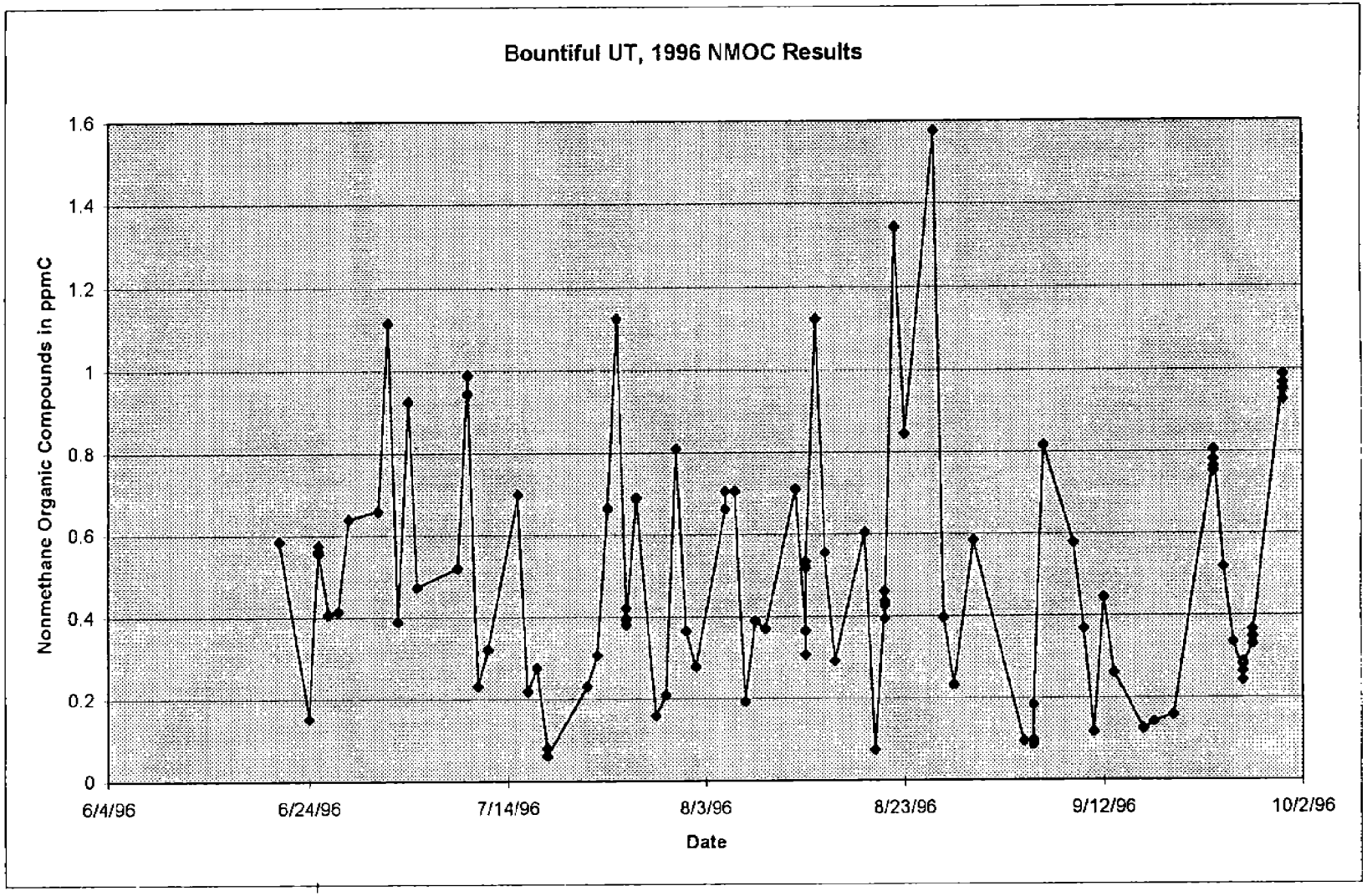
SL1U-96

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
SL1U	6659	7/1/96	921	KS	N		7/3/96	PS	N		0.659
SL1U	6621	7/2/96	169	KS	N		7/3/96	PS	N		1.115
SL1U	6675	7/3/96	500	KS	N		7/8/96	PS	N		0.389
SL1U	6751	7/4/96	777	KS	N		7/9/96	PS	N		0.926
SL1U	6746	7/5/96	107	KS	N		7/9/96	PS	N		0.473
SL1U	6784	7/9/96	306	KS	N		7/10/96	PS	N		0.519
SL1U	6807	7/10/96	762	KS	Y	607	7/12/96	PS	N		0.990
SL1U	6808	7/10/96	607	KS	Y	762	7/12/96	PS	N		0.945
SL1U	6891	7/11/96	651	KS	N		7/11/96	PS	N		0.233
SL1U	6883	7/12/96	1	KS	N		7/16/96	PS	N		0.322
SL1U	6884	7/15/96	844	KS	N		7/16/96	PS	N		0.700
SL1U	6971	7/16/96	36	KS	N		7/19/96	PS	N		0.220
SL1U	6961	7/17/96	179	KS	N		7/18/96	PS	N		0.277
SL1U	6963	7/18/96	911	KS	N		7/19/96	PS	Y	INITIAL	0.081
SL1U	6963	7/18/96	911	KS	N		7/19/96	PS	Y	REPEAT	0.064
SL1U	7134	7/22/96	680	KS	N		7/24/96	PS	N		0.232
SL1U	7048	7/23/96	633	KS	N		7/24/96	PS	N		0.308
SL1U	7091	7/24/96	2007	KS	N		7/26/96	PS	N		0.665
SL1U	7090	7/25/96	825	KS	N		7/26/96	PS	N		1.125
SL1U	7169	7/26/96	767	KS	Y	678	7/30/96	PS	Y	INITIAL	0.421
SL1U	7170	7/26/96	678	KS	Y	767	7/30/96	PS	Y	INITIAL	0.397
SL1U	7169	7/26/96	767	KS	Y	678	7/30/96	PS	Y	REPEAT	0.381
SL1U	7170	7/26/96	678	KS	Y	767	7/30/96	PS	Y	REPEAT	0.393
SL1U	7162	7/27/96	18	KS	N		7/30/96	PS	N		0.690
SL1U	7161	7/29/96	66	KS	N		7/30/96	PS	N		0.160
SL1U	7376	7/30/96	627	KS	N		8/7/96	PS	N		0.211
SL1U	7370	7/31/96	301	KS	N		8/8/96	PS	N		0.810

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
SL1U	7340	8/1/96	869	MY	N		8/7/96	PS	N		0.367
SL1U	7339	8/2/96	28	MY	N		8/7/96	PS	N		0.280
SL1U	7365	8/5/96	48	KS	N		8/7/96	PS	Y	INITIAL	0.663
SL1U	7365	8/5/96	48	KS	N		8/7/96	PS	Y	REPEAT	0.706
SL1U	7368	8/6/96	186	KS	N		8/7/96	PS	N		0.706
SL1U	7427	8/7/96	66	KS	N		8/12/96	PS	N		0.194
SL1U	7429	8/8/96	621	KS	N		8/12/96	PS	N		0.390
SL1U	7428	8/9/96	862	KS	N		8/12/96	PS	N		0.371
SL1U	7610	8/12/96	113	KS	N		8/16/96	PS	N		0.712
SL1U	7596	8/13/96	724	KS	Y	771	8/16/96	PS	Y	INITIAL	0.364
SL1U	7597	8/13/96	771	KS	Y	724	8/16/96	PS	Y	INITIAL	0.521
SL1U	7596	8/13/96	724	KS	Y	771	8/16/96	PS	Y	REPEAT	0.307
SL1U	7597	8/13/96	771	KS	Y	724	8/16/96	PS	Y	REPEAT	0.535
SL1U	7599	8/14/96	826	KS	N		8/16/96	PS	N		1.122
SL1U	7600	8/15/96	139	KS	N		8/16/96	PS	N		0.555
SL1U	7869	8/16/96	863	KS	N		8/27/96	PS	N		0.292
SL1U	7861	8/19/96	876	KS	N		8/27/96	PS	N		0.605
SL1U	7879	8/20/96	696	KS	N		8/27/96	PS	N		0.076
SL1U	7864	8/21/96	711	KS	Y	916	8/27/96	PS	Y	INITIAL	0.438
SL1U	7872	8/21/96	916	KS	Y	711	8/27/96	PS	Y	INITIAL	0.462
SL1U	7864	8/21/96	711	KS	Y	916	8/27/96	PS	Y	REPEAT	0.394
SL1U	7872	8/21/96	916	KS	Y	711	8/27/96	PS	Y	REPEAT	0.427
SL1U	7863	8/22/96	406	KS	N		8/27/96	PS	N		1.343
SL1U	7880	8/23/96	677	KS	N		8/27/96	PS	N		0.845
SL1U	7980	8/26/96	897	KS	N		9/3/96	PS	N		1.577
SL1U	7976	8/27/96	868	KS	N		9/3/96	PS	N		0.397
SL1U	7987	8/28/96	858	KS	N		9/3/96	PS	N		0.233
SL1U	7988	8/30/96	707	KS	N		9/3/96	PS	N		0.585

SL1U-96

SITE CODE	SAMPLE ID	COLLECTION DATE	CANISTER NUMBER	OPERATOR	DUPLICATE (Y/N)	DUP CAN NUMBER	DATE RECEIVED	ANALYST	REPLICATE (Y/N)	INITIAL/ REPEAT	AVERAGE CONC.
SL1U	8126	9/4/96	105	KS	N		9/9/96	PS	N		0.097
SL1U	8134	9/5/96	8	KS	Y	406	9/9/96	PS	Y	INITIAL	0.093
SL1U	8137	9/5/96	406	KS	Y	8	9/9/96	PS	Y	INITIAL	0.099
SL1U	8134	9/5/96	8	KS	Y	406	9/9/96	PS	Y	REPEAT	0.088
SL1U	8137	9/5/96	406	KS	Y	8	9/9/96	PS	Y	REPEAT	0.184
SL1U	8144	9/6/96	869	KS	N		9/9/96	PS	N		0.817
SL1U	8288	9/9/96	924	KS	N		9/17/96	PS	N		0.579
SL1U	8287	9/10/96	155	KS	N		9/17/96	PS	N		0.370
SL1U	8284	9/11/96	849	KS	N		9/17/96	PS	N		0.118
SL1U	8283	9/12/96	656	KS	N		9/17/96	PS	N		0.445
SL1U	8312	9/13/96	154	KS	N		9/18/96	PS	N		0.261
SL1U	8461	9/16/96	843	KS	N		9/27/96	PS	N		0.127
SL1U	8462	9/17/96	858	KS	N		9/27/96	PS	N		0.142
SL1U	8451	9/19/96	888	KS	N		9/27/96	PS	N		0.160
SL1U	8456	9/23/96	793	KS	Y	636	9/27/96	PS	Y	INITIAL	0.781
SL1U	8438	9/23/96	636	KS	Y	793	9/27/96	PS	Y	INITIAL	0.766
SL1U	8456	9/23/96	793	KS	Y	636	9/27/96	PS	Y	REPEAT	0.755
SL1U	8438	9/23/96	636	KS	Y	793	9/27/96	PS	Y	REPEAT	0.806
SL1U	8450	9/24/96	620	KS	N		9/27/96	PS	N		0.519
SL1U	8444	9/25/96	306	KS	N		9/27/96	PS	N		0.335
SL1U	8547	9/26/96	409	KS	Y	626	10/4/96	PS	Y	INITIAL	0.264
SL1U	8548	9/26/96	626	KS	Y	409	10/4/96	PS	Y	INITIAL	0.287
SL1U	8547	9/26/96	409	KS	Y	626	10/4/96	PS	Y	REPEAT	0.243
SL1U	8548	9/26/96	626	KS	Y	409	10/4/96	PS	Y	REPEAT	0.280
SL1U	8553	9/27/96	783	KS	Y	60	10/4/96	PS	Y	INITIAL	0.331
SL1U	8546	9/27/96	60	KS	Y	783	10/4/96	PS	Y	INITIAL	0.367
SL1U	8553	9/27/96	783	KS	Y	60	10/4/96	PS	Y	REPEAT	0.347
SL1U	8546	9/27/96	60	KS	Y	783	10/4/96	PS	Y	REPEAT	0.351
SL1U	8555	9/30/96	68	KS	Y	909	10/4/96	PS	Y	INITIAL	0.989
SL1U	8556	9/30/96	909	KS	Y	68	10/4/96	PS	Y	INITIAL	0.968
SL1U	8555	9/30/96	68	KS	Y	909	10/4/96	PS	Y	REPEAT	0.952
SL1U	8556	9/30/96	909	KS	Y	68	10/4/96	PS	Y	REPEAT	0.928


Bountiful UT, 1996 NMOC Results
Nonmethane Organic Compounds in ppmC
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
6/4/96
6/24/96
7/14/96
8/3/96
8/23/96
9/12/96
10/2/96
Date

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06179	06168	06187	06280	06205		06289	
Sampling Date:	6/4/96	6/5/96	6/6/96	6/7/96	6/10/96		6/11/96	
Analysis Date:	6/26/96	7/1/96	7/3/96	7/5/96	7/9/96		7/10/96	
Ethylene	19.48	39.16	13.03	4.45	8.44		6.47	
Acetylene/Ethane	41.51	57.48	33.24	7.49	17.14		15.04	
Propylene	16.53	17.23	8.79	4.13	3.84		7.06	
Propane	17.63	20.65	41.87	5.17	8.89		7.54	
Propyne	1.15	0.73	0.26	ND	ND		0.14	
Isobutane	6.98	8.38	4.11	3.03	4.02		4.21	
Isobutene/1-butene	6.66	ND	3.33	1.70	2.77		2.38	
1,3-Butadiene	2.07	2.76	ND	ND	ND		0.30	
n-butane	17.86	21.07	10.31	7.44	10.67		16.51	
trans-2-Butene	1.28	1.99	0.80	0.17	0.40		0.37	
cis-2-butene	1.10	1.45	0.60	0.17	0.50		0.34	
3-Methyl-1-butene	0.80	1.10	0.56	0.17	0.43		ND	a
Isopentane	45.52	51.45	26.79	13.16	22.22		19.22	
1-Pentene	2.73	2.87	1.25	0.58	0.78		0.76	
2-Methyl-1-butene	3.40	4.03	1.87	0.77	1.53		1.19	
n-Pentane	16.78	19.72	9.43	5.20	9.04		6.97	
Isoprene	3.87	4.83	4.83	1.82	2.80		2.06	
trans-2-Pentene	4.05	4.61	2.14	0.62	1.37		1.21	
cis-2-Pentene	2.27	2.50	1.04	0.55	0.77		0.68	
2-Methyl-2-butene	5.87	5.41	2.30	0.93	1.16		1.07	
2,2-Dimethylbutane	2.14	2.68	1.35	0.56	ND		1.04	
Cyclopentene	0.80	1.36	2.00	ND	ND	a	ND	
4-Methyl-1-pentene	0.50	1.13	ND	ND	ND	a	0.75	
Cyclopentane	1.85	2.02	1.23	0.68	1.02		0.76	
2,3-Dimethylbutane	4.93	5.85	3.45	1.90	2.53		2.01	
2-Methylpentane	18.45	20.78	11.09	3.89	11.90		7.49	
3-Methylpentane	8.03	9.69	4.90	1.93	4.30		3.28	
1-Hexene	ND	ND	ND	ND	ND		ND	
2-Methyl-1-pentene	2.07	2.54	1.30	0.60	0.68		0.70	
2-Ethyl-1-butene	ND	ND	ND	ND	ND		ND	
n-Hexane	7.75	10.71	4.87	1.95	3.41		2.66	
trans-2-Hexene	0.84	1.24	0.52	0.11	0.49		0.21	
cis-2-Hexene	0.71	0.83	0.32	0.20	0.38		0.30	
Methylcyclopentane	6.06	5.83	2.83	1.08	2.39		1.74	
2,4-Dimethylpentane	2.86	3.21	1.55	0.58	1.28		1.07	
Benzene	17.13	51.95	10.03	4.43	7.27		10.12	
Cyclohexane	4.28	6.32	2.79	0.38	0.45		0.57	
2-Methylhexane	5.19	3.65	3.39	0.87	3.01		2.06	
2,3-Dimethylpentane	2.96	3.77	1.91	0.63	1.44		1.42	
3-Methylhexane	7.53	9.69	4.88	1.69	4.42		3.63	
1-Heptene	1.78	2.12	0.99	0.45	0.86		0.65	
2,2,4-Trimethylpentane	12.46	14.75	7.08	2.91	8.71		4.64	
n-Heptane	3.97	4.64	2.19	0.95	1.63		1.38	
Methylcyclohexane	2.25	2.83	1.41	0.63	1.03		1.24	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06179	06168	06187	06280	06205	06269
Sampling Date:	6/4/96	6/5/96	6/6/96	6/7/96	6/10/96	6/11/96
Analysis Date:	6/28/96	7/1/96	7/3/96	7/5/96	7/9/96	7/10/96
2,2,3-Trimethylpentane	2.59	3.30	1.53	0.68	1.34	1.06
2,3,4-Trimethylpentane	4.84	5.89	2.61	1.00	2.37	1.77
Toluene	46.92	57.09	23.02	9.72	18.73	17.51
2-Methylheptane	1.16	1.90	0.72	0.45	0.51	0.66
1-Octene	1.31	1.79	0.72	0.25	0.19	0.12
3-Methylheptane	1.43	1.81	0.79	0.36	0.62	0.76
n-Octane	1.90	2.80	1.38	0.61	0.86	1.56
Ethylbenzene	8.33	9.60	4.27	1.90	3.17	2.79
m-Xylene/p-Xylene	28.21	37.23	15.77	5.79	11.26	10.95
Styrene	8.18	10.78	2.85	0.92	2.87	1.32
o-Xylene	9.47	13.56	5.86	2.16	4.20	3.71
1-Nonene	ND	ND	ND	ND	ND	ND
n-Nonane	2.00	3.62	1.71	0.69	1.17	1.52
Isopropylbenzene	0.87	1.18	0.76	0.19	0.34	0.42
a-Pinene	2.94	8.22	2.20	0.76	2.67	1.51
n-Propylbenzene	2.37	3.36	1.71	0.58	0.80	0.93
m-Ethyltoluene	8.98	11.77	4.99	2.00	3.61	3.35
p-Ethyltoluene	3.85	5.91	2.75	1.09	1.96	1.69
1,3,5-Trimethylbenzene	4.86	5.56	3.05	0.89	1.85	1.60
o-Ethyltoluene	2.53	3.65	1.81	0.86	1.60	1.37
b-Pinene	3.12	6.34	2.91	ND	2.51	1.76
1-Decene	12.01	3.13	3.22	18.09	4.90	5.68
1,2,4-Trimethylbenzene	12.05	16.01	6.94	2.78	5.23	4.57
n-Decane	2.37	0.63	3.29	1.02	1.21	1.29
1,2,3-Trimethylbenzene	0.87	4.69	0.90	0.14	1.57	1.82
m-Diethylbenzene	2.35	2.30	0.59	0.22	0.79	0.30
p-Diethylbenzene	3.45	3.91	1.08	0.63	1.73	1.14
1-Undecene	6.28	7.25	4.68	1.35	3.42	3.10
n-Undecane	2.72	5.53	7.26	3.99	1.20	1.73
1-Dodecene	3.13	2.66	1.06	0.82	1.22	1.41
n-Dodecane	7.53	11.87	9.37	7.22	3.16	4.91
1-Tridecene	0.40	1.60	0.51	0.29	0.71	ND
n-Tridecane	1.28	20.48	15.62	5.02	1.18	ND
TNMOC (w/ unknowns)	616.26	882.40	487.52	254.99	364.31	282.36
TNMOC (speciated)	532.15	710.76	372.58	156.43	241.09	223.52

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06278	06306	06325	06330	06391	06397D1
Sampling Date:	6/12/96	6/14/96	6/17/96	6/18/96	6/19/96	6/20/96
Analysis Date:	7/11/96	7/14/96	7/16/96	7/16/96	7/18/96	7/18/96
Ethylene	8.19	8.12	1.80	5.37	7.46	7.49
Acetylene/Ethane	19.71	22.35	5.21	9.52	13.10	12.28
Propylene	5.78	3.71	2.06	3.88	5.75	4.18
Propane	12.36	8.91	3.60	6.28	9.49	5.59
Propyne	0.20	0.12	ND	0.20	0.30	ND
Isobutane	4.37	2.95	2.10	1.88	2.92	2.79
Isobutene/1-butene	2.23	1.82	1.57	2.10	2.34	1.25
1,3-Butadiene	0.23	0.22	ND	1.73	ND	ND
n-butane	8.04	6.06	4.03	4.79	7.37	7.73
trans-2-Butene	0.36	0.15	ND	ND	ND	ND
cis-2-butene	0.19	0.17	0.26	ND	0.21	0.19
3-Methyl-1-butene	0.09	0.41	1.25	5.05	0.68	0.20
Isopentane	16.03	12.20	11.07	10.00	15.01	16.80
1-Pentene	0.68	0.94	0.36	0.45	1.18	0.50
2-Methyl-1-butene	1.30	1.12	0.71	0.76	1.27	0.67
n-Pentane	6.37	5.08	4.18	3.70	5.49	5.30
Isoprene	1.30	6.49	4.10	6.45	5.85	2.29
trans-2-Pentene	1.24	1.29	0.81	0.59	1.32	0.79
cis-2-Pentene	0.72	0.89	0.90	0.33	0.86	0.49
2-Methyl-2-butene	2.30	1.45	0.43	0.56	1.37	0.95
2,2-Dimethylbutane	1.11	0.83	4.56	0.78	2.59	0.78
Cyclopentene	0.48	0.33	0.84	0.20	0.34	0.31
4-Methyl-1-pentene	1.48	1.76	0.72	1.24	2.07	0.51
Cyclopentane	0.32	0.55	0.69	ND	0.75	1.13
2,3-Dimethylbutane	0.82	0.69	1.78	1.28	1.80	1.94
2-Methylpentane	6.05	5.70	5.89	3.24	8.92	ND
3-Methylpentane	3.36	3.79	5.07	2.08	8.27	2.48
1-Hexene	ND	ND	ND	ND	ND	ND
2-Methyl-1-pentene	0.41	0.76	1.62	0.50	1.46	1.29
2-Ethyl-1-butene	ND	ND	ND	ND	ND	0.42
n-Hexane	2.79	2.83	1.95	1.77	2.91	1.98
trans-2-Hexene	0.34	0.69	0.75	ND	0.57	ND
cis-2-Hexene	0.40	0.47	0.38	ND	0.38	ND
Methylcyclopentane	1.78	1.44	1.37	1.04	1.41	1.44
2,4-Dimethylpentane	0.99	0.81	0.75	0.28	0.51	ND
Benzene	6.38	6.88	4.76	4.21	5.79	7.90
Cyclohexane	0.40	0.70	0.32	0.24	0.36	0.60
2-Methylhexane	1.90	1.30	1.33	1.52	1.63	1.87
2,3-Dimethylpentane	1.54	0.92	0.77	1.30	2.02	0.74
3-Methylhexane	2.57	2.31	1.48	2.56	3.59	1.47
1-Heptene	0.70	0.61	0.99	0.52	0.70	0.23
2,2,4-Trimethylpentane	4.80	3.15	4.28	2.86	4.77	3.80
n-Heptane	1.36	0.88	0.91	1.49	1.87	2.23
Methylcyclohexane	1.70	1.52	0.76	1.63	1.42	0.85

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06278	06306	06325	06330	06391	06397D1
Sampling Date:	6/12/96	6/14/96	6/17/96	6/18/96	6/19/96	6/20/96
Analysis Date:	7/11/96	7/14/96	7/16/96	7/16/96	7/18/96	7/18/96
2,2,3-Trimethylpentane	0.96	0.91	0.82	0.61	1.15	0.79
2,3,4-Trimethylpentane	1.76	1.42	1.54	1.49	1.84	1.44
Toluene	16.93	13.43	13.13	13.01	16.75	11.13
2-Methylheptane	0.82	0.73	0.32	0.54	0.90	0.43
1-Octene	0.34	0.43	0.31	0.43	0.14	ND
3-Methylheptane	0.87	0.80	0.67	0.52	1.68	0.71
n-Octane	1.04	0.69	0.57	0.30	0.22	1.33
Ethylbenzene	2.82	2.07	2.02	1.93	2.71	2.20
m-Xylene/p-Xylene	9.78	7.86	7.36	6.72	10.18	7.34
Styrene	2.18	1.87	2.69	2.17	1.99	0.41
o-Xylene	3.67	2.98	2.97	2.68	3.69	2.34
1-Nonene	ND	ND	ND	ND	ND	ND
n-Nonane	0.99	0.92	0.60	1.02	1.36	0.89
Isopropylbenzene	0.36	0.27	ND	0.16	0.68	ND
a-Pinene	1.29	4.31	2.18	1.20	3.60	1.08
n-Propylbenzene	0.89	1.19	1.37	0.72	2.13	0.54
m-Ethyltoluene	3.19	2.85	3.18	2.08	5.42	2.33
p-Ethyltoluene	1.59	1.87	1.79	1.46	2.68	1.27
1,3,5-Trimethylbenzene	1.57	1.56	1.59	1.01	2.80	1.14
o-Ethyltoluene	1.31	1.06	1.31	0.93	2.19	1.40
b-Pinene	1.66	1.36	1.59	1.13	2.25	0.58
1-Decene	2.56	4.70	5.21	3.80	3.97	ND
1,2,4-Trimethylbenzene	4.38	3.93	3.93	3.05	5.51	4.40
n-Decane	1.02	1.22	0.83	1.06	1.42	0.99
1,2,3-Trimethylbenzene	1.18	1.75	1.49	0.49	1.88	2.64
m-Diethylbenzene	0.59	0.53	0.48	0.18	0.59	0.30
p-Diethylbenzene	1.31	1.24	1.15	0.75	2.45	0.97
1-Undecene	2.85	2.21	2.44	1.78	3.35	2.15
n-Undecane	1.07	1.27	1.77	1.87	1.83	2.11
1-Dodecene	1.48	0.91	1.02	1.08	3.36	1.07
n-Dodecane	2.76	4.28	3.75	3.45	3.45	2.27
1-Tridecene	0.29	0.34	ND	0.20	0.83	0.59
n-Tridecane	0.25	11.93	0.64	1.29	1.12	1.50
TNMOC (w/ unknowns)	261.63	262.73	246.23	211.45	308.74	229.19
TNMOC (speciated)	207.08	206.25	155.13	151.48	230.17	157.78

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06398D2		06440	06482D1		06484D2		06527	06592	
Sampling Date:	6/20/96		6/21/96	6/25/96		6/25/96		6/26/96	6/27/96	
Analysis Date:	7/18/96		7/18/96	7/24/96		7/29/96		7/25/96	7/26/96	
Ethylene	6.87		19.95	4.25		4.01		5.28	7.34	
Acetylene/Ethane	12.26		43.57	4.81		3.98		15.07	17.37	
Propylene	2.28		20.43	1.21		2.24		7.82	8.54	
Propane	6.79		22.47	3.60		2.38		13.36	14.95	
Propyne	ND		ND	ND		ND		0.49	0.64	
Isobutane	3.08		9.01	1.19		1.03		3.42	3.12	
Isobutene/1-butene	1.66		5.26	0.83		0.94		2.83	3.03	
1,3-Butadiene	ND		2.06	ND		0.29		0.77	0.93	
n-butane	7.68		18.69	2.02		1.99		9.62	8.39	
trans-2-Butene	ND		1.60	0.10		0.21		0.63	0.82	
cis-2-butene	0.13		2.76	0.02		0.11		0.49	0.72	
3-Methyl-1-butene	0.25		0.46	0.14		0.07		0.38	0.43	
Isopentane	16.69		41.61	4.14		12.02		20.25	20.60	
1-Pentene	0.72		2.57	0.31		0.35		0.71	1.44	
2-Methyl-1-butene	0.71		3.19	ND	a	0.41		1.31	1.62	
n-Pentane	5.52		15.83	1.66		2.33		7.48	9.95	
Isoprene	1.21		6.87	6.51		6.86		2.29	3.74	
trans-2-Pentene	0.96		3.87	0.35		0.44		0.33	1.88	
cis-2-Pentene	0.44		2.05	0.17		0.30		0.83	0.96	
2-Methyl-2-butene	1.47		4.91	0.57		1.42		2.12	ND	a
2,2-Dimethylbutane	0.60		1.94	0.77		0.24		1.42	ND	a
Cyclopentene	0.43		1.11	0.25		0.09		0.44	0.45	
4-Methyl-1-pentene	0.17		0.78	1.33		ND	a	0.20	0.66	
Cyclopentane	0.56		1.66	0.09		0.75		0.57	2.68	
2,3-Dimethylbutane	2.14		4.30	0.42		2.98		1.92	2.03	
2-Methylpentane	3.59		14.00	1.22		2.02		5.53	7.55	
3-Methylpentane	2.24		8.04	1.61		0.97		8.93	6.02	
1-Hexene	ND		ND	ND		ND		ND	ND	
2-Methyl-1-pentene	ND	a	4.69	0.43		0.24		1.20	1.81	
2-Ethyl-1-butene	ND	a	ND	ND		ND		ND	ND	
n-Hexane	1.48		8.54	0.91		0.96		10.42	12.21	
trans-2-Hexene	ND		1.28	0.09		0.09		0.60	0.72	
cis-2-Hexene	0.23		0.83	0.12		0.13		0.46	0.78	
Methylcyclopentane	1.48		4.33	0.56		0.34		4.24	4.70	
2,4-Dimethylpentane	ND	a	2.52	0.22		0.22		2.00	2.17	
Benzene	9.35		51.77	6.21		6.21		7.09	7.88	
Cyclohexane	0.35		3.05	0.14		0.11		14.13	15.87	
2-Methylhexane	1.52		2.11	0.52		0.93		2.74	4.04	
2,3-Dimethylpentane	0.75		3.12	0.28		0.34		1.74	1.53	
3-Methylhexane	1.49		5.07	0.67		1.52		4.15	4.88	
1-Heptene	ND		1.60	ND		0.17		0.81	1.03	
2,2,4-Trimethylpentane	3.24		11.76	1.46		1.49		5.97	6.73	
n-Heptane	1.33		3.78	0.55		0.46		3.47	2.92	
Methylcyclohexane	0.89		3.71	0.25		0.42		1.94	3.43	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06398D2	06440	06482D1	06484D2	06527	06592
Sampling Date:	6/20/96	6/21/96	6/25/96	6/25/96	6/26/96	6/27/96
Analysis Date:	7/18/96	7/18/96	7/24/96	7/29/96	7/25/96	7/26/96
2,2,3-Trimethylpentane	0.77	2.65	0.19	0.33	1.20	1.10
2,3,4-Trimethylpentane	1.49	4.77	1.31	0.45	2.28	2.87
Toluene	11.99	49.22	5.96	5.70	28.53	27.02
2-Methylheptane	0.88	1.58	0.14	0.20	0.57	0.58
1-Octene	ND	0.39	0.18	0.21	0.93	0.83
3-Methylheptane	0.76	2.22	0.19	0.20	0.46	0.91
n-Octane	1.28	5.03	0.49	0.34	1.86	1.11
Ethylbenzene	2.16	8.36	0.95	1.04	7.05	6.02
m-Xylene/p-Xylene	7.66	34.08	3.67	3.87	23.33	20.33
Styrene	0.33	6.67	0.89	1.18	7.55	7.27
o-Xylene	2.48	11.31	1.43	1.34	6.53	6.53
1-Nonene	ND	0.97	0.29	0.52	0.24	0.60
n-Nonane	1.16	5.21	0.34	0.27	1.55	1.40
Isopropylbenzene	ND	0.71	ND	ND	0.50	0.46
a-Pinene	1.12	6.97	3.93	2.69	3.86	4.36
n-Propylbenzene	0.80	3.12	0.33	0.35	1.74	1.43
m-Ethyltoluene	2.30	10.27	1.48	1.23	5.76	6.33
p-Ethyltoluene	1.23	5.73	0.54	0.47	3.05	2.91
1,3,5-Trimethylbenzene	1.05	5.70	0.58	0.43	2.95	3.07
o-Ethyltoluene	1.51	3.93	0.92	0.56	2.97	2.82
b-Pinene	0.68	1.73	2.35	2.95	3.07	2.31
1-Decene	ND	5.43	1.57	ND	1.84	ND
1,2,4-Trimethylbenzene	4.23	13.56	1.68	1.41	7.43	7.20
n-Decane	1.40	3.96	0.98	0.28	3.20	1.83
1,2,3-Trimethylbenzene	1.95	0.95	0.89	0.74	2.97	2.27
m-Diethylbenzene	ND	3.62	0.43	0.55	1.54	1.49
p-Diethylbenzene	0.82	3.45	0.54	0.30	2.71	2.85
1-Undecene	1.43	3.26	2.12	1.70	3.10	2.72
n-Undecane	3.17	3.24	0.90	0.59	2.03	2.90
1-Dodecene	0.60	1.10	1.55	0.98	2.58	1.25
n-Dodecane	4.39	10.08	1.45	0.63	3.39	3.58
1-Tridecene	ND	ND	0.55	34.38	0.25	2.19
n-Tridecane	4.28	0.87	1.27	13.37	2.73	2.04
TNMOC (w/ unknowns)	290.46	692.71	116.41	236.13	430.04	455.79
TNMOC (specialed)	162.46	587.30	90.04	141.33	315.18	327.17

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06594	06624	06669	06750	06779	06851
Sampling Date:	6/28/96	7/1/96	7/2/96	7/3/96	7/8/96	7/9/96
Analysis Date:	7/26/96	7/29/96	7/31/96	7/31/96	8/1/96	8/2/96
Ethylene	7.84	21.12	9.11	8.34	3.04	11.35
Acetylene/Ethane	17.72	30.31	19.21	15.85	7.34	11.84
Propylene	9.69	12.86	6.53	3.81	2.64	3.86
Propane	5.41	16.53	11.71	6.30	3.70	9.29
Propyne	0.50	0.40	0.25	0.19	ND	ND
Isobutane	2.63	7.06	1.99	2.08	1.60	1.48
Isobutene/1-butene	2.98	4.58	2.45	1.69	ND	2.15
1,3-Butadiene	0.97	1.38	0.80	0.56	ND	0.48
n-butane	7.67	17.13	6.96	4.69	ND	3.64
trans-2-Butene	0.73	1.23	0.42	0.16	0.15	0.03
cis-2-butene	0.62	0.92	0.23	0.18	ND	0.19
3-Methyl-1-butene	0.38	0.74	0.34	0.19	0.23	0.09
Isopentane	20.94	38.14	15.12	7.96	9.11	5.71
1-Pentene	1.74	2.65	1.31	0.48	ND a	0.35
2-Methyl-1-butene	1.61	2.28	ND a	0.59	ND a	0.14
n-Pentane	9.99	16.93	5.93	4.12	ND a	2.31
Isoprene	4.30	5.98	6.92	5.72	2.22	2.55
trans-2-Pentene	1.81	2.59	1.25	0.63	0.60	0.46
cis-2-Pentene	0.95	1.39	0.71	0.39	0.31	0.17
2-Methyl-2-butene	2.49	3.45	1.49	0.18	0.16	0.54
2,2-Dimethylbutane	0.82	2.04	1.14	ND a	0.56	0.29
Cyclopentene	1.58	3.37	0.54	0.10	1.30	0.13
4-Methyl-1-pentene	0.95	0.56	4.60	0.41	1.46	ND
Cyclopentane	2.75	ND a	0.45	1.48	0.26	0.17
2,3-Dimethylbutane	2.60	4.21	1.68	2.32	0.73	0.46
2-Methylpentane	7.86	10.93	10.20	2.41	2.21	2.08
3-Methylpentane	4.94	7.32	2.77	1.60	1.28	1.19
1-Hexene	ND	0.78	ND	ND	ND	ND
2-Methyl-1-pentene	1.17	0.66	0.74	0.42	0.41	0.20
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	7.98	8.14	3.01	2.04	1.58	1.62
trans-2-Hexene	0.58	0.76	0.48	0.22	0.10	0.19
cis-2-Hexene	0.34	0.47	0.23	0.13	0.06	0.19
Methylcyclopentane	3.46	4.61	1.76	1.12	0.74	ND a
2,4-Dimethylpentane	1.80	2.31	1.07	0.45	0.57	ND a
Benzene	9.46	35.90	9.27	22.62	6.61	23.58
Cyclohexane	8.34	4.52	0.37	0.28	0.49	0.23
2-Methylhexane	3.06	4.95	2.12	1.17	0.87	0.60
2,3-Dimethylpentane	1.53	2.15	1.52	0.40	0.35	0.29
3-Methylhexane	3.89	5.50	2.92	1.92	1.99	0.74
1-Heptene	0.88	1.35	0.65	0.36	0.36	ND
2,2,4-Trimethylpentane	6.84	11.24	5.29	2.40	2.71	1.36
n-Heptane	2.15	3.12	2.28	0.75	0.92	0.63
Methylcyclohexane	3.20	3.54	1.27	0.76	0.51	0.48

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06594	06624	06669	06750	06779	06851
Sampling Date:	6/28/96	7/1/96	7/2/96	7/3/96	7/8/96	7/9/96
Analysis Date:	7/26/96	7/29/96	7/31/96	7/31/96	8/1/96	8/2/96
2,2,3-Trimethylpentane	1.13	1.98	1.03	0.51	0.31	0.38
2,3,4-Trimethylpentane	3.66	4.13	2.05	0.70	0.93	0.69
Toluene	26.68	39.94	18.74	12.79	8.53	9.17
2-Methylheptane	0.72	1.53	1.64	0.47	0.44	0.21
3-Methylheptane	ND	1.36	1.31	0.43	0.34	0.23
1-Octene	1.00	1.36	0.71	0.46	1.20	0.28
n-Octane	1.72	1.88	2.94	0.55	0.87	0.46
Ethylbenzene	5.51	6.79	3.42	1.72	1.71	1.21
m-Xylene/p-Xylene	18.67	22.74	12.14	6.56	5.58	4.93
Styrene	7.99	3.23	0.95	1.55	0.86	0.76
o-Xylene	5.46	8.40	4.23	1.96	1.84	1.73
1-Nonene	ND	0.69	0.19	ND	0.30	0.37
n-Nonane	2.54	2.14	2.62	0.68	1.06	0.71
Isopropylbenzene	0.28	0.47	0.33	ND	0.18	0.05
a-Pinene	2.84	4.73	1.48	1.20	0.61	0.75
n-Propylbenzene	1.41	2.05	1.00	0.49	0.63	0.49
m-Ethyltoluene	5.15	7.36	3.99	1.83	2.00	1.66
p-Ethyltoluene	3.51	3.20	1.87	0.78	0.48	0.75
1,3,5-Trimethylbenzene	2.65	4.00	2.01	0.85	0.97	0.80
o-Ethyltoluene	2.81	4.21	2.39	1.44	1.21	0.86
b-Pinene	2.59	4.99	1.55	2.76	0.38	0.79
1-Decene	ND	0.51	1.34	0.27	3.95	1.13
1,2,4-Trimethylbenzene	6.95	9.86	5.06	2.59	2.11	2.24
n-Decane	4.56	3.47	3.49	1.02	3.25	0.65
1,2,3-Trimethylbenzene	1.15	1.61	0.98	0.61	0.37	0.12
m-Diethylbenzene	1.37	2.12	0.97	0.53	1.20	0.78
p-Diethylbenzene	2.67	3.66	1.64	1.46	1.17	0.69
1-Undecene	2.28	4.29	1.79	2.13	9.86	1.19
n-Undecane	6.31	7.53	9.72	2.77	5.26	0.74
1-Dodecene	1.11	4.38	2.00	2.61	14.72	1.15
n-Dodecane	6.05	8.76	19.49	4.16	10.59	0.51
1-Tridecene	0.38	0.79	0.14	0.58	0.37	ND
n-Tridecane	2.50	5.84	6.63	2.76	5.46	0.59
TNMOC (w/ unknowns)	476.80	637.63	336.64	236.03	242.09	177.66
TNMOC (speciated)	308.81	486.07	266.90	166.87	145.90	128.14

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06795D1		06797D2	06846	06841		06897	06947	
Sampling Date:	7/10/96		7/10/96	7/11/96	7/12/96		7/15/96	7/16/96	
Analysis Date:	8/7/96		8/7/96	8/7/96	8/8/96		8/13/96	8/13/96	
Ethylene	5.76		4.28	4.45	1.71		6.60	5.98	
Acetylene/Ethane	3.75		8.26	8.64	2.51		10.54	11.58	
Propylene	3.31		1.81	3.68	1.75		2.26	2.54	
Propane	7.29		5.70	5.13	1.19		4.96	5.07	
Propyne	ND		ND	ND	ND		ND	ND	
Isobutane	1.30		2.64	1.68	0.65		2.17	1.21	
Isobutene/1-butene	1.36		2.67	1.91	ND		1.64	2.06	
1,3-Butadiene	0.20		0.52	ND	ND		0.17	ND	
n-butane	3.35		4.61	5.63	1.44		3.62	4.78	
trans-2-Butene	ND		0.38	ND	ND		0.25	ND	
cis-2-butene	ND		0.22	0.40	ND		0.15	0.36	
3-Methyl-1-butene	0.22		0.13	ND	ND		0.09	0.35	
Isopentane	10.79		15.89	20.57	ND	a	7.04	ND	a
1-Pentene	0.34		1.13	2.26	ND	a	1.61	ND	a
2-Methyl-1-butene	0.59		0.61	1.90	ND	a	0.65	ND	a
n-Pentane	4.30		7.33	10.21	ND	a	2.64	3.72	
Isoprene	1.67		1.73	2.91	ND	a	1.23	2.57	
trans-2-Pentene	0.89		0.89	1.85	0.13		0.58	1.01	
cis-2-Pentene	1.12		0.44	1.27	0.15		0.29	0.37	
2-Methyl-2-butene	1.15		0.98	4.13	0.30		0.79	1.00	
2,2-Dimethylbutane	1.37		0.50	0.84	0.26		0.23	0.65	
Cyclopentene	0.14		0.18	1.65	ND		0.12	0.30	
4-Methyl-1-pentene	1.28		1.23	0.36	ND		1.10	0.20	
Cyclopentane	ND	a	0.66	0.55	0.47		0.21	0.54	
2,3-Dimethylbutane	ND	a	0.90	1.71	0.61		0.66	1.77	
2-Methylpentane	3.12		3.09	4.12	1.14		2.17	3.81	
3-Methylpentane	3.86		3.01	2.91	0.68		2.74	2.62	
1-Hexene	0.20		0.19	ND	ND		ND	ND	
2-Methyl-1-pentene	0.34		0.17	0.84	0.17		0.23	0.74	
2-Ethyl-1-butene	ND		ND	ND	ND		ND	ND	
n-Hexane	1.99		2.30	3.20	0.55		2.13	2.68	
trans-2-Hexene	ND	a	0.22	0.36	0.03		0.19	0.36	
cis-2-Hexene	0.31		0.24	0.19	0.01		0.11	0.12	
Methylcyclopentane	1.17		1.23	1.78	0.44		0.68	1.71	
2,4-Dimethylpentane	0.65		0.63	0.95	0.20		0.55	0.85	
Benzene	4.24		3.84	4.78	1.54		12.71	4.30	
Cyclohexane	0.99		0.92	1.38	0.06		0.23	0.53	
2-Methylhexane	1.19		1.07	2.15	0.59		0.81	2.56	
2,3-Dimethylpentane	0.81		0.60	0.79	0.20		0.42	0.95	
3-Methylhexane	2.93		1.56	3.30	1.41		1.95	2.39	
1-Heptene	0.46		0.37	0.48	0.32		0.30	0.63	
2,2,4-Trimethylpentane	3.16		3.05	4.75	1.68		2.74	5.13	
n-Heptane	1.01		1.01	1.84	0.25		1.38	1.03	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	06795D1	06797D2	06846	06841	06897	06947
Sampling Date:	7/10/96	7/10/96	7/11/96	7/12/96	7/15/96	7/16/96
Analysis Date:	8/7/96	8/7/96	8/7/96	8/8/96	8/13/96	8/13/96
Methylcyclohexane	0.41	0.60	1.35	0.33	0.48	1.26
2,2,3-Trimethylpentane	0.71	0.61	1.25	0.36	0.56	0.96
2,3,4-Trimethylpentane	1.23	1.13	1.60	0.51	1.00	2.42
Toluene	10.95	12.66	14.14	4.11	10.53	13.84
2-Methylheptane	0.49	0.46	0.82	0.22	0.87	0.83
3-Methylheptane	0.47	0.43	0.74	0.19	1.32	0.72
1-Octene	0.32	0.44	0.56	0.24	0.41	0.57
n-Octane	0.57	0.57	1.17	0.26	1.82	0.96
Ethylbenzene	1.84	1.86	2.88	0.86	1.50	4.49
m-Xylene/p-Xylene	6.68	6.47	10.30	2.49	5.96	12.30
Styrene	0.61	0.70	2.21	0.90	0.56	7.56
o-Xylene	2.22	2.28	3.69	0.83	2.12	5.74
1-Nonene	0.18	0.15	0.29	0.09	0.14	1.97
n-Nonane	0.63	0.50	1.11	0.31	1.38	2.64
Isopropylbenzene	0.11	0.13	0.13	0.03	0.11	5.65
a-Pinene	0.71	0.68	1.43	0.38	0.55	1.28
n-Propylbenzene	0.72	0.60	0.85	0.22	0.58	10.28
m-Ethyltoluene	2.44	1.89	3.39	0.92	2.25	7.34
p-Ethyltoluene	0.97	0.80	1.52	0.43	0.94	0.98
1,3,5-Trimethylbenzene	1.06	1.02	1.69	0.37	1.01	9.59
o-Ethyltoluene	1.38	1.10	1.83	0.32	1.16	7.88
b-Pinene	0.69	0.62	2.86	1.40	0.89	1.60
1-Decene	2.73	0.77	0.29	0.02	1.32	0.04
1,2,4-Trimethylbenzene	3.11	2.74	4.59	1.27	2.91	16.27
n-Decane	0.94	1.65	1.28	1.68	0.90	0.69
1,2,3-Trimethylbenzene	0.18	0.53	0.91	0.33	0.57	7.06
m-Diethylbenzene	1.42	1.11	0.72	0.21	0.68	0.93
p-Diethylbenzene	1.04	0.86	1.72	0.60	1.11	1.89
1-Undecene	3.99	0.96	1.56	1.50	1.70	6.14
n-Undecane	2.53	7.32	2.08	8.76	2.39	1.80
1-Dodecene	1.62	0.67	1.49	1.45	1.06	3.05
n-Dodecane	3.20	10.61	2.04	7.07	1.99	1.59
1-Tridecene	1.28	0.27	0.53	0.48	0.11	0.67
n-Tridecane	0.91	2.59	1.63	2.18	0.88	1.52
TNMOC (w/ unknowns)	206.06	193.54	293.52	137.61	188.50	310.80
TNMOC (speciated)	134.97	152.95	190.16	61.73	130.69	219.01

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07033D1	07034D2	07067	07054	07118	07108
Sampling Date:	7/18/96	7/18/96	7/22/96	7/23/96	7/24/96	7/25/96
Analysis Date:	8/16/96	8/16/96	8/16/96	8/16/96	8/19/96	8/19/96
Ethylene	6.35	6.20	5.47	13.03	7.64	3.09
Acetylene/Ethane	8.27	8.85	14.52	13.67	14.51	4.73
Propylene	3.78	3.69	2.40	4.43	6.77	2.30
Propane	5.85	6.56	4.50	13.47	10.97	3.47
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	1.86	1.81	2.44	1.27	1.50	1.74
Isobutene/1-butene	1.65	1.62	2.08	1.51	2.01	1.05
1,3-Butadiene	0.28	0.46	0.37	0.53	ND	ND
n-butane	0.48	4.82	4.02	2.98	9.05	3.95
trans-2-Butene	1.91	1.27	ND	0.34	0.54	0.15
cis-2-butene	0.00	0.19	0.16	0.45	0.26	0.12
3-Methyl-1-butene	1.06	0.19	0.11	0.15	0.38	0.15
Isopentane	11.70	12.03	17.02	5.68	21.49	7.91
1-Pentene	0.18	0.20	0.97	0.36	0.87	ND a
2-Methyl-1-butene	0.52	0.58	0.50	0.37	1.20	2.84
n-Pentane	4.02	4.09	4.33	2.11	7.68	2.27
Isoprene	2.63	2.28	11.64	1.18	9.29	0.68
trans-2-Pentene	10.30	0.90	0.67	0.49	1.60	0.60
cis-2-Pentene	0.47	0.47	0.30	0.21	0.76	0.26
2-Methyl-2-butene	1.11	1.01	0.68	0.51	1.33	0.42
2,2-Dimethylbutane	0.54	0.50	0.26	ND a	0.60	0.27
Cyclopentene	0.23	0.23	2.56	0.86	1.23	1.07
4-Methyl-1-pentene	0.76	0.74	ND	ND	0.19	0.08
Cyclopentane	0.48	0.51	0.67	0.21	0.69	0.19
2,3-Dimethylbutane	1.07	1.08	0.74	0.52	2.01	0.71
2-Methylpentane	3.42	3.46	7.43	1.58	9.45	3.81
3-Methylpentane	1.88	ND a	2.24	0.92	3.60	1.16
1-Hexene	ND	ND	ND	ND	0.48	0.22
2-Methyl-1-pentene	0.39	0.31	0.37	0.35	0.36	0.16
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.01	2.12	3.90	1.18	ND a	1.81
trans-2-Hexene	0.27	0.30	0.21	0.17	0.57	0.30
cis-2-Hexene	0.26	0.24	0.10	0.07	0.31	0.12
Methylcyclopentane	1.34	1.35	1.34	0.63	2.23	0.92
2,4-Dimethylpentane	0.73	0.74	0.80	0.37	1.33	0.40
Benzene	4.76	4.91	4.43	24.82	6.48	2.75
Cyclohexane	0.38	0.38	2.48	0.22	1.02	0.14
2-Methylhexane	1.17	1.38	4.14	1.05	2.72	1.43
2,3-Dimethylpentane	0.83	0.64	4.32	0.55	1.34	0.44
3-Methylhexane	1.11	1.07	9.73	1.19	3.07	2.13
1-Heptene	0.30	0.43	0.38	0.23	0.89	0.33
2,2,4-Trimethylpentane	4.18	4.09	2.58	2.19	8.11	2.34
n-Heptane	1.09	0.92	2.88	0.59	1.29	0.82

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07033D1	07034D2	07067	07054	07118	07108
Sampling Date:	7/18/96	7/18/96	7/22/96	7/23/96	7/24/96	7/25/96
Analysis Date:	8/16/96	8/16/96	8/16/96	8/16/96	8/19/96	8/19/96
Methylcyclohexane	0.64	0.64	3.70	0.68	1.26	0.09
2,2,3-Trimethylpentane	0.72	0.78	0.79	0.42	3.51	0.39
2,3,4-Trimethylpentane	1.43	1.49	0.74	0.70	2.77	0.97
Toluene	12.31	12.68	18.33	9.60	18.52	9.14
2-Methylheptane	0.70	0.75	2.22	0.22	0.75	0.40
3-Methylheptane	0.79	0.79	0.56	0.30	0.96	0.48
1-Octene	0.51	0.53	0.33	0.31	0.95	0.40
n-Octane	1.54	1.60	0.75	0.49	0.95	1.02
Ethylbenzene	2.40	2.58	2.36	1.29	3.65	1.82
m-Xylene/p-Xylene	8.92	9.10	6.62	5.67	12.19	6.55
Styrene	0.55	0.57	1.31	1.48	3.08	0.61
o-Xylene	2.96	3.06	2.53	1.92	5.24	2.13
1-Nonene	0.11	0.17	0.16	0.12	0.28	0.12
n-Nonane	1.02	1.00	0.81	0.63	1.26	0.99
Isopropylbenzene	0.13	0.11	0.17	0.08	0.22	0.08
a-Pinene	2.02	1.34	2.08	0.62	2.44	0.63
n-Propylbenzene	0.45	0.48	1.07	0.46	0.97	0.35
m-Ethyltoluene	2.80	2.51	3.48	1.78	4.04	1.51
p-Ethyltoluene	0.93	1.04	1.30	0.73	1.71	0.72
1,3,5-Trimethylbenzene	1.51	1.19	1.49	1.08	1.85	0.87
o-Ethyltoluene	1.48	1.46	1.51	0.65	1.61	0.66
b-Pinene	0.64	0.73	2.76	1.77	2.71	2.24
1-Decene	0.87	1.01	ND	0.38	0.32	0.20
1,2,4-Trimethylbenzene	3.11	3.18	3.69	2.91	5.89	2.38
n-Decane	0.94	1.04	25.40	1.28	3.02	0.59
1,2,3-Trimethylbenzene	0.36	0.23	1.00	0.90	1.39	0.45
m-Diethylbenzene	0.77	0.70	1.56	0.89	1.24	0.97
p-Diethylbenzene	1.10	1.09	1.56	1.12	2.17	1.36
1-Undecene	1.41	1.40	2.45	1.67	1.67	2.78
n-Undecane	1.38	1.43	119.53	4.39	10.66	1.36
1-Dodecene	0.73	1.26	1.45	1.29	2.03	1.45
n-Dodecane	1.25	1.10	141.20	6.65	8.27	1.41
1-Tridecene	ND	ND	0.58	0.51	0.64	0.60
n-Tridecane	0.91	0.71	41.94	4.44	5.00	1.77
TNMOC (w/ unknowns)	192.84	183.28	623.06	208.82	342.18	169.41
TNMOC (speciated)	146.97	140.35	519.15	157.85	259.25	104.85

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07222D1		07223D2		07201		07229		07309	07308
Sampling Date:	7/26/96		7/26/96		7/29/96		7/30/96		7/31/96	8/1/96
Analysis Date:	8/22/96		8/22/96		8/26/96		8/27/96		8/27/96	8/28/96
Ethylene	3.16		3.25		8.59		5.09		11.04	6.70
Acetylene/Ethane	5.16		6.66		15.23		5.58		14.69	11.42
Propylene	1.95		1.59		4.40		1.73		3.34	2.33
Propane	2.56		3.59		11.05		2.90		5.51	6.44
Propyne	ND		ND		ND		ND		0.28	ND
Isobutane	8.52		7.26		4.40		1.73		2.69	1.99
Isobutene/1-butene	0.89		1.04		3.21		1.47		2.28	1.83
1,3-Butadiene	0.20		0.21		0.88		0.34		0.56	0.41
n-butane	2.07		2.11		9.09		3.33		4.74	3.77
trans-2-Butene	0.07		ND		0.72		0.14		0.44	0.27
cis-2-butene	0.17		0.74		0.49		0.14		0.22	0.18
3-Methyl-1-butene	ND		ND		0.37		0.12		0.14	0.15
Isopentane	19.92		19.40		20.50		6.98		5.82	8.88
1-Pentene	ND	a	ND	a	1.68		0.41		0.59	0.59
2-Methyl-1-butene	0.32		ND	a	1.24		0.44		0.80	0.56
n-Pentane	5.72		4.87		6.69		1.68		4.50	3.36
Isoprene	2.67		ND	a	5.62		1.17		4.92	2.78
trans-2-Pentene	0.52		0.46		1.78		0.50		1.02	0.68
cis-2-Pentene	0.16		0.15		2.09		0.29		0.53	0.44
2-Methyl-2-butene	0.33		0.30		2.13		0.68		1.20	1.11
2,2-Dimethylbutane	0.37		0.51		1.40		0.21		0.74	0.45
Cyclopentene	1.00		1.02		0.42		0.14		0.88	0.19
4-Methyl-1-pentene	ND		ND		1.51		0.49		0.14	0.45
Cyclopentane	0.69		0.62		0.74		0.37		0.33	0.34
2,3-Dimethylbutane	0.54		0.48		ND	a	0.62		1.09	0.95
2-Methylpentane	1.71		1.64		ND	a	ND	a	2.81	2.55
3-Methylpentane	1.22		1.20		3.55		1.26		2.23	1.53
1-Hexene	0.09		ND		0.79		0.26		ND	0.41
2-Methyl-1-pentene	0.09		0.27		2.72		0.24		0.54	0.17
2-Ethyl-1-butene	ND		ND		ND		ND		ND	ND
n-Hexane	2.47		2.44		3.29		1.42		2.20	2.20
trans-2-Hexene	0.20		0.23		0.49		0.25		0.31	0.15
cis-2-Hexene	0.07		0.07		0.47		0.14		0.11	0.14
Methylcyclopentane	1.08		0.98		2.35		0.86		1.37	1.20
2,4-Dimethylpentane	0.34		0.31		1.49		0.25		0.72	0.58
Benzene	2.50		2.65		6.62		4.92		10.54	5.90
Cyclohexane	0.72		0.63		0.43		0.21		0.25	0.21
2-Methylhexane	1.02		0.85		2.38		0.78		2.09	1.15
2,3-Dimethylpentane	0.34		0.43		1.34		0.38		0.80	0.50
3-Methylhexane	1.61		1.20		2.54		0.91		3.79	1.00
1-Heptene	0.27		0.26		0.68		0.34		0.54	0.33
2,2,4-Trimethylpentane	1.65		1.71		9.08		2.45		3.94	3.01
n-Heptane	0.61		0.62		1.60		0.95		1.00	0.96

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07222D1	07223D2	07201	07229	07309	07306
Sampling Date:	7/26/96	7/26/96	7/29/96	7/30/96	7/31/96	8/1/96
Analysis Date:	8/22/96	8/22/96	8/26/96	8/27/96	8/27/96	8/28/96
Methylcyclohexane	0.60	0.64	1.18	0.45	1.10	0.67
2,2,3-Trimethylpentane	0.56	0.36	1.43	0.43	0.84	0.65
2,3,4-Trimethylpentane	0.59	0.70	3.10	0.92	1.61	1.13
Toluene	18.50	18.15	18.56	7.69	14.00	10.78
2-Methylheptane	0.28	0.37	0.84	0.43	0.81	0.85
3-Methylheptane	0.37	0.40	0.75	0.55	0.86	0.87
1-Octene	0.31	0.26	0.93	0.33	0.55	0.51
n-Octane	0.43	0.42	1.16	0.73	1.35	1.74
Ethylbenzene	1.52	1.12	3.23	1.48	2.70	1.97
m-Xylene/p-Xylene	3.78	3.64	11.77	5.30	8.79	7.74
Styrene	0.66	0.59	0.97	0.49	2.70	0.61
o-Xylene	1.55	1.44	4.14	1.96	3.24	2.58
1-Nonene	0.10	1.34	0.14	0.21	0.25	0.11
n-Nonane	0.52	0.57	0.72	0.55	1.08	1.45
Isopropylbenzene	0.18	0.10	0.19	0.07	0.14	0.07
a-Pinene	0.90	0.77	1.86	1.22	2.08	1.29
n-Propylbenzene	0.36	0.29	1.07	0.40	0.65	0.65
m-Ethyltoluene	1.74	1.57	3.89	1.56	3.17	2.46
p-Ethyltoluene	0.60	0.58	1.78	0.57	1.04	1.22
1,3,5-Trimethylbenzene	0.89	0.74	1.85	0.69	1.32	1.27
o-Ethyltoluene	0.47	0.46	1.86	0.79	1.13	1.25
b-Pinene	2.45	1.96	1.30	0.41	4.04	1.12
1-Decene	0.23	2.21	1.43	0.77	0.44	0.48
1,2,4-Trimethylbenzene	2.05	1.66	5.69	2.25	4.19	2.92
n-Decane	2.60	2.01	1.36	0.63	0.69	1.40
1,2,3-Trimethylbenzene	0.67	0.54	0.61	0.24	1.18	2.09
m-Diethylbenzene	0.79	0.49	1.08	0.51	1.58	1.45
p-Diethylbenzene	1.05	0.75	1.57	0.78	1.84	0.60
1-Undecene	2.53	1.78	1.24	1.17	2.19	0.59
n-Undecane	10.62	10.11	4.01	1.01	1.05	1.48
1-Dodecene	2.17	0.86	0.72	0.55	1.86	0.46
n-Dodecane	13.45	17.83	3.13	0.71	1.52	1.07
1-Tridecene	0.51	0.34	ND	ND	0.72	ND
n-Tridecane	4.80	8.69	0.53	0.41	1.34	0.84
TNMOC (w/ unknowns)	214.81	220.52	284.15	130.72	256.26	176.08
TNMOC (speciated)	151.83	153.49	228.08	88.39	173.81	132.44

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07320		07408		07421		07570		07580		07653	
Sampling Date:	8/2/96		8/6/96		8/7/96		8/12/96		8/13/96		8/14/96	
Analysis Date:	8/28/96		9/5/96		9/5/96		9/10/96		9/11/96		9/10/96	
Ethylene	13.97		5.43		14.80		5.46		2.99		12.11	
Acetylene/Ethane	24.31		5.36		28.86		7.39		4.66		19.07	
Propylene	17.18		2.36		8.66		1.57		2.11		16.72	
Propane	9.02		3.84		23.06		4.18		5.23		13.44	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	3.91		1.68		4.66		1.65		1.85		2.83	
Isobutene/1-butene	3.67		1.67		4.04		0.26		ND		2.69	
1,3-Butadiene	0.91		0.41		1.10		ND		0.15		0.83	
n-butane	11.78		3.63		12.70		2.82		1.47		7.98	
trans-2-Butene	0.64		ND		1.24		ND		ND		0.78	
cis-2-butene	0.56		0.19		0.68		0.24		ND		0.41	
3-Methyl-1-butene	0.57		0.18		0.52		0.08		0.10		0.40	
Isopentane	ND	a	9.08		29.72		6.14		8.05		ND	a
1-Pentene	2.01		0.81		2.34		0.08		ND	a	ND	c
2-Methyl-1-butene	2.09		0.63		1.88		ND	a	ND	a	1.52	
n-Pentane	12.11		3.27		10.98		ND	a	2.91		8.11	
Isoprene	4.90		4.47		8.85		1.18		1.08		1.88	
trans-2-Pentene	2.55		0.45		2.78		0.50		0.59		1.90	
cis-2-Pentene	1.40		ND	a	ND	a	0.27		0.35		0.95	
2-Methyl-2-butene	2.99		0.71		ND	a	0.51		0.74		2.33	
2,2-Dimethylbutane	1.36		0.47		1.14		0.61		0.85		1.01	
Cyclopentene	0.74		0.32		0.51		0.46		0.10		0.54	
4-Methyl-1-pentene	0.51		0.82		1.50		1.07		0.88		0.25	
Cyclopentane	1.61		ND	a	1.02		0.21		0.27		0.71	
2,3-Dimethylbutane	3.71		0.69		2.46		0.52		0.59		1.86	
2-Methylpentane	10.86		2.98		ND	a	2.11		2.26		7.18	
3-Methylpentane	7.25		2.87		8.09		1.95		1.60		4.77	
1-Hexene	0.96		0.19		0.76		ND		ND		0.52	
2-Methyl-1-pentene	0.41		0.13		0.70		0.25		0.99		0.39	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	10.64		3.07		7.45		1.43		1.29		7.54	
trans-2-Hexene	0.77		0.21		0.74		0.16		0.12		0.39	
cis-2-Hexene	0.33		0.20		0.83		0.13		0.19		0.21	
Methylcyclopentane	4.80		1.24		3.83		0.92		0.84		3.22	
2,4-Dimethylpentane	2.53		0.54		2.04		0.50		0.41		1.64	
Benzene	9.54		4.15		11.44		4.49		3.10		6.27	
Cyclohexane	10.10		0.30		5.94		0.16		0.18		8.56	
2-Methylhexane	4.86		1.11		3.02		0.86		0.79		3.21	
2,3-Dimethylpentane	2.67		0.51		1.45		0.37		0.30		1.54	
3-Methylhexane	6.17		1.37		3.79		0.93		0.88		4.06	
1-Heptene	1.37		0.42		1.17		0.24		0.28		0.91	
2,2,4-Trimethylpentane	10.17		3.49		8.22		2.29		2.16		5.89	
n-Heptane	2.85		0.89		2.70		0.98		0.69		2.61	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07320	07408	07421	07570	07580	07653
Sampling Date:	8/2/96	8/6/96	8/7/96	8/12/96	8/13/96	8/14/96
Analysis Date:	8/28/96	9/5/96	9/5/96	9/10/96	9/11/96	9/10/96
Methylcyclohexane	3.63	0.65	1.96	0.61	0.27	1.78
2,2,3-Trimethylpentane	2.08	0.64	1.50	0.47	0.42	1.38
2,3,4-Trimethylpentane	3.65	1.30	3.06	0.80	0.67	2.11
Toluene	28.62	9.37	25.91	7.17	8.38	21.76
2-Methylheptane	1.43	0.57	1.35	0.36	0.42	1.06
3-Methylheptane	1.31	0.48	1.47	0.42	0.29	0.98
1-Octene	1.37	0.47	1.09	0.37	0.22	0.77
n-Octane	1.56	0.57	1.95	0.94	0.75	1.01
Ethylbenzene	7.52	1.63	5.87	1.28	1.34	3.95
m-Xylene/p-Xylene	26.81	5.85	20.80	4.58	4.97	13.53
Styrene	11.00	0.53	8.93	0.44	0.46	6.02
o-Xylene	9.36	2.15	6.62	1.65	1.85	4.71
1-Nonene	0.43	0.09	0.18	0.07	0.29	0.56
n-Nonane	1.67	0.65	2.06	0.70	0.63	1.06
Isopropylbenzene	0.55	0.09	0.31	0.07	0.06	0.27
a-Pinene	3.87	1.30	4.23	1.06	2.31	1.07
n-Propylbenzene	1.95	0.53	1.41	0.49	0.39	1.15
m-Ethyltoluene	8.31	2.16	6.18	1.82	1.60	4.65
p-Ethyltoluene	3.45	0.77	2.64	0.74	0.52	1.66
1,3,5-Trimethylbenzene	4.15	1.03	3.03	0.75	0.69	2.34
o-Ethyltoluene	3.50	1.08	3.14	1.06	0.85	1.66
b-Pinene	2.72	1.46	2.82	0.47	1.22	1.97
1-Decene	0.24	1.04	1.66	0.73	1.35	0.40
1,2,4-Trimethylbenzene	10.59	3.23	8.27	1.96	2.35	5.74
n-Decane	5.59	0.78	2.93	0.52	1.06	1.61
1,2,3-Trimethylbenzene	1.00	0.49	1.49	0.87	0.42	1.72
m-Diethylbenzene	2.91	0.68	1.95	0.48	0.39	1.49
p-Diethylbenzene	3.23	0.56	1.52	0.55	0.43	1.06
1-Undecene	2.35	1.31	1.83	1.16	1.85	1.44
n-Undecane	18.23	0.90	4.15	0.70	0.81	1.64
1-Dodecene	1.88	0.96	2.29	1.74	1.23	1.01
n-Dodecane	20.50	0.82	3.17	1.04	1.09	0.92
1-Tridecene	0.27	0.09	ND	0.24	0.59	0.18
n-Tridecane	6.71	0.42	1.01	1.00	0.26	0.87
TNMOC (w/ unknowns)	527.21	162.77	486.82	148.56	177.32	355.20
TNMOC (speciated)	411.20	114.80	362.44	90.26	91.49	250.76

Footnotes:
a - Compound not analyzed due to FID flame out
c- Compound not analyzed due to sample (matrix) interference

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07654		07702		07697		07772		7786D1		7786D2	
Sampling Date:	8/15/96		8/16/96		8/19/96		8/20/96		8/21/96		8/21/96	
Analysis Date:	10/28/96		9/12/96		9/16/96		9/16/96		9/18/96		9/18/96	
Ethylene	13.57		6.96		28.14		3.32		3.32		3.19	
Acetylene/Ethane	25.67		13.11		34.92		3.47		4.05		4.26	
Propylene	27.87		5.97		14.22		1.25		1.37		1.69	
Propane	17.67		6.38		32.38		1.68		1.49		2.31	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	6.75		2.65		5.65		0.94		0.68		0.59	
Isobutene/1-butene	5.18		3.29		3.65		0.92		1.12		0.61	
1,3-Butadiene	1.43		1.27		2.27		0.11		0.18		0.20	
n-butane	18.70		6.87		16.74		1.95		2.07		2.27	
trans-2-Butene	1.30		0.84		1.54		0.20		0.19		ND	
cis-2-butene	0.84		0.52		1.20		ND		0.08		0.14	
3-Methyl-1-butene	0.77		0.52		0.74		ND		0.04		0.09	
Isopentane	47.99		ND	a	44.30		5.31		ND	a	ND	a
1-Pentene	2.55		0.74		0.81		0.35		0.19		0.21	
2-Methyl-1-butene	ND	a	2.08		3.15		0.38		0.34		0.43	
n-Pentane	18.11		12.53		16.72		2.38		2.15		2.33	
Isoprene	2.93		3.60		2.35		1.67		1.71		1.94	
trans-2-Pentene	3.69		2.25		4.14		0.49		0.47		0.48	
cis-2-Pentene	1.95		1.23		2.21		0.24		0.25		0.24	
2-Methyl-2-butene	4.10		2.59		5.66		0.38		0.40		0.48	
2,2-Dimethylbutane	2.06		1.33		1.83		0.25		0.24		0.31	
Cyclopentene	1.20		0.57		0.89		0.07		0.14		0.14	
4-Methyl-1-pentene	0.30		0.44		1.94		0.04		0.16		0.04	
Cyclopentane	1.85		1.02		1.40		ND	a	0.21		0.17	
2,3-Dimethylbutane	4.86		2.69		4.51		0.47		0.51		0.53	
2-Methylpentane	14.96		9.43		15.66		2.11		2.02		1.53	
3-Methylpentane	8.54		5.71		11.39		1.12		1.21		1.14	
1-Hexene	1.01		0.65		ND		0.09		0.12		0.09	
2-Methyl-1-pentene	0.76		0.56		1.82		0.11		0.14		0.12	
2-Ethyl-1-butene	ND		ND		ND		ND		0.58		0.52	
n-Hexane	8.51		5.87		14.12		1.01		1.00		1.01	
trans-2-Hexene	0.99		0.73		1.02		0.14		0.17		0.17	
cis-2-Hexene	0.41		0.22		0.83		0.04		0.06		0.04	
Methylcyclopentane	4.95		3.33		7.17		0.75		0.69		0.62	
2,4-Dimethylpentane	2.88		1.91		3.47		0.38		0.39		0.42	
Benzene	14.63		8.73		16.79		2.52		2.45		2.40	
Cyclohexane	4.09		2.48		13.61		0.13		0.17		0.13	
2-Methylhexane	5.95		3.69		5.86		1.27		1.11		1.07	
2,3-Dimethylpentane	3.07		2.30		3.02		0.47		0.55		0.55	
3-Methylhexane	6.03		3.90		6.78		1.91		1.29		1.49	
1-Heptene	1.77		1.13		1.86		0.20		0.33		0.27	
2,2,4-Trimethylpentane	14.02		10.12		14.37		2.17		2.39		2.39	
n-Heptane	5.34		2.84		6.38		0.51		0.65		0.50	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07654	07702	07697	07772	7785D1	7785D2
Sampling Date:	8/15/96	8/16/96	8/19/96	8/20/96	8/21/96	8/21/96
Analysis Date:	10/28/96	9/12/96	9/16/96	9/16/96	9/18/96	9/18/96
Methylcyclohexane	3.77	2.05	3.01	0.59	0.53	0.48
2,2,3-Trimethylpentane	3.22	2.27	2.66	0.53	0.72	0.49
2,3,4-Trimethylpentane	5.16	3.63	5.34	0.73	0.84	0.75
Toluene	43.47	26.10	46.37	6.06	5.82	5.64
2-Methylheptane	2.23	1.56	2.25	0.38	0.41	0.30
3-Methylheptane	2.14	1.41	2.52	0.23	0.22	0.28
1-Octene	1.88	1.24	1.88	0.37	0.36	0.31
n-Octane	2.05	1.54	2.38	0.31	0.31	0.27
Ethylbenzene	9.18	5.38	14.44	1.61	1.26	1.31
m-Xylene/p-Xylene	30.14	17.41	48.53	4.93	3.94	4.25
Styrene	7.41	6.56	2.81	1.31	1.25	1.90
o-Xylene	10.82	6.64	15.58	1.91	1.54	1.70
1-Nonene	0.46	0.42	0.29	0.33	0.13	0.13
n-Nonane	2.22	2.25	2.20	0.56	0.44	0.50
Isopropylbenzene	0.27	0.89	0.57	0.17	0.11	0.11
a-Pinene	2.91	2.51	1.61	1.93	0.61	0.41
n-Propylbenzene	1.92	2.08	3.13	0.48	0.35	0.41
m-Ethyltoluene	8.34	6.40	11.72	1.69	1.48	1.71
p-Ethyltoluene	3.54	2.62	5.20	0.72	0.63	0.79
1,3,5-Trimethylbenzene	3.94	3.69	5.82	0.85	0.70	0.81
o-Ethyltoluene	3.09	2.18	5.08	0.61	0.54	0.62
b-Pinene	2.80	2.78	1.16	1.59	2.15	2.62
1-Decene	0.85	0.54	2.06	0.12	0.16	0.17
1,2,4-Trimethylbenzene	12.38	9.30	16.55	2.77	2.32	2.63
n-Decane	0.34	3.03	3.24	0.58	0.54	2.54
1,2,3-Trimethylbenzene	3.58	3.00	3.48	0.94	0.84	0.96
m-Diethylbenzene	2.02	1.82	3.93	0.61	0.49	0.67
p-Diethylbenzene	3.89	3.15	3.56	0.88	1.30	0.94
1-Undecene	2.39	2.46	1.79	1.44	3.59	3.59
n-Undecane	5.30	4.57	4.63	1.64	2.02	11.19
1-Dodecene	2.05	2.57	1.29	0.78	1.93	1.06
n-Dodecane	6.88	4.81	3.56	1.83	2.65	13.39
1-Tridecene	0.33	0.33	0.16	0.35	0.41	0.25
n-Tridecane	3.92	2.93	1.89	1.34	1.42	4.64
TNMOC (w/ unknowns)	655.98	406.69	721.46	141.30	138.59	150.92
TNMOC (speciated)	504.15	283.16	586.19	81.99	76.63	104.91

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07899		07870	07905		07903	07982		07981
Sampling Date:	8/22/96		8/23/96	8/26/96		8/27/96	8/28/96		8/29/96
Analysis Date:	9/19/96		9/19/96	9/24/96		9/24/96	9/25/96		9/25/96
Ethylene	ND	b	26.25	18.34		10.28	5.68		22.81
Acetylene/Ethane	25.10		35.93	35.45		13.75	9.45		55.22
Propylene	2.03		10.27	13.26		4.64	3.32		8.14
Propane	14.35		19.51	14.57		6.86	6.63		17.38
Propyne	ND		ND	ND		ND	ND		ND
Isobutane	3.35		6.62	4.86		1.75	1.68		7.16
Isobutene/1-butene	7.43		5.43	5.28		2.49	2.11		4.87
1,3-Butadiene	5.14		ND	1.81		ND	0.50		1.64
n-butane	8.40		20.09	12.83		5.99	10.15		16.67
trans-2-Butene	1.00		1.42	2.59		0.54	0.43		1.64
cis-2-butene	1.10		0.88	0.80		0.36	0.31		0.92
3-Methyl-1-butene	0.86		0.90	0.65		0.43	0.28		0.83
Isopentane	39.03		48.50	32.91		15.51	12.60		42.10
1-Pentene	ND	a	1.88	1.75		0.83	0.39		2.11
2-Methyl-1-butene	2.48		2.49	4.18		1.36	0.89		3.21
n-Pentane	13.99		17.30	12.83		6.61	5.04		16.12
Isoprene	2.67		3.59	3.43		1.29	0.84		4.31
trans-2-Pentene	3.19		3.68	2.82		1.52	1.04		4.30
cis-2-Pentene	1.73		1.97	1.57		0.81	0.44		2.15
2-Methyl-2-butene	4.56		4.50	ND	a	1.73	1.58		5.30
2,2-Dimethylbutane	1.71		1.70	1.53		0.73	0.52		1.83
Cyclopentene	ND	a	0.91	0.75		0.40	0.24		0.92
4-Methyl-1-pentene	1.87		0.67	1.91		0.28	ND	a	0.68
Cyclopentane	1.20		1.52	1.35		0.56	ND	a	1.31
2,3-Dimethylbutane	3.34		4.13	3.29		1.58	ND	a	3.55
2-Methylpentane	14.05		12.26	11.11		5.37	ND	a	15.92
3-Methylpentane	7.36		9.41	9.73		3.47	ND	a	8.26
1-Hexene	ND		1.28	1.24		0.42	ND	a	1.24
2-Methyl-1-pentene	1.60		0.55	0.79		0.39	ND	a	0.66
2-Ethyl-1-butene	ND		ND	ND		ND	ND		ND
n-Hexane	8.64		10.43	7.34		3.17	2.52		8.17
trans-2-Hexene	1.05		1.05	0.97		0.57	0.35		1.40
cis-2-Hexene	0.74		0.42	0.78		0.19	0.23		0.51
Methylcyclopentane	5.16		5.66	4.53		1.93	1.54		4.85
2,4-Dimethylpentane	2.64		2.97	2.26		1.19	0.67		2.78
Benzene	13.50		21.49	20.45		7.23	6.20		19.26
Cyclohexane	4.65		5.68	3.91		0.34	0.20		3.06
2-Methylhexane	4.73		6.11	4.18		2.62	1.61		5.50
2,3-Dimethylpentane	2.50		3.28	2.22		1.30	0.77		3.00
3-Methylhexane	5.71		6.82	5.10		2.56	2.40		6.12
1-Heptene	1.60		1.97	1.39		0.77	0.53		1.67
2,2,4-Trimethylpentane	11.83		13.99	10.76		6.19	3.57		12.86
n-Heptane	3.29		4.75	2.93		1.83	1.08		4.47

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	07899	07870	07905	07903	07982	07981
Sampling Date:	8/22/96	8/23/96	8/26/96	8/27/96	8/28/96	8/29/96
Analysis Date:	9/19/96	9/19/96	9/24/96	9/24/96	9/25/96	9/25/96
Methylcyclohexane	2.56	4.45	2.68	1.33	0.51	2.65
2,2,3-Trimethylpentane	2.19	3.04	1.97	1.47	0.66	2.40
2,3,4-Trimethylpentane	4.86	5.19	3.92	2.18	1.65	5.66
Toluene	40.00	45.60	33.61	17.98	14.33	43.23
2-Methylheptane	2.37	2.70	1.58	0.94	0.74	2.51
3-Methylheptane	2.18	2.27	1.75	0.93	0.64	2.48
1-Octene	2.09	1.78	1.41	0.83	0.54	2.08
n-Octane	2.35	3.00	1.84	0.98	0.75	2.59
Ethylbenzene	7.59	9.75	6.21	3.94	2.77	8.78
m-Xylene/p-Xylene	26.87	34.23	22.29	12.79	9.87	30.93
Styrene	12.02	7.21	2.24	1.34	0.78	4.05
o-Xylene	9.08	12.04	7.98	4.80	3.47	11.49
1-Nonene	0.24	1.60	0.17	0.23	0.41	0.62
n-Nonane	2.63	3.71	1.66	0.73	0.83	2.70
Isopropylbenzene	0.37	0.13	0.37	0.40	0.15	0.51
a-Pinene	2.24	1.15	5.10	0.52	0.93	1.73
n-Propylbenzene	2.34	2.69	2.11	1.09	0.73	2.37
m-Ethyltoluene	8.30	11.21	7.95	4.73	3.12	10.73
p-Ethyltoluene	3.70	4.55	3.59	2.13	1.15	3.83
1,3,5-Trimethylbenzene	4.27	5.81	3.84	2.43	1.38	5.45
o-Ethyltoluene	4.11	3.80	3.56	1.74	1.28	3.51
b-Pinene	2.35	3.74	2.22	1.13	0.94	3.93
1-Decene	2.05	0.73	2.22	0.59	1.09	0.91
1,2,4-Trimethylbenzene	11.57	15.99	11.34	7.84	4.56	15.35
n-Decane	3.60	4.74	3.26	1.30	0.74	4.03
1,2,3-Trimethylbenzene	2.55	5.20	2.56	2.31	0.73	4.56
m-Diethylbenzene	2.48	3.77	2.65	1.46	0.89	4.05
p-Diethylbenzene	2.43	6.56	2.92	2.87	0.76	5.70
1-Undecene	1.80	2.75	2.57	1.10	1.22	2.08
n-Undecane	4.49	7.00	6.21	3.30	1.52	5.40
1-Dodecene	1.04	2.96	1.04	1.11	1.04	1.31
n-Dodecane	2.83	6.74	3.34	4.56	1.19	4.48
1-Tridecene	0.44	0.29	0.22	0.65	0.28	0.30
n-Tridecane	2.54	4.00	1.58	3.03	0.61	3.86
TNMOC (w/ unknowns)	528.56	729.94	603.74	300.57	258.17	695.75
TNMOC (speciated)	416.12	558.62	426.41	214.61	148.04	531.15

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08065		08059		08128	08124D1		08125D1	08194	
Sampling Date:	8/30/96		9/3/96		9/4/96	9/5/96		9/5/96	9/6/96	
Analysis Date:	9/27/96		10/3/96		10/3/96	10/4/96		10/18/96	10/4/96	
Ethylene	51.62		8.35		19.17	12.30		17.85	34.21	
Acetylene/Ethane	20.20		11.20		63.21	94.65		96.07	47.42	
Propylene	7.20		4.16		18.80	7.03		8.15	12.88	
Propane	6.38		7.27		21.56	8.62		11.27	26.99	
Propyne	ND		ND		ND	ND		ND	ND	
Isobutane	1.63		3.09		6.25	35.41		41.52	5.08	
Isobutene/1-butene	2.27		3.28		3.70	2.97		3.10	6.27	
1,3-Butadiene	1.23		0.77		1.37	ND		1.25	2.17	
n-butane	4.39		5.11		9.58	9.68		8.39	18.82	
trans-2-Butene	0.40		0.16		0.76	1.79		1.59	0.82	
cis-2-butene	0.23		0.40		0.58	0.39		0.49	1.01	
3-Methyl-1-butene	0.17		0.27		0.56	0.77		0.40	0.78	
Isopentane	8.99		20.30		28.42	ND	a	83.90	45.17	
1-Pentene	0.99		0.57		1.01	1.45		1.31	1.98	
2-Methyl-1-butene	1.02		1.21		1.92	2.05		1.99	ND	a
n-Pentane	3.12		6.51		8.97	19.03		17.25	16.61	
Isoprene	ND	a	2.08		2.71	2.05		2.61	3.07	
trans-2-Pentene	ND	a	1.63		2.74	2.72		2.16	4.08	
cis-2-Pentene	0.38		ND	a	1.49	1.47		1.27	2.28	
2-Methyl-2-butene	0.77		2.08		3.74	3.43		2.89	5.57	
2,2-Dimethylbutane	0.27		0.70		0.62	1.37		1.32	2.30	
Cyclopentene	0.22		0.41		0.73	0.99		0.60	0.91	
4-Methyl-1-pentene	0.64		1.14		0.37	0.46		0.49	1.38	
Cyclopentane	0.39		0.57		0.85	1.83		1.72	1.73	
2,3-Dimethylbutane	0.92		1.64		2.53	2.11		2.34	4.70	
2-Methylpentane	2.24		5.96		10.74	9.12		7.50	15.85	
3-Methylpentane	1.82		4.04		6.76	6.25		5.82	12.36	
1-Hexene	0.19		ND		0.72	ND		0.72	1.09	
2-Methyl-1-pentene	0.17		0.81		0.74	1.34		0.57	0.95	
2-Ethyl-1-butene	ND		ND		ND	ND		ND	ND	
n-Hexane	1.55		3.28		9.72	8.90		7.62	12.85	
trans-2-Hexene	0.17		ND	a	0.88	0.95		0.90	1.38	
cis-2-Hexene	0.24		0.29		0.35	0.38		0.33	1.09	
Methylcyclopentane	1.12		2.46		4.82	4.16		3.88	7.25	
2,4-Dimethylpentane	0.49		1.18		2.40	2.97		2.59	3.33	
Benzene	28.35		7.54		13.56	13.43		12.12	17.48	
Cyclohexane	0.26		0.67		7.66	7.80		7.01	6.48	
2-Methylhexane	1.04		2.16		5.04	20.23		14.25	5.75	
2,3-Dimethylpentane	0.59		0.90		1.78	12.60		10.56	2.99	
3-Methylhexane	2.28		3.01		7.38	30.17		22.50	5.70	
1-Heptene	0.39		0.70		1.40	6.68		4.94	1.76	
2,2,4-Trimethylpentane	2.56		5.82		9.43	10.16		9.23	14.02	
n-Heptane	0.74		1.37		3.66	11.12		8.94	4.15	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08065	08059	08128	08124D1	08125D1	08194
Sampling Date:	8/30/96	9/3/96	9/4/96	9/5/96	9/5/96	9/6/96
Analysis Date:	9/27/96	10/3/96	10/3/96	10/4/96	10/18/96	10/4/96
Methylcyclohexane	0.58	1.02	3.82	8.61	6.69	2.76
2,2,3-Trimethylpentane	0.69	1.16	3.13	2.82	2.43	2.34
2,3,4-Trimethylpentane	0.83	2.58	3.60	3.38	3.50	5.88
Toluene	11.65	22.51	36.15	34.10	30.52	45.72
2-Methylheptane	0.40	1.01	1.65	2.16	1.71	2.05
3-Methylheptane	0.48	0.94	1.94	1.98	2.00	2.36
1-Octene	0.37	1.04	1.35	1.33	1.36	2.04
n-Octane	0.73	1.10	1.77	2.93	2.78	1.97
Ethylbenzene	1.71	3.81	7.30	7.38	6.15	8.57
m-Xylene/p-Xylene	6.63	13.48	25.10	24.67	19.99	30.33
Styrene	0.97	1.67	11.39	6.22	5.26	7.07
o-Xylene	2.34	4.73	9.02	8.72	7.40	10.65
1-Nonene	0.23	0.15	0.47	0.58	0.76	0.37
n-Nonane	0.58	1.07	1.68	2.72	2.34	2.45
Isopropylbenzene	0.09	0.22	0.56	0.46	0.64	0.43
a-Pinene	1.41	2.68	3.73	1.94	3.46	1.17
n-Propylbenzene	0.57	0.84	1.68	2.09	1.78	2.04
m-Ethyltoluene	2.09	4.15	7.78	8.11	6.44	9.32
p-Ethyltoluene	0.77	1.72	3.24	3.54	3.17	3.96
1,3,5-Trimethylbenzene	0.87	2.02	3.67	4.53	3.63	4.89
o-Ethyltoluene	0.99	2.03	3.39	1.99	2.19	4.04
b-Pinene	0.61	1.76	5.45	2.83	2.41	2.83
1-Decene	1.43	1.47	0.67	0.75	0.35	1.98
1,2,4-Trimethylbenzene	3.19	6.70	10.78	12.37	9.61	14.23
n-Decane	0.77	14.18	2.21	6.32	4.28	4.12
1,2,3-Trimethylbenzene	1.20	1.72	3.28	3.71	1.73	3.33
m-Diethylbenzene	0.64	1.28	2.47	2.45	2.05	2.33
p-Diethylbenzene	0.57	1.26	4.41	3.54	3.38	2.24
1-Undecene	0.98	1.24	3.25	1.95	2.30	0.81
n-Undecane	1.95	61.55	2.78	5.54	4.43	6.03
1-Dodecene	0.97	2.27	2.42	1.60	2.47	1.17
n-Dodecane	1.45	50.52	2.94	4.90	3.53	5.34
1-Tridecene	0.17	0.08	0.88	0.24	0.93	0.15
n-Tridecane	0.74	12.27	2.45	3.24	3.13	1.87
TNMOC (w/ unknowns)	284.38	422.31	612.25	697.56	710.87	697.91
TNMOC (speciated)	207.27	349.36	465.09	538.50	584.20	557.58

Footnotes:

a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08187		08200		08203		08234		08293		08298	
Sampling Date:	9/9/96		9/10/96		9/11/96		9/12/96		9/13/96		9/16/96	
Analysis Date:	10/7/96		10/9/96		11/11/96		10/10/96		11/11/96		10/14/96	
Ethylene	30.61		16.62		24.22		19.42		4.01		2.18	
Acetylene/Ethane	32.49		35.99		94.88		68.63		8.84		3.41	
Propylene	11.00		6.86		10.92		7.38		1.72		1.08	
Propane	17.25		14.72		29.16		25.69		10.87		2.25	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	8.11		4.98		7.37		6.06		1.25		1.10	
Isobutene/1-butene	7.73		3.88		4.23		3.88		1.58		ND	
1,3-Butadiene	2.20		1.17		1.26		1.02		0.26		ND	
n-butane	28.10		9.54		10.21		11.67		4.46		2.23	
trans-2-Butene	1.59		0.67		1.24		0.29		0.19		0.07	
cis-2-butene	1.18		0.41		0.64		0.67		0.16		0.08	
3-Methyl-1-butene	1.05		0.37		0.17		0.58		0.11		0.12	
Isopentane	56.22		25.44		28.58		29.41		6.53		4.20	
1-Pentene	3.22		2.91		1.12		2.63		0.07		ND	a
2-Methyl-1-butene	4.12		ND	a	2.24		ND	a	0.23		0.23	
n-Pentane	19.92		ND	a	10.27		ND	a	3.07		1.56	
Isoprene	3.35		1.43		1.92		2.44		ND	a	0.28	
trans-2-Pentene	4.31		2.31		ND	a	2.79		ND	a	0.35	
cis-2-Pentene	2.49		0.87		ND	a	1.49		0.25		0.18	
2-Methyl-2-butene	5.37		2.49		4.16		3.57		0.79		0.42	
2,2-Dimethylbutane	2.32		1.01		1.44		1.29		0.34		0.23	
Cyclopentene	0.83		0.48		0.84		0.60		0.20		0.11	
4-Methyl-1-pentene	ND	a	ND	a	0.58		1.02		0.54		0.28	
Cyclopentane	ND	a	0.64		1.03		0.99		0.33		0.11	
2,3-Dimethylbutane	ND	a	2.05		2.89		2.66		0.62		0.46	
2-Methylpentane	16.81		7.33		10.53		10.13		2.06		1.62	
3-Methylpentane	10.25		4.89		8.25		6.66		2.85		1.83	
1-Hexene	1.37		0.61		0.86		ND		0.24		ND	
2-Methyl-1-pentene	0.98		0.36		0.64		1.42		0.27		0.10	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	9.23		5.73		13.20		8.86		1.50		0.81	
trans-2-Hexene	1.44		0.58		1.01		0.71		0.18		0.10	
cis-2-Hexene	1.25		0.52		0.45		0.60		0.23		0.04	
Methylcyclopentane	6.12		3.36		6.12		4.90		0.93		0.59	
2,4-Dimethylpentane	3.01		1.60		3.00		2.23		0.37		0.29	
Benzene	22.53		20.03		13.52		11.98		3.15		2.17	
Cyclohexane	1.74		3.19		14.88		7.10		0.21		0.15	
2-Methylhexane	5.15		2.75		5.45		3.94		0.68		0.51	
2,3-Dimethylpentane	2.25		1.25		2.81		1.98		0.41		0.22	
3-Methylhexane	6.26		4.46		6.48		4.70		0.90		1.31	
1-Heptene	1.80		1.03		1.57		1.33		0.18		0.15	
2,2,4-Trimethylpentane	15.29		7.19		10.35		9.25		2.54		1.57	
n-Heptane	4.86		2.32		4.26		3.07		0.88		0.59	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08187	08200	08203	08234	08293	08298	
Sampling Date:	9/9/96	9/10/96	9/11/96	9/12/96	9/13/96	9/16/96	
Analysis Date:	10/7/96	10/9/96	11/11/96	10/10/96	11/11/96	10/14/96	
Methylcyclohexane	2.50	2.00	3.85	2.20	0.31	0.18	
2,2,3-Trimethylpentane	2.57	1.33	4.73	1.48	0.41	ND	a
2,3,4-Trimethylpentane	5.43	2.77	4.01	3.28	0.80	1.22	
Toluene	42.64	29.80	31.17	30.70	6.83	4.61	
2-Methylheptane	2.45	1.33	1.56	2.30	0.34	0.63	
3-Methylheptane	2.69	1.53	0.29	1.35	0.25	0.16	
1-Octene	1.81	0.94	1.47	1.14	0.28	0.19	
n-Octane	3.18	2.22	1.60	1.49	0.32	0.45	
Ethylbenzene	8.02	5.62	8.99	6.45	1.29	0.98	
m-Xylene/p-Xylene	28.55	19.90	31.82	22.81	4.60	3.54	
Styrene	2.71	4.39	7.33	8.08	0.22	0.30	
o-Xylene	10.47	6.86	10.65	7.55	1.58	1.30	
1-Nonene	1.14	0.29	0.70	0.21	0.41	0.30	
n-Nonane	3.48	2.18	1.35	1.69	0.90	0.26	
Isopropylbenzene	0.54	0.38	0.54	0.36	0.05	0.04	
a-Pinene	2.73	1.44	2.20	1.34	1.18	1.12	
n-Propylbenzene	2.42	1.59	2.62	1.64	0.24	0.26	
m-Ethyltoluene	9.68	6.56	8.93	7.34	1.48	1.16	
p-Ethyltoluene	4.27	2.69	4.39	2.86	0.79	0.46	
1,3,5-Trimethylbenzene	5.24	3.29	4.46	3.64	0.86	0.47	
o-Ethyltoluene	5.19	2.73	3.89	3.06	0.80	0.55	
b-Pinene	2.26	1.89	2.43	1.92	1.05	0.52	
1-Decene	2.75	1.92	2.26	1.19	1.23	1.36	
1,2,4-Trimethylbenzene	14.24	8.73	13.22	10.08	2.07	1.37	
n-Decane	5.75	26.48	2.47	2.37	0.75	0.51	
1,2,3-Trimethylbenzene	4.11	2.28	2.26	2.61	1.21	0.48	
m-Diethylbenzene	2.66	2.04	3.47	2.04	0.57	0.34	
p-Diethylbenzene	2.58	1.42	2.43	1.60	0.61	0.35	
1-Undecene	3.63	2.18	2.03	1.16	1.65	2.98	
n-Undecane	12.83	116.56	4.35	3.66	0.70	1.43	
1-Dodecene	1.71	0.92	1.61	0.61	0.92	1.62	
n-Dodecane	26.99	99.07	4.85	4.00	0.57	1.36	
1-Tridecene	0.39	0.09	0.37	0.34	0.13	0.27	
n-Tridecane	17.18	25.27	3.10	3.59	0.54	0.43	
TNMOC (w/ unknowns)	749.98	691.90	630.44	517.88	137.46	112.57	
TNMOC (speciated)	598.57	590.72	524.15	419.20	99.95	64.18	

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08327	08330		08392	08389		08407D1		08408D2	
Sampling Date:	9/17/96	9/18/96		9/19/96	9/20/96		9/23/96		9/23/96	
Analysis Date:	10/14/96	10/17/96		10/17/96	10/17/96		10/18/96		10/18/96	
Ethylene	4.15	6.30		29.15	18.72		20.11		38.10	
Acetylene/Ethane	9.68	10.08		127.08	26.75		42.28		48.70	
Propylene	2.13	3.29		15.40	9.24		15.66		17.64	
Propane	2.70	7.37		22.45	15.01		13.49		20.11	
Propyne	ND	ND		ND	ND		ND		ND	
Isobutane	1.23	1.85		4.12	4.53		7.91		9.70	
Isobutene/1-butene	1.22	2.15		4.15	5.91		32.44		18.39	
1,3-Butadiene	ND	0.49		1.78	1.88		3.33		3.17	
n-butane	1.53	6.13		11.48	15.93		31.13		30.55	
trans-2-Butene	0.25	0.35		2.61	1.57		0.36		1.75	
cis-2-butene	0.12	0.28		0.70	1.00		1.64		1.58	
3-Methyl-1-butene	ND	0.22		0.53	0.66		1.03		1.16	
Isopentane	5.57	11.76		27.65	37.93		63.43		63.59	
1-Pentene	0.34	ND	c	1.36	2.14		2.86		3.48	
2-Methyl-1-butene	0.47	0.62		2.08	1.37		ND	a	ND	a
n-Pentane	2.81	4.08		9.97	13.56		ND	a	ND	a
Isoprene	1.66	0.31		1.67	1.39		3.47		3.40	
trans-2-Pentene	0.71	1.11		2.70	3.36		5.25		5.97	
cis-2-Pentene	0.36	0.51		1.42	1.95		2.90		3.23	
2-Methyl-2-butene	0.75	1.46		3.78	4.95		7.66		7.98	
2,2-Dimethylbutane	0.28	0.56		1.62	ND	a	3.04		ND	a
Cyclopentene	0.39	0.18		0.65	0.93		1.33		1.42	
4-Methyl-1-pentene	0.09	ND	a	0.40	1.43		1.47		1.56	
Cyclopentane	0.20	ND	a	0.86	1.36		2.22		2.33	
2,3-Dimethylbutane	0.72	0.77		2.52	3.46		5.87		5.78	
2-Methylpentane	2.14	3.18		8.82	11.75		21.15		19.96	
3-Methylpentane	1.39	2.86		6.41	8.11		13.27		13.84	
1-Hexene	0.22	ND	a	0.80	ND		2.00		2.12	
2-Methyl-1-pentene	0.13	ND	a	0.54	1.93		1.13		0.96	
2-Ethyl-1-butene	ND	ND		ND	ND		ND		ND	
n-Hexane	1.35	2.19		9.65	8.26		11.46		ND	a
trans-2-Hexene	0.20	0.33		1.02	1.12		1.91		ND	a
cis-2-Hexene	0.08	0.26		0.77	0.94		1.52		2.14	
Methylcyclopentane	0.77	1.46		4.39	5.37		7.67		7.76	
2,4-Dimethylpentane	0.42	0.70		2.63	2.65		3.85		4.02	
Benzene	3.68	4.50		16.76	14.48		31.84		32.52	
Cyclohexane	0.19	0.29		8.62	4.10		1.86		1.91	
2-Methylhexane	1.21	1.50		4.29	4.57		7.70		7.81	
2,3-Dimethylpentane	0.58	0.62		2.16	2.70		3.59		3.71	
3-Methylhexane	1.65	2.23		4.97	6.76		7.28		7.21	
1-Heptene	0.25	0.54		1.21	1.54		2.37		2.55	
2,2,4-Trimethylpentane	2.39	3.64		10.32	13.27		21.14		21.38	
n-Heptane	0.76	1.10		3.51	4.17		6.58		6.74	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08327	08330	08392	08389	08407D1	08408D2
Sampling Date:	9/17/96	9/18/96	9/19/96	9/20/96	9/23/96	9/23/96
Analysis Date:	10/14/96	10/17/96	10/17/96	10/17/96	10/18/96	10/18/96
Methylcyclohexane	0.52	0.49	4.17	2.02	3.37	3.67
2,2,3-Trimethylpentane	0.52	0.61	2.04	2.38	3.64	3.74
2,3,4-Trimethylpentane	0.96	1.28	5.73	5.04	7.83	7.82
Toluene	7.61	11.78	29.56	34.64	56.11	57.21
2-Methylheptane	0.57	0.61	1.32	1.67	2.67	2.76
3-Methylheptane	0.44	0.54	1.25	1.83	3.60	2.93
1-Octene	0.41	0.60	1.36	1.82	2.64	2.67
n-Octane	0.36	0.64	1.35	1.59	2.60	3.08
Ethylbenzene	1.62	2.05	6.96	6.80	10.33	10.65
m-Xylene/p-Xylene	5.40	6.90	25.19	23.66	36.57	37.31
Styrene	1.18	0.61	7.49	3.04	2.90	3.05
o-Xylene	2.04	2.39	8.10	8.32	13.09	13.36
1-Nonene	0.08	ND	0.24	0.31	0.28	0.33
n-Nonane	0.21	0.44	1.39	1.56	2.95	3.01
Isopropylbenzene	0.11	0.10	0.25	0.42	0.57	0.57
a-Pinene	1.19	1.07	0.75	1.44	3.39	3.58
n-Propylbenzene	0.46	0.46	1.98	1.97	2.60	2.80
m-Ethyltoluene	1.99	2.05	7.55	7.80	11.82	12.13
p-Ethyltoluene	0.69	1.02	3.46	3.69	5.05	5.24
1,3,5-Trimethylbenzene	0.78	1.06	3.83	3.84	6.04	6.41
o-Ethyltoluene	0.67	1.04	3.16	3.92	5.71	5.35
b-Pinene	2.08	0.39	1.80	0.55	1.89	1.93
1-Decene	0.12	0.97	0.59	2.63	2.03	2.17
1,2,4-Trimethylbenzene	2.78	2.94	10.69	11.63	17.86	18.56
n-Decane	0.46	1.34	2.51	2.90	5.15	5.11
1,2,3-Trimethylbenzene	0.83	0.76	2.77	2.84	4.45	5.70
m-Diethylbenzene	0.57	0.51	2.25	2.07	2.67	2.60
p-Diethylbenzene	0.67	0.59	2.92	2.10	3.26	3.85
1-Undecene	1.21	0.79	2.06	1.88	1.35	1.02
n-Undecane	1.50	4.49	5.41	5.54	4.45	5.19
1-Dodecene	1.06	0.51	1.69	1.09	1.12	0.94
n-Dodecane	1.27	3.78	6.04	5.16	5.83	4.83
1-Tridecene	0.18	0.20	0.43	0.22	0.22	0.19
n-Tridecane	1.29	1.39	2.68	2.59	1.68	1.55
TNMOC (w/ unknowns)	156.90	187.19	52.86	539.64	788.29	808.89
TNMOC (speciated)	96.63	139.68	521.96	425.67	651.12	665.52

Footnotes:
a - Compound not analyzed due to FID flame out
c- Compound not analyzed due to sample (matrix) interference

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08410		08428		08496		08497		08517	
Sampling Date:	9/24/96		9/25/96		9/26/96		9/27/96		9/30/96	
Analysis Date:	10/18/96		10/21/96		10/25/96		10/25/96		10/29/96	
Ethylene	22.52		16.38		6.21		3.18		2.56	
Acetylene/Ethane	47.13		40.85		8.56		3.80		4.94	
Propylene	18.84		7.73		3.59		1.49		1.21	
Propane	15.43		12.15		5.17		1.75		4.42	
Propyne	ND		ND		ND		ND		ND	
Isobutane	8.01		5.88		2.65		0.88		1.67	
Isobutene/1-butene	7.27		6.11		2.39		1.19		1.53	
1,3-Butadiene	ND		ND		0.59		0.20		0.04	
n-butane	34.79		24.33		8.25		3.27		5.19	
trans-2-Butene	2.11		1.27		0.22		0.38		ND	
cis-2-butene	1.38		0.88		0.28		0.15		0.07	
3-Methyl-1-butene	1.21		0.80		0.19		0.12		0.07	
Isopentane	67.21		49.93		13.40		6.56		7.09	
1-Pentene	3.75		2.40		1.04		0.28		0.24	
2-Methyl-1-butene	4.93		3.42		ND	a	0.41		0.23	
n-Pentane	22.76		18.98		4.68		2.22		3.07	
Isoprene	1.80		2.64		0.90		0.44		0.21	
trans-2-Pentene	ND	a	3.75		0.95		0.49		0.33	
cis-2-Pentene	3.29		2.05		0.55		0.32		0.20	
2-Methyl-2-butene	7.97		4.50		1.19		0.54		0.54	
2,2-Dimethylbutane	3.28		2.44		0.76		0.23		0.36	
Cyclopentene	1.37		0.89		0.17		0.17		0.08	
4-Methyl-1-pentene	0.83		0.71		0.90		0.10		ND	a
Cyclopentane	2.17		1.54		0.56		0.20		0.20	
2,3-Dimethylbutane	6.03		4.18		1.17		ND	a	0.63	
2-Methylpentane	20.64		14.73		4.02		ND	a	2.10	
3-Methylpentane	12.92		9.23		2.49		1.13		1.26	
1-Hexene	1.84		1.30		0.27		0.16		0.17	
2-Methyl-1-pentene	0.85		0.64		0.32		0.17		0.12	
2-Ethyl-1-butene	ND		ND		ND		ND		ND	
n-Hexane	11.48		9.28		2.44		1.42		1.28	
trans-2-Hexene	1.73		1.28		0.37		0.26		0.09	
cis-2-Hexene	0.72		0.81		0.30		0.05		0.10	
Methylcyclopentane	6.82		5.32		1.64		0.63		0.77	
2,4-Dimethylpentane	3.83		2.89		0.80		0.44		0.40	
Benzene	23.57		16.27		5.52		2.97		2.95	
Cyclohexane	2.30		2.48		0.40		0.10		0.22	
2-Methylhexane	7.84		5.92		1.56		0.84		0.78	
2,3-Dimethylpentane	4.18		3.32		0.85		0.49		0.49	
3-Methylhexane	8.10		6.35		1.31		1.19		0.69	
1-Heptene	2.55		1.91		0.51		0.22		0.12	
2,2,4-Trimethylpentane	20.66		16.04		4.81		1.97		2.27	
n-Heptane	5.70		4.29		0.93		2.30		0.82	

SNMOC REPORT
SITE CODE: B1AL
All concentrations reported in ppbC

Sample No.:	08410	08428	08496	08497	08517
Sampling Date:	9/24/96	9/25/96	9/26/96	9/27/96	9/30/96
Analysis Date:	10/18/96	10/21/96	10/25/96	10/25/96	10/29/96
Methylcyclohexane	4.73	3.26	0.69	0.44	0.41
2,2,3-Trimethylpentane	4.22	3.11	0.77	0.50	0.40
2,3,4-Trimethylpentane	7.86	7.38	2.47	0.71	0.69
Toluene	52.17	42.43	13.50	5.35	5.71
2-Methylheptane	2.47	1.86	0.71	0.32	0.22
3-Methylheptane	2.37	1.76	0.62	0.27	0.33
1-Octene	2.49	1.89	0.60	0.60	0.24
n-Octane	2.49	1.93	0.55	0.32	0.37
Ethylbenzene	9.75	8.38	2.24	1.10	1.14
m-Xylene/p-Xylene	33.36	27.38	7.92	3.66	3.54
Styrene	4.68	5.74	0.76	0.87	0.32
o-Xylene	12.66	10.09	2.95	1.39	1.43
1-Nonene	0.75	0.38	0.14	0.08	0.32
n-Nonane	2.68	1.84	0.64	0.37	1.49
Isopropylbenzene	0.46	0.43	0.10	0.08	0.05
a-Pinene	3.17	2.82	1.06	0.36	0.47
n-Propylbenzene	2.77	2.01	0.53	0.28	0.42
m-Ethyltoluene	11.85	9.06	2.84	1.17	1.49
p-Ethyltoluene	4.16	3.44	1.23	0.47	0.84
1,3,5-Trimethylbenzene	6.20	4.53	1.43	0.59	0.73
o-Ethyltoluene	5.12	3.97	1.26	0.38	0.89
b-Pinene	2.68	3.86	0.72	1.14	1.07
1-Decene	1.24	2.53	0.93	0.08	0.96
1,2,4-Trimethylbenzene	17.68	15.11	4.43	1.74	2.03
n-Decane	3.72	2.74	0.85	0.28	1.53
1,2,3-Trimethylbenzene	4.70	3.84	1.34	1.21	5.44
m-Diethylbenzene	4.96	2.50	0.70	0.43	0.41
p-Diethylbenzene	6.76	2.95	0.75	0.85	0.54
1-Undecene	2.07	2.45	0.63	1.12	1.28
n-Undecane	3.91	6.98	1.25	0.63	1.47
1-Dodecene	2.52	2.91	0.49	1.19	1.19
n-Dodecane	2.98	7.84	1.04	0.80	1.09
1-Tridecene	0.44	0.91	0.25	0.34	0.12
n-Tridecane	3.27	4.38	0.62	1.03	1.02
TNMOC (w/ unknowns)	799.09	663.92	214.28	157.28	140.82
TNMOC (speciated)	653.18	518.54	149.90	72.63	89.15

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06169	06194	06233	06234	06286	06277	
Sampling Date:	6/5/96	6/6/96	6/7/96	6/10/96	6/11/96	6/12/96	
Analysis Date:	7/2/96	7/3/96	7/5/96	7/10/96	7/10/96	7/12/96	
Ethylene	4.35	4.91	22.30	3.36	5.64	11.33	
Acetylene/Ethane	7.82	7.14	10.37	6.49	12.32	30.17	
Propylene	4.28	4.53	4.83	2.65	3.58	7.06	
Propane	6.89	2.92	4.80	2.72	6.34	12.47	
Propyne	ND	ND	ND	ND	0.15	0.34	
Isobutane	2.00	0.61	1.71	0.96	2.41	13.04	
Isobutene/1-butene	1.10	1.58	1.48	1.21	0.88	6.27	
1,3-Butadiene	ND	ND	ND	ND	ND	ND	
n-butane	5.38	3.34	4.45	2.66	3.96	7.49	
trans-2-Butene	0.09	0.25	0.29	ND	0.10	0.40	
cis-2-butene	0.26	0.18	0.20	0.36	0.08	0.49	
3-Methyl-1-butene	0.13	0.16	0.18	1.17	ND	0.27	
Isopentane	13.76	7.13	9.74	6.73	10.01	ND	a
1-Pentene	0.45	0.20	0.35	1.21	0.31	0.75	
2-Methyl-1-butene	0.69	0.43	0.54	1.05	0.52	1.28	
n-Pentane	7.41	2.92	4.33	2.60	4.17	23.85	
Isoprene	7.54	6.44	4.58	4.83	3.65	4.92	
trans-2-Pentene	0.52	0.23	0.54	1.33	0.49	1.26	
cis-2-Pentene	0.24	0.24	0.32	1.54	0.35	0.91	
2-Methyl-2-butene	0.56	0.51	0.62	0.92	0.31	1.32	
2,2-Dimethylbutane	0.73	0.42	0.52	1.25	0.64	2.58	
Cyclopentene	2.37	ND	ND	0.79	0.22	0.79	
4-Methyl-1-pentene	ND	ND	1.45	0.61	ND	1.84	
Cyclopentane	0.47	0.28	0.33	0.86	0.42	4.17	
2,3-Dimethylbutane	1.00	0.62	0.92	0.96	0.79	5.06	
2-Methylpentane	3.92	5.37	4.11	4.34	3.30	23.69	
3-Methylpentane	2.32	1.68	2.08	2.73	2.02	21.39	
1-Hexene	ND	ND	ND	ND	ND	ND	
2-Methyl-1-pentene	0.67	0.37	0.47	0.80	0.47	2.91	
2-Ethyl-1-butene	ND	ND	ND	0.48	0.05	ND	
n-Hexane	1.63	1.24	2.58	2.02	2.12	27.69	
trans-2-Hexene	0.13	0.08	0.07	0.61	0.05	ND	
cis-2-Hexene	0.17	0.18	0.06	0.26	0.14	ND	
Methylcyclopentane	1.31	1.12	1.30	0.69	1.09	14.59	
2,4-Dimethylpentane	0.77	0.67	0.73	1.17	0.58	6.24	
Benzene	6.96	4.66	6.69	3.51	6.70	12.98	
Cyclohexane	0.38	0.18	1.62	0.28	1.06	29.33	
2-Methylhexane	3.08	1.39	1.47	1.16	1.30	19.31	
2,3-Dimethylpentane	1.71	0.67	0.97	0.71	1.01	10.30	
3-Methylhexane	5.71	2.95	3.11	3.53	2.54	30.76	
1-Heptene	1.18	0.42	0.71	0.35	0.46	5.04	
2,2,4-Trimethylpentane	2.19	2.23	2.75	2.00	2.60	8.03	
n-Heptane	1.03	0.67	1.20	0.39	0.93	29.55	
Methylcyclohexane	0.81	0.11	0.56	0.62	0.54	15.16	
2,2,3-Trimethylpentane	0.63	0.46	0.53	0.50	0.53	4.51	
2,3,4-Trimethylpentane	2.91	0.83	0.88	1.06	0.89	4.38	
Toluene	9.75	9.88	11.53	8.20	9.93	377.54	
2-Methylheptane	0.47	0.42	0.33	0.66	0.32	2.62	
1-Octene	0.34	0.17	0.23	0.34	0.25	ND	
3-Methylheptane	0.19	0.23	0.41	0.50	0.38	0.43	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06169	06194	06233	06234	06286	06277
Sampling Date:	6/5/96	6/6/96	6/7/96	6/10/96	6/11/96	6/12/96
Analysis Date:	7/2/96	7/3/96	7/5/96	7/10/96	7/10/96	7/12/96
n-Octane	0.54	0.41	0.91	0.43	0.83	1.91
Ethylbenzene	4.20	1.52	1.76	1.24	1.66	7.96
m-Xylene/p-Xylene	4.71	5.37	7.03	4.39	5.90	29.53
Styrene	5.68	3.36	1.62	2.40	1.28	6.63
o-Xylene	2.36	2.11	2.42	1.93	2.22	10.53
1-Nonene	ND	ND	ND	ND	ND	ND
n-Nonane	0.72	0.50	0.91	0.45	0.89	8.64
Isopropylbenzene	0.33	0.16	0.18	0.19	0.22	2.04
a-Pinene	9.12	6.36	4.70	6.25	3.28	6.09
n-Propylbenzene	0.65	1.35	1.13	1.11	0.59	2.52
m-Ethyltoluene	2.44	2.44	2.61	1.80	1.87	6.32
p-Ethyltoluene	1.08	1.26	1.38	1.17	1.12	3.29
1,3,5-Trimethylbenzene	3.49	3.20	1.30	0.89	0.63	4.78
o-Ethyltoluene	0.43	0.83	0.99	0.81	0.77	2.83
b-Pinene	11.88	4.74	1.79	2.14	1.62	3.56
1-Decene	5.75	4.36	3.83	5.69	3.86	5.76
1,2,4-Trimethylbenzene	2.29	2.61	2.89	2.06	2.50	8.04
n-Decane	3.91	4.63	0.70	0.34	1.08	7.32
1,2,3-Trimethylbenzene	0.07	0.53	1.00	0.95	0.85	3.33
m-Diethylbenzene	0.11	0.62	0.47	0.47	0.40	5.04
p-Diethylbenzene	2.06	1.12	0.86	1.01	0.69	2.65
1-Undecene	20.02	9.05	2.49	2.36	2.42	5.95
n-Undecane	23.09	27.05	1.24	0.65	2.78	22.66
1-Dodecene	12.28	7.60	2.45	1.71	1.09	1.88
n-Dodecane	26.49	27.13	3.48	1.58	3.97	20.31
1-Tridecene	ND	ND	0.22	0.33	0.05	1.82
n-Tridecane	2.35	8.44	0.84	1.39	0.08	66.19
TNMOC (w/ unknowns)	366.31	275.10	241.05	181.26	171.88	1374.86
TNMOC (speciated)	262.32	207.96	168.69	126.88	139.42	1036.09

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06299		06304		06326		06329		06392		06386D1
Sampling Date:	6/13/96		6/14/96		06/17/96		06/18/96		06/19/96		06/20/96
Analysis Date:	7/13/96		7/14/96		07/15/96		07/16/96		07/17/96		07/18/96
Ethylene	9.27		4.25		3.26		1.80		4.71		4.29
Acetylene/Ethane	17.91		8.60		5.94		3.28		5.93		7.23
Propylene	5.51		5.04		1.94		2.30		ND		1.30
Propane	10.32		6.62		2.24		2.71		4.05		4.23
Propyne	0.21		ND		ND		ND		ND		ND
Isobutane	3.26		2.11		0.31		0.79		0.93		1.26
Isobutene/1-butene	2.09		1.11		1.15		0.95		0.99		0.70
1,3-Butadiene	0.31		ND		ND		ND		ND		ND
n-butane	15.00		4.71		1.35		2.38		2.56		2.73
trans-2-Butene	0.46		ND		ND		ND		ND		ND
cis-2-butene	0.24		0.15		ND		ND		ND		ND
3-Methyl-1-butene	ND	a	0.61		ND	a	0.75		ND		ND
Isopentane	13.84		9.13		4.08		2.76		6.91		5.76
1-Pentene	0.46		0.16		0.15		0.50		0.17		0.62
2-Methyl-1-butene	1.06		0.35		0.30		2.01		0.36		ND
n-Pentane	6.51		4.60		1.73		10.14		2.21		2.01
Isoprene	8.82		6.52		5.81		0.58		5.32		2.58
trans-2-Pentene	1.20		0.25		0.30		0.63		0.24		ND
cis-2-Pentene	0.84		0.31		0.21		0.59		0.20		ND
2-Methyl-2-butene	1.55		0.52		0.32		0.35		0.27		ND
2,2-Dimethylbutane	1.23		0.97		0.36		0.32		0.35		0.19
Cyclopentene	ND		0.38		ND		0.37		ND		0.92
4-Methyl-1-pentene	0.33		1.66		1.32		0.49		ND		0.07
Cyclopentane	0.79		0.24		0.20		0.54		ND		0.75
2,3-Dimethylbutane	1.72		0.97		0.52		0.36		0.61		0.62
2-Methylpentane	5.52		3.78		2.37		1.30		1.68		1.58
3-Methylpentane	3.41		2.02		2.30		1.91		1.94		0.37
1-Hexene	ND		ND		ND		ND		ND		ND
2-Methyl-1-pentene	0.82		0.64		ND		0.52		ND		0.79
2-Ethyl-1-butene	0.34		0.36		ND		0.32		ND		ND
n-Hexane	3.00		3.20		0.86		1.46		0.96		1.23
trans-2-Hexene	0.59		0.19		ND		0.60		ND	a	ND
cis-2-Hexene	0.43		0.32		0.15		0.38		ND	a	ND
Methylcyclopentane	1.45		1.18		0.37		0.82		0.69		0.65
2,4-Dimethylpentane	1.03		0.63		0.30		0.52		0.50		0.34
Benzene	6.95		4.90		2.46		3.76		3.82		5.32
Cyclohexane	0.81		3.22		ND		0.21		ND		0.42
2-Methylhexane	1.35		1.25		0.41		0.46		0.52		0.60
2,3-Dimethylpentane	1.36		1.29		0.49		0.31		0.40		0.28
3-Methylhexane	4.26		2.34		1.27		1.58		0.53		0.51
1-Heptene	0.69		0.44		0.17		0.17		ND		ND
2,2,4-Trimethylpentane	3.78		2.38		1.24		1.65		1.60		1.36
n-Heptane	1.08		0.75		0.40		0.63		0.64		0.48
Methylcyclohexane	0.91		0.28		0.19		1.25		0.34		0.28
2,2,3-Trimethylpentane	0.97		0.59		ND		0.42		0.31		0.25
2,3,4-Trimethylpentane	1.41		0.88		0.50		0.60		0.67		0.17
Toluene	17.11		9.71		5.09		5.73		5.97		5.62
2-Methylheptane	0.26		0.21		0.15		1.40		0.15		0.46
1-Octene	0.15		0.10		ND		0.12		ND		ND
3-Methylheptane	0.32		0.15		0.12		1.61		0.26		0.36

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06396D2	06505	06506D1	06507D2	06538	06591
Sampling Date:	06/20/96	6/24/96	6/25/96	6/25/96	6/26/96	6/28/96
Analysis Date:	07/18/96	7/24/96	7/24/96	7/29/96	7/25/96	7/26/96
2,2,3-Trimethylpentane	0.26	0.28	0.16	0.24	0.31	0.44
2,3,4-Trimethylpentane	0.60	2.03	0.39	0.40	0.65	0.69
Toluene	5.10	5.45	3.81	4.62	6.61	7.85
2-Methylheptane	0.19	0.52	0.10	0.09	0.15	0.35
1-Octene	ND	ND	0.14	0.96	ND	ND
3-Methylheptane	0.48	0.17	0.12	ND	0.16	0.11
n-Octane	1.08	0.25	0.12	0.15	0.37	0.22
Ethylbenzene	1.15	7.99	0.69	0.82	1.14	1.46
m-Xylene/p-Xylene	2.93	2.95	2.46	2.38	3.78	4.18
Styrene	0.28	1.34	1.14	1.57	0.71	1.38
o-Xylene	1.20	1.23	0.94	0.97	1.58	1.64
1-Nonene	ND	ND	ND	ND	0.30	0.70
n-Nonane	0.49	1.56	0.13	0.26	0.45	0.36
Isopropylbenzene	0.74	ND	ND	ND	ND	ND
a-Pinene	3.12	5.16	5.93	4.43	6.59	4.21
n-Propylbenzene	ND	0.43	0.33	0.33	0.35	0.60
m-Ethyltoluene	1.09	1.82	1.43	1.34	1.65	1.79
p-Ethyltoluene	0.71	0.39	0.44	0.30	0.38	0.63
1,3,5-Trimethylbenzene	0.69	0.56	0.38	0.39	0.63	0.79
o-Ethyltoluene	0.76	0.37	0.60	0.74	0.99	1.17
b-Pinene	1.94	4.11	3.11	4.32	2.75	3.34
1-Decene	ND	ND	1.44	1.07	1.19	ND
1,2,4-Trimethylbenzene	3.05	1.50	1.28	0.71	1.90	2.01
n-Decane	0.87	0.39	0.71	0.16	0.78	ND
1,2,3-Trimethylbenzene	2.48	2.37	1.25	1.20	1.32	1.26
m-Diethylbenzene	ND	0.32	0.50	0.28	0.44	0.23
p-Diethylbenzene	0.56	1.21	0.51	0.42	0.59	1.03
1-Undecene	1.03	1.82	1.76	1.34	1.65	1.98
n-Undecane	1.07	1.55	0.86	0.28	0.77	1.21
1-Dodecene	1.04	1.54	0.99	0.99	1.23	1.91
n-Dodecane	2.08	1.56	0.94	0.29	1.25	1.66
1-Tridecene	0.97	0.91	0.27	0.82	0.66	0.48
n-Tridecane	2.10	1.55	0.55	1.00	1.21	0.73
TNMOC (w/ unknowns)	159.02	153.12	112.31	187.31	161.28	183.07
TNMOC (speciated)	84.76	106.23	78.29	68.29	103.92	117.32

Footnotes:

a - Compound not analyzed due to FID flame out

b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06628		06670		06742		06783		06853	06796D1	
Sampling Date:	7/1/96		7/2/96		7/3/96		7/8/96		7/9/96	7/10/96	
Analysis Date:	7/30/96		7/31/96		7/31/96		8/1/96		8/1/96	8/7/96	
Ethylene	5.99		3.34		3.77		4.01		2.29	3.66	
Acetylene/Ethane	9.43		4.71		8.22		6.28		5.89	3.90	
Propylene	2.37		3.29		2.24		2.68		1.29	1.64	
Propane	5.11		2.37		5.91		3.93		3.73	3.05	
Propyne	ND		ND		ND		ND		ND	ND	
Isobutane	1.54		0.85		1.44		0.89		0.52	0.66	
Isobutene/1-butene	1.54		0.96		1.13		1.14		0.68	0.13	
1,3-Butadiene	0.26		0.25		0.36		0.29		0.07	ND	
n-butane	4.79		2.55		3.38		2.58		1.57	1.75	
trans-2-Butene	0.18		0.14		0.20		0.12		ND	ND	
cis-2-butene	0.41		0.03		0.07		0.08		ND	0.09	
3-Methyl-1-butene	ND		0.12		0.13		0.09		ND	0.07	
Isopentane	11.06		6.58		6.11		5.43		2.24	4.20	
1-Pentene	0.60		0.40		0.92		0.25		0.16	0.35	
2-Methyl-1-butene	0.39		0.38		0.25		ND		0.11	0.49	
n-Pentane	7.59		3.46		2.76		2.03		1.43	ND	a
Isoprene	6.21		9.50		9.44		1.16		4.75	ND	a
trans-2-Pentene	0.35		0.38		0.31		0.19		0.13	0.24	
cis-2-Pentene	0.25		0.17		0.17		0.29		0.05	0.14	
2-Methyl-2-butene	0.33		0.28		0.58		0.12		0.17	0.45	
2,2-Dimethylbutane	0.79		ND	a	0.38		0.27		0.50	0.44	
Cyclopentene	2.13		ND		0.59		ND		0.10	0.05	
4-Methyl-1-pentene	ND	a	0.24		1.68		0.26		0.20	0.78	
Cyclopentane	ND	a	0.08		0.47		0.24		0.69	0.18	
2,3-Dimethylbutane	1.42		2.32		0.85		0.36		0.85	0.43	
2-Methylpentane	6.60		2.22		2.10		1.55		2.00	1.73	
3-Methylpentane	2.59		1.56		3.80		0.98		0.43	1.35	
1-Hexene	ND		ND		ND		ND		ND	ND	
2-Methyl-1-pentene	0.80		0.34		ND		0.13		0.17	0.29	
2-Ethyl-1-butene	ND		ND		ND	a	ND		ND	ND	
n-Hexane	2.30		1.98		ND	a	1.40		0.59	0.91	
trans-2-Hexene	0.07		0.08		0.15		0.03		ND	0.06	
cis-2-Hexene	0.04		ND		0.13		0.05		ND	0.04	
Methylcyclopentane	1.21		0.74		0.93		0.49		0.32	0.49	
2,4-Dimethylpentane	0.69		0.50		0.48		0.28		0.15	0.30	
Benzene	6.83		3.22		4.72		4.98		1.78	2.72	
Cyclohexane	0.74		1.24		1.16		1.68		0.06	0.10	
2-Methylhexane	1.64		1.08		0.67		0.54		0.59	0.52	
2,3-Dimethylpentane	0.65		0.41		0.30		0.30		0.13	0.30	
3-Methylhexane	2.43		1.88		1.64		0.66		1.83	0.97	
1-Heptene	0.28		0.26		0.26		0.11		ND	0.12	
2,2,4-Trimethylpentane	3.01		2.39		1.86		1.34		0.63	1.30	
n-Heptane	0.72		0.62		0.98		ND	a	0.23	0.45	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06628	06670	06742	06783	06853	06796D1
Sampling Date:	7/1/96	7/2/96	7/3/96	7/8/96	7/9/96	7/10/96
Analysis Date:	7/30/96	7/31/96	7/31/96	8/1/96	8/1/96	8/7/96
Methylcyclohexane	0.71	0.67	0.29	0.35	0.27	0.20
2,2,3-Trimethylpentane	0.49	3.64	0.40	0.29	0.15	0.21
2,3,4-Trimethylpentane	2.01	0.84	0.76	0.56	0.57	0.43
Toluene	10.42	7.91	6.80	7.66	2.48	5.04
2-Methylheptane	0.43	0.85	0.17	0.87	0.07	0.14
3-Methylheptane	0.40	0.28	0.29	0.45	0.15	0.16
1-Octene	0.58	0.27	0.19	0.25	0.10	0.12
n-Octane	0.36	0.29	0.55	0.93	0.15	0.23
Ethylbenzene	2.00	1.59	1.28	1.11	0.59	0.93
m-Xylene/p-Xylene	5.68	4.97	4.40	3.75	1.92	3.29
Styrene	1.28	1.30	0.61	0.40	1.82	0.42
o-Xylene	2.24	1.85	1.50	1.27	0.75	1.19
1-Nonene	0.95	0.09	0.29	0.28	0.43	0.10
n-Nonane	0.65	0.57	0.65	0.73	0.16	0.24
Isopropylbenzene	0.12	0.11	0.11	0.05	0.05	ND
a-Pinene	3.71	4.56	4.21	0.75	1.39	2.39
n-Propylbenzene	0.64	0.50	0.41	0.32	0.18	0.26
m-Ethyltoluene	2.15	1.95	1.72	1.23	0.76	1.22
p-Ethyltoluene	0.63	0.61	0.68	0.67	0.25	0.43
1,3,5-Trimethylbenzene	0.72	0.68	0.65	0.63	0.41	0.46
o-Ethyltoluene	1.29	1.06	0.94	0.65	3.43	0.85
b-Pinene	3.61	3.94	2.58	0.47	3.17	1.50
1-Decene	ND	0.16	1.09	1.19	ND	1.27
1,2,4-Trimethylbenzene	2.47	2.28	1.89	1.72	0.80	1.62
n-Decane	0.38	4.18	1.35	0.46	0.22	0.31
1,2,3-Trimethylbenzene	0.97	0.77	0.39	0.04	0.38	0.05
m-Diethylbenzene	0.52	0.49	0.63	0.68	0.48	0.42
p-Diethylbenzene	0.87	1.07	0.64	0.46	0.89	0.51
1-Undecene	0.96	1.64	0.88	2.32	2.95	1.19
n-Undecane	0.70	46.61	4.70	0.88	1.09	1.30
1-Dodecene	0.79	1.51	0.91	1.84	2.79	0.68
n-Dodecane	0.44	98.38	5.25	1.16	1.73	2.00
1-Tridecene	0.35	0.48	0.19	0.43	1.16	0.07
n-Tridecane	2.04	18.69	3.39	1.00	1.48	1.13
TNMOC (w/ unknowns)	224.29	323.94	169.45	136.95	151.59	96.67
TNMOC (specialed)	144.90	275.72	121.30	83.02	69.52	64.69

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06799D2		06857		06840		06948		07042D1		07045D2	
Sampling Date:	7/10/96		7/11/96		7/12/96		7/17/96		7/18/96		7/18/96	
Analysis Date:	8/7/96		8/7/96		8/8/96		8/14/96		8/16/96		8/16/96	
Ethylene	2.60		5.13		1.09		1.52		3.76		4.64	
Acetylene/Ethane	3.45		5.87		1.70		5.19		4.18		4.77	
Propylene	2.24		2.85		0.47		1.69		2.73		1.82	
Propane	2.57		2.98		0.80		2.64		1.91		2.24	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	0.56		1.09		0.50		0.85		0.75		ND	
Isobutene/1-butene	1.00		1.45		ND		1.53		0.98		0.62	
1,3-Butadiene	ND		0.35		ND		0.53		0.14		0.37	
n-butane	2.20		2.89		0.84		2.01		2.11		2.02	
trans-2-Butene	ND		ND		ND		0.28		0.25		0.16	
cis-2-butene	0.10		0.17		0.04		0.12		0.13		0.10	
3-Methyl-1-butene	0.09		ND		0.04		0.09		0.07		0.10	
Isopentane	4.43		7.18		ND	a	5.64		6.14		5.80	
1-Pentene	0.26		0.60		ND	a	0.35		0.25		0.09	
2-Methyl-1-butene	0.35		0.43		0.05		1.00		0.35		0.28	
n-Pentane	1.61		4.36		0.91		9.49		2.24		2.09	
Isoprene	3.57		5.56		1.91		1.30		5.07		4.66	
trans-2-Pentene	0.19		0.60		0.07		ND		0.34		0.30	
cis-2-Pentene	ND	a	0.35		0.06		0.22		0.19		0.18	
2-Methyl-2-butene	ND	a	0.66		0.21		0.62		0.34		0.52	
2,2-Dimethylbutane	ND	a	0.50		0.09		0.34		0.32		0.34	
Cyclopentene	ND		0.15		1.06		ND	a	0.06		0.06	
4-Methyl-1-pentene	0.63		0.30		ND		1.31		0.58		0.40	
Cyclopentane	0.24		0.72		0.96		0.27		0.23		ND	a
2,3-Dimethylbutane	0.41		1.84		0.75		0.52		0.61		ND	a
2-Methylpentane	1.47		3.20		1.05		1.67		1.85		1.99	
3-Methylpentane	1.18		2.04		0.30		2.18		1.27		1.32	
1-Hexene	0.08		ND		ND		ND		ND		ND	
2-Methyl-1-pentene	0.10		0.59		0.14		0.22		0.16		0.23	
2-Ethyl-1-butene	ND		ND	a	ND		ND	a	ND		ND	
n-Hexane	0.97		ND	a	0.41		ND	a	1.24		1.21	
trans-2-Hexene	0.06		ND	a	ND		0.54		0.07		0.13	
cis-2-Hexene	0.07		ND		ND		0.64		ND	a	0.12	
Methylcyclopentane	0.54		0.74		0.15		ND	a	ND	a	0.70	
2,4-Dimethylpentane	0.39		0.76		0.12		0.51		0.24		0.49	
Benzene	2.71		4.51		1.04		3.39		3.89		3.70	
Cyclohexane	0.04		0.14		0.05		0.67		0.28		0.24	
2-Methylhexane	0.51		1.87		0.63		0.52		0.77		0.70	
2,3-Dimethylpentane	0.30		0.66		0.16		1.04		0.41		0.36	
3-Methylhexane	0.58		2.88		1.71		2.00		0.83		1.34	
1-Heptene	0.09		0.40		0.03		0.23		0.21		0.24	
2,2,4-Trimethylpentane	1.33		3.13		0.75		1.91		2.08		1.98	
n-Heptane	0.46		0.67		0.29		1.18		0.75		0.66	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	06799D2	06857	06840	06948		07042D1	07045D2
Sampling Date:	7/10/96	7/11/96	7/12/96	7/17/96		7/18/96	7/18/96
Analysis Date:	8/7/96	8/7/96	8/8/96	8/14/96		8/16/96	8/16/96
Methylcyclohexane	0.15	3.26	0.34	0.29		0.32	0.30
2,2,3-Trimethylpentane	0.34	0.68	ND	0.21		0.40	0.42
2,3,4-Trimethylpentane	0.49	1.24	0.20	0.50		0.80	0.66
Toluene	4.81	10.95	1.90	7.67		7.18	7.56
2-Methylheptane	0.88	0.59	0.38	ND	a	0.34	0.29
3-Methylheptane	0.12	0.52	0.07	0.46		0.40	0.39
1-Octene	0.14	0.42	0.10	0.35		0.24	0.20
n-Octane	0.21	0.48	0.17	0.29		0.54	0.52
Ethylbenzene	0.90	2.17	0.68	1.66		1.29	1.26
m-Xylene/p-Xylene	3.07	6.90	1.50	4.63		4.70	4.44
Styrene	0.47	2.07	1.62	1.24		0.81	0.83
o-Xylene	1.15	2.58	0.65	1.95		1.67	1.66
1-Nonene	0.13	1.01	0.17	0.11		0.08	0.09
n-Nonane	0.26	0.61	0.14	2.39		0.39	0.43
Isopropylbenzene	0.04	0.11	0.09	1.14		0.07	0.10
a-Pinene	2.57	4.15	0.70	6.17		3.76	3.82
n-Propylbenzene	0.20	0.65	0.17	2.14		0.24	0.47
m-Ethyltoluene	1.48	3.03	0.58	2.26		1.77	1.73
p-Ethyltoluene	0.52	0.90	0.39	0.57		0.73	0.69
1,3,5-Trimethylbenzene	0.42	1.06	0.34	1.32		0.81	0.65
o-Ethyltoluene	0.80	1.52	0.64	0.96		0.80	0.91
b-Pinene	1.47	4.23	2.03	3.70		1.23	1.69
1-Decene	1.76	0.25	ND	1.08		0.85	1.31
1,2,4-Trimethylbenzene	1.71	3.21	0.81	3.89		2.04	1.93
n-Decane	0.24	0.96	1.18	0.60		0.43	0.53
1,2,3-Trimethylbenzene	0.09	0.92	0.04	0.64		0.18	0.28
m-Diethylbenzene	0.73	0.62	0.63	ND		0.57	0.71
p-Diethylbenzene	0.61	1.36	0.77	0.58		0.69	0.77
1-Undecene	1.70	2.19	2.03	0.80		1.27	1.27
n-Undecane	0.51	1.20	1.58	1.08		1.08	2.08
1-Dodecene	1.45	1.67	1.70	0.91		0.75	1.21
n-Dodecane	0.41	1.37	1.63	1.27		0.88	3.18
1-Tridecene	0.67	0.65	0.69	0.17		ND	0.30
n-Tridecane	1.09	1.39	0.89	0.75		0.22	1.84
TNMOC (w/ unknowns)	120.61	208.00	96.71	178.39		120.57	132.13
TNMOC (speciated)	68.94	132.51	43.18	106.00		85.28	91.45

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07031		07062		07104		07109		07216D1		07221D2	
Sampling Date:	7/19/96		7/23/96		7/24/96		7/25/96		7/26/96		7/26/96	
Analysis Date:	8/14/96		8/16/96		8/19/96		8/22/96		8/22/96		8/22/96	
Ethylene	4.42		1.75		3.89		1.94		2.11		1.84	
Acetylene/Ethane	5.06		4.53		6.88		3.00		4.24		4.40	
Propylene	2.55		0.84		2.32		0.79		0.56		0.67	
Propane	6.26		3.02		5.82		1.51		2.51		2.56	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	1.27		0.71		0.89		1.05		0.49		0.50	
Isobutene/1-butene	0.90		0.81		1.07		0.53		0.45		0.46	
1,3-Butadiene	0.23		0.12		0.25		ND		0.06		0.04	
n-butane	6.01		1.29		2.21		3.26		1.30		1.32	
trans-2-Butene	0.33		ND		0.20		0.20		ND		ND	
cis-2-butene	0.15		ND		0.10		ND		0.03		0.04	
Isopentane	0.10		ND		0.08		ND		0.05		0.02	
Isopentane	7.12		2.46		5.67		5.43		2.81		2.80	
1-Pentene	0.35		0.05		0.24		0.20		0.73		0.11	
2-Methyl-1-butene	0.46		0.10		0.31		0.30		ND	a	0.29	
n-Pentane	2.77		1.04		2.48		1.99		1.05		ND	a
Isoprene	10.84		2.40		4.90		1.02		2.72		ND	a
trans-2-Pentene	0.42		0.08		0.28		0.30		0.12		0.09	
cis-2-Pentene	0.25		0.08		0.18		0.14		0.05		0.04	
2-Methyl-2-butene	0.40		0.08		0.35		0.19		0.21		0.14	
2,2-Dimethylbutane	ND	a	ND	a	0.28		ND	a	0.19		0.24	
Cyclopentene	0.07		0.21		ND	a	0.50		0.08		0.25	
4-Methyl-1-pentene	0.07		0.05		ND	a	ND		0.96		0.09	
Cyclopentane	0.22		0.13		0.16		ND	a	0.12		0.11	
2,3-Dimethylbutane	0.62		0.29		0.71		ND	a	0.19		0.15	
2-Methylpentane	3.83		1.26		3.82		ND	a	1.22		0.80	
3-Methylpentane	1.40		0.59		1.30		0.83		0.96		0.61	
1-Hexene	0.20		ND		ND		ND		ND		ND	
2-Methyl-1-pentene	0.15		0.13		0.29		0.21		0.16		0.21	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	1.77		0.55		1.18		0.87		0.57		0.59	
trans-2-Hexene	0.19		0.09		0.21		0.13		0.02		0.04	
cis-2-Hexene	0.11		0.04		0.08		0.04		ND		0.04	
Methylcyclopentane	0.90		0.30		0.93		0.48		0.28		0.32	
2,4-Dimethylpentane	0.51		0.18		0.47		0.23		0.21		0.15	
Benzene	3.83		2.09		2.46		1.83		1.73		1.65	
Cyclohexane	0.88		0.08		0.08		0.23		0.09		0.09	
2-Methylhexane	0.93		0.41		0.74		0.76		0.25		0.27	
2,3-Dimethylpentane	0.45		0.29		0.57		0.24		0.11		0.18	
3-Methylhexane	1.55		0.63		1.33		1.50		0.44		0.38	
1-Heptene	0.24		0.11		0.23		0.09		0.09		0.04	
2,2,4-Trimethylpentane	1.88		0.88		1.66		1.27		0.84		0.78	
n-Heptane	0.92		0.23		0.46		0.31		0.35		0.25	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07031	07062	07104	07109	07216D1	07221D2
Sampling Date:	7/19/96	7/23/96	7/24/96	7/25/96	7/26/96	7/26/96
Analysis Date:	8/14/96	8/16/96	8/19/96	8/22/96	8/22/96	8/22/96
Methylcyclohexane	0.81	0.36	0.45	0.38	0.14	0.12
2,2,3-Trimethylpentane	0.37	0.23	0.51	0.13	0.16	0.19
2,3,4-Trimethylpentane	2.15	0.47	0.59	0.34	0.26	0.22
Toluene	10.91	2.84	5.49	3.11	2.51	2.53
2-Methylheptane	0.26	0.21	0.33	0.17	0.04	0.13
3-Methylheptane	0.38	0.08	0.32	0.24	0.06	0.18
1-Octene	0.33	ND	0.15	0.18	0.05	0.07
n-Octane	0.51	0.16	0.25	0.25	0.14	0.16
Ethylbenzene	1.38	0.60	1.17	0.61	0.42	0.48
m-Xylene/p-Xylene	4.57	1.81	3.26	2.02	1.44	1.53
Styrene	1.08	0.32	0.44	1.31	0.22	0.21
o-Xylene	1.75	0.68	1.29	1.17	0.55	0.67
1-Nonene	0.09	0.10	0.04	0.07	0.10	ND
n-Nonane	4.36	6.49	0.27	0.27	0.18	0.16
Isopropylbenzene	0.13	0.10	0.07	ND	0.02	0.02
a-Pinene	5.26	1.34	4.21	0.96	2.48	2.04
n-Propylbenzene	0.32	0.19	0.33	0.15	0.08	0.11
m-Ethyltoluene	1.90	0.78	1.32	0.83	0.69	0.63
p-Ethyltoluene	0.65	0.20	0.43	0.30	0.21	0.20
1,3,5-Trimethylbenzene	0.68	0.34	0.49	0.32	0.19	0.20
o-Ethyltoluene	0.80	0.19	0.66	0.26	0.37	0.29
b-Pinene	4.99	1.82	3.33	1.51	1.09	1.03
1-Decene	ND	ND	ND	0.00	1.00	0.87
1,2,4-Trimethylbenzene	2.27	0.87	1.70	0.87	0.71	0.74
n-Decane	0.42	0.23	0.35	0.21	0.18	0.23
1,2,3-Trimethylbenzene	0.82	0.24	0.29	0.39	0.03	0.12
m-Diethylbenzene	0.72	0.41	0.68	0.48	0.37	0.19
p-Diethylbenzene	2.01	2.21	0.86	0.93	0.37	0.35
1-Undecene	1.59	1.22	1.04	1.48	2.07	2.35
n-Undecane	1.03	1.49	1.67	0.43	0.43	0.77
1-Dodecene	1.12	1.57	1.01	1.49	1.04	1.41
n-Dodecane	2.09	2.70	2.06	0.61	0.39	0.74
1-Tridecene	0.54	0.64	0.27	0.49	0.13	0.07
n-Tridecane	2.66	1.22	0.82	0.50	0.11	0.29
TNMOC (w/ unknowns)	196.80	103.88	133.26	100.79	69.93	62.84
TNMOC (speciated)	129.54	60.03	91.20	53.86	46.58	41.84

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07196	07225	07300	07310		7371D1		7372D2	
Sampling Date:	7/29/96	7/30/96	7/31/96	8/1/96		8/5/96		8/6/96	
Analysis Date:	8/26/96	8/27/96	8/27/96	8/28/96		9/5/96		11/5/96	
Ethylene	8.16	8.66	4.93	3.77		5.57		4.64	
Acetylene/Ethane	4.70	10.19	4.72	4.04		6.83		3.69	
Propylene	2.97	3.37	2.04	1.50		2.21		1.44	
Propane	4.25	5.26	4.13	2.79		3.29		1.55	
Propyne	ND	0.22	ND	ND		ND		ND	
Isobutane	1.39	1.30	1.37	0.92		0.67		0.45	
Isobutene/1-butene	1.30	1.78	1.47	0.86		1.22		1.03	
1,3-Butadiene	0.40	0.49	0.47	0.23		0.26		0.26	
n-butane	4.41	4.21	3.92	2.14		3.52		1.86	
trans-2-Butene	0.25	0.47	ND	0.12		0.11		0.13	
cis-2-butene	0.14	0.25	0.14	0.06		0.14		0.12	
3-Methyl-1-butene	0.15	0.23	0.13	0.03		0.12		ND	a
Isopentane	9.51	12.16	8.43	4.63		ND	a	7.30	
1-Pentene	1.09	0.56	1.25	0.09		0.33		ND	b
2-Methyl-1-butene	0.40	0.83	0.55	0.26		0.45		ND	a
n-Pentane	3.76	4.69	3.40	1.93		3.12		2.63	
Isoprene	6.79	3.98	5.02	3.41		4.36		5.73	
trans-2-Pentene	0.71	1.08	0.51	0.25		0.48		0.41	
cis-2-Pentene	0.39	0.59	0.29	0.24		0.31		0.22	
2-Methyl-2-butene	0.91	1.30	0.69	0.50		0.74		0.61	
2,2-Dimethylbutane	0.47	0.57	0.48	0.25		0.37		0.17	
Cyclopentene	0.18	0.36	0.18	0.07		0.27		0.89	
4-Methyl-1-pentene	0.26	0.11	0.82	0.59		0.10		0.04	
Cyclopentane	0.19	0.36	0.24	0.12		0.22		0.19	
2,3-Dimethylbutane	0.76	0.98	0.68	0.28		0.56		0.51	
2-Methylpentane	2.55	4.00	2.73	1.37		3.97		1.58	
3-Methylpentane	1.74	2.21	2.28	ND	a	1.33		1.20	
1-Hexene	ND	0.29	ND	ND		0.13		0.12	
2-Methyl-1-pentene	0.28	0.18	0.28	0.16		0.25		0.15	
2-Ethyl-1-butene	ND	ND	ND	ND		ND		ND	
n-Hexane	2.03	2.57	1.89	1.15		1.61		1.10	
trans-2-Hexene	0.18	0.29	0.63	0.05		0.18		0.15	
cis-2-Hexene	0.16	0.11	0.07	0.10		0.07		0.08	
Methylcyclopentane	1.01	1.58	0.95	0.62		0.96		0.64	
2,4-Dimethylpentane	0.53	0.75	0.59	0.36		0.40		0.43	
Benzene	4.16	7.52	5.17	2.42		3.95		3.66	
Cyclohexane	0.87	1.27	0.65	0.51		0.14		0.19	
2-Methylhexane	0.97	1.64	0.70	0.57		3.21		1.06	
2,3-Dimethylpentane	0.60	0.84	0.42	0.19		0.55		0.50	
3-Methylhexane	1.22	2.19	0.91	1.61		6.82		1.96	
1-Heptene	0.27	0.45	0.25	0.14		0.17		0.23	
2,2,4-Trimethylpentane	2.45	3.27	2.16	1.20		2.47		2.14	
n-Heptane	0.69	0.91	0.93	0.68		0.84		0.61	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07196	07225	07300	07310	7371D1	7372D2
Sampling Date:	7/29/96	7/30/96	7/31/96	8/1/96	8/5/96	8/5/96
Analysis Date:	8/26/96	8/27/96	8/27/96	8/28/96	9/5/96	11/5/96
Methylcyclohexane	0.40	1.12	0.28	0.20	1.34	0.52
2,2,3-Trimethylpentane	0.45	0.76	0.43	0.17	0.57	0.28
2,3,4-Trimethylpentane	0.37	1.15	0.70	0.49	0.79	0.68
Toluene	7.77	13.31	7.45	4.07	8.44	6.90
2-Methylheptane	0.40	0.66	0.14	0.24	0.62	0.21
3-Methylheptane	0.47	0.70	0.40	0.24	0.28	0.22
1-Octene	0.27	0.41	0.27	0.11	0.17	0.65
n-Octane	0.48	1.04	0.43	0.28	0.36	0.29
Ethylbenzene	1.43	2.47	1.33	0.76	1.92	1.44
m-Xylene/p-Xylene	5.14	8.67	4.62	2.72	4.91	4.67
Styrene	0.72	3.23	0.59	0.45	6.27	2.05
o-Xylene	1.78	3.02	1.70	1.07	2.41	1.70
1-Nonene	0.08	0.23	0.11	0.18	0.40	0.15
n-Nonane	0.37	0.93	0.47	0.21	0.64	0.23
Isopropylbenzene	0.08	0.14	0.07	0.04	0.24	0.07
a-Pinene	4.30	3.58	4.94	3.86	2.12	1.18
n-Propylbenzene	0.42	0.85	0.39	0.23	0.95	0.42
m-Ethyltoluene	2.10	3.28	1.77	1.13	2.25	1.78
p-Ethyltoluene	0.73	1.25	0.54	0.45	0.86	0.75
1,3,5-Trimethylbenzene	0.78	1.35	0.70	0.37	0.82	0.66
o-Ethyltoluene	0.90	1.71	0.86	0.61	3.41	0.66
b-Pinene	2.08	3.75	2.10	1.95	8.36	4.53
1-Decene	0.97	0.42	1.16	1.87	0.17	0.22
1,2,4-Trimethylbenzene	2.38	4.37	2.25	1.31	2.28	2.49
n-Decane	0.40	0.80	1.09	0.86	0.96	0.28
1,2,3-Trimethylbenzene	0.15	1.52	0.56	1.21	1.39	0.80
m-Diethylbenzene	0.46	1.62	0.52	1.06	4.28	0.41
p-Diethylbenzene	0.58	1.94	0.81	0.60	0.95	0.74
1-Undecene	0.84	1.83	1.53	2.29	6.56	3.45
n-Undecane	0.72	3.60	4.41	1.64	1.77	0.63
1-Dodecene	1.38	1.86	1.09	1.29	4.29	1.86
n-Dodecane	0.63	6.11	4.49	1.87	1.75	0.59
1-Tridecene	ND	0.68	ND	0.19	1.88	0.49
n-Tridecane	0.22	3.70	0.98	0.99	1.25	0.83
TNMOC (w/ unknowns)	148.13	243.86	165.05	108.24	256.52	212.02
TNMOC (speciated)	113.47	176.10	115.64	75.19	137.99	92.53

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07407		07407		07571		07589		07663		07662	
Sampling Date:	8/6/96		8/7/96		8/12/96		8/13/96		8/14/96		8/15/96	
Analysis Date:	9/5/96		9/5/96		9/10/96		9/11/96		9/10/96		9/11/96	
Ethylene	1.90		5.78		4.57		3.42		4.97		3.43	
Acetylene/Ethane	6.02		8.15		6.67		4.70		7.06		4.86	
Propylene	1.21		1.66		1.64		1.98		3.80		1.88	
Propane	4.07		4.19		3.66		3.52		5.40		3.41	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	0.52		0.98		1.13		0.66		1.08		0.78	
Isobutene/1-butene	1.24		1.47		1.22		0.96		1.45		1.07	
1,3-Butadiene	0.24		0.48		0.32		0.28		0.44		0.14	
n-butane	1.64		3.65		3.23		1.91		3.52		2.52	
trans-2-Butene	0.23		0.40		0.08		0.10		0.46		ND	
cis-2-butene	0.50		0.14		0.13		0.05		0.29		0.14	
3-Methyl-1-butene	0.16		0.14		0.07		0.16		ND		ND	a
Isopentane	4.30		7.75		6.35		4.11		5.64		ND	a
1-Pentene	0.45		0.78		0.20		0.05		0.34		0.19	
2-Methyl-1-butene	0.14		0.74		0.28		ND		0.43		0.44	
n-Pentane	1.63		3.03		2.39		1.56		3.49		3.80	
Isoprene	5.36		6.62		1.49		1.19		3.08		3.98	
trans-2-Pentene	0.38		0.79		0.37		0.18		0.58		0.63	
cis-2-Pentene	0.22		ND		0.23		0.10		0.24		0.30	
2-Methyl-2-butene	0.47		ND		0.61		0.31		0.86		0.67	
2,2-Dimethylbutane	ND	a	0.48		0.30		0.29		0.47		0.62	
Cyclopentene	0.26		0.27		ND	a	0.04		0.16		0.20	
4-Methyl-1-pentene	ND	a	0.81		0.63		0.25		0.05		0.07	
Cyclopentane	ND	a	0.54		0.23		0.22		0.26		0.24	
2,3-Dimethylbutane	ND	a	0.63		0.59		0.37		0.60		0.60	
2-Methylpentane	1.11		ND		2.07		1.25		2.54		2.29	
3-Methylpentane	0.86		1.29		1.09		0.69		ND	a	1.42	
1-Hexene	ND		0.11		ND		ND		0.16		ND	
2-Methyl-1-pentene	0.36		0.17		0.22		0.85		0.11		0.25	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	0.77		1.57		1.10		0.82		1.66		1.50	
trans-2-Hexene	ND	a	0.17		0.12		0.05		0.16		0.17	
cis-2-Hexene	0.09		0.09		0.09		0.09		0.06		0.04	
Methylcyclopentane	0.43		0.91		0.51		0.52		0.72		0.64	
2,4-Dimethylpentane	0.27		0.50		0.47		0.28		0.44		0.43	
Benzene	2.84		3.58		3.00		2.54		3.36		3.09	
Cyclohexane	ND		0.16		0.15		0.08		0.14		0.16	
2-Methylhexane	0.44		0.70		0.65		0.46		1.00		0.92	
2,3-Dimethylpentane	0.34		0.35		0.38		0.28		0.52		0.43	
3-Methylhexane	1.40		0.79		0.88		0.56		1.29		1.57	
1-Heptene	ND		0.17		0.22		0.15		0.23		0.39	
2,2,4-Trimethylpentane	1.55		1.95		2.61		1.52		2.11		2.08	
n-Heptane	0.69		0.50		0.77		0.52		0.62		0.44	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07407	07407	07571	07589	07663	07662
Sampling Date:	8/6/96	8/7/96	8/12/96	8/13/96	8/14/96	8/15/96
Analysis Date:	9/5/96	9/5/96	9/10/96	9/11/96	9/10/96	9/11/96
Methylcyclohexane	0.19	2.83	0.34	0.20	0.42	0.44
2,2,3-Trimethylpentane	0.26	0.33	0.43	0.26	2.30	0.33
2,3,4-Trimethylpentane	1.07	0.89	0.87	0.50	0.71	0.70
Toluene	4.93	7.07	6.69	4.85	6.69	6.15
2-Methylheptane	0.20	0.38	0.55	0.40	0.31	0.27
3-Methylheptane	0.23	0.16	0.25	0.26	0.32	ND
1-Octene	0.12	0.22	0.24	0.15	0.23	0.30
n-Octane	0.21	1.57	0.36	0.22	0.25	0.22
Ethylbenzene	0.91	1.23	1.41	0.93	1.35	1.30
m-Xylene/p-Xylene	3.13	5.66	4.95	3.32	4.37	3.97
Styrene	0.54	0.53	0.37	0.36	0.95	1.08
o-Xylene	1.22	1.44	1.91	1.29	1.90	1.92
1-Nonene	0.10	0.12	0.08	0.16	0.11	0.15
n-Nonane	0.19	0.33	0.22	0.21	0.15	0.21
Isopropylbenzene	ND	0.95	0.07	0.05	0.04	ND
a-Pinene	1.89	5.88	1.12	2.11	2.50	3.18
n-Propylbenzene	0.31	0.22	0.58	0.21	0.36	0.32
m-Ethyltoluene	1.39	2.13	1.94	1.18	1.75	1.76
p-Ethyltoluene	0.51	1.60	0.87	0.50	0.49	0.51
1,3,5-Trimethylbenzene	0.45	1.00	0.86	0.50	0.68	0.52
o-Ethyltoluene	0.87	1.11	0.84	0.55	0.68	0.71
b-Pinene	1.45	2.67	0.71	0.79	2.22	2.86
1-Decene	2.21	1.39	1.33	1.02	0.20	0.15
1,2,4-Trimethylbenzene	1.56	2.26	2.55	1.58	2.41	1.97
n-Decane	0.31	1.09	0.26	0.62	0.18	0.24
1,2,3-Trimethylbenzene	0.24	2.10	0.42	1.54	0.73	0.54
m-Diethylbenzene	0.41	0.55	0.49	0.23	0.48	0.52
p-Diethylbenzene	0.38	0.55	0.82	0.35	0.56	1.10
1-Undecene	2.59	2.03	1.39	1.55	1.07	0.92
n-Undecane	0.83	2.32	0.66	1.28	1.37	1.31
1-Dodecene	1.65	1.84	1.36	0.90	1.65	0.83
n-Dodecane	0.79	1.03	0.64	3.60	3.80	1.75
1-Tridecene	0.60	0.08	0.45	0.27	0.39	0.31
n-Tridecane	0.56	0.11	1.22	6.23	2.85	1.07
TNMOC (w/ unknowns)	153.88	179.32	133.88	104.11	155.16	133.87
TNMOC (speciated)	74.39	116.17	87.98	75.20	104.06	83.41

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07698	07696		07784	7788D1		7789D2		07900
Sampling Date:	8/16/96	8/19/96		8/20/96	8/21/96		8/21/96		8/22/96
Analysis Date:	9/12/96	9/16/96		9/16/96	9/18/96		9/18/96		9/19/96
Ethylene	4.56	6.04		4.08	4.41		ND	b	6.82
Acetylene/Ethane	5.62	6.50		6.13	4.74		ND	b	7.51
Propylene	2.50	2.95		1.71	2.32		ND	b	3.92
Propane	3.73	2.91		2.12	1.97		ND	b	4.09
Propyne	ND	ND		ND	ND		ND	b	ND
Isobutane	0.85	0.81		0.43	0.65		0.61		1.05
Isobutene/1-butene	1.00	1.72		1.03	1.01		0.41		4.26
1,3-Butadiene	0.39	0.54		0.21	0.29		0.37		0.79
n-butane	3.01	2.73		1.11	1.51		1.80		4.71
trans-2-Butene	0.24	ND		0.05	0.09		ND		0.39
cis-2-butene	0.33	0.14		0.12	0.10		ND		0.22
3-Methyl-1-butene	ND	0.10		0.06	0.18		ND		0.21
Isopentane	7.69	ND	a	5.31	ND	a	5.68		13.53
1-Pentene	0.07	0.24		0.29	0.19		0.13		0.37
2-Methyl-1-butene	0.42	0.45		0.36	0.41		0.26		0.45
n-Pentane	3.60	2.77		1.90	2.12		2.10		9.09
Isoprene	4.10	4.69		3.07	3.31		3.38		5.08
trans-2-Pentene	0.49	0.47		0.35	0.52		0.40		0.89
cis-2-Pentene	0.29	0.23		0.19	0.21		0.15		0.49
2-Methyl-2-butene	0.55	0.76		0.50	0.50		0.65		1.21
2,2-Dimethylbutane	0.50	0.42		0.22	0.26		0.20		0.82
Cyclopentene	0.11	0.10		0.11	0.06		0.15		0.13
4-Methyl-1-pentene	0.12	0.95		0.10	0.08		ND	a	1.04
Cyclopentane	0.27	0.22		0.14	0.17		ND	a	0.62
2,3-Dimethylbutane	0.64	0.70		0.43	0.49		0.51		1.25
2-Methylpentane	2.42	2.15		2.42	2.82		1.78		5.86
3-Methylpentane	1.46	1.43		1.07	1.13		1.15		3.72
1-Hexene	ND	ND		0.14	0.11		0.09		ND
2-Methyl-1-pentene	0.49	0.35		0.12	0.12		0.32		0.61
2-Ethyl-1-butene	ND	ND		ND	ND		ND		ND
n-Hexane	1.43	1.42		1.01	1.04		1.15		4.13
trans-2-Hexene	0.09	0.18		0.11	0.19		0.23		0.27
cis-2-Hexene	0.05	0.13		0.07	0.08		0.14		0.14
Methylcyclopentane	0.66	0.87		0.62	0.59		0.77		1.09
2,4-Dimethylpentane	0.41	0.50		0.27	0.33		0.48		0.64
Benzene	3.26	4.46		2.76	3.13		3.26		6.79
Cyclohexane	0.11	0.14		0.12	0.07		0.17		0.27
2-Methylhexane	0.81	0.91		0.92	0.76		0.88		1.77
2,3-Dimethylpentane	0.49	0.52		0.44	0.42		0.62		0.89
3-Methylhexane	0.83	1.68		1.55	1.15		1.26		2.75
1-Heptene	0.27	0.28		0.16	0.27		0.12		0.51
2,2,4-Trimethylpentane	2.17	2.89		1.63	2.00		2.07		3.18
n-Heptane	0.48	1.00		0.49	0.59		0.47		1.70

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07698	07696	07784	7788D1	7789D2	07900
Sampling Date:	8/16/96	8/19/96	8/20/96	8/21/96	8/21/96	8/22/96
Analysis Date:	9/12/96	9/16/96	9/16/96	9/18/96	9/18/96	9/19/96
Methylcyclohexane	0.29	0.34	0.45	0.47	0.41	0.60
2,2,3-Trimethylpentane	0.32	1.21	0.28	0.27	0.53	0.90
2,3,4-Trimethylpentane	0.70	0.98	0.64	0.73	0.70	1.06
Toluene	6.43	8.71	7.01	6.50	6.40	13.35
2-Methylheptane	0.24	1.28	0.36	0.31	0.31	0.59
3-Methylheptane	0.40	0.33	0.41	0.29	0.33	1.19
1-Octene	0.29	0.33	0.26	0.24	0.23	0.35
n-Octane	0.18	0.31	0.24	0.29	0.33	0.39
Ethylbenzene	1.31	1.75	1.15	1.52	1.24	2.48
m-Xylene/p-Xylene	4.16	5.90	3.48	4.83	4.26	8.28
Styrene	0.60	0.61	1.09	1.00	0.45	0.67
o-Xylene	1.64	2.15	1.28	1.86	1.57	3.04
1-Nonene	0.10	0.16	0.06	0.30	0.07	0.08
n-Nonane	0.49	0.55	0.25	0.23	0.23	0.28
Isopropylbenzene	0.11	0.12	0.10	0.09	0.07	0.10
a-Pinene	3.44	3.73	0.87	1.40	0.92	4.65
n-Propylbenzene	0.32	0.50	0.35	0.41	0.36	0.59
m-Ethyltoluene	1.73	2.20	1.32	1.93	1.80	2.82
p-Ethyltoluene	0.45	0.92	0.56	0.75	0.55	1.16
1,3,5-Trimethylbenzene	0.55	0.96	0.47	0.83	0.75	1.23
o-Ethyltoluene	0.66	0.99	0.50	0.70	0.53	1.26
b-Pinene	2.47	1.14	1.69	0.07	ND	1.76
1-Decene	0.15	1.17	0.25	1.73	1.96	1.31
1,2,4-Trimethylbenzene	1.97	3.02	1.89	2.73	2.42	3.60
n-Decane	0.10	0.94	0.22	1.00	0.38	0.60
1,2,3-Trimethylbenzene	0.63	1.29	0.61	0.76	0.78	1.10
m-Diethylbenzene	0.29	0.47	0.49	0.56	0.45	0.59
p-Diethylbenzene	0.53	0.59	1.09	1.08	1.13	1.02
1-Undecene	0.36	1.41	1.64	1.81	2.21	1.37
n-Undecane	0.40	4.37	1.20	3.85	2.22	2.00
1-Dodecene	0.76	1.22	1.30	0.85	1.20	1.04
n-Dodecane	0.32	5.21	2.95	3.67	2.48	1.71
1-Tridecene	0.14	0.30	0.53	0.32	0.52	0.47
n-Tridecane	4.39	2.70	1.47	2.37	1.46	0.71
TNMOC (w/ unknowns)	129.89	160.65	135.07	146.69	114.75	213.49
TNMOC (speciated)	93.42	113.22	80.44	86.16	71.00	165.59

Footnotes:

a - Compound not analyzed due to FID flame out

b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07854	07906	07904	07974	08067	08063
Sampling Date:	8/23/96	8/26/96	8/27/96	8/28/96	8/30/96	9/3/96
Analysis Date:	9/19/96	9/24/96	9/24/96	9/25/96	9/27/96	10/3/96
Ethylene	4.27	6.85	6.50	5.99	2.97	4.76
Acetylene/Ethane	5.61	8.21	7.08	8.67	6.88	6.45
Propylene	2.66	3.14	3.88	2.15	1.35	2.43
Propane	4.30	7.53	6.12	4.40	4.28	2.45
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.42	1.32	0.91	1.18	1.55	0.66
Isobutene/1-butene	1.43	2.08	1.75	0.98	1.12	1.83
1,3-Butadiene	0.26	0.72	0.59	0.27	ND	0.54
n-butane	9.20	4.68	3.22	2.44	5.76	4.74
trans-2-Butene	0.37	0.13	0.32	0.22	ND	0.27
cis-2-butene	0.22	0.26	0.21	0.09	ND	0.20
3-Methyl-1-butene	0.22	0.21	0.15	0.13	ND	0.14
Isopentane	18.06	11.63	9.96	5.85	ND a	9.28
1-Pentene	0.49	0.64	0.26	ND a	0.20	ND c
2-Methyl-1-butene	0.88	0.66	ND a	0.18	0.29	0.48
n-Pentane	7.93	4.80	4.34	2.47	4.34	3.31
Isoprene	4.99	3.78	2.00	0.91	1.69	1.70
trans-2-Pentene	0.89	0.77	ND a	0.33	0.32	0.73
cis-2-Pentene	0.27	0.40	ND a	0.18	0.18	0.41
2-Methyl-2-butene	0.89	1.07	0.73	0.57	0.35	1.05
2,2-Dimethylbutane	1.23	0.66	0.41	0.37	0.32	0.55
Cyclopentene	0.20	0.29	0.23	0.13	0.10	0.24
4-Methyl-1-pentene	0.28	0.12	0.19	0.31	0.16	ND a
Cyclopentane	0.50	0.34	0.33	0.22	0.20	ND a
2,3-Dimethylbutane	1.10	1.04	0.87	0.51	0.60	0.78
2-Methylpentane	5.15	3.83	3.41	2.13	3.17	2.59
3-Methylpentane	2.82	2.48	2.10	1.31	1.40	1.76
1-Hexene	0.30	0.47	0.25	0.11	0.07	ND
2-Methyl-1-pentene	0.20	0.40	0.16	0.21	0.11	0.46
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.77	2.35	2.26	1.36	1.49	1.60
trans-2-Hexene	0.26	0.27	0.23	0.08	0.11	0.21
cis-2-Hexene	0.07	0.23	0.08	0.11	0.05	0.17
Methylcyclopentane	1.21	1.30	1.11	0.77	0.54	1.08
2,4-Dimethylpentane	0.65	0.64	0.66	0.39	0.26	0.62
Benzene	4.31	5.24	4.95	4.60	3.16	4.20
Cyclohexane	0.24	0.22	0.76	0.23	0.08	0.24
2-Methylhexane	1.53	1.35	1.56	0.70	0.84	0.88
2,3-Dimethylpentane	0.83	0.54	0.75	0.32	0.48	0.41
3-Methylhexane	2.36	1.65	1.74	1.43	1.52	1.70
1-Heptene	0.38	0.42	0.39	0.26	0.22	0.29
2,2,4-Trimethylpentane	2.91	3.35	3.17	1.88	1.56	2.61
n-Heptane	0.90	0.86	0.96	0.56	0.43	0.96

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	07854	07906	07904	07974	08067	08063
Sampling Date:	8/23/96	8/26/96	8/27/96	8/28/96	8/30/96	9/3/96
Analysis Date:	9/19/96	9/24/96	9/24/96	9/25/96	9/27/96	10/3/96
Methylcyclohexane	0.80	0.51	0.71	0.30	0.46	0.37
2,2,3-Trimethylpentane	0.60	0.73	0.64	0.51	0.23	0.44
2,3,4-Trimethylpentane	1.17	1.46	1.16	1.06	0.47	1.08
Toluene	9.82	10.66	11.17	7.56	5.38	8.57
2-Methylheptane	0.51	0.49	0.47	0.25	0.36	0.46
3-Methylheptane	0.42	0.57	0.46	2.04	0.34	0.44
1-Octene	0.32	0.90	0.34	0.44	0.22	0.39
n-Octane	0.36	0.26	0.45	0.53	0.22	0.34
Ethylbenzene	2.00	1.98	2.16	1.26	1.14	1.63
m-Xylene/p-Xylene	6.58	7.05	7.06	4.55	3.25	5.65
Styrene	1.25	0.64	1.17	0.61	1.17	0.72
o-Xylene	2.53	2.72	2.61	1.77	1.26	2.12
1-Nonene	0.55	0.13	0.09	0.25	0.05	0.30
n-Nonane	0.32	0.26	0.29	0.99	0.23	0.34
Isopropylbenzene	0.16	0.14	0.05	0.15	0.07	0.24
a-Pinene	0.93	5.03	3.51	2.38	2.45	4.07
n-Propylbenzene	0.54	0.55	0.53	0.56	0.28	0.52
m-Ethyltoluene	2.75	2.89	2.48	2.02	1.41	2.33
p-Ethyltoluene	0.95	1.00	0.99	0.84	0.38	0.92
1,3,5-Trimethylbenzene	1.03	1.14	1.02	0.87	0.44	0.98
o-Ethyltoluene	1.20	1.20	0.80	0.89	0.02	0.97
b-Pinene	4.68	2.33	2.53	1.11	ND	1.62
1-Decene	0.24	0.82	0.23	0.65	2.43	1.16
1,2,4-Trimethylbenzene	3.68	3.49	3.32	2.31	1.64	3.12
n-Decane	0.41	0.33	0.37	0.50	0.29	0.44
1,2,3-Trimethylbenzene	1.08	1.09	1.06	2.15	1.51	0.96
m-Diethylbenzene	0.48	0.50	0.56	0.53	0.34	0.54
p-Diethylbenzene	0.55	0.68	0.77	0.53	0.43	0.69
1-Undecene	1.19	0.68	0.78	1.17	1.45	1.28
n-Undecane	1.98	1.35	1.10	2.38	1.05	0.81
1-Dodecene	0.99	0.49	0.92	1.31	1.18	1.17
n-Dodecane	1.73	1.06	0.82	3.57	1.46	1.19
1-Tridecene	0.27	0.08	0.15	0.53	0.51	0.12
n-Tridecane	0.97	0.41	0.72	2.75	0.94	1.24
TNMOC (w/ unknowns)	210.21	178.58	160.64	194.91	142.67	170.04
TNMOC (speciated)	148.60	140.55	126.08	104.32	81.20	109.99

Footnotes:
a - Compound not analyzed due to FID flame out
c- Compound not analyzed due to sample (matrix) interference

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	08131		08139D1		08143D2		08189		08188		08215	
Sampling Date:	9/4/96		9/5/96		9/6/96		9/6/96		9/9/96		9/10/96	
Analysis Date:	10/3/96		10/4/96		10/16/96		10/4/96		10/7/96		10/9/96	
Ethylene	5.70		4.90		4.91		7.49		6.35		8.10	
Acetylene/Ethane	8.61		6.17		5.94		7.48		7.73		11.01	
Propylene	1.81		1.73		1.85		2.93		3.33		2.71	
Propane	7.34		3.44		2.15		7.07		5.05		6.80	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	0.90		ND		1.29		1.07		1.26		1.51	
Isobutene/1-butene	1.24		0.85		0.96		1.98		2.27		1.68	
1,3-Butadiene	0.32		0.25		0.27		0.71		0.76		0.42	
n-butane	3.35		2.12		2.20		4.08		6.31		4.49	
trans-2-Butene	0.19		ND		0.24		0.15		0.28		0.17	
cis-2-butene	0.12		0.13		0.12		0.26		0.21		0.17	
3-Methyl-1-butene	0.25		ND		0.22		0.14		0.21		0.13	
Isopentane	7.35		5.08		8.18		10.75		12.93		8.79	
1-Pentene	0.69		0.30		0.25		ND	a	0.36		0.26	
2-Methyl-1-butene	0.48		ND	a	0.30		ND	a	0.58		ND	a
n-Pentane	3.72		ND	a	2.53		4.70		5.17		ND	a
Isoprene	4.22		1.22		1.24		3.67		3.18		ND	a
trans-2-Pentene	0.52		0.47		0.44		0.88		0.87		ND	a
cis-2-Pentene	0.25		0.18		0.19		0.48		0.41		ND	a
2-Methyl-2-butene	0.71		0.45		0.46		1.07		1.20		0.73	
2,2-Dimethylbutane	0.35		0.20		0.52		0.62		0.71		0.53	
Cyclopentene	ND	a	0.13		0.09		0.26		0.23		0.22	
4-Methyl-1-pentene	0.19		0.12		0.13		0.18		0.66		0.17	
Cyclopentane	0.27		0.16		0.21		0.68		ND	a	0.62	
2,3-Dimethylbutane	0.69		0.44		0.51		0.98		3.81		0.85	
2-Methylpentane	2.63		2.06		2.15		4.10		4.02		2.92	
3-Methylpentane	1.71		1.17		1.30		2.27		3.02		1.77	
1-Hexene	ND		0.12		0.12		0.19		ND	a	0.20	
2-Methyl-1-pentene	0.39		0.15		0.16		0.21		ND	a	1.04	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	2.10		1.43		1.27		2.32		2.70		1.89	
trans-2-Hexene	0.28		0.23		0.17		0.28		0.25		0.18	
cis-2-Hexene	0.09		0.06		0.12		0.26		0.10		0.16	
Methylcyclopentane	1.16		0.72		0.73		1.25		1.57		1.09	
2,4-Dimethylpentane	0.59		0.46		0.40		0.61		2.17		0.46	
Benzene	4.31		4.05		3.79		5.50		7.36		6.34	
Cyclohexane	0.17		0.15		0.19		0.25		0.24		0.26	
2-Methylhexane	1.25		0.92		1.46		1.22		1.58		1.06	
2,3-Dimethylpentane	0.61		0.37		0.84		0.73		0.83		0.58	
3-Methylhexane	2.26		1.38		2.78		1.12		2.22		1.24	
1-Heptene	0.31		0.36		0.47		0.37		0.47		0.40	
2,2,4-Trimethylpentane	2.46		2.33		2.32		3.05		3.95		2.85	
n-Heptane	0.63		0.54		1.04		1.12		1.32		0.71	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	08131	08139D1	08143D2	08189	08188	08215
Sampling Date:	9/4/96	9/5/96	9/6/96	9/6/96	9/9/96	9/10/96
Analysis Date:	10/3/96	10/4/96	10/18/96	10/4/96	10/7/96	10/9/96
Methylcyclohexane	0.55	0.52	0.74	0.72	0.51	0.40
2,2,3-Trimethylpentane	0.59	0.39	0.51	0.55	0.86	0.41
2,3,4-Trimethylpentane	0.89	0.75	0.65	1.26	1.37	0.99
Toluene	8.74	7.35	7.32	10.90	13.18	9.64
2-Methylheptane	0.35	0.37	0.26	0.43	0.58	0.41
3-Methylheptane	0.48	0.42	0.33	0.53	0.57	0.50
1-Octene	0.47	0.33	0.23	0.35	0.51	0.31
n-Octane	0.41	0.32	0.23	0.38	0.58	0.60
Ethylbenzene	2.26	1.63	1.38	2.03	2.43	1.64
m-Xylene/p-Xylene	5.93	4.51	4.07	7.04	8.50	5.89
Styrene	1.70	1.07	1.61	0.85	0.76	0.62
o-Xylene	2.24	1.78	1.60	2.72	3.18	2.21
1-Nonene	0.16	0.26	0.11	0.16	0.15	0.27
n-Nonane	0.32	0.25	0.24	0.27	0.39	0.47
Isopropylbenzene	0.14	0.11	0.23	0.10	0.10	0.14
a-Pinene	1.73	2.03	1.13	6.70	6.89	3.76
n-Propylbenzene	0.43	0.40	0.40	0.48	0.65	0.46
m-Ethyltoluene	2.11	1.85	1.21	2.88	3.19	2.21
p-Ethyltoluene	0.62	0.55	0.68	0.95	1.18	0.89
1,3,5-Trimethylbenzene	0.78	0.89	0.48	1.17	1.39	1.03
o-Ethyltoluene	0.70	0.65	0.55	1.17	1.46	1.02
b-Pinene	4.99	2.45	2.49	2.79	2.91	1.58
1-Decene	0.17	0.18	0.11	1.12	1.32	1.11
1,2,4-Trimethylbenzene	2.53	2.45	2.12	3.71	4.51	2.94
n-Decane	0.40	1.22	0.30	0.39	3.04	0.45
1,2,3-Trimethylbenzene	0.97	0.89	0.79	1.16	1.46	0.78
m-Diethylbenzene	0.59	0.45	0.42	0.53	0.57	0.42
p-Diethylbenzene	1.46	1.22	1.13	0.65	0.91	0.51
1-Undecene	3.26	2.53	1.97	1.07	0.96	0.95
n-Undecane	1.43	4.20	0.97	1.19	11.02	1.03
1-Dodecene	1.06	2.49	1.24	0.69	0.45	1.25
n-Dodecane	1.68	2.06	2.02	0.96	6.39	1.39
1-Tridecene	0.34	0.39	0.48	0.09	0.11	0.23
n-Tridecane	1.46	0.75	1.19	0.37	2.42	1.74
TNMOC (w/ unknowns)	198.04	152.31	164.22	177.05	235.99	173.33
TNMOC (speciated)	122.16	92.54	93.74	138.81	180.17	120.75

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	08226		08235	08297	08307		08308		08331	
Sampling Date:	9/11/96		9/12/96	9/13/96	9/16/96		9/17/96		9/18/96	
Analysis Date:	11/11/96		10/10/96	10/10/96	10/14/96		10/14/96		10/17/96	
Ethylene	8.62		7.41	4.88	1.34		4.65		4.86	
Acetylene/Ethane	9.45		8.90	6.26	2.27		6.20		6.68	
Propylene	4.78		3.46	2.26	0.41		2.37		2.66	
Propane	7.27		8.74	4.95	1.15		3.36		5.13	
Propyne	ND		ND	ND	ND		ND		ND	
Isobutane	1.24		1.67	1.04	0.38		1.35		1.13	
Isobutene/1-butene	2.14		2.08	1.14	ND		0.97		1.26	
1,3-Butadiene	0.70		0.56	0.28	ND		0.20		0.41	
n-butane	4.87		4.82	3.16	ND		3.10		3.35	
trans-2-Butene	0.42		0.18	0.19	ND		0.24		0.20	
cis-2-butene	0.22		0.28	0.19	ND		0.10		0.13	
3-Methyl-1-butene	ND	a	0.17	0.21	ND		0.08		0.07	
Isopentane	11.38		11.19	4.91	3.15		6.51		6.94	
1-Pentene	0.40		0.35	0.26	ND	a	0.25		0.31	
2-Methyl-1-butene	0.67		0.58	0.47	ND	a	ND	a	0.32	
n-Pentane	4.93		5.18	2.72	1.20		ND	a	2.89	
Isoprene	2.93		2.48	1.78	0.40		ND	a	ND	a
trans-2-Pentene	0.80		0.79	0.59	0.33		0.46		ND	a
cis-2-Pentene	0.42		0.47	0.26	0.16		0.24		0.26	
2-Methyl-2-butene	1.17		1.33	0.53	0.28		0.50		0.82	
2,2-Dimethylbutane	0.66		1.01	0.56	0.10		0.35		0.54	
Cyclopentene	0.23		0.13	0.24	0.03		0.31		0.21	
4-Methyl-1-pentene	0.09		0.15	0.14	0.18		0.08		0.11	
Cyclopentane	0.34		0.39	0.25	0.12		0.25		ND	a
2,3-Dimethylbutane	0.87		1.03	0.55	0.34		0.54		ND	a
2-Methylpentane	3.33		3.80	2.17	1.11		2.41		ND	a
3-Methylpentane	2.39		2.63	1.29	0.89		1.42		2.05	
1-Hexene	0.22		0.28	0.11	0.07		0.14		ND	
2-Methyl-1-pentene	0.24		0.16	0.12	0.08		0.17		0.85	
2-Ethyl-1-butene	ND		ND	ND	ND		ND		ND	
n-Hexane	2.82		2.93	1.42	0.56		1.65		ND	a
trans-2-Hexene	0.25		0.34	0.24	0.04		0.14		ND	a
cis-2-Hexene	0.09		0.26	0.05	0.05		0.05		0.08	
Methylcyclopentane	1.36		1.39	0.74	0.25		0.75		0.98	
2,4-Dimethylpentane	0.62		0.71	0.41	0.19		0.43		0.57	
Benzene	5.85		5.71	3.92	1.38		3.67		3.90	
Cyclohexane	0.15		0.24	0.29	0.10		0.71		0.19	
2-Methylhexane	1.51		1.37	0.88	0.30		0.96		0.89	
2,3-Dimethylpentane	0.72		0.72	0.50	0.16		0.49		0.48	
3-Methylhexane	3.15		1.63	0.94	0.47		1.36		0.99	
1-Heptene	0.27		0.41	0.28	0.12		0.27		0.28	
2,2,4-Trimethylpentane	3.33		3.34	2.20	1.03		1.98		2.47	
n-Heptane	0.81		0.74	0.87	0.30		0.57		0.68	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	08226	08235	08297	08307	08308	08331
Sampling Date:	9/11/96	9/12/96	9/13/96	9/16/96	9/17/96	9/18/96
Analysis Date:	11/11/96	10/10/96	10/10/96	10/14/96	10/14/96	10/17/96
Methylcyclohexane	0.59	0.47	0.42	0.06	0.48	0.39
2,2,3-Trimethylpentane	0.57	0.55	0.33	0.14	0.32	0.30
2,3,4-Trimethylpentane	1.15	1.16	1.39	0.24	0.66	0.85
Toluene	10.77	11.56	6.39	2.29	5.98	7.13
2-Methylheptane	0.44	0.44	0.38	0.21	0.35	0.29
3-Methylheptane	0.42	0.44	0.36	1.55	0.34	0.41
1-Octene	0.36	0.34	0.25	0.11	0.24	0.29
n-Octane	0.47	0.34	0.27	0.12	0.26	0.29
Ethylbenzene	2.22	2.12	1.34	0.37	1.15	1.31
m-Xylene/p-Xylene	6.80	7.41	4.50	1.31	3.56	4.56
Styrene	2.76	0.82	0.75	0.12	0.61	0.53
o-Xylene	2.76	2.84	1.73	0.57	1.32	1.71
1-Nonene	0.21	0.14	0.13	0.14	0.05	0.28
n-Nonane	0.24	0.29	0.18	0.23	0.14	0.21
Isopropylbenzene	0.10	0.11	0.14	0.02	0.03	0.06
a-Pinene	0.80	6.22	2.22	1.21	0.09	1.85
n-Propylbenzene	0.53	0.51	0.38	0.13	0.29	0.46
m-Ethyltoluene	2.47	2.97	1.76	0.50	3.57	1.81
p-Ethyltoluene	0.95	0.97	0.66	0.13	1.57	0.55
1,3,5-Trimethylbenzene	0.95	1.18	0.70	0.16	0.63	0.65
o-Ethyltoluene	0.93	1.19	0.76	0.25	0.55	ND c
b-Pinene	3.98	2.50	1.57	0.52	2.58	0.72
1-Decene	0.29	1.17	0.22	0.73	0.13	1.39
1,2,4-Trimethylbenzene	3.36	4.09	2.55	0.74	1.83	2.39
n-Decane	0.19	0.41	0.32	2.64	0.21	1.16
1,2,3-Trimethylbenzene	0.70	1.32	0.75	0.29	0.67	0.55
m-Diethylbenzene	0.56	0.53	0.48	0.10	0.47	0.48
p-Diethylbenzene	0.95	0.71	0.84	0.27	0.59	0.58
1-Undecene	0.24	0.95	0.78	1.43	0.41	2.44
n-Undecane	2.10	1.06	0.87	16.41	1.73	5.52
1-Dodecene	1.77	0.58	0.92	1.00	0.37	2.52
n-Dodecane	0.40	1.35	1.12	16.59	2.88	5.42
1-Tridecene	0.05	0.23	0.26	0.51	0.07	0.26
n-Tridecane	0.79	1.91	0.79	4.45	1.05	1.50
TNMOC (w/ unknowns)	197.04	192.74	130.74	105.14	123.47	155.97
TNMOC (speciated)	143.57	148.86	90.74	74.47	84.63	101.56

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	08394		08397		08425D1		08426D2		08409		08429	
Sampling Date:	9/19/96		9/20/96		9/23/96		9/23/96		9/24/96		9/25/96	
Analysis Date:	10/17/96		10/17/96		10/18/96		10/18/96		10/18/96		10/21/96	
Ethylene	6.04		7.28		6.97		6.87		7.93		10.84	
Acetylene/Ethane	6.49		8.05		7.63		8.11		7.90		13.15	
Propylene	3.17		2.90		3.63		4.14		6.16		4.41	
Propane	3.08		5.83		10.08		9.84		8.26		9.81	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	0.88		3.65		1.68		1.66		1.67		1.59	
Isobutene/1-butene	1.70		1.90		2.29		2.68		2.63		2.13	
1,3-Butadiene	0.36		ND		0.72		0.74		ND		0.60	
n-butane	3.39		11.97		5.39		5.50		7.14		7.33	
trans-2-Butene	0.22		0.37		0.23		0.47		0.65		0.70	
cis-2-butene	0.08		0.17		0.27		0.25		0.31		0.36	
3-Methyl-1-butene	ND		0.18		0.15		0.20		0.17		ND	a
Isopentane	7.88		12.43		10.50		10.50		13.86		11.75	
1-Pentene	0.28		0.39		ND	a	ND	a	0.70		1.23	
2-Methyl-1-butene	0.51		0.60		ND	a	0.59		ND	a	0.92	
n-Pentane	3.09		6.33		5.12		5.08		ND	a	6.56	
Isoprene	0.84		1.36		1.17		1.63		ND	a	2.70	
trans-2-Pentene	0.60		0.66		0.76		0.80		ND	a	1.12	
cis-2-Pentene	0.32		0.32		0.43		0.40		0.54		0.56	
2-Methyl-2-butene	0.79		0.83		1.19		1.19		1.33		ND	a
2,2-Dimethylbutane	ND	a	0.57		0.69		0.72		1.14		0.98	
Cyclopentene	0.17		0.17		0.16		0.23		0.23		0.26	
4-Methyl-1-pentene	0.07		0.17		0.23		0.40		0.18		0.16	
Cyclopentane	0.26		ND	a	0.43		0.38		0.49		0.44	
2,3-Dimethylbutane	0.58		ND	a	0.96		1.09		1.13		1.09	
2-Methylpentane	2.47		3.76		3.57		3.51		5.24		4.65	
3-Methylpentane	1.61		2.58		2.58		2.39		2.82		2.83	
1-Hexene	0.08		0.22		0.30		ND		0.29		0.30	
2-Methyl-1-pentene	0.36		0.27		0.28		0.73		0.28		0.26	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	1.60		2.38		2.33		2.34		2.94		3.03	
trans-2-Hexene	0.30		0.21		0.20		0.17		0.37		0.32	
cis-2-Hexene	0.16		0.08		0.23		0.13		0.13		0.13	
Methylcyclopentane	0.90		1.11		1.28		1.29		1.51		1.42	
2,4-Dimethylpentane	0.38		0.52		0.66		0.67		0.80		0.70	
Benzene	4.73		6.19		5.54		5.95		6.66		7.39	
Cyclohexane	0.16		0.17		0.21		0.24		0.26		0.27	
2-Methylhexane	1.15		1.48		1.47		1.46		1.80		1.62	
2,3-Dimethylpentane	0.61		0.70		0.60		0.58		0.89		0.91	
3-Methylhexane	1.50		1.77		1.19		1.80		1.97		2.03	
1-Heptene	0.45		0.38		0.40		0.44		0.50		0.51	
2,2,4-Trimethylpentane	2.95		3.41		3.49		3.76		4.07		4.06	
n-Heptane	0.79		0.97		0.87		1.10		1.20		1.10	

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	08394	08397	08425D1	08426D2	08409	08429
Sampling Date:	9/19/96	9/20/96	9/23/96	9/23/96	9/24/96	9/25/96
Analysis Date:	10/17/96	10/17/96	10/18/96	10/18/96	10/18/96	10/21/96
Methylcyclohexane	0.57	0.60	0.43	0.44	0.73	0.75
2,2,3-Trimethylpentane	0.51	0.66	0.67	0.60	0.80	0.68
2,3,4-Trimethylpentane	0.90	1.24	1.49	1.24	1.48	1.48
Toluene	7.90	19.60	10.97	11.55	12.83	14.99
2-Methylheptane	0.34	0.43	0.53	0.50	0.60	0.62
3-Methylheptane	0.43	0.46	0.49	0.56	0.51	0.67
1-Octene	0.32	0.40	0.39	0.45	0.45	0.44
n-Octane	0.38	0.60	0.35	0.39	0.52	0.45
Ethylbenzene	1.63	2.44	2.10	2.15	2.56	2.55
m-Xylene/p-Xylene	5.22	7.24	7.59	7.65	8.18	8.11
Styrene	0.96	1.41	0.74	1.03	1.42	1.41
o-Xylene	2.00	2.72	2.80	2.84	3.19	3.06
1-Nonene	0.11	0.13	0.18	0.28	0.12	0.10
n-Nonane	0.29	0.62	0.41	0.53	0.31	0.31
Isopropylbenzene	0.09	0.12	0.09	0.12	0.15	0.14
a-Pinene	0.73	1.55	3.73	3.69	1.58	1.45
n-Propylbenzene	0.42	0.72	0.51	0.52	0.63	0.59
m-Ethyltoluene	2.05	2.67	2.69	2.81	3.31	3.22
p-Ethyltoluene	0.78	1.20	1.07	1.14	1.09	0.89
1,3,5-Trimethylbenzene	0.93	1.75	1.33	1.39	1.46	1.24
o-Ethyltoluene	0.65	1.33	1.46	1.39	0.99	1.55
b-Pinene	1.74	2.49	1.49	1.46	3.45	4.02
1-Decene	0.34	0.48	1.07	0.98	0.26	0.42
1,2,4-Trimethylbenzene	2.92	4.05	4.06	4.07	4.36	4.32
n-Decane	0.42	0.90	0.92	1.24	0.78	0.50
1,2,3-Trimethylbenzene	0.93	1.11	1.11	2.54	0.75	1.32
m-Diethylbenzene	1.45	0.57	0.56	0.59	0.65	0.67
p-Diethylbenzene	0.78	1.52	0.80	0.77	1.81	0.87
1-Undecene	1.25	2.54	0.68	0.49	2.02	1.00
n-Undecane	1.26	1.07	0.83	2.32	14.83	1.85
1-Dodecene	1.83	2.17	0.73	0.90	3.80	1.18
n-Dodecane	2.61	1.04	0.57	2.05	30.30	3.41
1-Tridecene	0.53	0.45	0.31	0.12	0.91	0.48
n-Tridecane	1.65	0.91	0.44	0.68	6.98	1.85
TNMOC (w/ unknowns)	174.10	218.63	188.52	208.11	271.53	226.22
TNMOC (speciated)	105.93	159.53	139.48	149.51	207.92	176.79

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	08495		08493		08518
Sampling Date:	9/26/96		9/27/96		9/30/96
Analysis Date:	10/25/96		10/25/96		10/26/96
Ethylene	0.55		2.35		1.78
Acetylene/Ethane	1.12		4.85		3.40
Propylene	2.49		0.70		0.56
Propane	6.26		1.08		3.49
Propyne	ND		ND		ND
Isobutane	1.49		ND		0.78
Isobutene/1-butene	1.78		ND		0.69
1,3-Butadiene	0.48		ND		ND
n-butane	6.06		2.99		3.13
trans-2-Butene	0.26		0.13		0.02
cis-2-butene	0.23		0.05		0.06
3-Methyl-1-butene	0.18		0.11		0.05
Isopentane	ND	a	5.34		3.66
1-Pentene	0.15		0.16		0.88
2-Methyl-1-butene	0.51		0.30		ND
n-Pentane	4.40		1.75		1.26
Isoprene	1.23		0.41		0.27
trans-2-Pentene	0.74		0.37		0.04
cis-2-Pentene	0.34		0.20		0.04
2-Methyl-2-butene	1.00		0.51		0.19
2,2-Dimethylbutane	0.59		0.17		0.30
Cyclopentene	0.17		0.09		0.44
4-Methyl-1-pentene	0.43		0.13		ND
Cyclopentane	0.31		0.14		0.14
2,3-Dimethylbutane	0.89		0.41		0.26
2-Methylpentane	2.95		1.90		0.83
3-Methylpentane	2.21		0.91		0.92
1-Hexene	0.17		0.10		ND
2-Methyl-1-pentene	0.16		0.08		0.09
2-Ethyl-1-butene	ND		ND		ND
n-Hexane	2.06		0.83		0.64
trans-2-Hexene	0.28		0.18		0.02
cis-2-Hexene	0.19		0.04		0.06
Methylcyclopentane	1.07		0.44		0.29
2,4-Dimethylpentane	0.66		0.35		0.30
Benzene	4.96		2.29		2.36
Cyclohexane	0.33		0.12		0.22
2-Methylhexane	1.09		0.70		0.32
2,3-Dimethylpentane	0.83		0.57		0.23
3-Methylhexane	1.80		1.28		0.40
1-Heptene	0.37		0.21		0.12
2,2,4-Trimethylpentane	3.04		1.74		1.08
n-Heptane	0.77		ND	a	0.40

SNMOC REPORT
SITE CODE: B2AL
All concentrations reported in ppbC

Sample No.:	**08495**	**08493**	**08518**
Sampling Date:	**9/26/96**	**9/27/96**	**9/30/96**
Analysis Date:	**10/25/96**	**10/25/96**	**10/28/96**
Methylcyclohexane	0.36	0.28	1.86
2,2,3-Trimethylpentane	0.59	0.25	0.15
2,3,4-Trimethylpentane	0.73	0.60	0.32
Toluene	8.76	5.43	3.13
2-Methylheptane	0.37	0.23	0.17
3-Methylheptane	0.37	0.21	0.15
1-Octene	0.25	0.37	0.07
n-Octane	0.32	0.16	0.15
Ethylbenzene	1.59	0.92	0.44
m-Xylene/p-Xylene	5.74	2.77	1.36
Styrene	0.58	0.98	0.21
o-Xylene	2.14	1.07	0.10
1-Nonene	0.13	0.15	ND
n-Nonane	0.36	0.12	0.27
Isopropylbenzene	0.08	0.06	0.15
a-Pinene	3.04	1.46	1.17
n-Propylbenzene	0.47	0.29	0.18
m-Ethyltoluene	2.05	1.44	0.63
p-Ethyltoluene	0.87	0.48	0.28
1,3,5-Trimethylbenzene	0.91	0.59	0.40
o-Ethyltoluene	0.91	0.51	0.27
b-Pinene	1.25	1.85	1.63
1-Decene	1.06	0.08	0.75
1,2,4-Trimethylbenzene	2.89	1.45	1.65
n-Decane	0.32	0.15	0.34
1,2,3-Trimethylbenzene	0.84	0.69	4.29
m-Diethylbenzene	0.46	0.39	0.11
p-Diethylbenzene	0.63	0.45	0.33
1-Undecene	1.52	1.60	2.64
n-Undecane	0.77	0.89	0.49
1-Dodecene	0.92	1.77	2.48
n-Dodecane	0.91	1.13	1.02
1-Tridecene	0.11	0.37	0.20
n-Tridecane	0.59	0.82	0.69
TNMOC (w/ unknowns)	143.72	130.52	120.27
TNMOC (speciated)	97.49	64.01	57.75

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06170	06190	06216	06219	06290	06291
Sampling Date:	6/4/96	6/6/96	6/7/96	6/10/96	6/11/96	6/12/96
Analysis Date:	6/28/96	7/3/96	7/11/96	7/10/96	7/10/96	7/11/96
Ethylene	4.73	6.30	2.40	2.61	3.63	4.29
Acetylene/Ethane	9.63	12.13	8.07	7.42	10.43	12.39
Propylene	6.77	5.84	4.45	4.21	4.37	3.92
Propane	5.98	8.92	5.59	5.17	7.95	8.91
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	5.85	4.05	4.56	4.80	3.39	5.00
Isobutene/1-butene	2.74	2.73	2.32	ND	2.68	2.21
1,3-Butadiene	ND	0.30	ND	ND	0.09	ND
n-butane	22.58	10.94	30.60	15.17	1.07	17.15
trans-2-Butene	1.01	0.27	0.88	0.29	0.30	0.56
cis-2-butene	1.01	0.35	0.40	0.28	0.22	0.57
3-Methyl-1-butene	1.27	0.46	0.55	0.44	0.41	0.27
Isopentane	49.44	21.80	34.56	25.83	16.74	26.67
1-Pentene	2.39	0.92	1.19	0.86	0.63	0.73
2-Methyl-1-butene	2.97	1.54	1.61	1.40	1.02	1.28
n-Pentane	17.72	8.01	7.73	8.08	5.92	7.45
Isoprene	8.46	14.65	5.13	3.36	5.76	5.83
trans-2-Pentene	3.56	1.52	1.87	1.42	1.20	1.36
cis-2-Pentene	1.74	0.89	0.96	0.86	0.68	0.87
2-Methyl-2-butene	3.50	1.59	1.74	1.04	1.12	1.32
2,2-Dimethylbutane	2.65	0.96	0.84	1.47	0.96	2.12
Cyclopentene	0.42	0.30	0.27	0.33	0.29	0.51
4-Methyl-1-pentene	ND	0.45	0.61	0.86	ND	1.18
Cyclopentane	1.54	0.80	1.13	1.09	ND	0.88
2,3-Dimethylbutane	4.71	2.07	3.07	2.38	0.49	2.53
2-Methylpentane	16.29	6.76	7.34	8.78	4.36	7.38
3-Methylpentane	6.23	3.26	3.79	3.34	ND	3.39
1-Hexene	ND	ND	ND	0.09	2.56	ND
2-Methyl-1-pentene	5.92	0.87	0.88	0.79	0.62	0.68
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	5.83	3.22	2.69	3.22	2.46	3.12
trans-2-Hexene	0.82	0.35	0.18	0.28	0.26	0.12
cis-2-Hexene	0.66	0.20	0.18	0.26	0.27	0.35
Methylcyclopentane	2.98	1.84	1.76	1.79	1.47	1.75
2,4-Dimethylpentane	1.72	0.98	1.78	0.74	0.66	1.27
Benzene	7.62	5.84	3.00	3.56	3.93	5.32
Cyclohexane	1.62	0.48	0.53	0.53	0.54	0.33
2-Methylhexane	3.58	1.72	1.73	1.46	1.26	1.52
2,3-Dimethylpentane	2.59	1.24	4.93	1.04	1.01	1.68
3-Methylhexane	4.18	2.54	3.57	2.09	2.39	2.39
1-Heptene	1.15	0.85	0.97	0.75	0.58	ND
2,2,4-Trimethylpentane	6.77	4.27	5.82	3.07	2.57	3.48
n-Heptane	6.09	1.43	1.43	0.91	0.98	1.07
Methylcyclohexane	2.30	1.61	2.57	1.63	0.74	0.53

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06170	06190	06216	06219	06290	06291
Sampling Date:	6/4/96	6/6/96	6/7/96	6/10/96	6/11/96	6/12/96
Analysis Date:	6/28/96	7/3/96	7/11/96	7/10/96	7/10/96	7/11/96
2,2,3-Trimethylpentane	1.33	0.95	0.72	0.63	0.60	1.86
2,3,4-Trimethylpentane	2.15	1.54	1.52	0.97	0.86	1.46
Toluene	18.94	17.23	8.50	9.58	9.56	12.18
2-Methylheptane	0.63	0.41	0.32	0.19	0.30	0.55
1-Octene	ND	0.41	0.61	0.30	0.39	0.09
3-Methylheptane	0.66	0.54	0.42	0.41	0.38	0.55
n-Octane	1.37	0.78	0.68	3.70	0.77	0.60
Ethylbenzene	3.16	3.02	1.51	1.61	1.76	2.46
m-Xylene/p-Xylene	9.50	10.36	10.82	7.04	5.68	9.05
Styrene	1.22	2.01	0.85	0.93	0.93	1.95
o-Xylene	3.36	3.67	1.78	1.89	1.80	2.81
1-Nonene	ND	ND	ND	0.17	0.31	ND
n-Nonane	3.11	0.78	0.88	0.30	1.72	0.97
Isopropylbenzene	0.67	0.44	0.20	0.41	0.58	0.27
a-Pinene	8.93	17.64	3.00	2.34	4.33	7.26
n-Propylbenzene	0.58	2.33	0.60	0.30	ND	0.54
m-Ethyltoluene	2.99	6.84	1.63	1.57	1.74	1.92
p-Ethyltoluene	2.07	3.52	1.01	0.84	1.60	1.35
1,3,5-Trimethylbenzene	3.79	2.84	0.78	0.60	1.01	0.78
o-Ethyltoluene	1.05	2.36	0.49	0.39	0.56	0.77
b-Pinene	1.90	7.11	0.78	0.79	1.32	1.52
1-Decene	39.96	6.74	7.09	13.19	8.66	8.50
1,2,4-Trimethylbenzene	4.30	5.91	2.45	2.43	2.99	2.76
n-Decane	3.87	0.33	1.15	0.41	2.71	1.46
1,2,3-Trimethylbenzene	1.52	2.07	1.62	1.08	1.39	1.57
m-Diethylbenzene	0.40	1.21	0.47	0.13	0.43	0.29
p-Diethylbenzene	0.53	1.40	0.76	0.48	0.65	0.71
1-Undecene	2.96	2.68	1.83	1.47	2.65	1.91
n-Undecane	12.55	1.65	1.78	0.78	2.54	1.25
1-Dodecene	3.08	1.39	0.91	0.44	0.94	1.41
n-Dodecane	15.20	6.59	2.72	2.02	3.31	2.07
1-Tridecene	0.21	0.10	ND	0.12	0.38	ND
n-Tridecane	2.90	2.51	ND	0.28	ND	1.00
TNMOC (w/ unknowns)	505.19	330.46	414.92	254.01	212.47	272.75
TNMOC (speciated)	391.93	262.61	221.58	181.53	158.86	214.26

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06298	06312	06324	06390		06388		06446D1	
Sampling Date:	6/13/96	6/14/96	6/17/96	6/18/96		6/19/96		6/20/96	
Analysis Date:	7/12/96	7/13/96	7/16/96	7/16/96		7/17/96		7/18/96	
Ethylene	5.34	1.10	1.81	2.78		0.99		1.32	
Acetylene/Ethane	14.03	3.70	4.88	5.33		2.89		4.91	
Propylene	4.61	2.20	1.62	1.09		0.45		0.57	
Propane	17.64	3.63	2.73	3.33		2.04		3.88	
Propyne	ND	ND	ND	ND		ND		ND	
Isobutane	13.00	1.46	0.88	1.87		1.38		1.33	
Isobutene/1-butene	3.57	1.78	1.74	1.80		0.99		1.05	
1,3-Butadiene	1.21	ND	ND	0.12		ND		ND	
n-butane	57.18	12.11	2.01	6.48		5.91		4.07	
trans-2-Butene	1.83	ND	ND	1.03		ND		ND	
cis-2-butene	3.79	ND	ND	0.74		0.20		ND	
3-Methyl-1-butene	1.91	0.17	0.32	0.38		0.20		ND	
Isopentane	124.94	5.71	4.62	19.85		13.99		11.33	
1-Pentene	0.43	0.11	ND	0.85		0.39		ND	
2-Methyl-1-butene	6.06	0.23	2.33	1.32		0.67		0.48	
n-Pentane	27.70	2.65	5.32	7.25		4.46		2.94	
Isoprene	12.09	2.56	0.38	8.65		2.89		2.76	
trans-2-Pentene	7.16	0.20	0.62	1.66		1.01		0.46	
cis-2-Pentene	3.99	0.40	0.13	0.69		0.61		0.19	
2-Methyl-2-butene	8.83	0.52	0.32	1.26		1.23		0.29	
2,2-Dimethylbutane	3.74	2.86	0.50	1.14		0.66		0.76	
Cyclopentene	1.08	2.06	0.29	0.21		0.27		ND	
4-Methyl-1-pentene	0.54	1.80	1.45	2.38		0.28		ND	
Cyclopentane	2.32	0.98	0.46	ND	a	0.88		0.32	
2,3-Dimethylbutane	6.97	2.62	1.35	ND	a	2.25		0.96	
2-Methylpentane	23.25	1.49	4.51	ND	a	ND	a	2.01	
3-Methylpentane	9.29	1.42	3.24	2.90		1.31		ND	a
1-Hexene	ND	ND	1.01	ND		ND		ND	a
2-Methyl-1-pentene	2.16	0.56	0.63	0.55		ND		ND	a
2-Ethyl-1-butene	ND	0.46	ND	0.12		ND		ND	a
n-Hexane	9.24	1.39	1.37	2.50		16.38		2.19	
trans-2-Hexene	1.22	0.39	0.87	ND		0.30		ND	
cis-2-Hexene	0.99	0.37	0.42	0.23		0.24		0.37	
Methylcyclopentane	5.89	0.60	0.74	1.38		0.50		0.73	
2,4-Dimethylpentane	4.10	0.45	0.26	0.84		0.36		0.36	
Benzene	9.36	2.02	2.07	3.09		1.35		2.03	
Cyclohexane	3.08	0.27	0.29	0.26		0.21		ND	
2-Methylhexane	5.16	0.56	0.65	0.98		0.47		0.42	
2,3-Dimethylpentane	5.19	0.78	0.52	0.74		0.39		0.46	
3-Methylhexane	7.78	2.23	2.92	2.13		0.58		0.43	
1-Heptene	1.73	0.26	0.83	0.40		ND		ND	
2,2,4-Trimethylpentane	10.71	0.67	0.93	2.61		1.13		1.12	
n-Heptane	4.31	0.38	0.56	0.94		0.31		0.35	
Methylcyclohexane	3.72	0.67	0.36	1.16		0.28		0.35	

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06298	06312	06324	06390	06388	06448D1
Sampling Date:	6/13/96	6/14/96	6/17/96	6/18/96	6/19/96	6/20/96
Analysis Date:	7/12/96	7/13/96	7/16/96	7/16/96	7/17/96	7/18/96
2,2,3-Trimethylpentane	1.96	0.17	0.27	0.51	0.20	ND
2,3,4-Trimethylpentane	4.67	0.25	0.74	0.85	0.44	0.38
Toluene	59.52	2.87	5.08	7.18	2.81	3.36
2-Methylheptane	0.66	0.16	0.14	0.26	0.19	0.17
1-Octene	ND	0.21	ND	ND	0.16	ND
3-Methylheptane	1.01	0.35	ND	0.35	0.17	ND
n-Octane	1.30	0.35	0.42	0.62	0.36	0.21
Ethylbenzene	4.16	0.50	0.91	0.98	0.41	0.67
m-Xylene/p-Xylene	14.94	1.28	2.54	3.45	1.32	1.49
Styrene	2.80	1.92	1.19	4.82	ND	0.20
o-Xylene	5.46	0.60	1.22	2.60	0.69	0.67
1-Nonene	ND	ND	ND	0.39	ND	ND
n-Nonane	1.95	0.46	0.34	0.95	ND	0.35
Isopropylbenzene	0.66	0.21	0.05	0.21	0.26	0.66
a-Pinene	12.35	5.34	2.93	3.29	1.46	2.51
n-Propylbenzene	2.69	ND	ND	ND	ND	ND
m-Ethyltoluene	4.46	0.58	0.90	1.13	0.58	0.76
p-Ethyltoluene	2.64	0.82	0.69	1.25	0.22	0.28
1,3,5-Trimethylbenzene	1.15	0.23	0.38	0.57	0.17	ND
o-Ethyltoluene	1.77	ND	0.31	0.62	0.31	0.44
b-Pinene	1.59	2.19	ND	ND	1.09	1.33
1-Decene	9.99	8.56	11.33	9.72	0.32	ND
1,2,4-Trimethylbenzene	5.16	0.70	1.43	1.87	0.79	0.97
n-Decane	2.15	0.42	0.32	1.19	0.45	ND
1,2,3-Trimethylbenzene	1.70	0.74	0.82	2.15	1.10	1.41
m-Diethylbenzene	1.32	0.16	0.17	0.16	ND	ND
p-Diethylbenzene	2.08	0.28	0.35	0.51	0.15	ND
1-Undecene	2.95	3.19	1.46	1.73	0.66	1.26
n-Undecane	3.16	1.05	2.04	1.38	0.94	0.66
1-Dodecene	1.44	1.46	0.75	1.21	1.05	2.22
n-Dodecane	4.03	3.28	4.28	2.40	1.20	1.02
1-Tridecene	0.53	0.12	ND	ND	0.32	0.56
n-Tridecane	5.98	0.85	0.33	1.35	1.30	1.91
TNMOC (w/ unknowns)	682.91	157.69	189.17	210.65	130.37	126.51
TNMOC (speciated)	603.41	103.11	97.30	144.71	88.28	71.93

Footnotes:

a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06450D2		06451	06495	06535D1		06536D2		06544	
Sampling Date:	6/20/96		6/21/96	6/24/96	6/25/96		6/25/96		6/26/96	
Analysis Date:	7/18/96		7/18/96	7/19/96	7/24/96		7/29/96		7/25/96	
Ethylene	1.46		4.44	3.50	1.56		1.42		3.84	
Acetylene/Ethane	5.57		14.99	11.08	3.59		2.40		4.93	
Propylene	0.72		5.64	2.74	0.85		1.23		3.92	
Propane	4.26		9.53	7.11	3.09		2.37		3.13	
Propyne	ND		0.34	0.79	ND		ND		0.27	
Isobutane	1.30		4.11	2.60	0.71		0.62		2.22	
Isobutene/1-butene	0.63		1.98	2.54	0.78		0.81		2.05	
1,3-Butadiene	ND		ND	ND	ND		0.10		0.28	
n-butane	4.70		15.12	10.93	1.39		1.31		5.50	
trans-2-Butene	ND		0.27	0.24	0.05		0.12		0.24	
cis-2-butene	ND		0.24	0.28	0.07		ND		0.28	
3-Methyl-1-butene	ND		0.84	0.21	ND		ND		0.22	
Isopentane	12.49		38.07	18.17	2.30		2.68		24.93	
1-Pentene	0.19		1.31	0.87	ND		0.17		0.87	
2-Methyl-1-butene	0.52		2.26	0.90	ND		0.13		1.80	
n-Pentane	3.38		12.02	5.52	1.21		1.52		5.33	
Isoprene	3.17		6.56	18.71	10.37		11.16		4.47	
trans-2-Pentene	0.42		2.55	1.21	ND		ND		0.61	
cis-2-Pentene	0.19		1.52	0.76	ND		ND		0.50	
2-Methyl-2-butene	0.30		2.89	1.13	ND		0.16		0.53	
2,2-Dimethylbutane	0.71		2.15	1.53	0.07		0.48		ND	a
Cyclopentene	ND	a	0.57	0.21	ND	a	ND	a	ND	a
4-Methyl-1-pentene	ND	a	1.22	2.82	1.45		ND	a	ND	a
Cyclopentane	ND	a	0.80	0.57	ND		0.46		ND	a
2,3-Dimethylbutane	ND	a	2.79	1.00	0.17		2.54		ND	a
2-Methylpentane	2.37		8.05	3.08	0.61		1.88		ND	a
3-Methylpentane	1.29		6.06	2.72	1.07		0.55		ND	a
1-Hexene	ND	a	1.02	ND	ND		ND		ND	a
2-Methyl-1-pentene	ND	a	1.16	0.37	0.16		0.15		ND	a
2-Ethyl-1-butene	ND	a	ND	ND	ND		ND		ND	a
n-Hexane	ND	a	4.12	1.62	0.54		0.60		ND	a
trans-2-Hexene	ND	a	0.66	0.36	ND		ND		ND	a
cis-2-Hexene	0.52		0.44	0.21	ND		ND		ND	a
Methylcyclopentane	0.76		2.29	1.00	0.29		0.36		0.90	
2,4-Dimethylpentane	0.26		0.85	0.48	0.10		0.22		0.53	
Benzene	2.07		5.41	2.91	1.43		1.62		4.80	
Cyclohexane	ND		0.46	0.26	0.09		0.52		0.37	
2-Methylhexane	0.51		1.52	0.68	0.17		0.57		1.83	
2,3-Dimethylpentane	0.31		1.56	0.56	0.09		0.15		0.66	
3-Methylhexane	0.45		2.25	0.79	0.78		1.15		3.10	
1-Heptene	ND		0.65	0.22	ND		0.08		0.37	
2,2,4-Trimethylpentane	1.11		4.30	1.83	0.63		0.55		2.48	
n-Heptane	0.46		1.00	0.64	0.38		0.21		1.62	
Methylcyclohexane	0.40		1.53	0.65	0.15		0.24		1.25	

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06450D2	06451	06495	06535D1	06536D2	06544
Sampling Date:	6/20/96	6/21/96	6/24/96	6/25/96	6/25/96	6/26/96
Analysis Date:	7/18/96	7/18/96	7/19/96	7/24/96	7/29/96	7/25/96
2,2,3-Trimethylpentane	ND	0.76	0.42	0.28	0.12	2.07
2,3,4-Trimethylpentane	0.82	1.38	0.59	0.14	0.24	0.77
Toluene	4.21	10.80	6.54	2.24	2.54	10.95
2-Methylheptane	0.29	0.21	ND	ND	0.09	0.23
1-Octene	0.48	0.52	ND	ND	ND	0.29
3-Methylheptane	ND	1.51	1.56	ND	0.12	1.30
n-Octane	0.72	0.37	0.41	0.09	0.10	0.62
Ethylbenzene	0.65	2.03	1.03	0.34	0.42	2.30
m-Xylene/p-Xylene	1.57	6.89	3.49	1.09	1.09	5.63
Styrene	0.27	2.51	1.70	1.18	1.05	2.09
o-Xylene	0.69	2.44	1.24	0.43	0.52	2.06
1-Nonene	ND	ND	ND	0.16	0.35	0.15
n-Nonane	0.36	0.92	0.55	0.29	0.27	0.83
Isopropylbenzene	0.63	0.56	0.18	ND	ND	0.13
a-Pinene	2.69	8.66	7.26	6.60	5.90	5.37
n-Propylbenzene	ND	0.89	0.53	0.14	0.27	0.50
m-Ethyltoluene	0.75	2.29	1.02	1.12	1.09	2.04
p-Ethyltoluene	0.26	1.77	1.37	0.21	ND	0.71
1,3,5-Trimethylbenzene	0.29	3.21	0.76	0.16	0.26	0.97
o-Ethyltoluene	0.52	0.87	0.52	1.29	0.54	1.10
b-Pinene	1.55	4.39	1.65	3.18	5.13	4.14
1-Decene	ND	6.96	13.22	1.37	ND	ND
1,2,4-Trimethylbenzene	1.30	2.83	1.50	0.40	0.76	2.83
n-Decane	1.51	2.11	0.63	1.92	2.16	4.28
1,2,3-Trimethylbenzene	1.32	1.19	1.01	1.66	1.09	1.27
m-Diethylbenzene	ND	0.21	0.21	0.11	ND	0.25
p-Diethylbenzene	ND	1.02	0.61	0.21	ND	0.87
1-Undecene	0.59	9.55	2.96	2.02	1.26	1.99
n-Undecane	0.69	8.88	2.72	3.90	0.53	23.24
1-Dodecene	0.73	11.72	3.58	0.75	1.21	1.68
n-Dodecane	1.17	18.23	4.80	7.54	0.67	26.62
1-Tridecene	0.27	ND	ND	0.26	0.38	0.57
n-Tridecane	1.94	8.06	2.01	3.60	1.36	5.75
TNMOC (w/ unknowns)	129.99	355.53	230.12	126.69	129.50	303.10
TNMOC (speciated)	76.79	299.31	177.88	76.82	68.07	197.44

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06579		06672		06741		06767		06794		06801D1
Sampling Date:	6/28/96		7/2/96		7/3/96		7/8/96		7/9/96		7/10/96
Analysis Date:	7/26/96		7/31/96		7/31/96		8/1/96		8/1/96		8/7/96
Ethylene	3.73		4.40		3.14		0.89		1.35		2.47
Acetylene/Ethane	5.58		8.26		5.42		2.29		6.74		4.95
Propylene	2.10		8.90		2.74		0.66		0.61		1.03
Propane	3.21		39.89		4.10		1.42		4.20		3.20
Propyne	ND		ND		ND		ND		ND		ND
Isobutane	1.63		20.99		1.90		0.69		0.97		0.51
Isobutene/1-butene	1.87		4.29		2.27		2.16		1.21		1.21
1,3-Butadiene	0.27		0.21		ND		ND		ND		0.08
n-butane	4.03		85.35		5.13		0.87		2.21		2.05
trans-2-Butene	0.23		0.99		0.24		ND		ND		0.10
cis-2-butene	0.26		0.81		0.04		ND		ND		0.07
3-Methyl-1-butene	0.15		0.84		0.13		ND		ND		0.05
Isopentane	24.84		96.61		9.18		1.30		3.62		3.72
1-Pentene	1.30		1.49		0.55		0.46		0.14		0.39
2-Methyl-1-butene	0.58		2.81		4.34		0.03		0.15		0.19
n-Pentane	3.35		19.25		12.32		0.44		1.63		1.33
Isoprene	6.59		10.08		0.12		1.09		5.90		1.97
trans-2-Pentene	0.47		2.79		0.42		0.06		0.11		0.21
cis-2-Pentene	0.40		1.52		0.31		0.36		0.05		0.09
2-Methyl-2-butene	0.29		2.48		0.35		0.07		0.32		0.29
2,2-Dimethylbutane	ND	a	2.34		0.53		ND	a	0.13		0.16
Cyclopentene	1.37		3.93		ND		ND	a	ND	a	0.04
4-Methyl-1-pentene	0.75		ND	a	0.22		ND	a	0.21		0.21
Cyclopentane	1.55		ND	a	1.05		ND	a	0.80		0.13
2,3-Dimethylbutane	2.42		ND	a	2.79		ND	a	1.11		0.29
2-Methylpentane	3.27		4.93		2.28		0.13		2.14		0.97
3-Methylpentane	1.41		9.76		1.29		0.06		0.54		1.90
1-Hexene	ND		ND		ND		ND		ND		ND
2-Methyl-1-pentene	0.37		1.40		0.40		0.04		ND		0.18
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	1.53		4.80		1.50		0.22		0.61		0.84
trans-2-Hexene	ND		0.55		0.08		ND		ND		0.06
cis-2-Hexene	ND		0.09		0.08		ND		ND		ND
Methylcyclopentane	0.97		3.31		0.70		0.30		0.24		0.46
2,4-Dimethylpentane	0.33		4.61		0.38		0.18		0.40		0.19
Benzene	2.83		5.23		3.10		0.73		1.71		1.75
Cyclohexane	ND		0.47		0.16		0.03		0.07		0.06
2-Methylhexane	1.18		2.06		1.56		0.07		0.62		0.33
2,3-Dimethylpentane	0.35		4.93		0.46		0.05		0.16		0.21
3-Methylhexane	2.85		3.48		3.03		0.42		0.91		0.55
1-Heptene	0.23		0.62		0.21		ND		0.07		0.07
2,2,4-Trimethylpentane	1.99		11.33		1.76		0.34		0.66		0.95
n-Heptane	0.85		2.24		0.97		0.16		0.35		0.31

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06579	06672	06741	06767	06794	06801D1
Sampling Date:	6/28/96	7/2/96	7/3/96	7/6/96	7/9/96	7/10/96
Analysis Date:	7/26/96	7/31/96	7/31/96	8/1/96	8/1/96	8/7/96
Methylcyclohexane	0.71	1.05	0.90	0.02	0.29	0.50
2,2,3-Trimethylpentane	0.68	1.25	3.20	0.06	ND	0.16
2,3,4-Trimethylpentane	0.77	2.20	0.50	0.07	0.26	0.27
Toluene	8.95	12.83	5.39	1.04	2.11	3.26
2-Methylheptane	0.29	0.57	1.44	0.07	0.13	0.10
3-Methylheptane	0.63	0.56	0.47	0.07	0.06	0.06
1-Octene	0.23	0.62	0.29	0.03	0.13	0.08
n-Octane	1.66	0.75	0.67	0.16	0.29	0.63
Ethylbenzene	1.45	2.08	1.17	0.35	0.54	0.52
m-Xylene/p-Xylene	3.97	7.21	3.37	0.89	1.25	1.76
Styrene	2.61	0.58	2.41	0.25	1.19	0.27
o-Xylene	1.39	2.47	1.07	0.31	0.61	0.68
1-Nonene	ND	0.25	0.15	0.10	0.17	0.12
n-Nonane	0.51	2.43	0.44	0.56	0.20	0.16
Isopropylbenzene	0.61	0.12	0.08	0.34	ND	0.23
a-Pinene	4.57	4.19	4.56	0.99	1.37	0.83
n-Propylbenzene	0.36	0.63	0.35	0.59	0.15	0.20
m-Ethyltoluene	1.50	2.79	1.54	0.39	0.50	0.70
p-Ethyltoluene	0.45	1.25	0.33	0.10	0.15	0.27
1,3,5-Trimethylbenzene	0.47	1.40	0.47	0.28	ND	0.27
o-Ethyltoluene	0.75	1.91	0.66	0.24	0.96	0.41
b-Pinene	5.93	2.62	6.70	0.69	3.14	0.54
1-Decene	ND	1.51	ND	0.96	ND	0.56
1,2,4-Trimethylbenzene	1.99	2.66	1.68	0.70	1.22	0.97
n-Decane	ND	2.85	0.48	0.34	0.62	0.28
1,2,3-Trimethylbenzene	1.51	0.67	0.61	1.58	0.42	3.49
m-Diethylbenzene	0.19	0.43	0.49	0.19	0.15	0.13
p-Diethylbenzene	0.56	0.87	0.67	0.08	0.86	0.31
1-Undecene	4.55	2.45	2.93	1.48	3.14	0.46
n-Undecane	1.95	6.24	2.51	0.62	2.33	0.47
1-Dodecene	4.17	1.23	1.89	1.17	2.97	0.55
n-Dodecane	6.08	4.66	6.33	1.09	1.93	0.33
1-Tridecene	1.64	0.02	0.56	0.13	0.82	0.33
n-Tridecane	2.86	1.48	3.74	0.78	1.40	0.49
TNMOC (w/ unknowns)	233.63	534.23	221.77	87.49	126.18	86.64
TNMOC (speciated)	149.10	452.83	133.29	32.24	69.29	53.91

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06802D2		06920		07061		06944		07035D1		07046D2	
Sampling Date:	7/10/96		7/11/96		7/12/96		7/17/96		7/18/96		7/18/96	
Analysis Date:	8/8/96		8/7/96		8/8/96		8/14/96		8/16/96		8/16/96	
Ethylene	2.31		2.79		1.34		1.99		2.95		2.77	
Acetylene/Ethane	4.55		5.04		2.56		2.80		5.85		4.90	
Propylene	1.15		1.34		0.75		1.38		1.23		1.21	
Propane	3.10		3.41		1.07		2.51		2.98		2.61	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	0.73		0.83		0.30		1.12		1.18		1.10	
Isobutene/1-butene	1.15		1.17		ND		1.73		0.92		0.93	
1,3-Butadiene	ND		ND		ND		ND		0.15		0.12	
n-butane	2.31		2.03		0.25		5.14		5.06		4.58	
trans-2-Butene	ND		ND		ND		0.25		0.33		0.12	
cis-2-butene	0.05		ND		ND		0.47		0.13		0.19	
3-Methyl-1-butene	0.09		ND		ND		0.27		0.12		0.16	
Isopentane	3.70		3.69		2.08		6.58		11.56		ND	a
1-Pentene	0.19		0.31		0.36		0.23		0.47		0.23	
2-Methyl-1-butene	ND	a	0.34		0.22		0.37		0.45		0.43	
n-Pentane	ND	a	1.74		1.09		2.23		3.42		3.35	
Isoprene	2.20		2.36		2.41		8.32		3.86		3.67	
trans-2-Pentene	0.21		0.24		0.09		0.50		0.55		0.56	
cis-2-Pentene	0.11		0.13		0.07		0.20		0.32		0.25	
2-Methyl-2-butene	0.29		0.39		ND		0.56		0.53		0.42	
2,2-Dimethylbutane	0.39		0.33		0.13		ND	a	0.62		0.60	
Cyclopentene	ND	a	ND		ND		ND		0.05		0.11	
4-Methyl-1-pentene	ND	a	0.12		ND		1.49		0.60		ND	a
Cyclopentane	0.11		ND	a	ND	a	0.24		0.61		0.21	
2,3-Dimethylbutane	0.32		ND	a	ND	a	0.68		1.33		0.50	
2-Methylpentane	1.04		0.95		ND	a	1.70		2.11		2.49	
3-Methylpentane	0.76		0.85		0.48		0.84		ND	a	1.25	
1-Hexene	ND		ND		ND		ND		ND	a	ND	
2-Methyl-1-pentene	0.14		0.19		0.28		0.26		ND	a	0.34	
2-Ethyl-1-butene	ND		ND		ND		ND		ND	a	ND	
n-Hexane	0.69		0.87		0.68		0.89		1.37		1.36	
trans-2-Hexene	0.03		0.03		ND		0.06		ND		0.16	
cis-2-Hexene	0.02		ND		ND		0.03		ND		0.08	
Methylcyclopentane	0.45		0.32		0.17		0.63		0.66		0.64	
2,4-Dimethylpentane	0.22		0.21		0.11		0.28		0.37		0.36	
Benzene	2.08		2.16		1.29		1.52		2.24		2.05	
Cyclohexane	0.06		0.06		0.27		ND		0.19		0.15	
2-Methylhexane	0.31		0.87		0.96		0.47		0.61		0.62	
2,3-Dimethylpentane	0.19		0.26		0.84		0.23		0.44		0.39	
3-Methylhexane	0.79		1.49		1.96		0.95		0.82		1.05	
1-Heptene	0.12		ND		ND		0.25		0.34		0.28	
2,2,4-Trimethylpentane	1.06		1.72		0.64		1.10		1.84		1.73	
n-Heptane	0.36		0.43		0.13		0.87		0.55		0.67	

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	06802D2	06920	07061	06944	07035D1	07046D2
Sampling Date:	7/10/96	7/11/96	7/12/96	7/17/96	7/18/96	7/18/96
Analysis Date:	8/8/96	8/7/96	8/8/96	8/14/96	8/16/96	8/16/96
Methylcyclohexane	0.16	1.98	0.42	0.29	0.41	0.61
2,2,3-Trimethylpentane	0.12	0.16	0.17	0.18	0.25	0.20
2,3,4-Trimethylpentane	0.40	0.37	0.08	0.37	0.54	0.81
Toluene	3.53	3.92	1.87	3.19	5.68	5.40
2-Methylheptane	0.16	0.14	0.17	0.19	0.21	0.33
3-Methylheptane	0.61	0.09	0.12	0.15	0.36	0.13
1-Octene	0.08	0.16	0.05	0.08	0.18	0.14
n-Octane	0.24	0.74	0.15	0.27	0.36	0.12
Ethylbenzene	0.57	0.70	0.38	0.46	1.04	0.84
m-Xylene/p-Xylene	1.91	2.19	1.38	1.68	3.19	3.00
Styrene	0.37	1.40	0.57	0.64	0.41	0.37
o-Xylene	0.80	0.80	0.42	0.59	1.07	1.04
1-Nonene	0.24	0.08	ND	0.13	0.09	0.09
n-Nonane	0.24	0.36	0.19	0.38	0.55	0.47
Isopropylbenzene	0.03	0.06	0.09	0.03	0.14	0.09
a-Pinene	0.88	0.83	0.87	3.53	3.56	2.94
n-Propylbenzene	0.26	0.19	0.31	0.18	0.14	0.26
m-Ethyltoluene	0.77	0.79	1.01	0.92	1.21	1.13
p-Ethyltoluene	0.33	0.34	ND	0.20	0.51	0.40
1,3,5-Trimethylbenzene	0.26	0.33	0.37	ND	0.49	0.35
o-Ethyltoluene	0.44	0.43	0.20	ND	0.63	0.77
b-Pinene	0.57	2.10	3.03	1.92	0.99	1.26
1-Decene	0.77	0.12	ND	0.58	0.63	0.96
1,2,4-Trimethylbenzene	1.21	1.51	0.95	0.55	1.25	1.15
n-Decane	0.25	0.29	1.85	2.06	1.12	0.60
1,2,3-Trimethylbenzene	0.02	0.22	2.56	0.13	1.77	0.06
m-Diethylbenzene	0.24	0.28	0.19	0.49	0.39	0.32
p-Diethylbenzene	0.36	0.63	0.40	0.44	0.19	0.49
1-Undecene	1.49	1.49	2.41	0.67	1.09	2.72
n-Undecane	0.47	1.07	12.82	0.77	2.25	1.43
1-Dodecene	1.72	1.36	1.78	0.43	0.84	1.40
n-Dodecane	0.40	1.22	1.27	1.80	2.64	1.70
1-Tridecene	0.45	0.64	0.95	0.29	0.29	0.43
n-Tridecane	0.89	0.89	0.97	2.96	2.60	1.15
TNMOC (w/ unknowns)	133.79	155.66	141.08	130.25	138.96	120.48
TNMOC (speciated)	52.57	64.56	58.53	75.68	93.92	75.79

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07024	07058	07063	07126	07115	07219D1
Sampling Date:	7/19/96	7/22/96	7/23/96	7/24/96	7/25/96	7/26/96
Analysis Date:	8/14/96	8/16/96	8/16/96	8/19/96	8/19/96	8/30/96
Ethylene	2.53	2.16	1.94	3.97	1.16	0.76
Acetylene/Ethane	6.46	8.41	4.95	7.51	3.81	1.12
Propylene	1.02	0.56	0.58	4.39	0.48	0.39
Propane	3.78	4.49	2.83	4.27	2.95	2.01
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	2.08	1.50	0.79	ND	4.38	0.65
Isobutene/1-butene	1.44	1.90	1.17	2.48	1.36	0.78
1,3-Butadiene	0.07	0.11	ND	ND	ND	ND
n-butane	8.82	2.69	0.96	36.82	17.06	1.02
trans-2-Butene	0.26	ND	ND	0.61	0.17	ND
cis-2-butene	0.40	ND	0.13	1.06	0.30	0.41
3-Methyl-1-butene	0.30	ND	ND	ND a	0.17	ND
Isopentane	22.97	3.39	1.87	90.73	17.83	1.29
1-Pentene	0.61	ND	ND a	3.79	0.56	0.11
2-Methyl-1-butene	1.37	0.13	ND a	4.06	ND a	0.77
n-Pentane	6.43	1.42	0.78	26.52	3.16	1.86
Isoprene	16.41	10.44	2.75	7.69	1.11	ND b
trans-2-Pentene	1.32	ND	ND a	ND a	0.95	ND b
cis-2-Pentene	0.76	0.06	ND a	ND a	0.38	ND b
2-Methyl-2-butene	1.49	0.10	ND a	ND	0.88	0.82
2,2-Dimethylbutane	1.48	ND a	ND	1.44	0.65	0.39
Cyclopentene	1.42	0.02	0.82	1.31	0.43	0.10
4-Methyl-1-pentene	0.13	0.17	ND	0.82	0.11	0.24
Cyclopentane	0.40	0.37	0.13	2.10	0.33	0.14
2,3-Dimethylbutane	1.22	2.51	0.77	6.56	0.96	0.05
2-Methylpentane	3.20	2.33	1.48	15.56	3.93	0.14
3-Methylpentane	2.08	ND	ND	8.24	ND a	0.18
1-Hexene	ND	ND	ND	ND	ND a	ND
2-Methyl-1-pentene	0.69	ND	ND	1.47	ND a	0.03
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	1.73	0.69	0.36	5.98	1.86	0.30
trans-2-Hexene	0.35	ND	ND	ND a	0.33	0.02
cis-2-Hexene	0.26	ND	ND	ND a	0.11	0.09
Methylcyclopentane	1.04	0.32	0.29	3.43	1.05	0.22
2,4-Dimethylpentane	0.54	0.39	0.37	1.85	0.36	0.33
Benzene	2.42	1.53	2.39	7.74	1.93	1.06
Cyclohexane	0.23	0.07	0.10	0.78	0.25	0.06
2-Methylhexane	0.96	0.39	1.10	2.66	0.91	0.17
2,3-Dimethylpentane	0.43	0.13	ND	1.89	0.33	0.07
3-Methylhexane	1.45	0.75	1.89	2.84	2.17	0.53
1-Heptene	0.33	0.10	0.17	1.15	0.21	ND
2,2,4-Trimethylpentane	2.03	0.58	0.92	5.88	1.24	0.27
n-Heptane	0.83	0.27	0.77	1.29	0.65	0.37

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07024	07058	07063	07126	07115	07219D1
Sampling Date:	7/19/96	7/22/96	7/23/96	7/24/96	7/25/96	7/26/96
Analysis Date:	8/14/96	8/16/96	8/16/96	8/19/96	8/19/96	8/30/96
Methylcyclohexane	0.64	2.70	1.84	1.37	0.40	1.01
2,2,3-Trimethylpentane	2.85	0.05	1.83	1.17	0.23	0.12
2,3,4-Trimethylpentane	0.54	0.12	0.44	1.61	0.33	0.04
Toluene	4.14	1.63	1.89	14.15	2.87	1.25
2-Methylheptane	0.35	0.13	0.11	0.51	0.33	0.05
3-Methylheptane	0.10	0.09	0.09	0.99	0.21	0.08
1-Octene	0.22	0.23	0.05	0.53	0.44	0.04
n-Octane	0.22	0.16	6.50	1.48	0.29	0.19
Ethylbenzene	0.87	0.27	0.34	2.33	0.56	0.17
m-Xylene/p-Xylene	2.40	0.90	1.10	8.11	1.63	0.75
Styrene	0.99	0.59	1.96	1.36	9.13	0.10
o-Xylene	2.71	0.36	0.58	2.75	0.64	0.20
1-Nonene	0.06	ND	ND	0.19	0.12	0.12
n-Nonane	0.44	0.12	0.31	1.08	0.21	0.17
Isopropylbenzene	ND	ND	ND	0.37	0.12	0.03
a-Pinene	7.26	3.80	1.37	5.92	1.34	1.60
n-Propylbenzene	0.47	0.07	0.13	0.73	0.12	0.02
m-Ethyltoluene	1.43	0.65	0.73	2.55	0.71	0.32
p-Ethyltoluene	0.19	0.07	0.16	0.79	0.17	0.14
1,3,5-Trimethylbenzene	0.50	0.08	0.17	1.02	0.34	0.10
o-Ethyltoluene	0.53	0.49	0.31	1.21	0.18	0.22
b-Pinene	5.28	3.71	3.10	3.84	4.93	0.78
1-Decene	ND	0.12	ND	ND	ND	0.75
1,2,4-Trimethylbenzene	1.41	0.73	1.37	3.26	1.18	0.47
n-Decane	0.32	0.14	33.99	1.02	0.81	1.59
1,2,3-Trimethylbenzene	0.02	0.22	0.62	1.07	0.29	0.64
m-Diethylbenzene	0.70	0.31	0.58	0.48	ND	ND
p-Diethylbenzene	0.66	0.21	0.79	0.91	0.73	ND
1-Undecene	0.97	0.82	2.03	1.01	4.10	1.21
n-Undecane	1.05	0.58	96.15	2.58	2.74	0.29
1-Dodecene	0.92	0.72	1.54	1.14	5.22	0.99
n-Dodecane	1.35	1.11	57.51	7.28	5.11	0.86
1-Tridecene	0.47	0.20	0.67	0.29	4.97	0.09
n-Tridecane	1.35	1.20	14.34	4.39	3.35	0.43
TNMOC (w/ unknowns)	208.78	121.26	303.14	459.31	223.45	77.48
TNMOC (speciated)	143.15	70.51	262.90	344.39	128.32	31.57

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07220D2		07184		07232	07307		07311		07326
Sampling Date:	7/26/96		7/29/96		7/30/96	7/31/96		8/1/96		8/2/96
Analysis Date:	8/22/96		8/26/96		8/27/96	8/27/96		8/28/96		8/28/96
Ethylene	0.94		2.42		2.63	1.71		0.94		4.67
Acetylene/Ethane	2.94		3.67		4.68	3.57		2.76		6.25
Propylene	0.24		1.55		1.52	1.10		0.72		3.40
Propane	2.38		7.01		4.58	2.63		2.79		3.46
Propyne	ND		ND		ND	ND		ND		ND
Isobutane	0.47		4.36		3.29	0.97		0.89		2.04
Isobutene/1-butene	0.51		3.63		2.22	1.51		1.25		2.47
1,3-Butadiene	ND		0.07		0.27	0.08		ND		0.42
n-butane	0.82		20.58		12.36	3.10		1.42		8.44
trans-2-Butene	ND		0.59		ND	0.13		ND		0.21
cis-2-butene	ND		0.50		0.30	0.11		ND		0.27
3-Methyl-1-butene	ND		0.34		0.31	0.10		0.05		0.25
Isopentane	1.11		29.59		25.11	5.59		1.81		17.35
1-Pentene	ND		1.12		0.72	0.12		0.08		0.82
2-Methyl-1-butene	ND	a	1.37		0.98	0.35		ND	a	1.04
n-Pentane	ND	a	7.56		6.44	2.14		2.21		6.28
Isoprene	0.36		7.55		3.88	8.61		0.13		10.63
trans-2-Pentene	0.01		1.93		1.21	0.45		0.07		1.41
cis-2-Pentene	0.02		0.96		0.73	0.27		0.13		0.59
2-Methyl-2-butene	0.05		2.21		ND	0.51		0.16		1.27
2,2-Dimethylbutane	0.08		1.01		0.78	ND	a	0.03		0.65
Cyclopentene	0.22		0.36		0.18	1.25		ND		0.41
4-Methyl-1-pentene	0.27		0.82		0.86	ND		ND		0.14
Cyclopentane	0.22		0.49		0.54	0.15		0.10		0.49
2,3-Dimethylbutane	0.08		1.66		1.36	0.37		0.13		1.19
2-Methylpentane	0.29		6.16		3.80	1.27		0.48		3.68
3-Methylpentane	0.15		ND	a	2.54	0.76		0.25		2.61
1-Hexene	ND		ND		ND	ND	a	0.05		0.37
2-Methyl-1-pentene	0.03		0.59		0.41	ND	a	0.09		0.21
2-Ethyl-1-butene	ND		ND		ND	ND		ND		ND
n-Hexane	0.23		2.47		1.76	0.69		0.38		2.58
trans-2-Hexene	0.01		0.35		0.12	0.05		0.02		0.34
cis-2-Hexene	0.02		0.31		0.14	0.02		0.02		0.12
Methylcyclopentane	0.10		1.42		1.18	0.37		0.17		1.45
2,4-Dimethylpentane	0.03		0.87		0.79	0.21		0.07		0.76
Benzene	0.78		3.00		2.99	1.27		0.76		4.69
Cyclohexane	0.03		0.30		0.28	0.09		0.06		0.30
2-Methylhexane	0.09		1.10		0.90	0.60		0.15		1.70
2,3-Dimethylpentane	0.03		0.79		0.83	0.26		0.09		0.83
3-Methylhexane	0.16		1.72		2.04	0.57		0.13		1.64
1-Heptene	ND		0.51		0.33	0.08		0.05		0.46
2,2,4-Trimethylpentane	0.29		3.34		2.63	0.93		0.33		3.78
n-Heptane	0.14		0.76		0.94	0.25		0.17		1.06

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07220D2	07184	07232	07307	07311	07326
Sampling Date:	7/26/96	7/29/96	7/30/96	7/31/96	8/1/96	8/2/96
Analysis Date:	8/22/96	8/26/96	8/27/96	8/27/96	8/28/96	8/28/96
Methylcyclohexane	0.06	0.61	0.49	0.28	0.10	1.04
2,2,3-Trimethylpentane	0.05	0.58	1.13	0.04	0.52	0.94
2,3,4-Trimethylpentane	0.06	0.94	0.69	0.25	0.07	1.27
Toluene	0.89	7.63	6.22	2.36	0.96	11.10
2-Methylheptane	0.03	0.41	0.31	0.08	0.11	0.40
3-Methylheptane	0.08	0.25	0.20	0.07	0.21	0.49
1-Octene	0.01	0.32	0.15	0.07	0.05	0.45
n-Octane	0.08	0.30	0.43	0.12	0.07	0.51
Ethylbenzene	0.13	1.10	0.97	0.84	0.17	2.10
m-Xylene/p-Xylene	0.45	3.90	3.83	2.70	0.64	7.22
Styrene	0.10	0.64	0.65	0.71	0.19	1.43
o-Xylene	0.17	1.36	1.21	0.95	0.27	2.76
1-Nonene	0.06	0.10	0.08	0.06	0.09	0.16
n-Nonane	0.13	0.41	0.65	0.26	0.08	0.55
Isopropylbenzene	0.01	0.04	0.08	ND	ND	0.13
a-Pinene	1.17	6.15	5.04	5.86	2.16	9.37
n-Propylbenzene	0.03	0.42	0.16	0.13	0.07	0.59
m-Ethyltoluene	0.30	1.66	1.28	1.42	0.49	2.84
p-Ethyltoluene	0.07	0.55	0.49	0.15	0.12	0.75
1,3,5-Trimethylbenzene	0.10	0.60	0.64	0.21	0.12	1.00
o-Ethyltoluene	0.12	0.81	0.77	0.39	0.26	1.16
b-Pinene	0.55	2.13	1.85	4.35	1.28	ND
1-Decene	0.47	0.97	1.17	0.25	0.31	4.44
1,2,4-Trimethylbenzene	0.29	1.14	1.31	1.16	0.45	3.47
n-Decane	0.14	0.51	3.94	0.58	2.78	0.97
1,2,3-Trimethylbenzene	0.60	1.58	0.32	0.50	0.18	1.17
m-Diethylbenzene	0.04	0.21	0.37	0.37	0.17	0.52
p-Diethylbenzene	0.11	0.45	0.45	0.46	0.10	1.10
1-Undecene	0.74	1.59	1.30	1.01	0.43	0.80
n-Undecane	0.44	0.83	17.14	1.75	0.28	2.86
1-Dodecene	0.49	0.71	0.83	0.91	0.45	0.77
n-Dodecane	0.60	0.74	18.76	1.99	0.59	2.60
1-Tridecene	0.18	0.21	ND	0.32	0.09	0.15
n-Tridecane	0.56	0.70	4.32	1.86	0.56	1.54
TNMOC (w/ unknowns)	42.28	216.44	237.30	117.27	70.18	250.64
TNMOC (speciated)	22.42	165.55	173.85	74.70	33.36	167.34

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	7364D1		7367D2		07420		07419		07485		07573	
Sampling Date:	8/5/96		8/5/96		8/6/96		8/7/96		8/9/96		8/12/96	
Analysis Date:	11/5/96		11/5/96		9/5/96		9/8/96		9/8/96		9/10/96	
Ethylene	5.00		4.65		2.29		3.52		0.32		1.00	
Acetylene/Ethane	10.69		9.95		3.49		5.85		4.13		3.87	
Propylene	1.88		2.13		2.10		1.82		1.31		0.43	
Propane	5.88		4.30		3.11		4.67		3.10		2.64	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	2.05		1.09		1.28		3.49		1.37		0.68	
Isobutene/1-butene	1.75		1.59		1.27		2.83		1.62		1.84	
1,3-Butadiene	0.11		0.17		ND		0.19		0.20		ND	
n-butane	6.26		5.20		3.04		15.56		4.78		1.22	
trans-2-Butene	0.12		0.08		ND		0.84		0.20		ND	
cis-2-butene	0.08		0.13		0.09		0.89		0.24		ND	
3-Methyl-1-butene	0.10		0.12		ND		0.57		0.15		0.03	
Isopentene	ND	a	12.44		6.53		37.40		ND	a	1.55	
1-Pentene	0.32		ND	a	ND	a	1.20		0.57		11.17	
2-Methyl-1-butene	0.63		0.62		ND	a	1.97		0.79		0.38	
n-Pentane	4.84		5.80		ND	a	12.59		4.82		0.54	
Isoprene	8.43		10.28		ND	a	10.05		4.46		1.45	
trans-2-Pentene	0.80		0.77		0.42		2.59		1.03		0.02	
cis-2-Pentene	0.37		0.44		0.23		ND	a	0.50		0.01	
2-Methyl-2-butene	0.84		0.89		0.31		2.03		0.81		0.28	
2,2-Dimethylbutane	0.43		0.47		0.28		1.53		0.45		0.09	
Cyclopentene	0.17		0.15		ND		ND	a	0.77		ND	a
4-Methyl-1-pentene	0.08		0.09		0.62		1.23		0.08		ND	a
Cyclopentane	0.36		0.40		0.29		1.03		0.29		ND	a
2,3-Dimethylbutane	0.68		0.88		0.55		2.21		0.80		ND	a
2-Methylpentane	2.93		2.82		0.87		7.46		3.15		0.53	
3-Methylpentane	2.03		2.00		2.26		4.89		1.58		ND	b
1-Hexene	0.19		0.19		ND		0.48		ND		ND	b
2-Methyl-1-pentene	0.23		0.15		0.29		0.40		ND		ND	b
2-Ethyl-1-butene	0.14		0.08		ND		ND		ND		ND	a
n-Hexane	2.17		1.93		1.14		3.43		1.43		0.31	
trans-2-Hexene	0.28		0.24		0.05		0.40		0.09		ND	
cis-2-Hexene	0.08		0.07		0.19		0.52		0.04		ND	
Methylcyclopentane	1.18		1.07		0.66		2.21		0.88		0.14	
2,4-Dimethylpentane	0.55		0.52		0.28		0.93		0.41		0.04	
Benzene	5.47		6.34		1.96		4.80		4.74		1.25	
Cyclohexane	0.27		0.21		0.12		0.42		0.12		ND	
2-Methylhexane	1.93		1.16		0.44		1.38		1.06		0.13	
2,3-Dimethylpentane	0.75		0.74		0.26		0.74		0.60		0.04	
3-Methylhexane	3.73		1.30		0.42		3.16		1.38		0.26	
1-Heptene	0.43		0.33		0.20		0.85		0.24		ND	
2,2,4-Trimethylpentane	3.28		2.88		1.25		4.01		2.14		0.35	
n-Heptane	0.99		0.69		0.42		0.76		0.70		0.17	

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	**7364D1**	**7367D2**	**07420**	**07419**	**07485**	**07573**
Sampling Date:	**8/5/96**	**8/5/96**	**8/6/96**	**8/7/96**	**8/9/96**	**8/12/96**
Analysis Date:	**11/5/96**	**11/5/96**	**9/5/96**	**9/8/96**	**9/8/96**	**9/10/96**
Methylcyclohexane	1.15	0.74	0.39	1.01	0.66	ND
2,2,3-Trimethylpentane	0.27	0.67	0.18	0.77	0.41	ND
2,3,4-Trimethylpentane	1.11	0.93	0.64	1.25	0.73	0.05
Toluene	11.31	14.06	3.89	10.10	6.72	1.10
2-Methylheptane	0.47	0.22	0.17	0.48	0.42	ND
3-Methylheptane	0.32	0.23	0.12	0.54	0.40	0.60
1-Octene	0.42	0.36	0.08	0.37	0.30	ND
n-Octane	0.57	0.37	0.32	0.95	0.71	0.09
Ethylbenzene	1.97	1.50	0.57	1.97	1.38	0.13
m-Xylene/p-Xylene	5.75	4.81	2.07	6.05	4.11	0.59
Styrene	3.04	1.25	0.48	0.96	1.49	0.13
o-Xylene	2.31	1.97	0.73	1.84	2.85	0.20
1-Nonene	0.26	0.15	0.11	0.13	0.60	0.06
n-Nonane	1.33	0.35	0.30	0.67	0.66	0.15
Isopropylbenzene	0.17	0.08	ND	0.07	0.11	ND
a-Pinene	1.19	0.37	2.75	6.49	5.13	1.21
n-Propylbenzene	0.68	0.39	0.12	0.25	0.46	ND
m-Ethyltoluene	2.63	2.11	1.03	2.41	1.78	0.36
p-Ethyltoluene	0.90	0.69	0.26	0.79	0.70	0.19
1,3,5-Trimethylbenzene	1.14	0.62	0.32	0.77	0.89	0.18
o-Ethyltoluene	0.80	0.68	0.55	1.29	0.84	0.32
b-Pinene	6.44	3.67	1.64	2.84	4.41	0.95
1-Decene	0.24	0.14	0.52	2.70	0.25	1.17
1,2,4-Trimethylbenzene	3.09	2.45	1.17	2.40	2.71	0.44
n-Decane	2.04	0.58	3.69	3.15	0.57	0.22
1,2,3-Trimethylbenzene	0.90	0.58	0.32	0.67	0.73	0.16
m-Diethylbenzene	0.82	0.52	0.26	0.52	0.61	0.10
p-Diethylbenzene	0.79	0.58	0.18	0.50	0.64	0.27
1-Undecene	2.57	1.37	0.51	3.07	2.08	2.12
n-Undecane	3.15	0.76	0.95	0.85	1.03	1.01
1-Dodecene	1.51	0.73	0.61	2.56	2.11	1.30
n-Dodecane	3.58	0.66	1.08	0.74	1.05	1.14
1-Tridecene	0.62	0.17	0.21	1.01	0.34	0.16
n-Tridecane	2.28	1.23	1.67	1.16	1.33	1.05
TNMOC (w/ unknowns)	243.46	189.42	102.11	301.16	188.87	92.40
TNMOC (speciated)	144.53	131.40	64.54	212.23	100.59	45.88

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07587		07659	07658	07689	07691		07773
Sampling Date:	8/13/96		8/14/96	8/15/96	8/16/96	8/19/96		8/20/96
Analysis Date:	9/11/96		9/10/96	10/28/96	9/12/96	9/16/96		9/17/96
Ethylene	3.00		3.37	9.91	6.79	1.87		2.64
Acetylene/Ethane	5.24		7.94	11.94	10.46	3.27		3.17
Propylene	0.45		2.54	5.08	5.05	1.32		0.96
Propane	6.84		4.66	5.24	2.69	2.68		2.08
Propyne	ND		ND	ND	ND	ND		ND
Isobutane	1.44		2.14	2.46	1.85	1.20		0.77
Isobutene/1-butene	0.99		1.85	3.94	2.47	2.27		1.08
1,3-Butadiene	0.05		0.27	0.78	0.57	0.39		0.14
n-butane	4.23		4.83	8.18	6.29	3.56		2.78
trans-2-Butene	0.12		0.31	0.42	0.75	ND		0.20
cis-2-butene	0.10		0.30	0.56	0.35	0.12		0.08
3-Methyl-1-butene	0.12		ND	0.39	0.32	0.10		0.16
Isopentane	7.99		9.27	20.18	18.90	8.08		7.06
1-Pentene	0.31		0.32	0.42	0.68	0.39		0.22
2-Methyl-1-butene	0.67		0.65	1.33	1.51	0.43		0.36
n-Pentane	0.94		3.08	7.15	8.64	2.96		2.21
Isoprene	3.99		2.16	5.92	11.31	2.61		2.17
trans-2-Pentene	0.60		0.96	1.56	2.34	0.38		0.37
cis-2-Pentene	0.20		0.31	0.70	0.91	0.15		0.20
2-Methyl-2-butene	0.31		0.62	1.65	2.20	0.32		0.43
2,2-Dimethylbutane	0.34		0.39	0.65	1.09	0.29		0.22
Cyclopentene	0.22		0.35	0.36	0.37	0.69		0.68
4-Methyl-1-pentene	0.08		0.12	0.24	0.19	0.42		0.05
Cyclopentane	0.33		0.25	0.59	0.69	0.69		0.17
2,3-Dimethylbutane	0.58		0.72	1.51	1.71	ND	a	0.40
2-Methylpentane	1.88		3.08	6.18	6.93	2.12		1.81
3-Methylpentane	1.10		1.62	3.49	3.90	1.36		0.82
1-Hexene	ND		0.14	ND	0.57	0.44		0.09
2-Methyl-1-pentene	0.72		0.18	0.23	0.31	0.60		0.08
2-Ethyl-1-butene	ND	a	ND	ND	ND	ND		ND
n-Hexane	ND	a	1.54	3.11	3.66	1.11		0.85
trans-2-Hexene	ND	a	0.15	0.37	0.60	0.08		0.15
cis-2-Hexene	ND	a	0.05	0.17	0.22	0.17		0.02
Methylcyclopentane	0.76		0.88	1.90	2.22	0.88		0.50
2,4-Dimethylpentane	0.38		0.40	0.91	1.12	0.40		0.25
Benzene	3.32		2.98	6.52	6.55	3.18		2.07
Cyclohexane	0.22		0.33	0.35	0.37	0.17		0.13
2-Methylhexane	0.63		0.93	1.99	2.75	0.62		0.63
2,3-Dimethylpentane	0.30		0.56	1.10	1.28	0.32		0.41
3-Methylhexane	0.70		1.28	2.43	3.64	1.03		1.06
1-Heptene	0.16		0.27	0.65	0.82	0.14		0.34
2,2,4-Trimethylpentane	1.58		2.26	4.68	5.58	2.07		1.58
n-Heptane	0.44		0.48	1.34	1.26	0.45		0.37

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07587	07659	07658	07689	07691	07773
Sampling Date:	8/13/96	8/14/96	8/15/96	8/16/96	8/19/96	8/20/96
Analysis Date:	9/11/96	9/10/96	10/28/96	9/12/96	9/16/96	9/17/96
Methylcyclohexane	0.43	0.51	1.11	1.25	0.37	0.43
2,2,3-Trimethylpentane	0.25	0.43	0.98	1.21	0.38	0.40
2,3,4-Trimethylpentane	0.55	0.71	1.64	2.10	0.66	0.88
Toluene	4.70	7.18	15.66	16.74	6.40	6.45
2-Methylheptane	0.23	2.00	0.80	2.53	0.38	0.26
3-Methylheptane	0.32	0.39	0.93	0.83	0.41	0.94
1-Octene	0.24	0.34	0.67	0.73	0.29	0.23
n-Octane	0.42	0.43	0.71	0.85	0.33	0.21
Ethylbenzene	0.81	1.37	2.95	3.50	1.04	0.93
m-Xylene/p-Xylene	2.87	4.36	9.43	11.88	3.57	2.58
Styrene	0.40	1.14	1.45	2.84	0.36	0.87
o-Xylene	1.13	1.69	3.63	4.84	1.33	1.05
1-Nonene	0.09	0.10	0.16	0.25	0.10	0.08
n-Nonane	0.43	0.38	0.71	0.74	0.32	1.30
Isopropylbenzene	0.03	0.08	0.26	0.38	0.06	0.09
a-Pinene	3.52	3.37	0.33	9.14	3.42	0.97
n-Propylbenzene	0.15	0.49	0.84	4.65	0.34	0.24
m-Ethyltoluene	1.25	1.95	3.67	5.47	1.65	0.88
p-Ethyltoluene	0.33	0.70	1.29	2.21	0.66	0.30
1,3,5-Trimethylbenzene	0.40	0.71	1.43	2.53	1.82	0.32
o-Ethyltoluene	0.59	0.77	1.40	2.08	0.68	0.40
b-Pinene	1.53	2.51	4.17	6.84	0.99	1.56
1-Decene	0.40	0.17	0.36	0.29	1.44	0.19
1,2,4-Trimethylbenzene	1.04	2.84	5.28	7.02	1.86	1.61
n-Decane	1.51	0.62	0.91	0.68	6.28	0.28
1,2,3-Trimethylbenzene	0.22	0.89	1.82	1.88	0.93	0.59
m-Diethylbenzene	0.18	0.48	1.07	1.11	0.46	0.38
p-Diethylbenzene	0.34	0.62	1.68	2.17	0.38	0.83
1-Undecene	0.41	1.44	1.29	2.03	1.42	1.22
n-Undecane	0.57	2.82	1.74	1.00	1.62	0.67
1-Dodecene	0.48	1.59	1.43	1.89	1.12	0.90
n-Dodecane	0.69	2.75	2.66	1.10	1.92	0.59
1-Tridecene	0.22	0.38	0.31	0.68	0.31	0.42
n-Tridecane	1.58	1.74	2.14	1.30	1.70	0.89
TNMOC (w/ unknowns)	123.99	188.20	312.62	328.85	148.64	153.28
TNMOC (speciated)	79.60	112.51	201.48	234.68	94.31	69.66

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	7774D1		7775D2		07875		07862		07907		07921	
Sampling Date:	8/21/96		8/21/96		8/22/96		8/23/96		8/26/96		8/27/96	
Analysis Date:	9/18/96		9/18/96		9/19/96		9/19/96		9/24/96		9/24/96	
Ethylene	3.00		4.63		4.81		8.25		3.16		1.99	
Acetylene/Ethane	4.64		4.88		5.66		10.98		4.31		1.42	
Propylene	1.13		2.15		2.36		4.01		1.79		1.73	
Propane	2.64		2.88		4.24		6.12		4.48		2.73	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	0.46		0.43		1.46		2.99		2.46		0.56	
Isobutene/1-butene	1.11		1.23		2.15		2.55		2.44		1.36	
1,3-Butadiene	0.16		0.15		0.29		0.30		0.30		0.11	
n-butane	2.73		3.72		4.50		10.53		8.52		3.24	
trans-2-Butene	0.10		0.07		ND		0.19		0.21		ND	
cis-2-butene	0.05		0.12		0.19		0.83		0.35		ND	
3-Methyl-1-butene	0.04		0.12		0.13		0.40		0.34		ND	
Isopentane	6.13		9.58		9.85		19.77		20.21		7.66	
1-Pentene	0.35		ND	a	ND	a	1.18		0.50		0.30	
2-Methyl-1-butene	ND	a	0.56		ND	a	1.32		ND	a	0.45	
n-Pentane	ND	a	3.69		ND	a	8.40		ND	a	2.88	
Isoprene	ND	a	3.26		ND	a	17.21		3.13		2.42	
trans-2-Pentene	0.33		0.64		0.93		1.74		1.24		0.50	
cis-2-Pentene	0.21		0.30		0.39		0.78		0.50		0.23	
2-Methyl-2-butene	0.43		0.59		0.98		1.74		1.25		0.35	
2,2-Dimethylbutane	0.28		0.37		0.55		0.67		0.99		0.42	
Cyclopentene	0.07		0.18		0.17		0.38		0.18		0.07	
4-Methyl-1-pentene	0.05		0.16		0.63		0.29		0.83		0.10	
Cyclopentane	0.17		0.26		ND	a	0.66		0.86		0.20	
2,3-Dimethylbutane	0.50		0.66		ND	a	1.71		1.13		0.45	
2-Methylpentane	1.87		2.20		2.73		5.83		3.93		1.94	
3-Methylpentane	1.01		1.47		2.10		3.67		2.33		ND	a
1-Hexene	0.14		0.14		0.19		0.42		0.31		ND	a
2-Methyl-1-pentene	0.12		0.16		0.26		0.39		0.17		ND	a
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	1.16		1.33		1.67		3.58		2.00		0.89	
trans-2-Hexene	0.18		0.19		0.15		0.27		0.24		0.22	
cis-2-Hexene	0.12		0.10		0.10		0.24		0.33		0.08	
Methylcyclopentane	0.54		0.98		1.13		1.93		1.43		0.50	
2,4-Dimethylpentane	0.34		0.37		0.47		0.98		0.56		0.23	
Benzene	2.45		3.40		3.70		6.56		3.52		2.05	
Cyclohexane	0.16		0.14		0.28		0.36		0.26		0.10	
2-Methylhexane	0.90		1.26		0.93		2.06		1.06		0.48	
2,3-Dimethylpentane	0.44		0.57		0.44		1.14		0.41		0.27	
3-Methylhexane	1.39		3.13		1.17		2.29		1.09		0.73	
1-Heptene	0.16		0.25		0.33		0.65		0.35		0.12	
2,2,4-Trimethylpentane	1.50		2.09		2.43		5.04		2.52		1.05	
n-Heptane	0.36		0.53		0.79		1.42		0.86		0.33	

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	7774D1	7775D2	07875	07862	07907	07921
Sampling Date:	8/21/96	8/21/96	8/22/96	8/23/96	8/26/96	8/27/96
Analysis Date:	9/18/96	9/18/96	9/19/96	9/19/96	9/24/96	9/24/96
Methylcyclohexane	0.44	0.54	1.09	0.86	0.37	0.30
2,2,3-Trimethylpentane	0.20	0.31	0.42	1.04	0.37	0.83
2,3,4-Trimethylpentane	0.56	0.60	0.67	1.78	0.80	0.34
Toluene	5.46	7.45	8.59	17.43	8.84	4.10
2-Methylheptane	0.19	0.25	0.36	0.57	0.35	0.26
3-Methylheptane	0.15	0.20	0.47	0.67	0.31	0.13
1-Octene	0.18	0.21	0.26	0.53	0.23	0.15
n-Octane	0.25	0.40	0.65	0.65	0.68	0.30
Ethylbenzene	1.10	1.38	1.52	2.97	1.31	0.72
m-Xylene/p-Xylene	3.47	3.81	5.22	10.24	4.73	2.13
Styrene	1.08	2.48	0.64	1.64	0.60	0.71
o-Xylene	1.33	1.45	1.90	3.84	1.69	0.74
1-Nonene	0.10	0.12	0.14	0.29	0.19	0.07
n-Nonane	0.35	0.30	0.45	0.73	0.51	0.26
Isopropylbenzene	0.07	ND	0.08	0.16	0.15	ND
a-Pinene	2.05	1.11	5.88	0.28	6.89	0.48
n-Propylbenzene	0.40	0.46	0.35	0.82	0.48	0.23
m-Ethyltoluene	1.48	1.54	1.97	4.21	2.75	1.08
p-Ethyltoluene	0.57	0.64	0.54	1.31	1.06	0.28
1,3,5-Trimethylbenzene	0.64	0.51	0.85	1.73	1.12	0.44
o-Ethyltoluene	0.81	0.60	0.92	1.62	1.13	0.34
b-Pinene	2.38	4.18	2.64	7.30	2.55	1.60
1-Decene	0.14	0.18	0.93	0.32	1.73	0.11
1,2,4-Trimethylbenzene	2.01	2.02	2.81	5.58	3.45	1.28
n-Decane	0.45	0.43	0.73	1.00	0.77	0.40
1,2,3-Trimethylbenzene	0.67	0.73	0.72	1.89	0.87	0.25
m-Diethylbenzene	0.31	0.40	0.35	0.94	0.36	0.10
p-Diethylbenzene	0.89	0.71	0.44	1.00	0.46	0.39
1-Undecene	0.56	3.91	0.70	1.15	3.11	0.77
n-Undecane	1.64	0.93	1.43	1.25	1.27	1.64
1-Dodecene	1.14	2.43	0.59	1.11	0.83	0.95
n-Dodecane	2.48	1.00	1.22	0.89	1.37	2.59
1-Tridecene	1.17	1.36	0.21	0.20	0.24	0.39
n-Tridecane	1.88	1.16	1.14	1.06	1.94	1.44
TNMOC (w/ unknowns)	133.92	162.32	152.88	314.92	200.49	113.03
TNMOC (speciated)	74.00	102.74	105.05	216.87	134.06	63.97

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07972		07977		08070		08064		08112		08120D1	
Sampling Date:	8/28/96		8/29/96		8/30/96		9/3/96		9/4/96		9/5/96	
Analysis Date:	9/25/96		9/25/96		9/27/96		10/3/96		11/11/96		10/4/96	
Ethylene	7.75		4.08		3.37		2.43		6.25		3.79	
Acetylene/Ethane	8.52		7.89		5.74		2.90		10.00		4.20	
Propylene	1.33		2.44		1.05		1.51		2.42		2.68	
Propane	5.65		6.51		3.44		2.65		5.81		1.42	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	1.92		2.94		1.33		1.35		1.96		ND	
Isobutene/1-butene	1.76		1.66		1.43		2.63		2.23		1.55	
1,3-Butadiene	0.26		ND		0.15		0.23		0.37		ND	
n-butane	3.90		11.19		3.48		5.50		5.22		8.11	
trans-2-Butene	0.23		0.11		ND		0.23		0.35		0.65	
cis-2-butene	0.08		0.36		ND		0.15		0.20		0.47	
3-Methyl-1-butene	0.21		0.34		0.13		0.21		0.15		ND	a
Isopentane	7.09		ND	a	7.03		10.02		11.42		17.74	
1-Pentene	ND	a	0.61		ND	b	0.16		0.44		1.15	
2-Methyl-1-butene	0.35		0.98		ND	a	0.59		0.70		1.14	
n-Pentane	2.73		5.24		ND	a	3.28		4.13		5.10	
Isoprene	2.09		6.00		0.66		1.96		2.95		2.47	
trans-2-Pentene	ND	a	1.19		0.26		0.91		0.91		1.43	
cis-2-Pentene	0.10		0.52		0.10		0.39		0.37		0.75	
2-Methyl-2-butene	0.27		0.96		0.20		1.07		1.03		1.71	
2,2-Dimethylbutane	0.39		0.56		0.41		0.46		0.41		0.67	
Cyclopentene	0.40		0.24		ND		0.11		0.17		0.39	
4-Methyl-1-pentene	0.09		0.13		ND		0.48		0.07		0.21	
Cyclopentane	0.19		0.36		0.32		0.19		0.34		0.32	
2,3-Dimethylbutane	0.51		1.15		0.47		0.57		0.77		0.87	
2-Methylpentane	1.82		2.95		1.89		2.25		3.41		3.45	
3-Methylpentane	1.15		2.00		1.29		1.63		1.86		2.06	
1-Hexene	ND		0.25		0.08		ND		0.19		ND	
2-Methyl-1-pentene	0.25		0.19		0.12		0.38		0.24		0.51	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	1.07		1.84		1.01		1.35		1.89		2.05	
trans-2-Hexene	ND	b	0.17		0.07		0.21		0.27		0.28	
cis-2-Hexene	ND	b	0.08		0.10		0.13		0.06		0.12	
Methylcyclopentane	0.76		1.08		0.66		0.80		1.11		1.16	
2,4-Dimethylpentane	0.27		0.79		0.28		0.36		0.43		0.49	
Benzene	9.76		4.37		3.50		2.24		4.29		3.82	
Cyclohexane	0.20		0.39		0.11		0.23		0.16		0.24	
2-Methylhexane	0.60		1.16		0.41		0.67		1.47		1.15	
2,3-Dimethylpentane	0.22		0.83		0.24		0.26		0.78		0.52	
3-Methylhexane	1.36		2.15		0.60		1.71		3.07		1.36	
1-Heptene	0.18		0.37		0.16		0.22		0.31		0.26	
2,2,4-Trimethylpentane	1.63		3.51		1.37		1.71		2.47		2.36	
n-Heptane	0.78		0.84		0.42		0.85		0.69		0.71	

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	07972	07977		08070	08064	08112	08120D1
Sampling Date:	8/28/96	8/29/96		8/30/96	9/3/96	9/4/96	9/5/96
Analysis Date:	9/25/96	9/25/96		9/27/96	10/3/96	11/11/96	10/4/96
Methylcyclohexane	0.33	0.73		0.24	0.49	0.73	0.49
2,2,3-Trimethylpentane	0.31	ND	a	0.24	0.37	0.85	0.59
2,3,4-Trimethylpentane	0.29	0.96		0.46	0.53	0.76	0.37
Toluene	8.07	8.03		4.91	5.34	7.96	6.54
2-Methylheptane	0.29	0.21		0.21	0.37	0.45	0.37
3-Methylheptane	0.30	0.22		0.29	0.30	0.29	0.37
1-Octene	0.15	0.27		0.16	0.18	0.25	0.32
n-Octane	0.56	0.39		0.34	0.41	0.51	0.36
Ethylbenzene	0.95	1.35		0.71	0.79	1.47	1.53
m-Xylene/p-Xylene	3.67	4.32		2.76	2.76	4.58	4.10
Styrene	0.62	1.65		0.33	0.37	2.28	1.05
o-Xylene	1.34	1.71		1.08	0.96	1.72	1.55
1-Nonene	0.10	0.10		0.20	0.09	0.50	0.17
n-Nonane	0.73	0.64		0.35	0.94	0.34	0.32
Isopropylbenzene	0.06	ND		0.06	0.02	0.20	0.10
a-Pinene	4.23	5.36		2.34	3.14	1.40	0.95
n-Propylbenzene	0.53	0.32		0.28	0.37	0.69	0.46
m-Ethyltoluene	1.67	1.83		1.03	1.17	2.13	1.95
p-Ethyltoluene	0.75	0.35		0.44	0.43	0.72	0.57
1,3,5-Trimethylbenzene	0.70	0.61		0.46	0.52	0.64	0.60
o-Ethyltoluene	0.79	0.67		0.52	0.62	0.84	0.59
b-Pinene	1.53	3.96		0.96	1.33	4.92	2.44
1-Decene	1.25	ND		1.10	1.35	0.26	0.20
1,2,4-Trimethylbenzene	2.34	2.25		1.72	1.50	2.71	2.16
n-Decane	0.77	0.48		0.41	0.44	0.31	0.39
1,2,3-Trimethylbenzene	0.43	0.26		0.40	0.36	0.64	0.60
m-Diethylbenzene	0.50	0.47		0.34	0.36	0.41	0.37
p-Diethylbenzene	0.36	0.29		0.32	0.33	0.57	0.55
1-Undecene	0.89	1.30		0.74	1.11	2.14	1.09
n-Undecane	2.75	1.74		0.47	2.66	0.58	0.62
1-Dodecane	1.19	1.27		0.46	0.86	1.64	0.99
n-Dodecane	2.68	4.75		0.40	3.64	0.54	0.59
1-Tridecene	0.09	0.44		0.17	0.21	0.87	0.38
n-Tridecane	1.40	3.37		0.58	1.60	1.04	0.99
TNMOC (w/ unknowns)	176.80	250.69		157.52	156.16	200.61	179.86
TNMOC (speciated)	108.44	128.70		67.36	90.88	127.32	112.05

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	08121D2	08184	08201	08210	08218	08240
Sampling Date:	9/5/96	9/6/96	9/9/96	9/10/96	9/11/96	9/12/96
Analysis Date:	10/18/96	10/4/96	10/7/96	10/9/96	11/11/96	10/10/96
Ethylene	4.64	3.88	3.52	7.02	6.76	8.79
Acetylene/Ethane	6.26	6.39	6.25	10.23	12.00	13.35
Propylene	1.85	2.19	3.95	1.79	3.23	3.73
Propane	2.32	7.40	8.67	6.03	6.88	8.17
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	0.68	2.56	1.83	2.48	3.05	4.64
Isobutene/1-butene	1.74	2.88	3.43	2.17	3.28	3.39
1,3-Butadiene	ND	0.58	0.51	0.33	0.44	0.62
n-butane	8.12	10.71	13.45	6.46	6.79	14.64
trans-2-Butene	0.40	0.66	0.72	0.16	0.41	0.72
cis-2-butene	0.35	0.59	0.52	0.15	0.31	0.51
3-Methyl-1-butene	0.19	0.36	0.36	0.25	ND a	0.45
Isopentane	17.94	22.77	29.52	12.67	22.16	29.30
1-Pentene	1.08	0.77	0.74	1.15	2.36	ND a
2-Methyl-1-butene	1.15	1.22	1.54	0.59	0.78	1.80
n-Pentane	5.26	8.58	7.72	8.35	8.40	10.54
Isoprene	2.45	7.64	14.25	1.41	1.50	4.06
trans-2-Pentene	1.46	1.88	2.10	0.57	1.19	2.77
cis-2-Pentene	0.78	1.04	1.71	ND a	0.48	1.25
2-Methyl-2-butene	1.79	2.37	2.65	0.42	1.11	2.74
2,2-Dimethylbutane	0.62	1.06	0.86	0.45	0.66	1.14
Cyclopentene	0.43	0.28	0.34	0.11	0.19	ND a
4-Methyl-1-pentene	0.24	0.21	1.29	0.49	0.18	ND a
Cyclopentane	0.34	0.70	0.60	0.46	0.77	ND a
2,3-Dimethylbutane	0.93	1.81	2.18	0.83	1.37	2.92
2-Methylpentane	3.51	5.82	7.49	2.79	3.97	7.73
3-Methylpentane	2.04	3.79	3.83	1.89	2.59	5.33
1-Hexene	0.30	ND a	ND	0.11	0.27	0.61
2-Methyl-1-pentene	0.17	ND a	0.79	0.18	0.21	0.59
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	2.00	4.27	ND a	1.60	2.77	4.06
trans-2-Hexene	0.30	0.67	0.42	0.07	0.27	0.55
cis-2-Hexene	0.20	0.56	0.27	0.08	0.08	0.53
Methylcyclopentane	1.22	2.36	2.05	1.20	1.47	2.67
2,4-Dimethylpentane	0.47	1.05	1.24	0.50	0.71	1.11
Benzene	4.35	6.48	6.61	5.11	5.75	7.77
Cyclohexane	0.15	0.37	0.60	0.33	0.40	0.49
2-Methylhexane	1.30	1.73	1.75	0.63	1.58	1.74
2,3-Dimethylpentane	0.47	1.03	2.02	0.36	0.97	1.06
3-Methylhexane	1.58	2.21	3.27	1.14	2.07	2.38
1-Heptene	0.17	0.72	0.68	0.28	0.44	0.66
2,2,4-Trimethylpentane	2.08	4.75	5.88	2.36	3.54	5.33
n-Heptane	0.75	1.28	1.67	0.86	0.97	1.08

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	**08121D2**	**08184**	**08201**	**08210**	**08218**	**08240**
Sampling Date:	**9/5/96**	**9/6/96**	**9/9/96**	**9/10/96**	**9/11/96**	**9/12/96**
Analysis Date:	**10/18/96**	**10/4/96**	**10/7/96**	**10/9/96**	**11/11/96**	**10/10/96**
Methylcyclohexane	0.58	1.02	1.44	0.83	0.98	0.89
2,2,3-Trimethylpentane	0.40	0.69	0.81	0.38	0.67	0.77
2,3,4-Trimethylpentane	0.64	1.59	1.77	0.76	1.19	1.88
Toluene	6.81	14.61	14.23	9.42	14.48	15.04
2-Methylheptane	0.66	0.53	0.63	0.28	0.56	0.51
3-Methylheptane	0.38	0.66	0.68	0.31	0.45	0.59
1-Octene	0.24	0.43	0.54	0.25	0.47	0.69
n-Octane	0.32	0.23	0.94	0.76	0.68	0.80
Ethylbenzene	1.18	2.44	2.33	2.18	1.94	2.66
m-Xylene/p-Xylene	3.60	8.43	8.30	7.12	6.19	8.43
Styrene	1.51	1.13	1.29	0.62	1.82	1.19
o-Xylene	1.41	3.25	2.68	2.21	2.74	3.25
1-Nonene	0.11	0.21	0.08	0.08	0.41	0.25
n-Nonane	0.27	1.06	0.79	0.64	1.26	0.54
Isopropylbenzene	0.14	0.13	0.21	0.12	0.12	0.14
a-Pinene	0.94	9.56	10.77	1.23	0.89	10.41
n-Propylbenzene	0.38	0.65	0.72	0.44	0.61	0.56
m-Ethyltoluene	1.76	3.77	3.29	3.23	2.32	3.43
p-Ethyltoluene	0.56	1.03	1.04	0.71	1.00	0.93
1,3,5-Trimethylbenzene	0.70	1.49	1.37	0.69	1.18	1.33
o-Ethyltoluene	0.58	1.56	1.61	2.92	0.80	1.44
b-Pinene	2.72	3.46	4.37	1.27	3.75	3.75
1-Decene	0.17	1.53	1.90	1.50	0.17	1.52
1,2,4-Trimethylbenzene	2.03	5.10	4.61	2.92	3.62	4.56
n-Decane	0.25	1.34	1.45	7.94	10.38	0.83
1,2,3-Trimethylbenzene	0.62	1.40	1.35	0.72	0.82	1.26
m-Diethylbenzene	0.37	0.53	0.57	0.42	0.81	0.58
p-Diethylbenzene	0.93	0.71	0.61	2.43	0.71	0.67
1-Undecene	1.74	1.35	1.03	1.38	1.56	0.70
n-Undecane	0.48	1.22	2.29	40.80	41.51	1.02
1-Dodecene	1.92	1.06	0.51	0.95	0.97	0.71
n-Dodecane	0.74	0.77	1.25	33.38	35.66	1.13
1-Tridecene	0.88	ND	0.24	0.25	0.47	0.18
n-Tridecane	0.87	3.94	1.17	7.66	8.68	1.65
TNMOC (w/ unknowns)	183.75	264.07	316.62	294.50	345.14	319.77
TNMOC (speciated)	119.03	202.47	224.34	221.29	262.26	233.69

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	08296		08294		08329		08335		08402		08403
Sampling Date:	9/13/96		9/16/96		9/17/96		9/18/96		9/19/96		9/20/96
Analysis Date:	10/10/96		10/14/96		10/14/96		10/17/96		10/17/96		10/17/96
Ethylene	4.00		0.88		1.17		4.67		4.21		5.14
Acetylene/Ethane	6.68		2.11		4.41		8.81		7.53		6.10
Propylene	1.21		0.29		0.37		1.98		1.60		1.87
Propane	4.06		1.12		4.11		5.47		4.36		3.26
Propyne	ND		ND		ND		ND		ND		ND
Isobutane	1.00		0.92		1.20		2.58		1.15		1.36
Isobutene/1-butene	2.00		1.95		1.26		2.25		2.19		3.54
1,3-Butadiene	ND		0.06		0.02		0.38		0.26		ND
n-butane	3.73		1.50		2.13		4.32		4.35		6.47
trans-2-Butene	0.13		0.02		ND		0.23		0.21		0.42
cis-2-butene	0.07		0.12		ND		0.19		0.15		0.20
3-Methyl-1-butene	0.14		0.05		0.17		0.15		0.12		0.17
isopentane	4.90		2.41		1.93		17.26		8.45		11.90
1-Pentene	ND	a	0.19		0.04		ND	c	0.37		0.50
2-Methyl-1-butene	0.24		ND	a	0.14		0.29		0.51		0.65
n-Pentane	2.21		ND	a	1.18		3.76		3.04		4.10
Isoprene	1.02		0.79		1.59		0.62		1.10		1.80
trans-2-Pentene	0.21		0.45		ND	a	0.82		0.66		0.82
cis-2-Pentene	0.15		ND	a	0.08		0.31		0.31		0.42
2-Methyl-2-butene	0.20		ND	a	0.17		1.03		0.90		0.95
2,2-Dimethylbutane	0.38		ND	a	0.16		0.43		0.34		0.50
Cyclopentene	0.07		0.04		0.07		0.24		0.13		0.14
4-Methyl-1-pentene	0.08		0.45		0.03		0.38		0.19		0.18
Cyclopentane	0.17		0.08		0.09		ND	a	0.29		0.43
2,3-Dimethylbutane	0.33		0.18		0.13		ND	a	0.58		0.83
2-Methylpentane	3.20		0.60		1.03		2.93		2.74		3.68
3-Methylpentane	0.84		0.56		0.44		1.91		1.16		2.05
1-Hexene	0.07		0.07		ND		ND		0.13		0.21
2-Methyl-1-pentene	0.10		0.20		0.08		0.49		0.17		0.16
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	1.08		0.31		0.63		1.94		1.01		1.81
trans-2-Hexene	0.08		0.02		0.05		0.25		0.19		0.30
cis-2-Hexene	0.02		0.02		0.01		0.16		0.11		0.07
Methylcyclopentane	0.61		0.45		0.37		0.93		0.72		1.04
2,4-Dimethylpentane	0.19		0.12		0.06		0.43		0.35		0.45
Benzene	4.60		0.80		1.53		3.42		3.21		4.68
Cyclohexane	0.12		0.15		0.11		0.87		0.12		0.15
2-Methylhexane	0.69		0.14		0.42		1.11		0.73		1.12
2,3-Dimethylpentane	0.31		0.08		0.18		0.64		0.45		0.59
3-Methylhexane	0.82		0.27		0.60		2.62		1.22		1.28
1-Heptene	0.18		0.06		0.12		0.37		0.35		0.31
2,2,4-Trimethylpentane	1.44		0.55		0.47		2.53		2.05		2.95
n-Heptane	0.42		0.24		0.24		1.02		0.54		0.65

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	08296	08294	08329	08335	08402	08403
Sampling Date:	9/13/96	9/16/96	9/17/96	9/18/96	9/19/96	9/20/96
Analysis Date:	10/10/96	10/14/96	10/14/96	10/17/96	10/17/96	10/17/96
Methylcyclohexane	0.37	ND	0.23	0.83	0.36	0.65
2,2,3-Trimethylpentane	0.30	ND	0.05	0.62	0.44	0.41
2,3,4-Trimethylpentane	0.36	0.21	0.14	0.75	0.62	0.77
Toluene	5.43	1.80	1.79	9.10	6.71	8.47
2-Methylheptane	0.24	0.13	0.19	0.32	0.28	0.38
3-Methylheptane	0.20	1.23	0.11	0.69	0.24	0.39
1-Octene	0.35	0.14	0.23	0.39	0.25	0.31
n-Octane	0.31	0.15	0.16	0.56	0.25	0.36
Ethylbenzene	0.96	0.30	0.47	1.45	1.18	1.59
m-Xylene/p-Xylene	2.90	1.09	1.11	4.51	3.36	5.07
Styrene	0.72	0.18	0.60	0.59	1.24	0.87
o-Xylene	1.08	0.30	0.35	1.62	1.30	1.92
1-Nonene	0.80	0.13	0.20	0.14	0.18	0.09
n-Nonane	0.28	0.34	0.16	0.61	0.28	0.26
Isopropylbenzene	0.10	0.09	0.06	0.09	0.17	0.10
a-Pinene	0.68	1.46	0.99	3.01	0.37	3.02
n-Propylbenzene	0.33	0.12	0.10	0.53	0.45	0.38
m-Ethyltoluene	1.09	0.55	0.58	1.92	1.45	1.71
p-Ethyltoluene	0.48	0.19	0.14	0.74	0.57	0.60
1,3,5-Trimethylbenzene	0.40	0.12	0.16	0.62	0.88	0.72
o-Ethyltoluene	0.29	0.27	0.15	2.44	0.49	0.79
b-Pinene	1.02	0.69	2.11	0.85	2.68	2.19
1-Decene	0.15	1.51	0.10	2.32	0.18	0.30
1,2,4-Trimethylbenzene	1.78	0.59	0.79	2.28	2.30	2.82
n-Decane	0.42	0.27	1.41	2.17	0.41	0.39
1,2,3-Trimethylbenzene	0.39	0.22	2.01	0.81	0.70	0.85
m-Diethylbenzene	0.19	0.07	0.15	0.37	0.45	0.51
p-Diethylbenzene	0.62	0.13	0.17	0.40	0.54	0.57
1-Undecene	1.06	2.50	0.89	2.60	2.86	0.77
n-Undecane	1.07	0.09	7.71	8.37	0.85	0.57
1-Dodecene	1.08	1.26	0.81	1.25	2.58	0.85
n-Dodecane	1.31	3.14	7.00	9.98	1.36	0.72
1-Tridecene	0.30	0.57	0.29	0.22	0.50	0.27
n-Tridecane	1.25	1.97	2.63	4.39	1.29	1.18
TNMOC (w/ unknowns)	122.83	100.26	11.37	232.21	168.81	178.35
TNMOC (speciated)	76.07	40.02	60.80	145.30	96.03	114.11

Footnotes:
a - Compound not analyzed due to FID flame out
c- Compound not analyzed due to sample (matrix) interference

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	08423D1		08424D2	08432		08443		08439		08494
Sampling Date:	9/23/96		9/23/96	9/24/96		9/25/96		9/26/96		9/27/96
Analysis Date:	10/18/96		10/18/96	10/18/96		10/21/96		10/25/96		10/25/96
Ethylene	6.67		7.89	10.83		10.31		4.02		1.36
Acetylene/Ethane	11.69		12.00	11.75		11.52		4.81		2.37
Propylene	5.17		4.08	9.32		7.55		2.71		0.82
Propane	10.31		12.25	6.21		7.99		4.79		1.37
Propyne	ND		ND	ND		ND		ND		ND
Isobutane	13.57		16.73	5.84		6.06		3.61		0.46
Isobutene/1-butene	4.35		9.56	4.26		3.18		2.47		0.46
1,3-Butadiene	0.58		0.72	ND		ND		0.27		0.14
n-butane	119.69		103.60	27.80		28.61		30.59		1.89
trans-2-Butene	2.10		2.17	1.24		1.28		0.71		ND
cis-2-butene	2.04		1.77	0.67		0.87		0.46		ND
3-Methyl-1-butene	1.40		1.19	0.79		0.72		0.47		ND
Isopentane	110.76		97.94	37.95		39.49		30.88		ND
1-Pentene	ND	a	4.04	ND	a	0.26		0.72		0.12
2-Methyl-1-butene	ND	a	5.14	2.35		0.92		ND	a	0.14
n-Pentane	23.95		21.75	12.74		ND	a	8.23		0.93
Isoprene	4.01		3.58	6.73		4.50		1.31		0.25
trans-2-Pentene	6.98		6.34	3.02		3.05		1.49		0.19
cis-2-Pentene	3.27		3.13	1.86		1.35		0.75		0.04
2-Methyl-2-butene	8.77		8.13	3.75		3.49		0.99		0.19
2,2-Dimethylbutane	2.27		2.13	1.61		1.50		1.34		0.14
Cyclopentene	1.09		0.98	0.67		0.49		0.13		0.02
4-Methyl-1-pentene	ND	a	0.83	0.48		0.30		0.61		0.02
Cyclopentane	ND	a	1.44	1.03		0.43		0.73		0.10
2,3-Dimethylbutane	ND	a	5.17	2.40		1.02		1.64		0.23
2-Methylpentane	14.79		11.38	8.79		8.55		ND		0.56
3-Methylpentane	8.00		7.06	5.22		5.27		3.44		0.61
1-Hexene	ND		ND	0.69		0.71		0.26		0.20
2-Methyl-1-pentene	3.11		1.70	0.47		0.44		0.30		0.03
2-Ethyl-1-butene	ND		ND	ND		ND		ND		ND
n-Hexane	5.90		5.50	4.72		4.93		2.73		0.53
trans-2-Hexene	1.42		1.21	0.66		0.61		0.29		0.07
cis-2-Hexene	1.02		1.00	0.22		0.22		0.26		0.02
Methylcyclopentane	4.34		4.00	2.81		2.76		1.70		0.27
2,4-Dimethylpentane	3.79		3.55	1.40		1.18		0.86		0.09
Benzene	8.97		7.82	10.32		10.20		4.59		1.45
Cyclohexane	0.60		0.65	0.47		0.79		0.47		0.15
2-Methylhexane	3.08		2.54	2.65		2.63		1.11		0.57
2,3-Dimethylpentane	4.31		4.19	1.47		1.37		0.90		0.20
3-Methylhexane	3.47		2.89	2.92		3.18		1.41		0.64
1-Heptene	1.06		0.96	0.80		0.92		0.48		0.15
2,2,4-Trimethylpentane	14.50		13.13	7.25		6.62		3.58		0.76
n-Heptane	2.27		1.67	1.53		1.51		0.83		0.23

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	**08423D1**	**08424D2**	**08432**	**08443**	**08439**	**08494**
Sampling Date:	**9/23/96**	**9/23/96**	**9/24/96**	**9/25/96**	**9/26/96**	**9/27/96**
Analysis Date:	**10/18/96**	**10/18/96**	**10/18/96**	**10/21/96**	**10/25/96**	**10/25/96**
Methylcyclohexane	1.53	1.62	1.47	1.45	0.64	0.25
2,2,3-Trimethylpentane	2.03	1.45	1.29	1.17	0.36	0.13
2,3,4-Trimethylpentane	4.25	6.04	2.52	4.65	0.91	0.23
Toluene	20.21	19.41	20.15	21.35	8.74	2.64
2-Methylheptane	0.60	0.66	0.64	0.92	0.38	0.20
3-Methylheptane	0.76	0.73	0.66	0.58	1.33	0.17
1-Octene	1.11	0.27	0.76	0.67	0.23	0.28
n-Octane	0.60	0.42	0.66	0.74	0.69	0.26
Ethylbenzene	3.21	2.94	3.32	3.47	1.41	0.49
m-Xylene/p-Xylene	11.46	12.36	10.94	11.03	4.79	1.71
Styrene	1.14	0.97	1.68	2.14	0.64	0.54
o-Xylene	4.21	3.96	4.34	1.38	1.66	0.57
1-Nonene	0.19	0.17	0.33	ND	0.21	0.16
n-Nonane	0.70	0.56	0.59	0.72	0.69	0.26
Isopropylbenzene	0.15	0.11	0.27	0.13	0.06	0.05
a-Pinene	5.55	4.59	1.68	2.05	6.83	0.69
n-Propylbenzene	0.77	0.77	1.05	0.44	0.51	ND
m-Ethyltoluene	3.75	3.63	5.26	5.00	2.19	0.26
p-Ethyltoluene	1.28	1.19	1.30	1.25	0.72	0.16
1,3,5-Trimethylbenzene	1.54	1.51	1.74	1.60	0.93	0.10
o-Ethyltoluene	1.80	1.71	1.59	2.17	1.08	0.15
b-Pinene	1.78	1.87	6.52	9.11	2.28	1.15
1-Decene	1.43	1.50	0.36	1.60	2.73	0.08
1,2,4-Trimethylbenzene	4.74	5.21	6.56	6.47	2.25	1.07
n-Decane	0.88	4.02	0.93	1.23	2.30	0.31
1,2,3-Trimethylbenzene	1.25	1.25	1.72	2.30	0.45	0.71
m-Diethylbenzene	0.62	0.55	1.07	0.98	0.42	0.17
p-Diethylbenzene	0.85	0.73	1.85	1.81	0.46	0.44
1-Undecene	0.82	0.75	1.19	1.70	3.28	1.05
n-Undecane	1.16	22.32	1.73	1.72	7.33	0.81
1-Dodecene	0.59	0.60	1.49	1.89	1.19	1.09
n-Dodecane	0.89	25.85	2.62	2.66	4.59	1.44
1-Tridecene	0.23	0.25	0.80	0.61	0.41	0.34
n-Tridecane	0.71	7.73	2.25	1.90	2.03	1.99
TNMOC (w/ unknowns)	588.65	616.99	410.99	433.37	261.19	110.83
TNMOC (speciated)	502.06	539.47	297.00	283.68	191.67	37.70

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	**08515**	
Sampling Date:	**9/30/96**	
Analysis Date:	**10/28/96**	
Ethylene	2.34	
Acetylene/Ethane	2.93	
Propylene	1.03	
Propane	2.38	
Propyne	ND	
Isobutane	2.02	
Isobutene/1-butene	2.00	
1,3-Butadiene	0.06	
n-butane	11.19	
trans-2-Butene	0.22	
cis-2-butene	0.23	
3-Methyl-1-butene	0.15	
isopentane	10.91	
1-Pentene	0.70	
2-Methyl-1-butene	0.41	
n-Pentane	3.69	
Isoprene	0.13	
trans-2-Pentene	0.46	
cis-2-Pentene	0.26	
2-Methyl-2-butene	0.53	
2,2-Dimethylbutane	0.37	
Cyclopentene	0.05	
4-Methyl-1-pentene	0.42	
Cyclopentane	0.63	
2,3-Dimethylbutane	ND	a
2-Methylpentane	ND	a
3-Methylpentane	1.42	
1-Hexene	0.11	
2-Methyl-1-pentene	0.08	
2-Ethyl-1-butene	ND	
n-Hexane	1.14	
trans-2-Hexene	0.09	
cis-2-Hexene	0.09	
Methylcyclopentane	0.93	
2,4-Dimethylpentane	0.35	
Benzene	3.27	
Cyclohexane	0.17	
2-Methylhexane	0.66	
2,3-Dimethylpentane	0.45	
3-Methylhexane	0.71	
1-Heptene	ND	
2,2,4-Trimethylpentane	1.82	
n-Heptane	0.49	

SNMOC REPORT
SITE CODE: B3AL
All concentrations reported in ppbC

Sample No.:	**08515**	
Sampling Date:	**9/30/96**	
Analysis Date:	**10/28/96**	
Methylcyclohexane	0.24	
2,2,3-Trimethylpentane	0.24	
2,3,4-Trimethylpentane	0.65	
Toluene	4.93	
2-Methylheptane	0.15	
3-Methylheptane	0.12	
1-Octene	0.20	
n-Octane	0.23	
Ethylbenzene	0.82	
m-Xylene/p-Xylene	2.77	
Styrene	ND	c
o-Xylene	0.71	
1-Nonene	0.13	
n-Nonane	0.47	
Isopropylbenzene	ND	
a-Pinene	1.39	
n-Propylbenzene	0.18	
m-Ethyltoluene	1.12	
p-Ethyltoluene	0.38	
1,3,5-Trimethylbenzene	0.44	
o-Ethyltoluene	0.47	
b-Pinene	1.97	
1-Decene	1.02	
1,2,4-Trimethylbenzene	0.95	
n-Decane	0.58	
1,2,3-Trimethylbenzene	5.43	
m-Diethylbenzene	0.23	
p-Diethylbenzene	0.28	
1-Undecene	1.19	
n-Undecane	8.96	
1-Dodecene	1.53	
n-Dodecane	27.91	
1-Tridecene	0.28	
n-Tridecane	6.26	
TNMOC (w/ unknowns)	181.41	
TNMOC (speciated)	127.12	

Footnotes:
a - Compound not analyzed due to FID flame out
c- Compound not analyzed due to sample (matrix) interference

SNMOC REPORT
SITE CODE: CAMP
All concentrations reported in ppbC

Sample No.:	06806	06843	06882	06906	07028D1	07030D2	
Sampling Date:	7/10/96	7/12/96	7/14/96	7/16/96	7/22/96	7/22/96	
Analysis Date:	8/7/96	8/8/96	8/8/96	8/13/96	8/21/96	8/21/96	
Ethylene	15.64	16.54	2.80	20.36	19.18	19.65	
Acetylene/Ethane	33.84	25.71	4.90	13.41	24.91	26.88	
Propylene	7.61	6.68	4.35	9.13	8.77	8.88	
Propane	17.51	11.73	3.20	15.44	10.65	11.41	
Propyne	ND	0.32	ND	ND	0.49	0.44	
Isobutane	6.51	5.42	2.13	10.07	6.99	8.65	
Isobutene/1-butene	4.26	4.25	0.88	4.97	5.05	5.20	
1,3-Butadiene	1.04	0.96	ND	1.35	1.25	1.32	
n-butane	16.79	12.27	4.96	20.38	15.90	16.79	
trans-2-Butene	1.38	1.30	ND	2.81	1.86	1.55	
cis-2-butene	1.01	1.10	ND	2.00	1.08	1.05	
3-Methyl-1-butene	0.26	0.32	ND	0.68	0.42	0.47	
Isopentane	36.32	31.38	15.92	55.12	41.56	40.45	
1-Pentene	0.71	0.91	0.54	1.30	0.89	ND	a
2-Methyl-1-butene	1.89	1.18	0.33	2.74	1.51	2.04	
n-Pentane	27.46	17.84	5.01	30.50	29.35	27.49	
Isoprene	0.76	0.88	0.29	1.48	2.79	2.27	
trans-2-Pentene	2.87	1.67	0.71	3.61	2.59	3.20	
cis-2-Pentene	1.47	2.50	0.24	1.90	1.35	1.71	
2-Methyl-2-butene	4.14	1.92	0.55	3.53	3.00	3.63	
2,2-Dimethylbutane	2.01	1.36	0.53	2.17	1.86	1.99	
Cyclopentene	0.62	0.29	0.53	ND	0.56	0.88	
4-Methyl-1-pentene	0.78	0.62	0.88	ND	0.46	0.51	
Cyclopentane	2.10	1.42	0.87	2.46	1.80	1.84	
2,3-Dimethylbutane	4.07	2.47	4.19	4.80	3.35	3.45	
2-Methylpentane	17.50	10.59	4.03	19.20	16.28	16.51	
3-Methylpentane	11.31	6.11	2.26	ND	a 9.46	10.31	
1-Hexene	1.89	0.42	ND	ND	ND	ND	
2-Methyl-1-pentene	1.40	0.35	0.46	1.71	1.26	1.43	
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND	
n-Hexane	15.04	8.93	3.13	17.11	14.62	14.05	
trans-2-Hexene	0.98	0.46	0.07	2.02	1.13	0.97	
cis-2-Hexene	0.68	0.43	0.06	1.06	0.62	0.66	
Methylcyclopentane	7.57	4.37	2.15	6.18	6.72	7.09	
2,4-Dimethylpentane	2.73	1.74	0.59	3.20	2.55	2.84	
Benzene	14.84	11.57	3.27	20.82	15.72	16.69	
Cyclohexane	3.48	1.85	0.54	3.77	2.39	2.54	
2-Methylhexane	6.81	3.36	1.82	5.81	6.27	7.58	
2,3-Dimethylpentane	3.81	3.26	0.62	3.22	3.96	3.83	
3-Methylhexane	9.64	8.05	5.10	10.49	6.57	7.55	
1-Heptene	ND	1.38	0.51	2.78	2.03	2.17	
2,2,4-Trimethylpentane	9.35	5.58	1.62	9.60	7.95	8.88	
n-Heptane	4.95	3.17	1.17	5.78	4.39	4.80	
Methylcyclohexane	4.42	2.77	1.48	4.74	3.55	3.94	

SNMOC REPORT
SITE CODE: CAMP
All concentrations reported in ppbC

Sample No.:	06806	06843	06882	06906	07028D1	07030D2
Sampling Date:	7/10/96	7/12/96	7/14/96	7/16/96	7/22/96	7/22/96
Analysis Date:	8/7/96	8/8/96	8/6/96	8/13/96	8/21/96	8/21/96
2,2,3-Trimethylpentane	2.05	1.35	0.73	2.37	1.83	2.13
2,3,4-Trimethylpentane	2.70	1.66	0.48	2.79	4.88	2.56
Toluene	33.70	26.79	9.56	58.12	42.06	48.78
2-Methylheptane	2.55	1.98	0.45	1.80	2.26	2.43
3-Methylheptane	2.61	2.02	1.10	3.28	2.45	2.67
1-Octene	0.91	0.36	0.16	1.02	1.00	1.04
n-Octane	2.83	2.41	2.88	2.66	1.91	2.05
Ethylbenzene	6.56	4.07	1.81	7.29	6.34	6.98
m-Xylene/p-Xylene	24.02	15.61	5.06	26.70	22.53	24.26
Styrene	1.26	0.80	5.23	1.58	2.00	2.05
o-Xylene	8.18	5.30	1.86	9.19	7.93	8.58
1-Nonene	0.38	0.42	0.22	0.43	0.36	0.44
n-Nonane	1.41	1.16	1.96	1.57	1.00	1.15
Isopropylbenzene	0.28	0.19	0.10	0.30	ND	0.29
a-Pinene	1.61	3.06	1.79	1.27	0.48	2.34
n-Propylbenzene	2.17	1.77	0.86	2.16	1.75	2.10
m-Ethyltoluene	6.88	4.81	1.43	7.11	7.16	6.68
p-Ethyltoluene	2.81	1.90	0.77	3.42	2.76	2.91
1,3,5-Trimethylbenzene	3.60	2.47	0.60	3.96	3.60	3.62
o-Ethyltoluene	4.03	2.03	0.56	3.23	2.69	3.09
b-Pinene	8.36	14.42	6.63	ND	0.99	1.64
1-Decene	ND	ND	ND	11.48	0.47	0.63
1,2,4-Trimethylbenzene	9.85	6.51	2.12	10.74	10.09	9.73
n-Decane	1.80	1.70	0.62	2.31	1.73	1.51
1,2,3-Trimethylbenzene	1.04	0.71	1.51	1.35	3.12	2.87
m-Diethylbenzene	1.95	1.31	0.35	1.93	2.03	1.95
p-Diethylbenzene	3.11	2.89	0.76	3.47	3.42	3.32
1-Undecene	8.99	23.45	6.79	14.02	1.37	1.13
n-Undecane	1.78	1.84	1.13	4.19	2.57	2.08
1-Dodecene	3.58	8.41	2.86	4.27	0.99	0.39
n-Dodecane	0.60	0.79	1.67	6.02	2.19	1.19
1-Tridecene	0.66	1.11	0.94	1.07	0.39	0.24
n-Tridecane	1.22	1.23	1.42	4.56	2.28	1.89
TNMOC (w/ unknowns)	597.71	499.66	252.68	685.45	546.60	560.44
TNMOC (speciated)	460.90	369.93	147.11	533.33	439.70	458.33

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMP
All concentrations reported in ppbC

Sample No.:	07107		07136		07159		07217		07267		07322	
Sampling Date:	7/25/96		7/26/96		7/28/96		7/30/96		8/1/96		8/3/96	
Analysis Date:	8/21/96		8/21/96		8/20/96		8/27/96		8/29/96		8/30/96	
Ethylene	9.23		9.60		6.46		21.03		18.67		8.09	
Acetylene/Ethane	28.37		13.18		17.96		30.58		29.12		16.67	
Propylene	4.58		4.98		5.01		8.09		9.75		3.43	
Propane	26.62		5.71		11.86		12.40		14.15		9.69	
Propyne	0.21		ND		ND		ND		ND		ND	
Isobutane	8.47		2.50		4.72		6.25		7.00		5.48	
Isobutene/1-butene	3.47		2.07		1.91		4.64		3.74		1.87	
1,3-Butadiene	0.94		0.38		0.45		1.62		1.39		ND	
n-butane	20.31		5.85		10.85		14.16		16.81		10.37	
trans-2-Butene	1.17		0.40		0.45		0.66		1.28		0.37	
cis-2-butene	0.42		0.48		1.25		1.11		0.90		0.39	
3-Methyl-1-butene	0.15		0.19		0.37		0.47		0.31		0.13	
Isopentane	21.48		17.64		24.33		36.66		37.88		19.23	
1-Pentene	0.30		0.40		0.45		0.67		1.70		0.19	
2-Methyl-1-butene	1.54		0.75		0.68		0.67		1.80		0.64	
n-Pentane	16.10		10.04		14.41		20.30		21.34		ND	a
Isoprene	0.36		0.33		ND		0.94		0.81		ND	a
trans-2-Pentene	0.79		0.87		0.82		2.01		2.04		0.89	
cis-2-Pentene	0.40		0.46		0.46		1.02		1.07		0.45	
2-Methyl-2-butene	0.97		1.10		0.78		2.65		3.18		1.14	
2,2-Dimethylbutane	0.74		0.53		0.72		1.66		1.50		0.98	
Cyclopentene	0.23		0.17		0.26		0.43		0.43		0.37	
4-Methyl-1-pentene	0.19		0.11		0.19		0.36		0.37		0.53	
Cyclopentane	1.38		0.83		1.30		1.90		2.10		0.82	
2,3-Dimethylbutane	1.64		1.44		1.82		3.29		3.44		1.50	
2-Methylpentane	ND	a	6.88		9.46		13.08		13.66		7.02	
3-Methylpentane	5.26		4.10		5.42		8.43		8.05		5.13	
1-Hexene	0.46		ND		ND		ND		ND	a	ND	
2-Methyl-1-pentene	0.30		0.52		0.61		2.30		ND	a	0.57	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	7.41		5.59		7.45		11.26		11.52		5.69	
trans-2-Hexene	0.21		0.36		0.51		0.64		0.65		0.17	
cis-2-Hexene	0.26		0.24		0.12		0.88		0.73		0.07	
Methylcyclopentane	3.66		2.59		3.55		ND	a	5.84		2.94	
2,4-Dimethylpentane	1.24		1.08		1.34		2.10		2.30		1.17	
Benzene	7.66		7.03		6.36		15.09		14.77		6.42	
Cyclohexane	1.82		1.12		1.57		2.69		2.69		1.34	
2-Methylhexane	2.85		2.63		2.65		5.38		5.27		2.46	
2,3-Dimethylpentane	1.66		1.62		2.26		3.42		3.57		1.78	
3-Methylhexane	2.65		2.90		3.68		4.78		6.81		3.33	
1-Heptene	0.81		0.76		1.18		0.83		1.65		0.96	
2,2,4-Trimethylpentane	3.65		3.55		3.83		7.83		7.43		3.56	
n-Heptane	2.88		2.02		3.25		4.19		5.74		2.82	
Methylcyclohexane	2.24		1.70		2.50		3.25		4.78		1.63	

SNMOC REPORT
SITE CODE: CAMP
All concentrations reported in ppbC

Sample No.:	07107	07136	07159	07217	07267	07322
Sampling Date:	7/25/96	7/26/96	7/28/96	7/30/96	8/1/96	8/3/96
Analysis Date:	8/21/96	8/21/96	8/20/96	8/27/96	8/29/96	8/30/96
2,2,3-Trimethylpentane	0.81	0.95	0.65	1.61	1.54	0.66
2,3,4-Trimethylpentane	0.96	1.09	1.05	2.48	2.15	1.03
Toluene	15.70	14.59	17.30	37.97	44.36	16.44
2-Methylheptane	0.80	0.92	1.17	2.05	2.34	0.99
1-Octene	0.25	0.43	0.40	0.21	2.85	1.12
3-Methylheptane	1.25	1.02	1.20	2.38	0.48	0.32
n-Octane	1.48	0.86	1.08	2.32	3.06	1.25
Ethylbenzene	2.58	2.63	2.89	5.99	5.84	2.63
m-Xylene/p-Xylene	10.00	9.64	9.81	21.91	21.30	9.68
Styrene	0.62	1.30	3.32	1.35	1.27	0.54
o-Xylene	3.41	3.66	6.53	8.58	7.27	3.36
1-Nonene	0.22	0.89	ND	0.10	0.23	0.20
n-Nonane	0.84	0.42	0.69	1.30	1.48	0.87
Isopropylbenzene	0.13	0.11	0.12	0.28	0.26	0.13
a-Pinene	1.62	0.38	5.56	1.84	2.35	0.88
n-Propylbenzene	0.84	0.82	0.72	1.65	1.71	0.59
m-Ethyltoluene	2.70	2.82	2.90	5.82	5.96	2.63
p-Ethyltoluene	1.29	1.16	1.31	2.77	2.45	1.19
1,3,5-Trimethylbenzene	1.58	1.32	1.64	3.14	3.06	1.48
o-Ethyltoluene	1.16	1.15	1.37	2.48	2.56	1.21
b-Pinene	ND	1.59	1.45	0.94	0.53	0.30
1-Decene	0.77	0.29	3.72	1.50	1.95	0.97
1,2,4-Trimethylbenzene	4.09	4.09	3.32	8.68	8.90	3.94
n-Decane	1.09	0.48	1.10	1.82	1.86	1.25
1,2,3-Trimethylbenzene	0.43	1.06	0.47	1.05	1.41	0.61
m-Diethylbenzene	0.89	1.16	3.37	1.64	1.66	0.72
p-Diethylbenzene	1.54	1.86	2.14	2.66	2.88	1.21
1-Undecene	0.93	3.45	2.23	1.24	1.96	0.78
n-Undecane	1.57	1.27	1.59	2.82	2.66	1.44
1-Dodecene	0.64	3.03	1.86	1.17	1.60	0.65
n-Dodecane	0.65	1.75	1.35	2.81	1.41	0.65
1-Tridecene	ND	0.62	0.59	ND	0.10	ND
n-Tridecane	0.92	1.76	1.39	1.38	1.40	0.70
TNMOC (w/ unknowns)	314.04	249.79	334.48	465.47	511.72	254.25
TNMOC (speciated)	256.78	193.21	247.50	393.70	417.06	190.68

Footnotes:
a - Compound not analyzed due to FID flame out

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

Sample No.:	07325		07381D1		07382D2		07475		07582		07606	
Sampling Date:	8/5/96		8/7/96		8/7/96		8/9/96		8/13/96		8/15/96	
Analysis Date:	8/30/96		11/4/96		11/4/96		10/29/96		9/11/96		9/10/96	
Ethylene	12.65		14.32		10.77		17.00		15.95		26.48	
Acetylene/Ethane	19.53		18.33		16.33		22.94		21.14		38.25	
Propylene	6.31		6.07		5.49		10.83		5.30		16.39	
Propane	8.09		7.92		6.93		8.95		7.04		11.94	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	4.88		3.29		3.10		7.47		5.49		7.44	
Isobutene/1-butene	2.50		3.34		3.77		3.01		3.03		6.48	
1,3-Butadiene	0.60		1.15		1.14		ND		3.23		2.45	
n-butane	10.62		10.98		11.67		21.73		14.06		22.33	
trans-2-Butene	1.22		ND		0.18		1.38		1.34		2.92	
cis-2-butene	0.76		0.66		0.66		0.91		1.08		1.52	
3-Methyl-1-butene	0.34		0.26		0.19		0.08		0.43		0.59	
Isopentane	ND	a	22.11		23.83		49.25		39.45		ND	a
1-Pentene	0.92		0.96		0.22		1.47		1.40		1.51	
2-Methyl-1-butene	1.36		1.36		1.40		2.02		2.14		2.66	
n-Pentane	16.47		13.46		13.92		27.04		29.90		32.18	
Isoprene	0.64		0.58		0.62		1.10		2.40		1.68	
trans-2-Pentene	1.68		1.01		1.18		2.49		2.59		3.33	
cis-2-Pentene	0.85		0.41		0.54		1.25		1.41		1.78	
2-Methyl-2-butene	2.00		1.51		1.43		2.86		3.08		4.03	
2,2-Dimethylbutane	1.12		0.54		0.47		1.95		1.33		2.69	
Cyclopentene	0.34		0.25		0.21		0.46		0.46		0.71	
4-Methyl-1-pentene	0.26		ND	a	0.33		0.47		0.45		0.64	
Cyclopentane	1.14		1.10		1.11		1.95		1.75		2.42	
2,3-Dimethylbutane	2.14		2.20		1.94		3.43		3.26		4.91	
2-Methylpentane	9.86		8.68		8.77		15.88		14.75		19.34	
3-Methylpentane	6.00		ND	a	5.63		9.77		9.15		12.13	
1-Hexene	0.48		ND	a	0.38		0.63		0.67		0.85	
2-Methyl-1-pentene	0.24		ND	a	0.35		0.55		0.39		0.74	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	7.92		7.67		7.82		13.33		13.58		16.13	
trans-2-Hexene	0.48		0.43		0.45		0.77		1.11		1.02	
cis-2-Hexene	0.21		0.41		0.41		0.36		0.33		0.40	
Methylcyclopentane	4.12		3.30		3.75		6.30		5.25		7.33	
2,4-Dimethylpentane	1.65		1.44		1.28		2.74		2.50		3.49	
Benzene	9.93		9.91		10.31		15.73		15.79		20.52	
Cyclohexane	1.67		1.55		1.65		2.81		2.39		3.24	
2-Methylhexane	3.97		3.46		3.27		6.16		5.93		7.99	
2,3-Dimethylpentane	2.50		2.59		2.44		4.35		3.76		5.05	
3-Methylhexane	4.39		4.21		3.32		7.39		7.35		9.88	
1-Heptene	1.14		0.72		0.50		1.77		1.84		2.40	
2,2,4-Trimethylpentane	5.18		4.90		4.79		8.47		7.73		10.56	
n-Heptane	2.84		2.90		3.12		4.79		5.44		6.17	
Methylcyclohexane	2.57		2.31		1.61		4.25		4.58		4.99	

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

Sample No.:	07325	07381D1	07382D2	07475	07582	07606
Sampling Date:	8/5/96	8/7/96	8/7/96	8/9/96	8/13/96	8/15/96
Analysis Date:	8/30/96	11/4/96	11/4/96	10/29/96	9/11/96	9/10/96
2,2,3-Trimethylpentane	1.30	0.82	0.72	1.87	2.32	2.80
2,3,4-Trimethylpentane	1.62	1.48	4.92	2.40	2.41	3.13
Toluene	23.27	23.91	22.54	35.11	56.72	45.45
2-Methylheptane	1.47	1.24	1.24	2.34	2.58	3.17
3-Methylheptane	1.75	0.95	1.24	1.78	2.51	3.22
1-Octene	0.73	0.36	0.42	0.94	1.45	1.46
n-Octane	1.43	0.88	0.88	2.27	2.82	3.14
Ethylbenzene	3.93	3.83	4.03	6.27	6.37	9.35
m-Xylene/p-Xylene	14.54	13.86	14.67	21.89	22.89	32.20
Styrene	1.49	0.80	0.95	2.57	4.02	6.50
o-Xylene	5.06	4.87	5.11	7.88	8.42	11.62
1-Nonene	0.79	0.33	0.33	0.76	0.59	1.07
n-Nonane	0.79	0.64	0.61	1.38	1.56	2.60
Isopropylbenzene	0.16	0.21	0.21	0.44	0.64	0.36
a-Pinene	0.92	1.17	1.19	1.14	1.43	0.77
n-Propylbenzene	1.12	0.92	0.98	1.80	2.09	2.63
m-Ethyltoluene	4.13	3.96	4.32	6.10	6.88	8.75
p-Ethyltoluene	1.41	1.87	1.99	3.53	3.10	3.29
1,3,5-Trimethylbenzene	2.32	1.94	1.67	3.50	3.72	5.13
o-Ethyltoluene	1.10	1.82	1.62	1.97	2.07	2.58
b-Pinene	0.14	0.34	0.33	0.96	0.34	0.61
1-Decene	1.09	0.94	1.20	0.25	4.03	7.65
1,2,4-Trimethylbenzene	5.89	5.91	6.42	9.14	10.02	13.56
n-Decane	0.92	1.31	1.19	2.48	2.02	3.98
1,2,3-Trimethylbenzene	1.49	1.30	1.96	1.99	2.23	2.65
m-Diethylbenzene	1.22	1.13	1.04	1.95	2.03	3.23
p-Diethylbenzene	2.35	1.89	1.37	3.45	3.70	5.59
1-Undecene	1.72	0.39	0.44	0.86	3.72	12.47
n-Undecane	1.27	2.04	1.51	4.08	3.55	6.01
1-Dodecene	1.38	1.95	0.53	2.16	1.97	5.33
n-Dodecane	1.23	1.78	1.77	2.96	3.23	3.34
1-Tridecene	0.30	ND	ND	0.18	0.63	2.87
n-Tridecane	1.37	1.10	1.31	2.75	2.12	4.27
TNMOC (w/ unknowns)	344.68	275.80	304.30	573.41	590.99	717.63
TNMOC (speciated)	251.27	251.51	255.99	435.25	444.45	548.32

Footnotes:
a - Compound not analyzed due to FID flame out

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

Sample No.:	07680	07684	07777	07792D1		07793D2		07876
Sampling Date:	8/17/96	8/19/96	8/21/96	8/23/96		8/23/96		8/25/96
Analysis Date:	9/13/96	9/17/96	9/19/96	9/18/96		9/18/96		9/17/96
Ethylene	7.76	15.42	29.75	17.98		16.70		7.42
Acetylene/Ethane	14.23	41.08	52.05	50.91		45.91		19.44
Propylene	4.02	13.36	13.29	6.75		7.22		4.13
Propane	6.88	29.70	17.79	37.32		33.10		11.42
Propyne	ND	ND	ND	ND		ND		ND
Isobutane	3.70	12.40	10.96	12.63		9.19		3.95
Isobutene/1-butene	1.35	3.80	6.21	3.32		4.60		1.68
1,3-Butadiene	0.41	1.14	1.89	1.32		1.00		0.37
n-butane	8.33	26.07	25.27	29.74		27.18		9.74
trans-2-Butene	0.72	1.40	2.24	1.71		1.34		0.60
cis-2-butene	0.47	0.91	1.80	0.97		0.89		0.91
3-Methyl-1-butene	0.16	0.58	0.75	0.42		0.41		0.24
Isopentane	21.14	37.47	70.12	ND	a	ND	a	21.75
1-Pentene	0.65	0.49	2.03	ND	a	0.75		1.38
2-Methyl-1-butene	0.83	1.26	2.88	ND	a	1.24		1.05
n-Pentane	11.01	23.29	36.49	25.76		24.83		14.90
Isoprene	0.43	0.60	1.58	0.74		0.84		0.54
trans-2-Pentene	0.73	1.69	3.89	1.88		1.72		1.37
cis-2-Pentene	0.54	0.90	2.09	0.87		ND	a	0.81
2-Methyl-2-butene	0.86	2.15	5.21	ND	a	ND	a	1.69
2,2-Dimethylbutane	1.05	1.19	2.91	1.42		1.56		1.01
Cyclopentene	0.16	0.98	0.83	0.36		0.36		0.29
4-Methyl-1-pentene	0.22	1.24	0.69	0.20		0.46		0.20
Cyclopentane	0.75	0.66	2.68	1.92		1.79		1.04
2,3-Dimethylbutane	1.38	3.00	5.01	3.31		3.22		1.97
2-Methylpentane	6.32	12.07	22.94	13.50		12.90		8.42
3-Methylpentane	3.92	8.51	13.88	8.62		7.95		5.30
1-Hexene	ND	0.58	1.01	ND		ND		0.41
2-Methyl-1-pentene	0.52	0.36	0.89	1.03		0.91		0.19
2-Ethyl-1-butene	ND	ND	ND	ND		ND		ND
n-Hexane	5.13	11.09	17.75	11.60		11.24		6.93
trans-2-Hexene	0.09	0.52	1.25	0.36		0.37		0.26
cis-2-Hexene	0.08	0.43	0.57	0.33		0.33		0.18
Methylcyclopentane	2.42	5.39	8.37	5.74		5.61		3.14
2,4-Dimethylpentane	1.14	2.11	3.91	2.04		1.98		1.57
Benzene	6.57	11.24	22.35	13.22		12.67		7.58
Cyclohexane	1.19	2.61	3.68	2.64		2.82		1.92
2-Methylhexane	2.89	4.57	9.50	5.30		5.07		4.11
2,3-Dimethylpentane	1.95	1.98	6.18	2.94		2.78		3.04
3-Methylhexane	5.02	7.21	11.89	5.82		5.04		4.76
1-Heptene	0.46	1.34	2.71	1.44		1.39		1.28
2,2,4-Trimethylpentane	3.11	5.42	12.11	6.09		5.94		5.37
n-Heptane	2.21	5.10	9.81	4.45		5.40		4.58
Methylcyclohexane	1.93	4.31	6.30	3.93		3.34		4.72

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

Sample No.:	07680	07684	07777	07792D1	07793D2	07876
Sampling Date:	8/17/96	8/19/96	8/21/96	8/23/96	8/23/96	8/25/96
Analysis Date:	9/13/96	9/17/96	9/19/96	9/18/96	9/18/96	9/17/96
2,2,3-Trimethylpentane	0.39	1.52	3.44	1.03	1.18	1.99
2,3,4-Trimethylpentane	1.17	1.69	3.52	1.70	1.70	1.37
Toluene	18.81	24.98	51.09	26.40	27.71	24.87
2-Methylheptane	1.14	1.70	4.61	3.37	2.01	2.24
3-Methylheptane	1.41	1.75	5.10	1.97	1.98	1.63
1-Octene	0.73	0.80	1.58	0.75	0.56	0.62
n-Octane	1.34	2.00	3.99	2.17	2.24	1.41
Ethylbenzene	3.79	4.06	10.69	4.84	5.04	3.58
m-Xylene/p-Xylene	12.35	15.98	37.95	17.61	18.24	11.97
Styrene	3.77	0.87	6.72	1.07	1.19	1.50
o-Xylene	4.82	5.39	13.31	5.97	6.15	4.34
1-Nonene	0.43	0.23	0.91	0.26	0.24	0.34
n-Nonane	0.85	1.06	2.12	1.59	1.15	0.81
Isopropylbenzene	0.15	0.18	1.13	0.22	0.25	0.16
a-Pinene	1.55	1.00	2.08	1.95	1.58	0.72
n-Propylbenzene	1.21	1.14	3.15	1.39	1.45	1.29
m-Ethyltoluene	3.21	4.67	10.69	4.82	5.31	4.22
p-Ethyltoluene	1.53	2.01	4.80	2.30	2.13	1.74
1,3,5-Trimethylbenzene	1.88	2.42	5.86	2.66	2.92	2.18
o-Ethyltoluene	0.95	2.01	3.30	2.34	2.35	1.12
b-Pinene	0.16	ND	0.25	0.24	ND	0.19
1-Decene	3.70	7.11	5.57	1.81	1.20	1.03
1,2,4-Trimethylbenzene	4.76	6.80	15.03	7.44	7.89	5.98
n-Decane	1.13	1.28	2.92	1.26	1.31	1.45
1,2,3-Trimethylbenzene	1.80	1.30	2.25	1.64	2.77	1.90
m-Diethylbenzene	1.34	1.41	3.17	1.28	1.57	1.30
p-Diethylbenzene	1.93	2.51	5.53	1.32	1.32	2.51
1-Undecene	3.74	10.46	10.04	2.08	1.49	1.46
n-Undecane	2.32	1.55	5.27	2.81	2.47	2.80
1-Dodecene	2.01	3.37	4.49	1.30	1.19	1.57
n-Dodecane	1.63	1.35	6.35	2.60	2.88	2.76
1-Tridecene	0.66	0.79	1.33	0.37	0.28	0.31
n-Tridecane	1.48	2.16	3.70	1.39	2.73	2.41
TNMOC (w/ unknowns)	314.11	529.72	858.57	481.78	457.58	374.29
TNMOC (speciated)	220.88	421.19	695.46	398.50	382.51	265.41

Footnotes:
a - Compound not analyzed due to FID flame out

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

Sample No.:	07890		07945		08039	08001		08077		08148
Sampling Date:	8/27/96		8/29/96		8/31/96	9/2/96		9/4/96		9/6/96
Analysis Date:	9/25/96		9/26/96		9/30/96	10/3/96		10/4/96		10/4/96
Ethylene	22.75		36.17		13.65	12.34		12.17		12.48
Acetylene/Ethane	41.83		59.90		30.35	30.56		16.07		19.27
Propylene	8.60		15.62		8.58	1.23		6.25		4.77
Propane	18.60		25.43		17.24	9.65		9.33		12.54
Propyne	ND		ND		ND	ND		ND		ND
Isobutane	8.50		21.10		9.95	8.76		4.94		2.95
Isobutene/1-butene	21.54		9.70		5.39	3.73		3.84		2.09
1,3-Butadiene	ND		ND		1.20	0.96		0.82		ND
n-butane	1.77		37.84		22.30	20.53		12.02		12.42
trans-2-Butene	ND	a	ND	a	1.55	0.92		1.37		0.76
cis-2-butene	ND	a	ND	a	1.15	1.92		0.79		0.47
3-Methyl-1-butene	ND	a	1.55		0.35	0.37		0.35		0.12
Isopentane	44.42		96.23		50.92	51.59		31.78		19.76
1-Pentene	1.50		2.07		1.10	2.10		ND	a	0.54
2-Methyl-1-butene	1.97		4.48		1.57	2.10		ND	a	0.83
n-Pentane	26.75		50.30		26.44	28.20		ND	a	15.53
Isoprene	1.01		1.99		0.82	0.83		0.56		0.45
trans-2-Pentene	ND	a	5.79		2.38	2.79		1.78		0.99
cis-2-Pentene	ND	a	3.63		1.22	1.42		1.10		0.54
2-Methyl-2-butene	1.67		7.36		3.16	3.05		2.76		1.25
2,2-Dimethylbutane	ND	a	3.57		3.13	2.09		1.53		1.19
Cyclopentene	ND	a	1.11		0.45	ND	a	0.44		0.32
4-Methyl-1-pentene	ND	a	0.74		1.10	0.79		0.82		0.17
Cyclopentane	ND	a	3.43		2.04	2.11		1.53		1.26
2,3-Dimethylbutane	ND	a	6.15		4.10	3.62		2.75		1.71
2-Methylpentane	ND	a	28.61		15.77	16.19		11.92		8.16
3-Methylpentane	11.14		17.28		10.05	10.49		7.47		4.99
1-Hexene	ND		1.24		ND	0.69		0.59		ND
2-Methyl-1-pentene	1.48		0.91		1.19	0.47		0.31		0.58
2-Ethyl-1-butene	ND		ND		ND	ND		ND		ND
n-Hexane	13.34		20.85		13.00	12.50		9.68		6.93
trans-2-Hexene	0.54		1.57		0.83	0.60		0.66		0.29
cis-2-Hexene	0.21		0.62		0.51	0.62		0.54		0.11
Methylcyclopentane	6.07		9.91		5.84	6.21		4.87		3.22
2,4-Dimethylpentane	2.82		4.55		2.67	2.56		2.09		1.45
Benzene	19.43		24.53		15.14	13.22		10.93		10.35
Cyclohexane	3.09		4.51		2.61	2.53		1.99		1.64
2-Methylhexane	6.64		11.36		6.21	5.94		4.43		3.51
2,3-Dimethylpentane	4.16		6.56		4.30	3.73		2.77		2.23
3-Methylhexane	7.64		11.60		9.36	7.41		4.64		4.56
1-Heptene	ND	a	3.10		1.78	1.75		1.33		0.94
2,2,4-Trimethylpentane	ND	a	13.50		8.63	8.03		6.08		4.31
n-Heptane	9.68		8.83		6.45	4.69		3.72		3.59
Methylcyclohexane	4.65		7.18		4.25	3.69		2.90		2.55

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

Sample No.:	**07890**	**07945**	**08039**	**08001**	**08077**	**08148**
Sampling Date:	**8/27/96**	**8/29/96**	**8/31/96**	**9/2/96**	**9/4/96**	**9/6/96**
Analysis Date:	**9/25/96**	**9/26/96**	**9/30/96**	**10/3/96**	**10/4/96**	**10/4/96**
2,2,3-Trimethylpentane	2.50	3.54	1.85	1.31	1.25	1.48
2,3,4-Trimethylpentane	2.53	3.74	2.46	2.12	2.01	1.36
Toluene	41.89	61.56	38.89	38.67	29.34	21.44
2-Methylheptane	2.91	5.99	2.39	2.18	1.93	1.41
3-Methylheptane	2.99	4.26	2.56	2.60	1.90	1.39
1-Octene	1.16	1.71	0.92	0.99	0.70	0.55
n-Octane	2.48	3.57	3.13	2.50	1.62	1.39
Ethylbenzene	7.49	10.70	6.55	5.81	4.34	4.00
m-Xylene/p-Xylene	26.87	37.70	23.73	21.02	16.02	12.56
Styrene	1.33	3.37	1.46	1.13	0.82	1.77
o-Xylene	9.03	13.22	9.36	6.97	5.55	4.51
1-Nonene	0.45	0.71	0.33	0.25	0.32	0.37
n-Nonane	1.48	2.14	2.64	1.56	0.89	0.69
Isopropylbenzene	0.26	0.44	1.67	0.20	0.24	0.27
a-Pinene	2.75	0.45	2.97	3.17	1.22	1.14
n-Propylbenzene	1.77	3.34	5.24	1.64	1.36	0.96
m-Ethyltoluene	7.12	10.22	16.92	6.15	4.80	3.27
p-Ethyltoluene	2.82	4.50	7.93	2.80	2.04	1.34
1,3,5-Trimethylbenzene	3.93	6.05	8.47	3.73	2.49	1.45
o-Ethyltoluene	3.22	2.89	6.88	2.85	2.00	1.36
b-Pinene	0.35	1.67	0.97	1.00	0.58	0.12
1-Decene	1.78	1.08	3.76	1.58	1.05	2.50
1,2,4-Trimethylbenzene	10.62	15.79	20.21	9.24	6.78	4.04
n-Decane	2.46	4.31	4.62	3.74	1.47	1.52
1,2,3-Trimethylbenzene	1.82	2.54	4.55	2.79	1.28	0.72
m-Diethylbenzene	1.94	2.60	3.49	2.00	1.30	0.93
p-Diethylbenzene	3.37	4.95	3.25	2.55	2.10	1.50
1-Undecene	1.42	1.70	3.00	1.10	0.86	3.88
n-Undecane	2.51	4.03	3.19	3.71	1.77	4.05
1-Dodecene	1.86	2.07	1.72	0.43	0.70	1.68
n-Dodecane	2.36	2.83	1.51	2.90	1.22	3.98
1-Tridecene	0.36	0.15	0.34	ND	0.21	0.72
n-Tridecane	2.39	3.76	1.66	1.68	1.58	2.45
TNMOC (w/ unknowns)	577.87	983.85	676.45	528.92	367.41	356.35
TNMOC (speciated)	450.04	799.51	517.33	433.39	291.66	262.60

Footnotes:
a - Compound not analyzed due to FID flame out

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

Sample No.:	08166D1		08167D2		08193		08220		08258		08280
Sampling Date:	9/8/96		9/8/96		9/10/96		9/12/96		9/14/96		9/16/96
Analysis Date:	10/7/96		10/7/96		10/10/96		10/10/96		10/11/96		10/14/96
Ethylene	4.14		3.43		16.14		31.45		21.01		14.42
Acetylene/Ethane	8.39		9.72		20.10		49.87		46.06		39.53
Propylene	1.42		1.02		7.26		11.61		7.05		8.78
Propane	4.33		4.47		10.53		17.46		21.92		42.56
Propyne	ND		ND		ND		ND		ND		ND
Isobutane	1.42		1.44		5.94		8.97		7.13		17.17
Isobutene/1-butene	0.87		0.93		3.97		3.39		4.32		5.03
1,3-Butadiene	0.12		0.25		1.34		ND		15.70		1.27
n-butane	3.32		3.35		13.61		24.83		ND		39.08
trans-2-Butene	0.18		0.23		1.44		2.52		1.51		1.01
cis-2-butene	0.24		0.21		1.04		1.91		0.88		0.79
3-Methyl-1-butene	0.07		0.13		0.33		0.25		0.24		0.27
Isopentane	8.02		8.01		39.04		69.42		ND	a	38.79
1-Pentene	0.27		0.26		ND	a	2.28		1.51		0.66
2-Methyl-1-butene	0.38		0.34		ND	a	2.86		1.81		1.72
n-Pentane	4.63		4.72		18.62		39.25		22.94		30.25
Isoprene	0.28		ND	a	0.86		1.77		1.06		1.02
trans-2-Pentene	0.36		0.39		2.23		3.81		2.64		1.64
cis-2-Pentene	0.21		0.21		1.17		2.03		1.38		0.88
2-Methyl-2-butene	0.50		0.54		2.99		4.64		3.24		2.00
2,2-Dimethylbutane	0.40		0.37		1.80		2.90		2.03		1.67
Cyclopentene	0.15		0.08		0.36		0.72		0.53		0.24
4-Methyl-1-pentene	ND	a	ND	a	0.44		0.62		0.40		0.36
Cyclopentane	ND	a	0.70		1.58		3.61		1.72		1.96
2,3-Dimethylbutane	0.77		ND	a	2.96		5.01		3.23		3.07
2-Methylpentane	3.20		ND	a	12.27		22.01		14.82		14.44
3-Methylpentane	2.26		2.09		8.73		14.05		8.93		8.55
1-Hexene	ND	a	0.22		0.68		1.09		0.79		0.53
2-Methyl-1-pentene	ND	a	0.37		0.52		0.82		0.35		0.37
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	2.98		3.11		9.74		17.67		11.27		13.38
trans-2-Hexene	0.10		0.16		0.68		1.12		0.78		0.65
cis-2-Hexene	0.05		0.16		0.57		0.53		0.36		0.71
Methylcyclopentane	2.25		1.45		4.89		8.32		5.38		6.31
2,4-Dimethylpentane	0.56		0.78		2.33		3.93		2.56		2.32
Benzene	3.19		2.96		13.09		24.15		13.94		13.05
Cyclohexane	0.51		0.51		2.05		3.61		2.41		3.28
2-Methylhexane	1.10		1.08		3.86		8.98		5.40		5.09
2,3-Dimethylpentane	0.75		0.51		3.00		6.12		3.98		2.26
3-Methylhexane	1.34		0.87		4.24		9.69		6.44		5.76
1-Heptene	0.33		0.31		1.64		2.80		1.80		1.61
2,2,4-Trimethylpentane	1.62		1.63		6.71		11.90		7.73		6.66
n-Heptane	0.83		1.00		3.85		6.98		4.24		6.12
Methylcyclohexane	0.68		0.71		2.76		6.00		3.82		4.56

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

Sample No.:	08166D1	08167D2	08193	08220	08258	08280
Sampling Date:	9/8/96	9/8/96	9/10/96	9/12/96	9/14/96	9/16/96
Analysis Date:	10/7/96	10/7/96	10/10/96	10/10/96	10/11/96	10/14/96
2,2,3-Trimethylpentane	0.33	0.33	1.01	2.92	2.16	1.62
2,3,4-Trimethylpentane	0.38	0.48	2.21	4.13	2.28	2.09
Toluene	7.80	8.00	34.50	61.07	35.47	27.85
2-Methylheptane	0.54	0.58	2.03	3.65	2.25	2.41
3-Methylheptane	1.41	0.60	2.25	3.82	2.46	2.14
1-Octene	0.09	0.12	0.54	1.35	0.98	0.89
n-Octane	0.65	1.08	2.13	3.00	1.93	2.46
Ethylbenzene	1.18	1.24	5.08	9.80	5.99	4.83
m-Xylene/p-Xylene	4.10	4.08	18.98	34.52	20.60	17.80
Styrene	0.29	0.30	0.62	2.68	2.61	1.13
o-Xylene	1.58	1.50	6.20	12.03	7.37	6.10
1-Nonene	0.40	0.24	0.33	0.89	0.59	0.30
n-Nonane	0.38	0.67	0.89	1.60	1.25	1.11
Isopropylbenzene	0.12	0.14	0.40	0.46	0.41	0.19
a-Pinene	0.46	0.63	1.12	0.67	2.07	1.43
n-Propylbenzene	0.19	0.38	1.51	2.72	1.87	1.52
m-Ethyltoluene	1.43	1.57	5.33	10.12	6.29	5.27
p-Ethyltoluene	0.53	0.63	2.24	3.49	3.30	2.23
1,3,5-Trimethylbenzene	0.66	0.70	2.83	5.47	4.13	2.93
o-Ethyltoluene	0.63	0.60	2.28	4.03	2.77	2.35
b-Pinene	0.67	0.46	0.83	2.08	1.75	0.55
1-Decene	2.48	0.89	1.04	1.08	1.75	1.45
1,2,4-Trimethylbenzene	2.06	1.87	7.41	14.55	9.64	8.21
n-Decane	0.50	0.63	1.54	1.99	5.08	2.00
1,2,3-Trimethylbenzene	0.54	0.56	1.12	3.89	2.34	2.38
m-Diethylbenzene	0.43	0.50	1.47	2.23	1.73	1.39
p-Diethylbenzene	0.72	0.70	2.45	4.70	2.89	2.50
1-Undecene	2.42	0.81	0.52	1.94	0.34	1.14
n-Undecane	0.52	0.83	1.87	3.03	5.78	2.31
1-Dodecene	1.10	0.60	0.48	2.67	1.95	0.57
n-Dodecane	0.59	0.75	0.93	2.84	3.71	1.65
1-Tridecene	0.32	0.24	0.13	0.32	0.39	0.27
n-Tridecane	0.88	0.75	1.24	3.05	2.36	1.08
TNMOC (w/ unknowns)	154.24	148.95	430.54	793.75	565.86	604.32
TNMOC (speciated)	98.61	92.21	348.93	653.70	409.81	461.95

Footnotes:
a - Compound not analyzed due to FID flame out

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

Sample No.:	**08326**
Sampling Date:	**9/18/96**
Analysis Date:	**10/14/96**
Ethylene	20.73
Acetylene/Ethane	35.09
Propylene	9.50
Propane	8.86
Propyne	ND
Isobutane	7.54
Isobutene/1-butene	5.38
1,3-Butadiene	ND
n-butane	19.31
trans-2-Butene	1.79
cis-2-butene	1.18
3-Methyl-1-butene	0.42
Isopentane	43.78
1-Pentene	1.80
2-Methyl-1-butene	2.07
n-Pentane	25.80
Isoprene	1.34
trans-2-Pentene	2.68
cis-2-Pentene	1.49
2-Methyl-2-butene	3.58
2,2-Dimethylbutane	2.05
Cyclopentene	0.51
4-Methyl-1-pentene	0.43
Cyclopentane	2.02
2,3-Dimethylbutane	3.88
2-Methylpentane	17.62
3-Methylpentane	10.83
1-Hexene	0.73
2-Methyl-1-pentene	0.60
2-Ethyl-1-butene	ND
n-Hexane	13.81
trans-2-Hexene	0.98
cis-2-Hexene	0.44
Methylcyclopentane	6.50
2,4-Dimethylpentane	3.12
Benzene	18.89
Cyclohexane	2.89
2-Methylhexane	7.49
2,3-Dimethylpentane	4.85
3-Methylhexane	8.13
1-Heptene	2.05
2,2,4-Trimethylpentane	9.84
n-Heptane	6.46
Methylcyclohexane	4.54

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

Sample No.:	**08326**
Sampling Date:	**9/18/96**
Analysis Date:	**10/14/96**
2,2,3-Trimethylpentane	2.80
2,3,4-Trimethylpentane	2.98
Toluene	44.03
2-Methylheptane	2.83
3-Methylheptane	3.14
1-Octene	1.17
n-Octane	2.33
Ethylbenzene	7.83
m-Xylene/p-Xylene	27.78
Styrene	2.95
o-Xylene	10.27
1-Nonene	0.62
n-Nonane	1.30
Isopropylbenzene	0.55
a-Pinene	0.88
n-Propylbenzene	2.42
m-Ethyltoluene	8.51
p-Ethyltoluene	3.74
1,3,5-Trimethylbenzene	5.13
o-Ethyltoluene	4.14
b-Pinene	0.14
1-Decene	1.40
1,2,4-Trimethylbenzene	11.80
n-Decane	1.62
1,2,3-Trimethylbenzene	3.33
m-Diethylbenzene	2.20
p-Diethylbenzene	4.18
1-Undecene	2.40
n-Undecane	4.38
1-Dodecene	1.85
n-Dodecane	4.59
1-Tridecene	0.64
n-Tridecane	2.79
TNMOC (w/ unknowns)	616.08
TNMOC (speciated)	497.69

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06192		06214		06229	06230	06293	06292	
Sampling Date:	6/3/96		6/6/96		6/7/96	6/10/96	6/11/96	6/12/96	
Analysis Date:	6/26/96		7/3/96		7/5/96	7/10/96	7/10/96	7/12/96	
Ethylene	6.52		2.14		3.26	2.98	5.32	4.20	
Acetylene/Ethane	25.77		9.21		9.38	10.38	18.71	5.41	
Propylene	1.87		3.98		4.86	5.01	2.27	3.82	
Propane	13.76		5.93		5.82	6.97	14.42	7.68	
Propyne	0.29		ND		ND	ND	ND	ND	
Isobutane	5.92		3.25		3.08	3.93	7.74	3.97	
Isobutene/1-butene	3.19		1.86		2.62	2.88	2.56	2.17	
1,3-Butadiene	0.36		0.14		0.15	ND	ND	ND	
n-butane	22.91		15.85		14.91	16.42	20.46	17.98	
trans-2-Butene	1.48		1.24		0.86	1.39	1.31	0.86	
cis-2-butene	1.52		1.44		1.16	1.34	1.21	1.34	
3-Methyl-1-butene	ND	a	ND	a	0.93	1.04	0.91	0.93	
Isopentane	76.28		54.18		40.48	48.27	50.58	44.29	
1-Pentene	3.82		2.67		2.50	2.58	2.70	ND	a
2-Methyl-1-butene	4.88		3.51		3.53	3.85	4.00	3.73	
n-Pentane	28.36		19.71		19.39	22.44	23.50	21.43	
Isoprene	4.24		1.95		1.24	0.88	2.76	2.13	
trans-2-Pentene	7.25		5.45		5.04	5.45	5.74	5.12	
cis-2-Pentene	3.80		2.86		2.70	2.80	3.11	2.87	
2-Methyl-2-butene	8.44		6.01		5.74	5.88	6.44	6.23	
2,2-Dimethylbutane	2.68		1.99		1.73	2.24	2.49	1.98	
Cyclopentene	1.49		1.12		0.79	1.10	1.22	1.41	
4-Methyl-1-pentene	0.84		0.42		0.39	1.12	1.03	1.64	
Cyclopentane	2.82		2.70		1.84	1.84	2.26	2.00	
2,3-Dimethylbutane	7.35		34.16		26.66	33.43	30.23	3.92	
2-Methylpentane	20.86		13.92		13.96	19.00	18.07	40.76	
3-Methylpentane	11.71		8.48		8.66	10.05	11.96	9.29	
1-Hexene	ND		ND		ND	ND	ND	ND	
2-Methyl-1-pentene	2.54		2.33		2.19	2.37	2.47	1.92	
2-Ethyl-1-butene	ND		ND		ND	ND	ND	0.20	
n-Hexane	14.04		12.67		10.75	11.82	10.94	9.79	
trans-2-Hexene	1.75		1.53		1.14	1.32	1.09	1.22	
cis-2-Hexene	1.14		0.98		0.90	1.06	1.01	0.97	
Methylcyclopentane	5.94		4.83		4.39	4.84	5.08	4.69	
2,4-Dimethylpentane	2.05		1.69		1.42	1.76	1.63	1.45	
Benzene	10.47		6.20		5.54	6.54	7.22	5.05	
Cyclohexane	1.61		1.03		0.83	1.03	1.22	1.08	
2-Methylhexane	6.70		1.79		4.30	5.34	5.01	4.09	
2,3-Dimethylpentane	1.93		5.86		1.62	1.95	1.94	1.55	
3-Methylhexane	7.47		7.42		5.47	6.83	6.25	6.73	
1-Heptene	1.66		1.74		1.43	1.47	1.52	1.49	
2,2,4-Trimethylpentane	6.09		4.49		3.89	4.41	4.68	3.96	
n-Heptane	4.12		4.92		3.23	3.81	3.91	3.51	
Methylcyclohexane	3.17		3.29		1.43	1.66	1.85	2.43	

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	**06192**	**06214**	**06229**	**06230**	**06293**	**06292**
Sampling Date:	**6/3/96**	**6/6/96**	**6/7/96**	**6/10/96**	**6/11/96**	**6/12/96**
Analysis Date:	**6/26/96**	**7/3/96**	**7/5/96**	**7/10/96**	**7/10/96**	**7/12/96**
2,2,3-Trimethylpentane	3.32	1.32	1.35	1.28	1.36	1.07
2,3,4-Trimethylpentane	2.53	1.72	1.60	2.48	1.86	2.02
Toluene	29.61	20.70	18.22	20.14	20.77	16.93
2-Methylheptane	1.16	0.86	0.64	0.80	1.04	0.62
1-Octene	0.46	0.34	0.37	0.46	0.15	0.25
3-Methylheptane	1.56	1.00	0.81	1.01	1.02	1.14
n-Octane	1.96	1.49	1.06	1.20	1.29	1.36
Ethylbenzene	3.94	3.23	2.80	3.16	3.31	2.47
m-Xylene/p-Xylene	11.31	11.47	9.63	11.09	11.41	8.98
Styrene	2.96	2.63	0.69	2.35	0.95	1.95
o-Xylene	4.45	4.37	3.35	3.97	3.98	3.69
1-Nonene	0.38	ND	ND	ND	ND	ND
n-Nonane	1.12	1.31	0.91	1.03	1.01	0.83
Isopropylbenzene	0.41	0.20	0.30	0.26	0.48	0.12
a-Pinene	2.41	3.83	0.98	2.62	0.66	3.79
n-Propylbenzene	1.27	2.00	0.57	1.41	0.97	3.30
m-Ethyltoluene	3.77	3.79	2.94	4.03	3.54	3.61
p-Ethyltoluene	1.94	2.43	1.58	1.94	1.88	1.83
1,3,5-Trimethylbenzene	2.13	2.98	1.62	2.53	1.50	1.79
o-Ethyltoluene	1.28	1.21	0.86	1.15	1.14	1.14
b-Pinene	3.65	3.78	0.66	2.07	1.04	1.52
1-Decene	ND	21.27	9.67	14.05	8.65	9.08
1,2,4-Trimethylbenzene	5.53	5.36	4.53	5.32	5.38	4.62
n-Decane	3.12	2.32	1.32	1.68	1.57	1.45
1,2,3-Trimethylbenzene	11.81	2.23	1.15	2.03	2.09	1.23
m-Diethylbenzene	2.12	0.67	0.40	0.51	0.24	0.39
p-Diethylbenzene	2.94	1.53	1.12	1.66	1.27	1.45
1-Undecene	6.48	6.95	1.80	4.05	1.84	3.02
n-Undecane	5.16	4.73	1.18	1.91	1.69	1.90
1-Dodecene	10.04	4.66	1.29	2.92	0.74	0.88
n-Dodecane	6.71	7.22	2.12	4.10	2.92	2.62
1-Tridecene	1.53	0.26	0.39	0.53	0.42	ND
n-Tridecane	6.08	3.93	0.49	6.59	0.88	32.53
TNMOC (w/ unknowns)	676.25	502.43	380.24	454.43	448.69	443.24
TNMOC (speciated)	482.21	396.68	306.67	379.79	383.86	362.84

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06296	06311	06371	06366		06468	06476
Sampling Date:	6/13/96	6/14/96	6/17/96	6/18/96		6/20/96	6/21/96
Analysis Date:	7/13/96	7/13/96	7/15/96	7/16/96		7/16/96	7/18/96
Ethylene	5.70	6.40	4.99	6.29		6.68	2.23
Acetylene/Ethane	12.05	24.15	12.61	16.66		23.70	8.01
Propylene	2.94	3.39	6.62	5.13		5.18	4.58
Propane	6.63	13.71	9.33	9.03		15.32	7.78
Propyne	ND	0.26	0.17	0.16		0.24	0.24
Isobutane	3.71	7.86	4.58	3.98		8.27	4.58
Isobutene/1-butene	3.60	4.65	3.61	3.23		4.24	2.21
1,3-Butadiene	0.20	0.36	ND	ND		ND	0.22
n-butane	16.09	23.40	19.94	17.97		25.95	19.86
trans-2-Butene	1.08	1.81	1.28	1.47		1.11	1.22
cis-2-butene	0.95	1.77	1.29	1.10		1.42	1.29
3-Methyl-1-butene	0.21	1.31	5.26	5.70		0.24	0.24
Isopentane	48.62	55.23	50.47	ND	a	66.57	45.37
1-Pentene	2.52	2.88	2.63	2.51		5.92	2.65
2-Methyl-1-butene	4.92	4.35	4.03	4.10		5.47	3.93
n-Pentane	22.06	26.31	24.26	23.61		32.81	21.59
Isoprene	4.43	3.97	5.44	5.47		8.43	5.86
trans-2-Pentene	6.58	6.20	5.89	6.17		7.84	5.79
cis-2-Pentene	3.76	3.31	3.26	3.47		3.91	3.08
2-Methyl-2-butene	6.86	6.92	0.68	7.11		9.14	6.20
2,2-Dimethylbutane	3.15	2.60	2.86	2.59		3.00	2.31
Cyclopentene	0.50	1.04	1.45	0.89		1.62	0.94
4-Methyl-1-pentene	1.43	0.91	1.28	ND		5.09	0.83
Cyclopentane	2.36	2.27	3.02	2.52		3.81	2.88
2,3-Dimethylbutane	4.49	5.07	6.23	5.45		6.78	4.75
2-Methylpentane	42.49	43.22	45.17	47.38		58.50	41.49
3-Methylpentane	10.99	10.43	9.52	12.81		18.30	9.28
1-Hexene	ND	ND	ND	ND		0.24	0.24
2-Methyl-1-pentene	3.08	2.38	2.20	3.49		3.78	1.97
2-Ethyl-1-butene	0.44	ND	ND	ND		0.24	0.24
n-Hexane	12.18	13.95	12.69	13.46		17.45	11.66
trans-2-Hexene	1.76	1.40	1.61	1.82		1.87	1.49
cis-2-Hexene	1.31	0.85	0.99	1.22		1.26	1.13
Methylcyclopentane	5.21	5.57	5.55	5.32		6.78	4.79
2,4-Dimethylpentane	2.00	1.61	1.65	1.06		0.73	1.12
Benzene	6.78	8.12	8.57	7.25		8.59	5.71
Cyclohexane	0.89	1.40	1.64	1.21		1.54	1.52
2-Methylhexane	4.65	5.79	5.36	5.42		6.88	4.86
2,3-Dimethylpentane	2.05	2.27	2.83	2.28		2.85	2.07
3-Methylhexane	7.06	8.22	9.01	7.76		10.04	7.36
1-Heptene	1.68	1.50	1.43	1.61		2.15	1.31
2,2,4-Trimethylpentane	5.26	5.30	5.53	5.53		6.75	3.97
n-Heptane	3.26	3.88	3.48	3.38		4.90	3.05
Methylcyclohexane	3.92	3.64	3.33	2.98		5.06	2.27

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06296	06311	06371	06366	06468	06476
Sampling Date:	6/13/96	6/14/96	6/17/96	6/18/96	6/20/96	6/21/96
Analysis Date:	7/13/96	7/13/96	7/15/96	7/16/96	7/16/96	7/18/96
2,2,3-Trimethylpentane	1.70	1.75	1.93	1.55	1.92	1.10
2,3,4-Trimethylpentane	2.60	2.23	2.19	0.94	2.47	1.72
Toluene	24.01	25.85	23.19	26.13	31.99	18.73
2-Methylheptane	0.95	0.97	0.93	1.65	2.85	1.19
1-Octene	0.32	0.43	0.24	0.31	0.34	0.23
3-Methylheptane	0.92	0.92	2.54	1.30	2.02	1.30
n-Octane	1.48	1.57	0.78	0.36	0.58	0.28
Ethylbenzene	3.99	4.08	3.65	3.72	4.88	2.73
m-Xylene/p-Xylene	21.18	14.11	12.41	13.21	16.81	9.51
Styrene	1.45	2.18	2.99	1.82	2.99	1.69
o-Xylene	4.81	4.90	4.54	4.70	5.96	3.50
1-Nonene	ND	ND	ND	ND	0.24	0.24
n-Nonane	1.27	1.50	1.37	1.08	2.93	1.21
Isopropylbenzene	0.55	0.50	0.29	0.54	0.65	0.50
a-Pinene	3.03	1.34	4.10	2.68	2.17	1.76
n-Propylbenzene	2.61	1.32	1.43	1.34	1.65	0.90
m-Ethyltoluene	4.27	4.19	4.19	4.53	5.21	3.25
p-Ethyltoluene	2.53	2.56	2.89	2.41	3.65	1.99
1,3,5-Trimethylbenzene	2.55	2.26	2.28	2.23	3.50	1.96
o-Ethyltoluene	1.51	1.56	1.55	1.44	1.50	1.13
b-Pinene	1.43	1.90	2.28	1.95	1.53	1.51
1-Decene	8.73	7.60	24.96	12.50	12.20	12.39
1,2,4-Trimethylbenzene	5.52	6.40	6.04	6.37	7.16	4.52
n-Decane	1.92	2.27	2.24	2.26	14.78	2.08
1,2,3-Trimethylbenzene	1.63	3.12	5.00	4.25	2.47	2.63
m-Diethylbenzene	0.47	0.62	0.57	0.70	0.74	0.59
p-Diethylbenzene	1.39	1.84	3.27	2.53	2.10	2.07
1-Undecene	2.93	3.80	4.53	4.19	3.58	3.39
n-Undecane	1.79	2.20	2.52	9.02	45.32	3.44
1-Dodecene	0.82	4.79	9.27	3.01	1.58	1.85
n-Dodecane	2.21	3.23	4.85	11.65	28.10	5.23
1-Tridecene	ND	0.20	3.60	2.09	ND	0.52
n-Tridecane	13.25	1.41	2.45	4.19	5.46	1.79
TNMOC (w/ unknowns)	514.87	517.98	551.54	472.69	724.49	453.04
TNMOC (speciated)	403.67	443.28	446.84	395.27	631.27	362.59

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06514		06511		06517		06575D1		06576D2		06588
Sampling Date:	6/24/96		6/25/96		6/26/96		6/27/96		6/27/96		6/28/96
Analysis Date:	7/24/96		7/24/96		7/25/96		7/26/96		7/26/96		7/26/96
Ethylene	3.94		4.53		4.08		3.15		3.49		4.13
Acetylene/Ethane	10.57		10.11		8.95		9.87		8.96		9.63
Propylene	2.87		1.72		2.82		3.40		1.83		6.24
Propane	5.74		8.29		6.57		9.02		8.65		5.46
Propyne	ND		ND		0.71		ND		ND		0.20
Isobutane	1.70		3.65		4.72		3.75		4.25		3.99
Isobutene/1-butene	3.48		2.60		2.52		1.81		1.74		2.87
1,3-Butadiene	2.49		0.19		0.18		0.22		0.22		0.37
n-butane	9.45		12.62		12.08		12.64		12.26		14.57
trans-2-Butene	0.49		0.93		0.80		0.57		0.68		1.00
cis-2-butene	0.79		1.00		1.01		0.72		0.76		1.18
3-Methyl-1-butene	0.75		0.75		0.71		0.56		0.54		0.85
Isopentane	43.21		35.21		30.64		ND	a	26.33		39.14
1-Pentene	2.23		2.15		2.22		1.30		0.56		3.00
2-Methyl-1-butene	3.45		3.13		3.04		2.09		1.94		2.78
n-Pentane	16.80		16.70		17.16		13.69		13.19		19.61
Isoprene	2.76		3.07		2.20		2.02		1.89		4.49
trans-2-Pentene	3.79		3.98		4.43		3.17		ND	a	4.60
cis-2-Pentene	2.31		ND	a	2.37		1.62		1.80		2.34
2-Methyl-2-butene	4.56		ND	a	5.08		3.65		3.50		6.78
2,2-Dimethylbutane	1.35		ND	a	ND	a	1.22		1.15		1.72
Cyclopentene	ND	a	0.99		0.93		0.54		0.64		0.99
4-Methyl-1-pentene	ND	a	1.01		0.52		0.85		0.69		0.63
Cyclopentane	ND	a	1.17		1.43		1.15		1.20		1.43
2,3-Dimethylbutane	ND	a	2.36		24.21		2.78		2.88		3.58
2-Methylpentane	ND	a	25.36		12.39		23.93		23.10		19.37
3-Methylpentane	6.76		7.35		7.02		5.39		5.82		7.65
1-Hexene	ND		ND		1.07		ND		ND		ND
2-Methyl-1-pentene	1.49		1.64		0.49		1.19		1.27		1.71
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	8.47		8.49		8.51		6.78		6.66		9.45
trans-2-Hexene	1.03		1.03		1.10		0.86		0.84		1.19
cis-2-Hexene	0.73		0.77		0.76		0.51		0.57		0.83
Methylcyclopentane	3.96		3.97		3.94		3.16		3.12		4.52
2,4-Dimethylpentane	1.21		1.22		1.19		0.91		0.89		1.43
Benzene	5.79		5.95		5.80		5.14		4.77		6.52
Cyclohexane	0.92		0.97		1.02		0.89		0.83		0.99
2-Methylhexane	3.48		3.76		4.13		2.75		2.46		4.30
2,3-Dimethylpentane	0.94		1.12		0.77		0.64		0.82		1.35
3-Methylhexane	4.32		3.41		4.44		3.93		3.35		4.74
1-Heptene	0.86		1.04		0.97		0.78		0.76		1.19
2,2,4-Trimethylpentane	3.57		3.73		3.48		3.08		2.94		4.41
n-Heptane	2.50		2.58		2.63		1.91		1.84		3.06
Methylcyclohexane	3.53		1.68		1.73		0.15		0.13		2.39

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06514	06511	06517	06575D1	06576D2	06588
Sampling Date:	6/24/96	6/25/96	6/26/96	6/27/96	6/27/96	6/28/96
Analysis Date:	7/24/96	7/24/96	7/25/96	7/26/96	7/26/96	7/26/96
2,2,3-Trimethylpentane	0.72	0.55	0.65	0.62	0.62	0.46
2,3,4-Trimethylpentane	1.08	1.76	1.17	0.96	0.94	1.55
Toluene	16.25	15.88	14.39	11.66	11.25	18.22
2-Methylheptane	0.56	1.54	0.89	0.24	0.21	2.50
1-Octene	0.30	0.34	0.38	0.21	0.25	0.44
3-Methylheptane	0.91	0.85	0.89	0.77	0.29	0.90
n-Octane	0.92	0.90	0.92	1.01	1.10	1.98
Ethylbenzene	2.19	2.50	3.09	1.92	1.79	3.17
m-Xylene/p-Xylene	7.77	7.77	7.84	6.11	5.91	9.37
Styrene	1.63	1.31	1.62	0.80	0.22	1.29
o-Xylene	2.66	2.84	2.72	2.17	2.03	3.32
1-Nonene	0.99	ND	0.15	0.22	0.16	0.22
n-Nonane	ND	0.65	0.77	0.62	0.82	1.06
Isopropylbenzene	0.63	ND	ND	0.29	0.10	ND
a-Pinene	0.54	1.36	2.74	2.23	0.41	1.73
n-Propylbenzene	0.61	0.50	0.74	0.75	0.64	0.99
m-Ethyltoluene	2.29	2.30	2.80	2.18	1.94	3.12
p-Ethyltoluene	1.27	1.11	1.43	1.04	0.95	1.53
1,3,5-Trimethylbenzene	1.49	1.44	1.85	1.07	1.03	1.80
o-Ethyltoluene	1.53	2.51	1.62	1.10	1.01	1.60
b-Pinene	1.67	1.35	1.50	0.20	0.29	1.18
1-Decene	ND	ND	ND	1.24	0.40	ND
1,2,4-Trimethylbenzene	3.63	3.29	4.17	2.98	3.41	4.36
n-Decane	1.68	1.53	1.98	1.38	1.29	1.28
1,2,3-Trimethylbenzene	5.28	3.36	4.37	2.98	1.50	27.96
m-Diethylbenzene	0.39	0.54	1.01	0.67	0.49	0.90
p-Diethylbenzene	0.59	1.45	1.86	1.05	0.82	1.97
1-Undecene	2.65	1.88	2.73	2.78	1.04	2.46
n-Undecane	1.23	2.35	4.99	3.36	2.13	2.17
1-Dodecene	2.95	1.72	2.84	2.06	0.75	1.70
n-Dodecane	1.09	3.82	5.79	6.29	3.05	4.44
1-Tridecene	0.78	0.50	0.72	0.54	0.30	0.66
n-Tridecane	1.61	2.61	2.38	6.93	2.25	2.41
TNMOC (w/ unknowns)	366.64	358.44	399.63	261.32	268.85	445.87
TNMOC (speciated)	240.18	260.76	281.84	210.19	208.72	323.42

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06661		06654		06722		06740		06736		06766
Sampling Date:	7/1/96		7/2/96		7/3/96		7/5/96		7/8/96		7/9/96
Analysis Date:	7/30/96		7/31/96		7/31/96		8/1/96		8/1/96		8/2/96
Ethylene	3.98		4.02		10.47		3.25		3.37		3.94
Acetylene/Ethane	13.32		12.40		19.70		15.60		8.48		9.03
Propylene	3.27		2.33		7.75		1.85		2.20		2.21
Propane	8.75		7.67		14.02		9.76		4.58		5.98
Propyne	ND		ND		0.32		ND		ND		ND
Isobutane	4.02		3.17		6.09		3.03		2.40		2.32
Isobutene/1-butene	2.68		2.78		4.95		3.24		2.15		2.19
1,3-Butadiene	0.30		0.33		0.89		0.25		ND		0.13
n-butane	15.36		12.03		20.06		12.50		10.87		10.72
trans-2-Butene	0.92		0.85		0.58		0.82		ND		0.80
cis-2-butene	1.10		0.82		1.22		0.77		1.07		0.83
3-Methyl-1-butene	0.93		0.69		0.92		0.74		0.38		0.67
Isopentane	39.55		34.59		46.50		32.04		37.39		30.50
1-Pentene	3.04		0.41		3.43		1.41		2.51		2.21
2-Methyl-1-butene	3.23		3.75		3.51		3.10		2.96		3.09
n-Pentane	20.23		ND	a	23.08		15.65		16.16		17.30
Isoprene	5.07		3.51		6.33		2.78		5.73		4.58
trans-2-Pentene	4.54		4.04		5.22		3.79		4.65		4.43
cis-2-Pentene	2.36		2.38		2.53		2.15		2.17		2.13
2-Methyl-2-butene	4.64		4.55		5.39		4.22		5.31		4.45
2,2-Dimethylbutane	ND	a	1.65		ND	a	1.50		4.21		1.53
Cyclopentene	0.78		0.73		0.81		0.66		ND	a	0.69
4-Methyl-1-pentene	ND	a	1.60		0.78		1.13		0.47		0.95
Cyclopentane	ND	a	1.40		2.09		ND	a	ND		1.31
2,3-Dimethylbutane	20.53		2.96		4.95		2.30		3.62		2.60
2-Methylpentane	13.84		32.47		25.72		24.17		11.15		26.08
3-Methylpentane	8.11		8.39		10.21		9.91		7.02		5.98
1-Hexene	ND		0.80		1.25		0.80		ND		0.85
2-Methyl-1-pentene	1.88		0.62		0.90		0.56		1.65		0.66
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	9.87		8.24		12.10		8.02		8.28		7.54
trans-2-Hexene	1.20		1.03		1.34		0.87		1.04		0.95
cis-2-Hexene	0.83		0.76		1.03		0.66		0.63		0.78
Methylcyclopentane	4.73		3.92		5.18		3.87		3.53		3.58
2,4-Dimethylpentane	1.39		1.31		1.77		1.22		1.20		1.15
Benzene	6.54		5.88		11.45		6.73		5.98		5.33
Cyclohexane	1.12		0.93		1.43		0.43		1.20		0.83
2-Methylhexane	4.71		3.07		5.47		2.87		3.10		2.84
2,3-Dimethylpentane	1.28		0.64		1.43		0.57		0.56		0.72
3-Methylhexane	5.51		5.14		5.63		5.49		2.67		4.76
1-Heptene	1.08		1.02		1.77		0.98		0.93		0.92
2,2,4-Trimethylpentane	4.40		3.93		6.70		3.83		3.84		3.39
n-Heptane	2.85		2.77		4.06		2.35		2.24		2.08

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	**06661**	**06654**	**06722**	**06740**	**06736**	**06766**
Sampling Date:	**7/1/96**	**7/2/96**	**7/3/96**	**7/5/96**	**7/8/96**	**7/9/96**
Analysis Date:	**7/30/96**	**7/31/96**	**7/31/96**	**8/1/96**	**8/1/96**	**8/2/96**
Methylcyclohexane	2.09	1.52	2.60	1.52	1.64	1.20
2,2,3-Trimethylpentane	1.34	0.66	1.35	0.70	0.51	0.72
2,3,4-Trimethylpentane	1.93	1.29	2.25	1.42	0.67	1.14
Toluene	18.65	15.63	26.92	14.92	21.76	13.80
2-Methylheptane	1.28	0.67	1.60	0.92	1.23	0.79
3-Methylheptane	1.33	0.83	2.16	0.57	0.83	1.27
1-Octene	0.36	0.26	0.66	0.19	0.68	0.44
n-Octane	1.28	1.22	1.89	1.15	0.85	0.79
Ethylbenzene	2.99	2.86	4.57	2.74	2.86	2.21
m-Xylene/p-Xylene	9.93	8.88	14.54	8.19	8.73	7.66
Styrene	1.92	0.54	2.47	0.43	2.28	0.47
o-Xylene	3.71	2.91	4.95	2.66	3.39	2.81
1-Nonene	0.19	0.34	0.29	0.21	0.14	0.43
n-Nonane	0.86	0.81	0.63	0.97	6.38	0.64
Isopropylbenzene	ND	0.24	0.32	0.13	0.12	0.15
a-Pinene	0.59	0.53	0.70	0.44	0.90	0.50
n-Propylbenzene	0.98	1.05	1.29	1.03	0.89	0.85
m-Ethyltoluene	3.25	3.28	4.74	2.92	2.68	2.53
p-Ethyltoluene	1.46	1.65	2.27	1.48	1.41	1.13
1,3,5-Trimethylbenzene	1.40	1.64	2.25	1.28	1.26	1.23
o-Ethyltoluene	1.93	1.60	2.67	1.49	1.47	1.26
b-Pinene	1.92	0.54	0.95	0.53	3.06	0.45
1-Decene	ND	1.17	0.38	1.68	ND	1.03
1,2,4-Trimethylbenzene	4.59	4.42	6.96	3.83	3.96	3.63
n-Decane	1.35	1.83	2.20	1.53	1.28	1.14
1,2,3-Trimethylbenzene	0.93	0.78	1.40	0.77	0.83	0.27
m-Diethylbenzene	0.80	0.68	1.16	1.03	1.12	0.69
p-Diethylbenzene	2.02	1.19	2.09	1.33	2.76	1.05
1-Undecene	2.42	1.77	1.07	2.38	3.57	1.82
n-Undecane	2.05	3.46	4.21	4.27	2.97	1.77
1-Dodecene	2.67	1.58	0.53	1.73	3.69	1.21
n-Dodecane	2.28	3.96	6.09	4.70	4.18	1.52
1-Tridecene	0.74	0.16	0.27	0.14	1.72	0.06
n-Tridecane	2.64	1.69	3.54	1.70	1.67	0.50
TNMOC (w/ unknowns)	463.99	339.01	573.83	362.55	419.64	299.35
TNMOC (speciated)	309.81	261.20	400.98	266.84	267.16	240.14

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06816		06854	06877D1	06878D2		06904		06926	
Sampling Date:	7/10/96		7/11/96	7/12/96	7/12/96		7/15/96		7/16/96	
Analysis Date:	8/2/96		8/7/96	8/9/96	8/9/96		8/12/96		8/12/96	
Ethylene	2.62		3.99	4.92	3.86		5.01		1.82	
Acetylene/Ethane	6.88		14.60	8.43	4.89		11.17		6.50	
Propylene	1.69		1.34	2.50	3.40		1.26		1.31	
Propane	3.63		8.76	4.90	3.57		8.80		4.99	
Propyne	ND		ND	ND	ND		ND		ND	
Isobutane	1.72		4.27	1.12	1.56		2.69		1.30	
Isobutene/1-butene	1.68		ND	ND	ND		3.37		2.58	
1,3-Butadiene	0.05		ND	ND	ND		0.53		ND	
n-butane	8.96		22.69	9.30	8.48		12.75		10.24	
trans-2-Butene	0.52		0.95	0.52	0.61		1.46		0.69	
cis-2-butene	0.77		1.70	0.66	0.57		0.93		0.84	
3-Methyl-1-butene	0.45		1.82	0.52	0.41		0.66		0.74	
Isopentane	26.42		70.59	26.85	ND	a	33.23		32.66	
1-Pentene	2.20		4.35	1.66	1.61		2.28		ND	a
2-Methyl-1-butene	2.62		5.66	2.05	2.09		2.83		2.85	
n-Pentane	14.28		31.52	11.80	11.55		18.04		15.53	
Isoprene	0.90		1.07	1.17	1.32		1.67		0.61	
trans-2-Pentene	3.63		8.77	3.30	3.10		4.11		4.53	
cis-2-Pentene	1.77		4.36	1.81	1.61		1.90		2.17	
2-Methyl-2-butene	3.53		9.26	3.57	3.39		4.67		4.85	
2,2-Dimethylbutane	ND	a	3.45	1.35	1.22		1.40		0.93	
Cyclopentene	1.58		0.99	0.62	0.72		0.75		0.59	
4-Methyl-1-pentene	0.53		1.10	0.41	0.39		1.21		0.47	
Cyclopentane	1.35		2.52	0.86	1.22		1.42		1.15	
2,3-Dimethylbutane	2.84		6.07	2.50	3.69		2.92		3.78	
2-Methylpentane	19.07		41.75	13.81	13.80		28.93		21.96	
3-Methylpentane	5.99		13.48	5.24	5.23		6.61		6.37	
1-Hexene	0.85		ND	ND	ND		0.83		0.88	
2-Methyl-1-pentene	0.44		3.09	1.17	1.14		0.56		0.71	
2-Ethyl-1-butene	ND		ND	ND	ND		ND		ND	
n-Hexane	7.02		16.22	3.98	6.19		8.19		7.45	
trans-2-Hexene	0.93		2.17	0.63	0.76		1.08		0.85	
cis-2-Hexene	0.63		1.42	0.41	0.70		0.76		0.97	
Methylcyclopentane	3.33		6.86	2.98	3.03		3.86		14.19	
2,4-Dimethylpentane	0.98		2.33	0.98	0.92		1.23		3.46	
Benzene	4.94		9.57	4.83	4.85		6.60		4.84	
Cyclohexane	0.63		1.25	0.90	0.57		0.82		0.65	
2-Methylhexane	3.47		7.39	3.27	3.01		4.09		4.01	
2,3-Dimethylpentane	0.91		2.18	0.90	0.84		1.60		0.97	
3-Methylhexane	3.73		7.78	3.47	3.27		ND	a	4.64	
1-Heptene	0.79		1.95	0.86	0.74		1.08		0.84	
2,2,4-Trimethylpentane	3.06		6.30	3.65	3.47		4.23		3.65	
n-Heptane	2.20		5.86	1.84	1.94		2.34		3.82	

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06816	06854	06877D1	06878D2	06904	06926
Sampling Date:	7/10/96	7/11/96	7/12/96	7/12/96	7/15/96	7/16/96
Analysis Date:	8/2/96	8/7/96	8/9/96	8/9/96	8/12/96	8/12/96
Methylcyclohexane	1.14	2.92	1.33	1.78	1.23	6.53
2,2,3-Trimethylpentane	0.65	1.12	0.65	0.77	0.85	0.69
2,3,4-Trimethylpentane	1.26	2.38	1.61	3.87	1.42	1.09
Toluene	13.02	25.32	12.66	12.49	15.54	20.09
2-Methylheptane	0.84	5.69	1.03	1.03	0.92	1.19
3-Methylheptane	0.50	1.73	1.02	0.98	1.17	1.05
1-Octene	0.26	0.45	0.27	0.31	1.14	0.38
n-Octane	0.74	1.50	1.30	1.34	0.69	0.78
Ethylbenzene	2.25	4.33	2.57	2.59	2.68	2.02
m-Xylene/p-Xylene	7.11	13.62	8.27	8.42	8.86	7.99
Styrene	1.11	1.09	1.39	1.30	0.61	2.60
o-Xylene	2.46	4.76	2.95	2.85	3.25	9.40
1-Nonene	0.68	0.48	0.06	0.36	ND	0.39
n-Nonane	0.56	0.65	0.49	0.47	0.53	0.12
Isopropylbenzene	ND	0.21	0.14	0.16	0.15	0.09
a-Pinene	0.25	0.39	0.30	1.22	0.52	2.12
n-Propylbenzene	0.58	1.17	0.55	0.55	0.81	0.98
m-Ethyltoluene	2.27	4.20	2.30	2.15	2.67	2.82
p-Ethyltoluene	0.97	1.89	0.96	1.07	1.49	1.53
1,3,5-Trimethylbenzene	1.00	1.99	1.08	1.08	1.42	1.53
o-Ethyltoluene	1.14	1.56	1.02	1.14	1.31	0.70
b-Pinene	1.24	0.98	1.18	0.96	0.30	2.34
1-Decene	0.13	ND	0.17	0.14	0.95	ND
1,2,4-Trimethylbenzene	3.27	5.67	3.43	3.46	4.55	4.23
n-Decane	0.92	0.96	3.35	1.78	0.95	2.13
1,2,3-Trimethylbenzene	0.60	1.23	ND	0.70	0.77	1.18
m-Diethylbenzene	0.58	0.82	0.52	0.24	0.86	1.11
p-Diethylbenzene	1.13	1.53	1.33	ND	1.47	2.04
1-Undecene	1.72	1.82	1.93	1.78	1.27	2.92
n-Undecane	4.29	1.07	4.96	6.91	1.98	17.89
1-Dodecene	1.28	1.15	1.57	1.16	1.38	2.50
n-Dodecane	9.68	0.46	8.41	6.74	2.29	15.27
1-Tridecene	0.48	0.31	0.51	0.57	0.26	0.90
n-Tridecane	4.67	0.77	5.60	2.64	1.80	3.67
TNMOC (w/ unknowns)	315.83	571.47	304.69	260.51	349.86	463.36
TNMOC (speciated)	218.32	433.67	214.63	182.72	264.15	301.88

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06966	06989	06987	07057D1	07060D2	07080
Sampling Date:	7/17/96	7/18/96	7/19/96	7/22/96	7/22/96	7/23/96
Analysis Date:	8/14/96	8/14/96	8/14/96	8/20/96	8/20/96	8/15/96
Ethylene	2.28	4.89	3.06	3.01	3.18	3.23
Acetylene/Ethane	8.51	10.94	6.86	4.88	3.98	5.20
Propylene	0.78	2.55	1.69	1.45	2.04	1.79
Propane	5.37	8.48	6.24	2.90	2.53	2.88
Propyne	ND	ND	ND	ND	ND	ND
Isobutane	3.07	4.33	1.51	0.97	1.17	1.56
Isobutene/1-butene	0.51	1.68	1.84	1.75	1.73	2.00
1,3-Butadiene	ND	0.15	0.12	0.10	0.20	0.27
n-butane	10.80	11.37	11.43	6.24	6.75	8.38
trans-2-Butene	0.39	0.61	0.94	0.44	0.41	1.28
cis-2-butene	0.15	0.73	0.88	0.48	0.53	0.91
3-Methyl-1-butene	0.49	0.51	0.62	0.40	0.37	0.54
Isopentane	26.74	29.63	32.47	18.06	19.20	26.69
1-Pentene	0.27	1.88	1.94	1.07	0.91	0.16
2-Methyl-1-butene	2.05	2.19	ND a	0.99	1.47	ND a
n-Pentane	13.00	14.23	15.68	7.96	8.94	11.50
Isoprene	1.09	ND a	2.43	2.43	2.59	2.77
trans-2-Pentene	3.34	3.04	4.09	2.23	2.37	3.50
cis-2-Pentene	2.62	1.87	2.18	ND a	1.29	1.94
2-Methyl-2-butene	4.37	3.89	4.90	ND a	2.92	4.12
2,2-Dimethylbutane	1.28	1.56	1.37	0.87	0.81	1.22
Cyclopentene	0.28	0.64	0.70	0.38	0.22	0.66
4-Methyl-1-pentene	0.95	0.42	0.81	0.43	0.41	0.80
Cyclopentane	1.47	1.05	1.32	0.27	0.77	1.04
2,3-Dimethylbutane	2.64	2.06	2.77	0.71	0.79	2.52
2-Methylpentane	25.53	15.88	28.63	17.16	16.18	25.39
3-Methylpentane	6.02	5.82	ND a	3.90	4.38	5.47
1-Hexene	ND	0.70	ND a	0.64	ND	0.76
2-Methyl-1-pentene	1.53	0.53	ND a	0.49	1.02	0.47
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	6.57	7.30	8.08	4.53	4.70	6.57
trans-2-Hexene	0.95	0.81	0.96	0.60	0.65	0.80
cis-2-Hexene	0.62	0.57	ND a	0.42	0.48	0.59
Methylcyclopentane	2.93	2.84	4.17	2.15	2.13	3.13
2,4-Dimethylpentane	1.18	0.97	1.32	0.66	ND a	1.04
Benzene	4.80	4.81	4.37	3.52	3.58	4.66
Cyclohexane	1.33	0.97	0.94	0.52	0.50	0.68
2-Methylhexane	2.43	3.84	ND a	1.78	2.03	2.86
2,3-Dimethylpentane	0.63	1.00	ND a	0.49	0.63	0.95
3-Methylhexane	2.80	5.13	3.22	2.32	3.21	4.55
1-Heptene	0.65	0.91	0.98	0.60	0.57	0.86
2,2,4-Trimethylpentane	3.34	3.27	3.42	2.40	2.45	3.43
n-Heptane	1.75	2.25	3.94	2.15	1.53	2.16

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	06966	06989	06987	07057D1	07060D2	07060
Sampling Date:	7/17/96	7/18/96	7/19/96	7/22/96	7/22/96	7/23/96
Analysis Date:	8/14/96	8/14/96	8/14/96	8/20/96	8/20/96	8/15/96
Methylcyclohexane	1.01	0.36	2.04	0.87	0.72	1.06
2,2,3-Trimethylpentane	0.75	0.66	0.21	0.38	0.60	0.70
2,3,4-Trimethylpentane	0.76	1.08	1.48	0.72	0.77	0.93
Toluene	10.05	14.75	13.58	8.72	8.84	12.88
2-Methylheptane	0.87	1.07	0.91	0.55	0.57	0.81
3-Methylheptane	0.32	0.79	0.80	0.61	0.25	0.79
1-Octene	0.15	0.46	0.16	0.15	0.14	0.18
n-Octane	0.53	0.86	0.94	0.53	0.78	0.85
Ethylbenzene	1.61	2.26	2.19	1.61	1.55	2.38
m-Xylene/p-Xylene	6.19	7.09	7.29	5.54	5.39	8.09
Styrene	1.17	2.89	0.62	0.41	0.32	0.48
o-Xylene	2.43	2.55	2.50	2.02	1.89	2.91
1-Nonene	0.22	0.15	0.15	0.15	0.09	0.18
n-Nonane	0.18	0.52	0.88	0.42	0.39	0.62
Isopropylbenzene	0.46	0.20	0.23	0.03	0.07	0.15
a-Pinene	2.04	2.66	0.75	0.44	0.47	0.46
n-Propylbenzene	0.59	0.96	0.75	0.45	0.39	0.93
m-Ethyltoluene	2.27	3.11	2.72	1.88	1.74	3.04
p-Ethyltoluene	0.87	1.45	1.14	0.95	0.90	1.36
1,3,5-Trimethylbenzene	1.24	1.45	1.30	0.97	0.87	1.55
o-Ethyltoluene	0.93	1.08	1.33	0.98	0.95	1.30
b-Pinene	0.08	2.72	2.11	0.21	0.31	0.37
1-Decene	0.76	ND	1.02	0.44	0.81	0.85
1,2,4-Trimethylbenzene	2.67	4.14	3.67	2.73	2.59	3.69
n-Decane	6.29	0.87	4.37	0.77	0.75	0.99
1,2,3-Trimethylbenzene	0.55	1.16	0.20	0.19	0.05	0.27
m-Diethylbenzene	0.42	0.88	0.94	0.42	0.42	0.57
p-Diethylbenzene	0.73	1.89	0.87	0.66	0.72	0.95
1-Undecene	1.60	2.83	1.74	0.83	1.16	1.50
n-Undecane	0.88	1.80	25.00	1.19	1.60	1.72
1-Dodecene	0.97	2.10	1.21	0.71	0.88	1.14
n-Dodecane	1.43	2.67	33.20	1.00	1.52	1.40
1-Tridecene	0.17	1.12	0.85	0.13	0.07	0.29
n-Tridecane	0.90	2.15	10.66	0.74	0.64	0.87
TNMOC (w/ unknowns)	291.42	363.06	398.42	171.79	189.98	266.12
TNMOC (speciated)	207.77	237.00	293.65	140.73	148.82	205.63

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07106		07140		07173		07185		07214D1		07215D2	
Sampling Date:	7/24/96		7/25/96		7/26/96		7/29/96		7/30/96		7/30/96	
Analysis Date:	8/15/96		8/21/96		8/20/96		8/22/96		8/28/96		8/28/96	
Ethylene	2.73		3.72		2.52		3.29		3.57		3.25	
Acetylene/Ethane	10.44		8.40		10.73		8.02		4.42		5.91	
Propylene	1.68		2.38		2.08		2.88		1.63		1.48	
Propane	8.47		6.58		7.10		6.42		4.13		4.01	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	3.41		1.99		3.99		2.60		2.87		3.02	
Isobutene/1-butene	1.95		2.37		2.22		2.02		2.51		2.99	
1,3-Butadiene	0.18		0.17		0.08		0.21		0.17		0.32	
n-butane	12.04		8.94		12.90		10.90		20.92		21.18	
trans-2-Butene	ND		0.27		0.71		0.66		1.74		2.05	
cis-2-butene	1.11		1.10		1.07		0.76		1.97		1.93	
3-Methyl-1-butene	0.67		0.65		0.64		0.59		1.47		1.49	
Isopentane	33.93		28.94		31.49		29.89		68.89		69.90	
1-Pentene	2.66		1.51		1.52		1.56		3.94		6.33	
2-Methyl-1-butene	2.70		2.31		ND	a	2.19		5.73		9.58	
n-Pentane	16.15		13.72		11.36		15.91		31.41		34.66	
Isoprene	1.23		1.84		ND	a	3.45		1.32		2.11	
trans-2-Pentene	4.06		3.88		3.09		ND	a	9.21		9.52	
cis-2-Pentene	2.04		1.81		1.71		1.76		ND	a	4.70	
2-Methyl-2-butene	ND	a	4.06		3.34		4.06		ND	a	ND	a
2,2-Dimethylbutane	1.25		1.26		1.09		1.26		2.90		2.79	
Cyclopentene	0.82		0.61		1.19		0.38		1.63		1.78	
4-Methyl-1-pentene	0.49		0.47		0.39		0.77		1.61		1.45	
Cyclopentane	1.18		1.25		1.34		0.98		2.50		2.34	
2,3-Dimethylbutane	2.44		3.19		3.15		1.15		6.07		5.53	
2-Methylpentane	21.49		18.98		19.58		26.84		64.77		61.96	
3-Methylpentane	6.66		6.08		6.31		5.84		14.02		14.19	
1-Hexene	0.86		0.79		0.69		ND		ND		ND	
2-Methyl-1-pentene	0.71		0.59		0.54		1.20		3.39		3.31	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	8.42		7.26		7.63		7.21		15.97		16.33	
trans-2-Hexene	1.13		0.94		0.94		0.95		0.84		2.72	
cis-2-Hexene	0.75		0.68		0.62		0.68		1.26		1.81	
Methylcyclopentane	3.74		3.36		3.63		3.38		7.65		7.54	
2,4-Dimethylpentane	1.17		1.09		1.06		1.07		2.56		2.48	
Benzene	5.56		5.35		5.51		5.08		9.43		9.30	
Cyclohexane	0.78		0.54		0.76		0.76		1.23		1.19	
2-Methylhexane	4.08		3.74		3.75		2.93		7.48		6.67	
2,3-Dimethylpentane	1.00		0.89		0.75		0.94		1.40		2.03	
3-Methylhexane	4.23		3.84		4.08		4.59		9.81		9.55	
1-Heptene	1.05		0.89		0.93		0.88		1.86		1.95	
2,2,4-Trimethylpentane	3.56		3.51		3.41		3.46		6.51		6.61	
n-Heptane	2.59		2.22		2.59		2.30		4.94		7.24	

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07106	07140	07173	07185	07214D1	07215D2
Sampling Date:	7/24/96	7/25/96	7/26/96	7/29/96	7/30/96	7/30/96
Analysis Date:	8/15/96	8/21/96	8/20/96	8/22/96	8/28/96	8/28/96
Methylcyclohexane	1.70	1.24	1.29	1.14	2.69	2.36
2,2,3-Trimethylpentane	0.83	2.47	0.77	0.70	1.29	1.70
2,3,4-Trimethylpentane	1.16	1.22	1.03	1.02	2.40	2.24
Toluene	16.78	13.35	19.03	12.41	25.60	24.44
2-Methylheptane	0.97	1.03	0.88	0.89	1.66	1.68
3-Methylheptane	1.04	0.82	0.88	1.03	1.88	2.03
1-Octene	0.28	0.36	0.67	0.27	0.36	0.35
n-Octane	1.09	0.77	0.87	1.00	1.63	1.16
Ethylbenzene	2.79	2.35	2.18	2.07	4.25	4.17
m-Xylene/p-Xylene	8.24	7.30	6.66	6.72	13.96	13.40
Styrene	1.39	1.18	1.32	0.40	0.48	0.46
o-Xylene	3.04	2.74	2.53	2.45	4.66	4.67
1-Nonene	0.19	0.14	0.12	0.13	0.13	0.17
n-Nonane	0.70	0.39	0.61	0.56	0.78	0.74
Isopropylbenzene	0.08	0.10	0.09	0.10	0.14	0.16
a-Pinene	0.44	1.46	1.65	0.49	1.83	1.70
n-Propylbenzene	0.80	0.59	0.58	0.68	1.19	1.23
m-Ethyltoluene	2.65	2.18	2.18	2.32	4.00	3.93
p-Ethyltoluene	1.28	1.17	0.99	1.17	2.09	1.85
1,3,5-Trimethylbenzene	1.28	1.16	1.08	1.09	1.86	1.76
o-Ethyltoluene	1.12	1.03	0.60	1.16	4.84	1.76
b-Pinene	1.34	1.10	1.07	0.38	0.24	0.21
1-Decene	0.10	ND	ND	1.22	1.44	0.83
1,2,4-Trimethylbenzene	3.78	3.29	3.10	3.27	5.89	5.69
n-Decane	0.88	0.57	0.72	0.95	1.22	2.76
1,2,3-Trimethylbenzene	0.94	1.02	1.44	0.75	0.98	1.45
m-Diethylbenzene	1.48	0.60	0.85	0.57	0.88	0.82
p-Diethylbenzene	1.58	1.42	1.12	0.93	4.39	1.69
1-Undecene	1.65	1.96	1.41	1.72	2.33	1.33
n-Undecane	1.78	1.08	1.49	1.84	2.99	8.91
1-Dodecene	1.70	2.07	1.35	1.08	1.30	0.82
n-Dodecane	2.60	1.84	1.21	1.45	3.42	4.90
1-Tridecene	0.46	0.64	0.37	0.23	ND	ND
n-Tridecane	1.95	1.76	0.82	0.95	1.83	1.17
TNMOC (w/ unknowns)	331.75	302.52	327.40	289.63	502.76	508.83
TNMOC (speciated)	247.50	222.60	227.42	223.01	438.39	455.72

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07249	07259	07312		07400	07343	07414D1
Sampling Date:	7/31/96	8/1/96	8/2/96		8/5/96	8/6/96	8/7/96
Analysis Date:	8/28/96	8/28/96	8/29/96		8/29/96	8/30/96	9/3/96
Ethylene	8.77	2.96	6.98		1.80	2.10	3.82
Acetylene/Ethane	12.92	13.81	12.72		3.65	2.58	10.31
Propylene	5.61	4.32	5.69		1.54	1.40	3.67
Propane	8.86	9.79	9.33		1.20	2.78	7.41
Propyne	0.22	ND	ND		ND	ND	ND
Isobutane	25.02	4.81	3.74		1.15	1.24	4.06
Isobutene/1-butene	3.95	2.93	3.93		1.54	1.52	1.51
1,3-Butadiene	0.32	0.46	0.57		ND	0.14	0.14
n-butane	14.37	15.03	13.17		8.20	6.58	9.18
trans-2-Butene	0.60	0.54	1.93		0.63	0.61	0.37
cis-2-butene	0.91	0.85	0.91		0.66	0.69	0.38
3-Methyl-1-butene	1.01	0.72	0.83		0.65	0.57	0.33
Isopentane	162.53	35.21	37.12		29.13	26.36	20.30
1-Pentene	1.10	2.47	0.85		2.12	1.90	1.15
2-Methyl-1-butene	3.78	2.68	ND	a	2.48	2.35	1.47
n-Pentane	37.52	17.60	ND	a	13.62	13.23	9.94
Isoprene	2.22	3.60	3.66		2.10	2.25	2.54
trans-2-Pentene	5.29	3.96	4.32		3.74	3.51	2.11
cis-2-Pentene	2.68	2.09	2.14		1.94	1.80	1.09
2-Methyl-2-butene	5.87	4.63	4.99		4.35	4.02	2.45
2,2-Dimethylbutane	2.52	1.52	1.60		1.07	1.07	0.87
Cyclopentene	1.16	0.78	0.71		0.66	0.15	0.36
4-Methyl-1-pentene	0.81	0.50	1.29		0.41	0.42	0.24
Cyclopentane	4.44	1.20	1.35		1.06	1.29	0.71
2,3-Dimethylbutane	4.82	2.62	3.44		2.43	3.47	1.59
2-Methylpentane	30.23	17.62	34.32		17.45	19.95	9.76
3-Methylpentane	10.89	6.97	8.27		5.24	5.41	3.94
1-Hexene	ND	0.96	ND		0.81	ND	0.52
2-Methyl-1-pentene	2.08	0.41	1.54		0.44	1.30	0.29
2-Ethyl-1-butene	ND	ND	ND		ND	ND	ND
n-Hexane	15.20	9.65	9.05		6.55	6.54	5.22
trans-2-Hexene	1.39	0.77	0.66		0.98	0.87	0.58
cis-2-Hexene	0.88	0.39	0.59		0.64	0.40	0.23
Methylcyclopentane	5.97	3.51	4.58		2.91	2.78	2.24
2,4-Dimethylpentane	2.02	1.30	1.66		0.95	0.99	0.73
Benzene	9.11	6.21	7.65		3.89	4.25	3.61
Cyclohexane	6.15	1.00	0.85		0.62	0.75	0.83
2-Methylhexane	7.14	3.84	3.64		3.16	2.87	2.32
2,3-Dimethylpentane	2.19	1.19	1.09		0.85	0.85	0.72
3-Methylhexane	8.80	3.84	5.86		3.52	3.53	2.61
1-Heptene	1.96	1.00	1.18		0.83	0.80	0.56
2,2,4-Trimethylpentane	7.12	3.74	5.29		2.94	3.00	2.50
n-Heptane	4.52	2.84	2.84		1.90	2.45	2.03

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	**07249**	**07259**	**07312**	**07400**	**07343**	**07414D1**
Sampling Date:	**7/31/96**	**8/1/96**	**8/2/96**	**8/5/96**	**8/6/96**	**8/7/96**
Analysis Date:	**8/28/96**	**8/28/96**	**8/29/96**	**8/29/96**	**8/30/96**	**9/3/96**
Methylcyclohexane	4.49	1.99	1.80	1.22	1.35	1.38
2,2,3-Trimethylpentane	2.07	1.07	1.22	0.65	0.73	0.55
2,3,4-Trimethylpentane	2.21	1.21	2.35	0.93	1.06	0.70
Toluene	48.07	14.22	20.80	10.99	12.21	8.66
2-Methylheptane	2.08	1.04	1.41	0.73	0.77	0.73
3-Methylheptane	1.32	1.09	1.39	0.75	0.77	0.64
1-Octene	0.80	0.35	0.41	0.31	0.29	0.25
n-Octane	2.77	1.23	1.80	0.72	0.79	0.70
Ethylbenzene	7.15	2.56	4.36	2.16	2.20	2.53
m-Xylene/p-Xylene	20.19	8.11	14.59	6.62	6.80	4.57
Styrene	4.83	0.96	0.70	1.06	1.13	1.05
o-Xylene	7.24	3.03	4.78	2.41	3.08	2.11
1-Nonene	1.06	0.23	0.10	0.10	0.21	ND
n-Nonane	7.26	0.62	1.05	0.39	0.41	0.49
Isopropylbenzene	0.35	0.12	0.08	0.10	0.19	0.26
a-Pinene	6.69	0.56	0.74	1.52	1.73	1.13
n-Propylbenzene	1.92	0.71	1.02	0.53	0.57	0.40
m-Ethyltoluene	6.44	2.82	3.97	2.19	2.20	1.56
p-Ethyltoluene	3.26	1.40	2.04	0.88	0.89	0.76
1,3,5-Trimethylbenzene	4.11	1.37	1.92	1.05	1.08	0.83
o-Ethyltoluene	2.92	0.94	2.21	0.61	0.66	0.62
b-Pinene	2.71	0.92	1.17	0.07	0.07	0.04
1-Decene	ND	ND	5.83	1.16	0.98	1.17
1,2,4-Trimethylbenzene	9.05	4.05	7.50	3.20	3.25	2.32
n-Decane	31.07	0.96	1.93	0.59	0.56	0.66
1,2,3-Trimethylbenzene	5.11	3.05	1.20	0.92	1.05	1.22
m-Diethylbenzene	4.44	0.79	0.96	0.66	0.63	0.80
p-Diethylbenzene	3.37	1.44	1.49	1.27	0.72	0.92
1-Undecene	3.39	1.95	1.31	1.31	1.31	2.61
n-Undecane	149.33	2.45	2.69	1.59	0.92	1.31
1-Dodecene	2.48	1.98	1.08	1.62	1.27	1.77
n-Dodecane	160.24	2.94	1.75	2.15	0.61	1.90
1-Tridecene	0.67	0.28	0.17	0.33	0.32	0.42
n-Tridecane	44.35	1.78	1.02	1.21	0.82	0.93
TNMOC (w/ unknowns)	1180.42	356.90	402.90	290.31	284.98	243.79
TNMOC (speciated)	986.37	268.53	307.21	191.81	190.38	170.70

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07415D2	07471	07499		07483	07566	07618	
Sampling Date:	8/7/96	8/8/96	8/9/96		8/12/96	8/13/96	8/14/96	
Analysis Date:	9/3/96	9/4/96	9/4/96		9/9/96	9/9/96	9/10/96	
Ethylene	3.69	6.17	6.52		5.29	6.24	5.27	
Acetylene/Ethane	11.31	11.79	9.03		8.92	9.62	17.64	
Propylene	2.16	3.17	2.25		2.40	3.57	4.07	
Propane	8.42	8.64	5.53		5.66	4.21	12.88	
Propyne	ND	ND	ND		ND	ND	ND	
Isobutane	4.20	3.92	2.11		2.02	2.03	5.27	
Isobutene/1-butene	1.65	2.89	3.06		3.40	3.44	3.21	
1,3-Butadiene	0.09	0.28	0.45		0.47	0.50	0.40	
n-butane	9.14	12.00	10.54		10.47	10.49	15.45	
trans-2-Butene	0.49	0.64	0.45		1.56	1.03	0.94	
cis-2-butene	0.43	0.77	0.98		0.91	0.94	0.77	
3-Methyl-1-butene	0.46	0.68	0.72		0.74	0.73	0.69	
Isopentane	23.14	34.14	36.25		36.97	27.68	36.99	
1-Pentene	1.20	2.16	3.88		1.87	2.23	ND	b
2-Methyl-1-butene	1.72	2.73	2.68		3.02	2.83	2.67	
n-Pentane	11.31	18.19	16.59		16.66	16.09	18.31	
Isoprene	2.72	1.68	1.28		0.91	2.10	1.86	
trans-2-Pentene	2.50	3.96	4.44		4.55	4.19	3.94	
cis-2-Pentene	1.37	2.03	2.36		2.35	2.12	2.05	
2-Methyl-2-butene	2.99	4.64	5.30		5.20	4.75	4.61	
2,2-Dimethylbutane	1.04	1.44	1.55		1.49	2.37	1.64	
Cyclopentene	0.51	0.37	ND	a	0.82	0.82	0.72	
4-Methyl-1-pentene	0.35	1.97	1.45		0.82	0.56	1.90	
Cyclopentane	0.86	1.40	1.54		1.40	1.26	ND	a
2,3-Dimethylbutane	1.92	2.77	3.21		3.66	3.43	ND	a
2-Methylpentane	13.33	28.75	31.93		37.29	19.51	ND	a
3-Methylpentane	5.12	6.78	7.19		7.70	7.15	7.57	
1-Hexene	0.61	0.86	0.87		ND	ND	ND	
2-Methyl-1-pentene	0.43	0.49	0.72		1.55	1.53	1.40	
2-Ethyl-1-butene	ND	ND	ND		0.49	ND	ND	
n-Hexane	6.47	8.49	8.77		8.56	8.78	9.82	
trans-2-Hexene	0.75	0.97	1.19		0.77	1.08	1.11	
cis-2-Hexene	0.32	0.73	0.87		0.68	0.45	0.76	
Methylcyclopentane	2.83	3.82	ND	a	4.24	3.99	4.32	
2,4-Dimethylpentane	1.02	1.29	0.72		1.50	1.55	1.41	
Benzene	4.53	6.39	7.09		6.67	6.89	7.16	
Cyclohexane	1.00	0.89	0.85		0.83	0.87	0.97	
2-Methylhexane	3.23	3.54	3.83		3.93	4.09	4.28	
2,3-Dimethylpentane	0.97	0.66	1.10		1.05	1.53	1.15	
3-Methylhexane	3.52	3.96	7.35		6.10	4.51	5.49	
1-Heptene	0.88	1.00	1.19		1.07	1.13	1.11	
2,2,4-Trimethylpentane	3.22	3.93	4.66		4.95	5.00	4.36	
n-Heptane	2.62	2.54	3.01		2.99	3.21	4.39	

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	**07415D2**	**07471**	**07499**	**07483**	**07566**	**07618**
Sampling Date:	**8/7/96**	**8/8/96**	**8/9/96**	**8/12/96**	**8/13/96**	**8/14/96**
Analysis Date:	**9/3/96**	**9/4/96**	**9/4/96**	**9/9/96**	**9/9/96**	**9/10/96**
Methylcyclohexane	3.03	1.30	1.29	1.28	1.50	1.64
2,2,3-Trimethylpentane	0.77	0.67	0.97	0.99	1.53	0.91
2,3,4-Trimethylpentane	1.00	1.41	1.46	1.73	1.75	1.40
Toluene	10.42	15.45	17.75	18.13	17.75	17.57
2-Methylheptane	2.77	0.99	1.03	1.17	1.17	1.32
3-Methylheptane	0.78	0.92	1.45	1.02	1.07	1.22
1-Octene	0.32	0.33	0.74	0.39	0.49	0.30
n-Octane	1.47	1.09	0.79	1.26	1.08	1.66
Ethylbenzene	2.20	2.67	2.88	3.13	2.96	3.10
m-Xylene/p-Xylene	6.34	8.97	9.73	10.55	10.76	10.31
Styrene	1.46	0.58	0.53	0.55	1.28	0.53
o-Xylene	2.42	3.15	3.46	3.82	4.05	3.53
1-Nonene	0.18	0.12	0.24	0.17	0.25	0.17
n-Nonane	0.57	0.70	0.54	0.53	0.74	1.07
Isopropylbenzene	0.10	0.11	0.05	0.15	0.23	0.18
a-Pinene	1.01	1.50	1.28	1.37	0.59	1.51
n-Propylbenzene	0.63	0.62	0.79	0.96	1.05	0.92
m-Ethyltoluene	2.10	3.07	3.36	3.38	4.04	3.21
p-Ethyltoluene	0.97	1.70	1.74	1.83	1.52	1.78
1,3,5-Trimethylbenzene	1.09	1.58	1.53	1.73	1.67	1.78
o-Ethyltoluene	0.69	1.36	1.48	1.58	1.26	1.52
b-Pinene	1.78	0.16	0.26	0.24	0.12	0.13
1-Decene	0.15	0.96	1.65	1.56	1.33	0.69
1,2,4-Trimethylbenzene	3.14	4.38	4.83	5.31	5.84	4.79
n-Decane	0.85	1.57	0.80	0.96	0.86	1.91
1,2,3-Trimethylbenzene	1.02	0.72	0.75	1.43	1.57	1.26
m-Diethylbenzene	0.62	0.81	0.78	0.84	0.96	0.86
p-Diethylbenzene	1.35	0.64	0.72	0.95	1.27	0.92
1-Undecene	2.47	1.53	2.00	2.85	2.29	1.14
n-Undecane	1.73	4.01	1.67	1.11	1.42	2.39
1-Dodecene	1.22	1.28	1.54	3.39	2.78	1.04
n-Dodecane	1.52	9.55	1.93	0.82	1.62	1.68
1-Tridecene	0.32	0.18	0.28	0.22	0.36	0.20
n-Tridecane	1.06	3.27	1.16	0.38	1.89	0.41
TNMOC (w/ unknowns)	274.18	341.67	350.58	367.58	362.46	357.04
TNMOC (speciated)	202.07	280.91	274.97	287.71	263.56	269.62

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07666D1		07667D2		07675		07703		07728		07770	
Sampling Date:	8/15/96		8/15/96		8/16/96		8/19/96		8/20/96		8/21/96	
Analysis Date:	9/12/96		9/12/96		9/10/96		9/16/96		9/16/96		9/17/96	
Ethylene	4.68		4.79		3.11		3.24		4.41		9.70	
Acetylene/Ethane	11.46		17.83		8.15		12.72		11.84		22.70	
Propylene	2.05		1.99		3.10		1.91		2.34		4.89	
Propane	10.56		11.56		5.14		9.20		9.93		18.17	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	4.78		4.16		2.46		3.30		3.36		7.32	
Isobutene/1-butene	2.13		2.44		2.17		2.36		2.43		4.03	
1,3-Butadiene	0.28		0.13		0.20		0.08		0.21		0.34	
n-butane	12.39		10.91		11.81		11.89		11.15		17.51	
trans-2-Butene	0.69		0.55		0.81		0.70		0.63		1.03	
cis-2-butene	0.47		0.48		0.68		0.86		0.75		0.79	
3-Methyl-1-butene	0.40		0.38		0.58		0.70		0.71		0.74	
Isopentane	26.72		24.38		ND	a	ND	a	34.69		41.02	
1-Pentene	0.63		1.19		2.10		2.07		2.03		2.71	
2-Methyl-1-butene	ND	a	2.08		2.68		ND	a	2.92		2.88	
n-Pentane	12.93		13.32		15.75		ND	a	17.17		20.99	
Isoprene	1.08		1.24		1.30		0.61		1.22		1.57	
trans-2-Pentene	2.63		2.41		3.75		4.70		4.30		4.00	
cis-2-Pentene	1.38		1.29		1.91		2.34		2.32		ND	a
2-Methyl-2-butene	2.94		2.55		4.06		5.54		5.35		5.18	
2,2-Dimethylbutane	1.30		1.16		1.51		1.51		1.35		1.93	
Cyclopentene	0.45		0.60		0.74		0.88		0.77		0.95	
4-Methyl-1-pentene	2.14		0.44		0.55		0.65		0.54		1.65	
Cyclopentane	1.01		1.01		1.72		1.93		1.18		1.69	
2,3-Dimethylbutane	2.26		2.08		3.94		3.31		2.81		3.51	
2-Methylpentane	22.69		19.90		18.36		14.65		21.33		35.77	
3-Methylpentane	6.88		ND	a	6.40		8.31		7.60		10.51	
1-Hexene	ND		0.49		0.90		ND		1.03		1.04	
2-Methyl-1-pentene	1.23		0.33		0.48		1.84		0.68		0.73	
2-Ethyl-1-butene	ND		0.18		ND		ND		ND		ND	
n-Hexane	7.54		7.04		7.88		10.53		10.19		12.11	
trans-2-Hexene	0.77		0.64		0.93		0.73		1.33		1.32	
cis-2-Hexene	0.47		0.42		0.37		0.63		0.83		0.95	
Methylcyclopentane	3.57		3.35		3.41		4.87		4.40		5.74	
2,4-Dimethylpentane	1.07		1.05		1.14		1.67		1.71		1.93	
Benzene	6.00		5.93		5.27		6.70		7.29		9.84	
Cyclohexane	0.84		0.93		0.97		1.18		1.13		1.45	
2-Methylhexane	3.09		2.73		3.75		4.50		4.87		5.65	
2,3-Dimethylpentane	0.96		0.82		1.09		1.10		1.61		1.36	
3-Methylhexane	4.36		3.50		4.95		6.31		5.19		7.37	
1-Heptene	0.89		0.80		1.02		1.44		1.29		1.62	
2,2,4-Trimethylpentane	3.39		3.32		3.62		6.64		5.77		6.86	
n-Heptane	3.37		2.58		2.92		5.70		4.46		4.09	

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07666D1	07667D2	07675	07703	07728	07770
Sampling Date:	8/15/96	8/15/96	8/16/96	8/19/96	8/20/96	8/21/96
Analysis Date:	9/12/96	9/12/96	9/10/96	9/16/96	9/16/96	9/17/96
Methylcyclohexane	1.37	1.41	1.69	2.12	2.17	2.88
2,2,3-Trimethylpentane	0.75	0.61	1.00	1.27	1.28	1.85
2,3,4-Trimethylpentane	1.30	1.00	1.41	2.38	2.17	2.37
Toluene	12.69	12.51	14.05	20.85	20.96	27.61
2-Methylheptane	0.91	0.83	1.16	1.67	1.60	1.73
3-Methylheptane	0.88	0.96	1.07	1.63	1.59	1.78
1-Octene	0.35	0.28	0.36	1.90	0.69	0.67
n-Octane	1.15	1.13	0.98	1.21	1.58	2.18
Ethylbenzene	2.19	2.33	2.58	3.88	4.16	5.36
m-Xylene/p-Xylene	7.50	7.42	9.09	13.17	14.98	17.86
Styrene	0.36	0.39	1.94	0.97	1.59	0.99
o-Xylene	2.78	2.86	3.12	4.74	0.55	6.11
1-Nonene	0.16	0.37	0.18	0.20	ND	0.19
n-Nonane	0.65	0.70	0.55	0.82	1.00	1.41
Isopropylbenzene	0.29	0.11	0.21	0.20	0.30	0.53
a-Pinene	1.44	0.71	1.14	1.32	2.72	1.93
n-Propylbenzene	0.66	0.73	0.73	1.22	1.42	1.44
m-Ethyltoluene	2.39	2.60	2.77	4.64	5.17	5.61
p-Ethyltoluene	1.31	1.32	1.31	2.13	2.44	2.50
1,3,5-Trimethylbenzene	1.27	1.20	1.50	2.32	2.34	2.98
o-Ethyltoluene	1.07	1.06	0.95	2.01	2.23	2.45
b-Pinene	0.12	0.19	0.10	0.29	0.21	0.52
1-Decene	0.94	0.48	1.63	0.96	1.17	1.28
1,2,4-Trimethylbenzene	3.60	3.72	4.21	6.64	7.72	8.19
n-Decane	0.76	0.67	0.74	2.74	1.91	2.03
1,2,3-Trimethylbenzene	0.65	1.21	1.21	1.75	2.18	2.31
m-Diethylbenzene	0.58	0.65	0.82	1.08	1.33	1.66
p-Diethylbenzene	0.60	0.62	1.62	1.21	2.45	1.73
1-Undecene	1.74	0.54	2.15	1.15	1.64	1.39
n-Undecane	0.86	0.75	0.96	15.44	3.60	3.33
1-Dodecene	0.82	0.72	1.58	1.20	1.48	1.04
n-Dodecane	0.71	0.71	0.80	14.90	3.29	3.89
1-Tridecene	ND	0.21	0.77	0.24	0.28	0.43
n-Tridecane	0.50	1.85	1.11	2.49	1.86	4.83
TNMOC (w/ unknowns)	270.10	284.20	312.15	371.63	450.55	503.95
TNMOC (speciated)	225.85	215.86	207.19	268.06	305.19	406.70

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07808		07798D1		07799D1		07859		07892		07938	
Sampling Date:	8/22/96		8/23/96		8/23/96		8/26/96		8/27/96		8/28/96	
Analysis Date:	9/20/96		9/18/96		9/18/96		9/24/96		9/24/96		9/25/96	
Ethylene	5.81		5.35		ND	b	6.72		3.38		4.30	
Acetylene/Ethane	10.24		6.67		ND	b	17.36		0.14		13.08	
Propylene	3.48		2.40		ND	b	2.59		1.97		2.71	
Propane	5.07		3.72		ND	b	9.19		6.98		8.91	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	2.35		1.81		1.97		3.15		1.84		2.97	
Isobutene/1-butene	3.24		2.95		2.84		3.97		1.54		3.09	
1,3-Butadiene	0.45		0.49		0.48		0.42		0.11		0.31	
n-butane	8.99		6.78		7.13		11.10		9.21		13.70	
trans-2-Butene	0.25		0.56		ND		0.69		0.56		0.74	
cis-2-butene	0.82		0.66		0.56		0.75		0.59		0.79	
3-Methyl-1-butene	0.62		0.36		0.48		0.60		0.76		0.72	
Isopentane	32.88		22.61		23.84		35.31		28.14		29.64	
1-Pentene	1.81		1.46		1.43		1.06		ND	a	1.48	
2-Methyl-1-butene	ND	a	ND	a	2.40		2.32		2.31		2.81	
n-Pentane	ND	a	ND	a	10.88		17.39		13.81		16.07	
Isoprene	1.10		ND	a	0.27		1.03		0.74		1.24	
trans-2-Pentene	4.41		ND	a	1.23		4.20		3.47		ND	a
cis-2-Pentene	2.20		1.45		2.12		2.15		1.90		ND	a
2-Methyl-2-butene	5.30		3.35		ND	a	4.79		4.47		ND	a
2,2-Dimethylbutane	1.59		1.09		ND	a	1.47		1.29		1.36	
Cyclopentene	0.73		0.44		0.38		1.06		0.70		0.72	
4-Methyl-1-pentene	1.08		0.65		0.48		1.09		0.64		0.76	
Cyclopentane	1.34		0.93		1.43		1.81		1.13		1.67	
2,3-Dimethylbutane	2.90		1.97		2.22		3.92		2.23		2.96	
2-Methylpentane	32.42		20.42		22.31		38.57		15.65		26.95	
3-Methylpentane	8.45		5.40		5.77		10.08		5.42		6.44	
1-Hexene	0.98		0.67		0.49		ND		0.66		ND	
2-Methyl-1-pentene	0.67		0.40		0.36		2.01		0.56		1.39	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	a
n-Hexane	9.37		6.25		6.41		9.99		7.02		ND	a
trans-2-Hexene	1.14		0.63		0.72		1.42		0.90		1.02	
cis-2-Hexene	0.85		0.49		0.49		0.85		0.36		0.51	
Methylcyclopentane	4.44		3.04		3.10		4.73		2.98		3.74	
2,4-Dimethylpentane	1.54		1.04		1.05		1.55		1.01		1.18	
Benzene	7.33		5.80		5.80		7.40		4.99		5.62	
Cyclohexane	0.88		0.68		0.70		0.88		0.65		0.77	
2-Methylhexane	4.30		3.03		3.21		4.32		2.96		3.46	
2,3-Dimethylpentane	1.63		0.69		0.63		1.02		0.99		1.04	
3-Methylhexane	6.56		3.17		3.76		6.56		3.32		4.45	
1-Heptene	1.25		0.82		0.73		1.21		0.89		0.97	
2,2,4-Trimethylpentane	5.76		3.83		3.60		5.65		3.41		3.97	
n-Heptane	3.02		2.21		1.97		4.43		2.52		3.64	

SNMOC REPORT
SITE CODE: CAMS5
All concentrations reported in ppbC

Sample No.:	07808	07798D1	07799D1	07859	07892	07938
Sampling Date:	8/22/96	8/23/96	8/23/96	8/26/96	8/27/96	8/28/96
Analysis Date:	9/20/96	9/18/96	9/18/96	9/24/96	9/24/96	9/25/96
Methylcyclohexane	1.92	1.00	1.12	1.81	1.25	1.64
2,2,3-Trimethylpentane	1.85	0.84	0.80	1.12	0.88	0.86
2,3,4-Trimethylpentane	2.03	1.25	1.52	2.13	1.20	1.47
Toluene	21.75	14.86	14.24	20.42	12.52	16.60
2-Methylheptane	1.51	0.92	0.81	1.26	0.75	0.97
3-Methylheptane	1.42	0.91	2.04	1.28	0.76	0.91
1-Octene	0.64	0.22	0.38	0.52	0.35	0.41
n-Octane	1.90	1.20	0.99	1.50	0.74	2.63
Ethylbenzene	4.18	2.63	2.61	3.95	2.22	2.50
m-Xylene/p-Xylene	14.43	8.88	9.10	12.65	7.08	8.59
Styrene	0.84	0.61	0.61	0.62	1.04	0.55
o-Xylene	5.09	3.25	3.50	4.39	2.69	3.02
1-Nonene	0.42	0.16	0.34	0.15	0.09	0.14
n-Nonane	0.87	0.52	1.06	0.87	0.37	0.64
Isopropylbenzene	0.21	0.17	0.19	0.19	0.06	0.16
a-Pinene	1.61	0.96	2.10	1.69	2.38	0.93
n-Propylbenzene	1.29	0.72	0.90	1.34	0.90	0.81
m-Ethyltoluene	4.78	3.26	3.12	4.29	2.83	2.96
p-Ethyltoluene	2.45	1.31	1.60	2.24	1.31	1.45
1,3,5-Trimethylbenzene	2.35	1.52	1.59	1.97	1.43	1.41
o-Ethyltoluene	1.98	1.64	1.64	1.78	0.79	1.23
b-Pinene	0.31	0.15	0.23	0.28	0.09	0.24
1-Decene	1.31	1.02	1.09	1.51	0.98	0.82
1,2,4-Trimethylbenzene	7.32	4.80	4.80	6.49	3.95	4.58
n-Decane	1.56	0.83	1.19	1.38	0.88	1.69
1,2,3-Trimethylbenzene	2.12	1.06	1.09	2.11	1.23	0.74
m-Diethylbenzene	1.16	0.72	0.82	1.12	0.72	0.72
p-Diethylbenzene	1.13	0.73	0.82	1.15	1.47	0.68
1-Undecene	1.37	1.16	1.41	1.73	1.40	0.89
n-Undecane	1.66	1.02	3.06	1.96	4.80	6.25
1-Dodecene	1.82	0.76	0.78	1.34	1.29	0.86
n-Dodecane	2.33	1.07	2.34	1.88	4.99	2.57
1-Tridecene	0.36	0.25	0.36	0.24	0.41	0.19
n-Tridecane	1.84	0.63	0.77	1.24	1.98	0.52
TNMOC (w/ unknowns)	366.93	245.16	247.83	435.32	301.35	298.47
TNMOC (speciated)	285.09	185.31	191.19	323.37	208.07	245.78

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	07937	08058		08119	08135		08160	08182D1
Sampling Date:	8/29/96	9/3/96		9/4/96	9/5/96		9/6/96	9/9/96
Analysis Date:	9/25/96	10/3/96		10/3/96	10/4/96		10/4/96	10/7/96
Ethylene	3.49	6.13		11.66	9.60		15.87	9.35
Acetylene/Ethane	5.43	14.47		20.55	12.98		21.95	21.49
Propylene	2.57	2.10		13.65	5.38		14.62	6.25
Propane	8.17	9.00		11.25	8.54		16.10	17.75
Propyne	ND	ND		ND	ND		ND	ND
Isobutane	2.09	4.54		5.31	3.12		6.92	4.56
Isobutene/1-butene	2.03	6.13		5.51	6.10		11.09	3.63
1,3-Butadiene	ND	0.48		ND	1.00		ND	0.25
n-butane	7.22	23.59		16.61	11.66		25.17	15.25
trans-2-Butene	0.55	2.05		1.14	ND		1.76	0.64
cis-2-butene	0.74	2.16		0.98	1.07		1.32	0.61
3-Methyl-1-butene	0.59	2.01		0.98	0.86		1.40	0.60
Isopentane	29.79	95.86		51.84	45.34		62.84	31.35
1-Pentene	2.43	7.97		3.14	2.03		1.88	1.70
2-Methyl-1-butene	2.47	12.21		ND	2.63		5.36	2.42
n-Pentane	14.28	49.74		4.14	ND	a	30.06	17.58
Isoprene	0.52	1.22		26.04	ND	a	2.78	1.68
trans-2-Pentene	3.56	ND	a	5.71	5.05		7.06	2.35
cis-2-Pentene	1.94	7.19		3.10	2.84		3.67	1.71
2-Methyl-2-butene	4.27	15.52		7.18	6.30		8.60	3.99
2,2-Dimethylbutane	1.06	3.89		2.76	2.25		3.28	1.49
Cyclopentene	0.63	2.12		1.28	0.96		1.45	0.66
4-Methyl-1-pentene	0.50	2.06		0.78	1.38		1.07	0.53
Cyclopentane	1.22	3.58		2.11	1.94		2.79	1.33
2,3-Dimethylbutane	2.56	7.83		4.98	4.58		7.12	2.73
2-Methylpentane	16.31	43.40		30.77	42.32		43.36	17.43
3-Methylpentane	5.91	19.46		11.32	10.32		14.94	7.04
1-Hexene	ND	2.94		1.28	ND		1.63	0.81
2-Methyl-1-pentene	1.25	1.37		0.99	1.80		1.18	0.51
2-Ethyl-1-butene	ND	ND		ND	ND		ND	ND
n-Hexane	7.28	23.31		14.29	12.13		17.88	9.45
trans-2-Hexene	1.28	2.81		1.54	1.40		2.09	0.89
cis-2-Hexene	0.60	2.11		0.62	1.09		1.39	0.33
Methylcyclopentane	2.92	10.23		6.21	6.09		8.19	4.21
2,4-Dimethylpentane	1.03	3.41		2.30	2.08		3.08	1.40
Benzene	4.90	13.25		13.93	10.76		19.84	7.96
Cyclohexane	1.23	1.86		1.57	1.19		1.94	1.30
2-Methylhexane	3.19	9.81		7.05	5.48		9.29	4.29
2,3-Dimethylpentane	1.23	2.10		2.02	2.00		2.98	1.56
3-Methylhexane	3.96	10.80		7.51	8.67		9.87	5.21
1-Heptene	0.87	2.41		1.85	1.68		2.75	1.28
2,2,4-Trimethylpentane	3.39	9.57		9.41	7.65		13.23	5.75
n-Heptane	2.20	7.72		6.01	4.91		6.66	3.77

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	**07937**	**08058**	**08119**	**08135**	**08160**	**08182D1**
Sampling Date:	**8/29/96**	**9/3/96**	**9/4/96**	**9/5/96**	**9/6/96**	**9/9/96**
Analysis Date:	**9/25/96**	**10/3/96**	**10/3/96**	**10/4/96**	**10/4/96**	**10/7/96**
Methylcyclohexane	1.76	3.06	3.01	2.10	4.11	2.00
2,2,3-Trimethylpentane	0.71	1.83	2.57	1.94	3.23	1.38
2,3,4-Trimethylpentane	1.22	3.31	3.39	2.62	4.99	2.27
Toluene	16.52	34.20	34.01	26.14	54.08	18.14
2-Methylheptane	0.52	2.18	2.16	2.30	3.42	1.27
3-Methylheptane	0.84	2.26	2.06	1.69	3.39	1.19
1-Octene	0.31	0.91	1.10	0.93	1.77	0.58
n-Octane	0.76	2.15	2.90	2.09	3.54	1.26
Ethylbenzene	2.84	6.08	6.05	4.67	10.02	3.19
m-Xylene/p-Xylene	9.29	20.12	20.25	15.57	31.68	10.44
Styrene	1.21	0.95	2.11	1.07	3.25	1.45
o-Xylene	3.26	7.04	7.67	5.64	12.15	4.19
1-Nonene	0.23	0.21	0.37	0.16	0.78	0.28
n-Nonane	0.62	1.00	1.07	1.48	2.86	0.87
Isopropylbenzene	0.16	0.30	0.16	0.32	0.82	0.18
a-Pinene	2.37	0.82	1.04	1.82	4.36	2.16
n-Propylbenzene	0.78	1.74	1.79	1.48	3.02	1.17
m-Ethyltoluene	2.83	6.45	6.93	5.46	11.41	4.22
p-Ethyltoluene	1.42	3.07	3.01	2.79	5.03	1.86
1,3,5-Trimethylbenzene	1.48	2.97	3.26	2.72	6.09	2.20
o-Ethyltoluene	1.24	2.45	2.80	2.31	5.16	1.31
b-Pinene	1.08	1.22	1.54	1.55	2.06	1.25
1-Decene	4.13	ND	0.53	ND	1.15	0.44
1,2,4-Trimethylbenzene	6.66	9.97	10.35	8.81	17.85	6.30
n-Decane	1.75	1.79	1.43	2.05	10.22	1.78
1,2,3-Trimethylbenzene	2.47	3.08	3.08	2.23	5.89	1.15
m-Diethylbenzene	1.06	1.55	1.70	1.36	2.91	1.13
p-Diethylbenzene	1.31	1.67	1.64	1.18	3.46	2.18
1-Undecene	1.54	0.96	1.84	1.50	2.48	1.33
n-Undecane	4.77	1.85	1.75	3.40	9.62	3.45
1-Dodecene	1.09	1.12	1.68	1.07	2.14	1.36
n-Dodecane	5.23	1.43	1.78	2.86	5.28	1.65
1-Tridecene	ND	0.26	0.46	0.20	0.52	0.32
n-Tridecane	0.42	0.97	2.13	2.16	3.46	1.45
TNMOC (w/ unknowns)	340.39	747.32	60.23	466.80	893.93	417.10
TNMOC (speciated)	237.52	577.37	456.99	368.85	656.64	308.54

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	08183D2		08207	08202	08229	08322		08305D1
Sampling Date:	9/9/96		9/11/96	9/12/96	9/13/96	9/16/96		9/17/96
Analysis Date:	10/7/96		10/29/96	10/10/96	10/10/96	10/22/96		10/15/96
Ethylene	7.77		14.18	25.58	10.03	4.24		5.45
Acetylene/Ethane	19.30		29.05	13.57	15.94	19.07		9.37
Propylene	4.89		7.32	8.71	3.26	2.38		2.61
Propane	16.07		17.03	16.86	8.92	20.38		7.30
Propyne	ND		ND	ND	ND	ND		ND
Isobutane	4.38		3.91	5.36	2.80	5.59		2.70
Isobutene/1-butene	3.55		7.01	10.30	4.29	2.92		2.66
1,3-Butadiene	ND		1.13	2.45	ND	0.28		0.30
n-butane	14.50		14.91	15.10	10.28	17.11		6.97
trans-2-Butene	0.58		1.21	1.89	0.73	0.26		0.48
cis-2-butene	0.59		1.01	1.30	0.78	0.57		0.39
3-Methyl-1-butene	0.54		0.84	1.24	0.87	0.46		0.40
Isopentane	ND	a	50.66	56.00	38.20	31.40		20.63
1-Pentene	1.50		5.65	3.06	2.52	ND	a	0.95
2-Methyl-1-butene	2.21		3.61	4.68	3.17	2.47		1.77
n-Pentane	15.52		24.28	26.98	20.12	18.04		10.88
Isoprene	1.41		1.90	3.30	1.04	0.38		0.89
trans-2-Pentene	3.06		5.22	6.63	4.43	3.76		2.27
cis-2-Pentene	1.62		2.81	3.28	2.40	2.03		1.19
2-Methyl-2-butene	3.62		6.77	7.97	5.42	4.37		2.84
2,2-Dimethylbutane	1.79		2.09	2.72	2.18	1.33		1.06
Cyclopentene	0.67		0.93	1.18	0.93	0.66		0.45
4-Methyl-1-pentene	0.47		1.79	0.87	0.60	0.57		0.49
Cyclopentane	1.25		3.30	2.48	1.68	1.44		1.14
2,3-Dimethylbutane	2.60		4.55	5.38	4.41	2.61		2.23
2-Methylpentane	15.52		38.78	30.94	23.86	21.61		21.54
3-Methylpentane	6.35		14.20	14.29	9.34	6.89		5.68
1-Hexene	0.68		1.02	1.36	ND	0.79		0.58
2-Methyl-1-pentene	0.64		1.04	1.13	1.76	0.51		0.43
2-Ethyl-1-butene	ND		ND	ND	ND	ND		ND
n-Hexane	8.42		14.32	16.93	11.48	9.51		7.18
trans-2-Hexene	0.81		1.44	2.13	1.35	0.85		0.78
cis-2-Hexene	0.43		1.11	1.25	0.82	0.63		0.61
Methylcyclopentane	3.67		6.61	6.30	4.92	4.44		3.47
2,4-Dimethylpentane	1.20		2.17	2.73	1.78	1.24		1.32
Benzene	7.16		13.35	16.42	9.50	5.81		6.11
Cyclohexane	0.93		1.86	1.52	1.30	1.50		0.82
2-Methylhexane	3.59		6.41	8.02	5.26	3.80		3.72
2,3-Dimethylpentane	1.26		2.55	2.97	1.92	0.66		1.18
3-Methylhexane	4.28		8.19	8.30	5.75	4.94		5.02
1-Heptene	1.10		2.02	2.34	1.51	1.11		1.04
2,2,4-Trimethylpentane	5.13		9.96	11.50	6.92	4.23		5.85
n-Heptane	3.39		6.82	7.18	4.27	4.04		3.17

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	08183D2	08207	08202	08229	08322	08305D1	
Sampling Date:	9/9/96	9/11/96	9/12/96	9/13/96	9/16/96	9/17/96	
Analysis Date:	10/7/96	10/29/96	10/10/96	10/10/96	10/22/96	10/15/96	
Methylcyclohexane	1.76	3.03	3.81	2.33	2.52	1.59	
2,2,3-Trimethylpentane	1.21	2.25	2.29	1.88	0.80	0.99	
2,3,4-Trimethylpentane	1.69	3.71	4.02	2.49	1.29	2.27	
Toluene	15.56	42.62	43.48	25.89	13.89	18.77	
2-Methylheptane	1.15	2.92	2.96	1.90	1.14	2.26	
3-Methylheptane	1.07	2.81	2.88	1.71	1.07	ND	a
1-Octene	0.52	1.33	1.26	0.75	0.36	0.61	
n-Octane	1.14	3.29	0.73	2.17	1.40	1.38	
Ethylbenzene	2.84	7.93	9.26	5.34	2.58	3.94	
m-Xylene/p-Xylene	9.25	27.20	30.19	16.85	8.87	13.24	
Styrene	1.23	1.21	1.94	1.60	0.46	0.72	
o-Xylene	3.51	9.13	11.41	6.28	3.18	4.88	
1-Nonene	1.09	0.32	0.52	0.33	0.17	0.16	
n-Nonane	0.84	1.98	1.83	1.08	0.85	0.99	
Isopropylbenzene	0.31	0.50	0.58	0.26	0.21	0.21	
a-Pinene	1.87	2.92	3.15	2.60	1.19	1.12	
n-Propylbenzene	0.91	2.01	2.65	1.48	0.67	1.03	
m-Ethyltoluene	3.34	7.95	10.04	5.16	3.03	4.79	
p-Ethyltoluene	1.59	4.51	4.73	2.62	1.43	2.07	
1,3,5-Trimethylbenzene	1.67	5.18	5.00	2.75	1.42	2.31	
o-Ethyltoluene	0.99	3.34	4.10	1.71	1.15	1.90	
b-Pinene	0.96	1.53	2.28	1.15	0.08	0.32	
1-Decene	0.76	1.92	0.97	0.31	0.83	0.84	
1,2,4-Trimethylbenzene	5.28	11.65	15.04	8.04	4.53	7.19	
n-Decane	1.39	6.27	2.76	2.23	0.72	1.25	
1,2,3-Trimethylbenzene	1.23	5.06	4.35	2.22	1.74	1.91	
m-Diethylbenzene	0.94	2.29	2.37	1.31	0.71	1.13	
p-Diethylbenzene	0.94	2.17	2.57	2.56	1.25	1.34	
1-Undecene	1.70	3.46	2.81	1.53	0.95	0.79	
n-Undecane	4.81	14.76	3.15	3.16	1.10	1.41	
1-Dodecene	1.45	2.43	3.51	1.23	0.91	1.01	
n-Dodecane	13.19	17.92	2.52	2.16	0.55	1.11	
1-Tridecene	0.40	ND	0.45	0.36	0.21	0.14	
n-Tridecane	7.15	3.59	2.39	1.64	0.76	0.42	
TNMOC (w/ unknowns)	359.19	693.11	730.88	480.93	367.43	301.37	
TNMOC (speciated)	266.19	552.18	554.22	351.81	276.87	237.97	

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	08306D2		08386		08336		08352		08398		08417	
Sampling Date:	9/17/96		9/18/96		9/19/96		9/20/96		9/23/96		9/24/96	
Analysis Date:	10/15/96		10/15/96		10/16/96		10/16/96		10/22/96		10/23/96	
Ethylene	5.96		5.51		3.63		3.44		5.07		5.67	
Acetylene/Ethane	13.84		15.16		7.72		11.79		11.75		7.44	
Propylene	2.76		2.63		5.30		1.40		1.90		3.02	
Propane	9.32		15.86		6.76		7.99		11.15		5.91	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	2.76		6.52		5.31		2.85		5.50		2.82	
Isobutene/1-butene	2.85		1.47		1.57		1.71		0.97		0.78	
1,3-Butadiene	0.48		ND		ND		ND		ND		0.31	
n-butane	7.30		14.49		13.49		7.35		13.87		9.32	
trans-2-Butene	0.36		0.57		0.68		0.37		0.54		ND	
cis-2-butene	0.40		0.41		0.63		0.42		0.52		1.31	
3-Methyl-1-butene	0.36		0.49		0.67		0.45		0.59		0.47	
Isopentane	20.85		ND	a	37.12		ND	a	47.22		26.74	
1-Pentene	0.87		1.87		2.47		1.88		2.11		2.72	
2-Methyl-1-butene	1.61		2.54		ND	a	2.35		2.93		3.00	
n-Pentane	10.47		20.72		23.07		16.47		39.55		16.79	
Isoprene	0.71		0.58		1.03		0.79		0.70		1.38	
trans-2-Pentene	2.25		4.90		6.45		4.39		5.62		4.60	
cis-2-Pentene	1.24		2.36		3.40		2.27		2.88		2.28	
2-Methyl-2-butene	2.99		5.46		7.63		5.08		5.99		5.98	
2,2-Dimethylbutane	ND	a	1.69		2.32		1.64		1.43		1.28	
Cyclopentene	0.41		0.78		1.35		0.88		0.96		0.91	
4-Methyl-1-pentene	0.65		0.56		1.05		0.65		0.71		ND	a
Cyclopentane	1.13		2.10		2.32		1.60		4.19		ND	a
2,3-Dimethylbutane	2.37		5.15		5.43		3.81		3.17		2.66	
2-Methylpentane	20.99		28.36		32.75		21.66		27.67		26.69	
3-Methylpentane	5.82		10.55		13.56		8.46		10.15		7.81	
1-Hexene	0.78		1.28		2.17		1.17		1.27		ND	
2-Methyl-1-pentene	0.41		1.23		1.04		0.89		1.33		1.22	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	7.10		16.69		21.16		12.97		16.67		12.28	
trans-2-Hexene	0.79		2.06		2.45		1.68		2.21		1.66	
cis-2-Hexene	0.62		1.21		1.55		1.00		1.05		0.96	
Methylcyclopentane	3.45		7.00		8.48		5.14		6.41		5.51	
2,4-Dimethylpentane	1.20		2.44		3.08		1.94		2.19		2.08	
Benzene	6.31		11.84		14.62		9.77		12.12		9.99	
Cyclohexane	0.82		2.45		2.68		1.41		2.33		1.29	
2-Methylhexane	3.55		7.96		9.57		6.15		7.78		5.29	
2,3-Dimethylpentane	1.01		2.06		3.04		1.94		2.23		1.41	
3-Methylhexane	5.05		7.93		10.19		6.63		8.17		6.17	
1-Heptene	1.00		2.40		2.77		1.76		2.28		1.53	
2,2,4-Trimethylpentane	5.66		10.30		12.79		8.19		9.48		7.44	
n-Heptane	3.50		8.18		10.61		6.21		8.09		5.71	

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	08306D2	08386	08336	08352	08398	08417
Sampling Date:	9/17/96	9/18/96	9/19/96	9/20/96	9/23/96	9/24/96
Analysis Date:	10/15/96	10/15/96	10/16/96	10/16/96	10/22/96	10/23/96
Methylcyclohexane	1.52	3.96	4.45	2.58	3.88	2.40
2,2,3-Trimethylpentane	1.10	2.82	3.73	2.20	2.92	2.30
2,3,4-Trimethylpentane	2.19	4.55	5.27	3.52	4.11	3.11
Toluene	18.24	40.46	47.75	31.37	48.08	31.88
2-Methylheptane	1.27	3.32	3.53	1.94	2.59	1.86
3-Methylheptane	1.56	3.11	3.08	2.01	2.20	2.53
1-Octene	0.70	1.44	1.37	1.04	1.10	0.61
n-Octane	1.23	3.31	3.98	2.06	2.58	1.85
Ethylbenzene	3.81	8.50	9.09	6.30	8.58	6.38
m-Xylene/p-Xylene	12.92	28.45	32.12	21.18	29.08	22.76
Styrene	0.65	1.18	1.64	1.31	1.55	0.73
o-Xylene	4.80	10.36	11.62	7.67	10.38	7.69
1-Nonene	0.16	0.62	0.48	0.32	0.41	0.16
n-Nonane	1.15	1.40	2.09	0.87	1.21	0.98
Isopropylbenzene	0.25	0.32	0.27	0.17	0.39	0.32
a-Pinene	1.09	1.40	0.97	0.69	2.08	1.31
n-Propylbenzene	0.97	2.38	2.58	1.76	2.34	1.66
m-Ethyltoluene	4.54	8.86	9.85	6.51	8.62	7.19
p-Ethyltoluene	2.12	3.93	4.50	2.80	4.22	3.55
1,3,5-Trimethylbenzene	2.37	4.31	4.57	3.02	4.13	3.39
o-Ethyltoluene	2.15	3.50	3.78	2.09	3.27	2.81
b-Pinene	0.77	1.13	1.49	3.48	1.05	0.81
1-Decene	ND	0.20	0.18	0.84	0.09	ND
1,2,4-Trimethylbenzene	6.80	13.43	14.77	10.17	12.85	10.67
n-Decane	1.18	1.18	2.30	0.88	3.55	1.33
1,2,3-Trimethylbenzene	1.93	2.76	3.49	2.30	3.33	3.50
m-Diethylbenzene	1.10	2.20	2.15	1.59	2.42	1.48
p-Diethylbenzene	1.17	2.50	4.17	1.54	3.99	1.64
1-Undecene	0.66	1.82	2.14	1.82	2.26	1.29
n-Undecane	1.59	1.69	0.44	1.67	10.01	1.46
1-Dodecene	0.82	0.96	1.49	1.60	1.64	1.66
n-Dodecane	1.30	1.15	2.75	1.93	10.33	0.88
1-Tridecene	0.17	0.36	0.26	0.39	0.35	0.43
n-Tridecane	0.52	1.63	2.20	1.62	6.09	1.55
TNMOC (w/ unknowns)	296.45	548.23	40.56	413.52	649.98	417.37
TNMOC (speciated)	242.80	404.93	486.39	307.80	492.46	333.22

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	**08447**		**08530**		**08523**
Sampling Date:	**9/26/96**		**9/27/96**		**9/30/96**
Analysis Date:	**10/23/96**		**10/24/96**		**10/24/96**
Ethylene	2.27		2.79		7.54
Acetylene/Ethane	6.56		4.63		21.69
Propylene	1.92		1.27		4.45
Propane	4.60		4.80		16.91
Propyne	ND		ND		ND
Isobutane	1.68		1.98		6.37
Isobutene/1-butene	1.25		1.58		3.67
1,3-Butadiene	0.07		0.13		0.27
n-butane	5.99		7.75		15.75
trans-2-Butene	0.36		0.11		0.61
cis-2-butene	0.38		0.41		0.57
3-Methyl-1-butene	0.32		0.29		0.59
Isopentane	20.52		19.30		28.41
1-Pentene	1.47		1.44		1.91
2-Methyl-1-butene	2.19		1.79		2.38
n-Pentane	13.23		ND	a	18.72
Isoprene	0.84		ND	a	0.87
trans-2-Pentene	4.03		3.35		4.25
cis-2-Pentene	2.00		1.77		2.09
2-Methyl-2-butene	4.45		3.67		4.80
2,2-Dimethylbutane	ND	a	1.05		1.68
Cyclopentene	0.75		0.55		0.76
4-Methyl-1-pentene	0.55		0.48		0.68
Cyclopentane	1.12		1.17		2.04
2,3-Dimethylbutane	2.15		2.12		4.93
2-Methylpentane	16.33		19.46		19.64
3-Methylpentane	6.59		6.13		9.07
1-Hexene	1.02		0.86		1.23
2-Methyl-1-pentene	0.82		0.60		0.86
2-Ethyl-1-butene	ND		ND		ND
n-Hexane	10.83		9.46		12.97
trans-2-Hexene	1.44		0.99		1.30
cis-2-Hexene	0.53		0.63		0.53
Methylcyclopentane	3.94		4.19		5.34
2,4-Dimethylpentane	1.54		1.33		2.19
Benzene	7.75		7.15		11.37
Cyclohexane	1.09		1.02		1.40
2-Methylhexane	5.09		4.11		5.46
2,3-Dimethylpentane	1.29		0.86		1.91
3-Methylhexane	5.89		5.79		5.82
1-Heptene	1.32		1.15		1.66
2,2,4-Trimethylpentane	5.84		5.22		7.68
n-Heptane	5.33		4.12		6.45

SNMOC REPORT
SITE CODE:CAMS5
All concentrations reported in ppbC

Sample No.:	**08447**	**08530**	**08523**
Sampling Date:	**9/26/96**	**9/27/96**	**9/30/96**
Analysis Date:	**10/23/96**	**10/24/96**	**10/24/96**
Methylcyclohexane	2.16	1.62	2.41
2,2,3-Trimethylpentane	1.33	1.00	2.39
2,3,4-Trimethylpentane	2.45	1.78	2.92
Toluene	27.05	22.49	31.76
2-Methylheptane	1.66	1.27	2.19
3-Methylheptane	1.43	1.52	1.83
1-Octene	0.56	0.40	0.88
n-Octane	1.59	1.12	1.94
Ethylbenzene	5.87	4.21	6.09
m-Xylene/p-Xylene	20.78	14.65	21.20
Styrene	1.78	0.41	1.42
o-Xylene	7.47	5.06	7.78
1-Nonene	0.61	0.26	0.36
n-Nonane	0.86	0.97	1.07
Isopropylbenzene	0.22	0.17	0.24
a-Pinene	1.90	0.87	1.80
n-Propylbenzene	1.69	1.14	1.86
m-Ethyltoluene	8.12	4.29	7.04
p-Ethyltoluene	3.73	1.99	2.86
1,3,5-Trimethylbenzene	3.39	1.80	3.21
o-Ethyltoluene	2.09	1.55	2.86
b-Pinene	1.72	1.16	1.56
1-Decene	0.04	ND	ND
1,2,4-Trimethylbenzene	10.09	5.84	0.10
n-Decane	0.98	6.05	1.77
1,2,3-Trimethylbenzene	2.41	1.30	10.00
m-Diethylbenzene	1.55	0.79	1.67
p-Diethylbenzene	3.15	0.78	3.25
1-Undecene	2.47	1.11	2.97
n-Undecane	1.84	1.51	12.84
1-Dodecene	2.22	0.71	2.91
n-Dodecane	1.79	2.04	28.15
1-Tridecene	0.61	0.27	0.60
n-Tridecane	1.69	1.02	5.22
TNMOC (w/ unknowns)	380.69	286.27	597.61
TNMOC (speciated)	282.63	226.68	421.97

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06203	06186	06208	06227		06228	06245
Sampling Date:	6/3/96	6/5/96	6/6/96	6/7/96		6/10/96	6/11/96
Analysis Date:	6/28/96	7/2/96	7/3/96	7/5/96		7/9/96	7/11/96
Ethylene	19.05	5.06	4.65	1.45		5.96	6.28
Acetylene/Ethane	49.05	15.45	11.35	12.85		19.99	19.40
Propylene	14.65	4.06	3.36	2.71		3.37	3.28
Propane	19.55	9.51	5.55	11.39		12.82	15.05
Propyne	ND	ND	ND	ND		0.14	ND
Isobutane	8.54	2.88	1.87	2.99		5.03	4.11
Isobutene/1-butene	17.39	2.61	3.26	1.90		5.37	3.74
1,3-Butadiene	3.86	ND	ND	ND		ND	0.15
n-butane	28.47	5.05	4.55	4.26		12.65	6.49
trans-2-Butene	1.34	0.18	0.30	0.15		0.83	0.26
cis-2-butene	10.32	0.27	0.33	0.14		0.74	0.21
3-Methyl-1-butene	1.12	1.31	ND	ND	a	0.44	0.19
Isopentane	62.79	9.24	8.98	8.42		26.75	13.37
1-Pentene	2.34	0.23	0.27	0.23		0.93	0.38
2-Methyl-1-butene	4.00	0.60	0.77	0.30		1.69	1.09
n-Pentane	33.92	4.97	4.80	5.40		13.50	7.78
Isoprene	1.24	ND	0.53	ND		0.42	0.93
trans-2-Pentene	4.34	0.48	0.70	0.29		1.89	1.17
cis-2-Pentene	2.23	0.36	0.31	0.20		1.03	0.80
2-Methyl-2-butene	4.81	1.25	0.84	0.35		1.93	1.46
2,2-Dimethylbutane	4.61	0.74	0.79	0.56		2.18	1.44
Cyclopentene	2.16	0.55	0.35	ND		0.46	0.85
4-Methyl-1-pentene	0.88	ND	ND	0.32		0.99	0.31
Cyclopentane	4.80	1.42	0.53	1.15		2.13	1.40
2,3-Dimethylbutane	36.41	ND	ND	1.48		14.50	2.20
2-Methylpentane	23.38	5.52	6.61	2.43		12.63	14.58
3-Methylpentane	13.39	3.20	3.24	1.82		6.29	5.55
1-Hexene	ND	ND	ND	ND		ND	ND
2-Methyl-1-pentene	2.09	0.67	0.53	0.25		1.01	0.67
2-Ethyl-1-butene	ND	ND	ND	ND		ND	ND
n-Hexane	21.22	5.89	6.61	1.86		6.82	6.57
trans-2-Hexene	1.08	0.11	0.25	ND		0.37	0.65
cis-2-Hexene	1.11	ND	ND	ND		0.26	0.56
Methylcyclopentane	10.17	3.06	3.06	0.97		3.12	2.96
2,4-Dimethylpentane	2.61	0.54	0.79	0.45		1.38	0.96
Benzene	14.13	4.01	3.45	1.55		5.14	4.26
Cyclohexane	3.64	1.45	0.97	0.68		0.84	1.08
2-Methylhexane	8.85	3.34	2.42	1.03		3.13	2.37
2,3-Dimethylpentane	3.63	1.11	0.98	0.73		1.41	1.21
3-Methylhexane	10.40	3.96	3.81	2.80		5.30	5.42
1-Heptene	2.36	0.68	0.66	0.46		1.10	0.95
2,2,4-Trimethylpentane	10.46	2.20	2.09	1.66		4.04	3.11
n-Heptane	8.38	1.80	1.52	1.05		2.30	1.80
Methylcyclohexane	3.06	1.27	0.91	1.00		1.23	1.67

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06203	06186	06208	06227	06228	06245
Sampling Date:	6/3/96	6/5/96	6/6/96	6/7/96	6/10/96	6/11/96
Analysis Date:	6/28/96	7/2/96	7/3/96	7/5/96	7/9/96	7/11/96
2,2,3-Trimethylpentane	2.62	0.67	0.48	0.46	1.16	0.89
2,3,4-Trimethylpentane	4.17	1.79	1.64	0.54	1.35	1.26
Toluene	44.86	10.85	10.77	4.00	15.57	13.39
2-Methylheptane	1.89	0.60	0.33	0.43	1.13	0.82
1-Octene	0.82	0.25	0.19	0.18	0.29	0.20
3-Methylheptane	2.17	0.38	0.39	0.24	0.67	0.76
n-Octane	2.16	0.60	0.61	0.46	0.95	0.82
Ethylbenzene	7.33	1.85	1.57	0.44	2.08	1.89
m-Xylene/p-Xylene	23.38	5.77	5.41	4.61	7.40	7.78
Styrene	2.47	2.29	2.13	2.81	3.38	2.41
o-Xylene	8.34	2.56	2.19	0.86	3.01	2.64
1-Nonene	ND	ND	ND	ND	ND	ND
n-Nonane	1.99	0.76	0.77	0.39	0.90	0.81
Isopropylbenzene	0.96	0.19	0.19	ND	0.36	0.35
a-Pinene	3.49	2.69	1.86	1.45	2.32	1.09
n-Propylbenzene	2.68	1.28	1.15	ND	1.07	0.94
m-Ethyltoluene	8.37	2.22	2.57	0.37	2.97	2.82
p-Ethyltoluene	4.08	1.31	1.22	0.31	1.55	1.59
1,3,5-Trimethylbenzene	4.73	1.61	1.71	1.95	2.63	2.79
o-Ethyltoluene	2.64	0.77	0.75	ND	0.97	1.09
b-Pinene	2.90	2.84	2.58	3.91	3.86	3.44
1-Decene	13.38	9.63	5.29	4.31	7.21	4.53
1,2,4-Trimethylbenzene	12.51	3.46	3.42	1.14	4.76	4.74
n-Decane	3.05	1.02	1.14	0.48	1.22	1.04
1,2,3-Trimethylbenzene	1.80	0.54	0.24	0.23	1.58	1.30
m-Diethylbenzene	0.47	ND	0.21	0.09	0.54	0.48
p-Diethylbenzene	1.99	0.59	0.52	0.40	1.59	1.63
1-Undecene	7.22	5.87	5.35	9.38	8.49	11.89
n-Undecane	5.95	3.04	2.11	1.57	1.41	1.27
1-Dodecene	5.69	3.17	1.55	2.45	2.43	2.10
n-Dodecane	13.52	8.31	4.57	3.94	3.85	4.87
1-Tridecene	0.69	0.61	ND	0.77	2.90	0.66
n-Tridecane	1.79	2.16	41.84	16.18	2.81	8.20
TNMOC (w/ unknowns)	775.95	287.45	283.84	200.97	389.04	302.76
TNMOC (speciated)	677.94	184.71	196.73	139.80	284.51	237.17

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06288	06300	06310		06375	06370	06469
Sampling Date:	6/12/96	6/13/96	6/14/96		6/17/96	6/18/96	6/20/96
Analysis Date:	7/11/96	7/12/96	7/14/96		7/15/96	7/16/96	7/17/96
Ethylene	3.76	10.25	13.24		9.77	10.74	7.47
Acetylene/Ethane	11.64	26.21	61.79		19.71	31.11	12.70
Propylene	1.94	13.19	12.24		14.50	6.29	5.21
Propane	5.90	13.73	27.14		12.78	24.11	9.26
Propyne	ND	0.48	0.26		0.43	0.36	ND
Isobutane	1.66	7.11	10.01		5.26	24.74	5.29
Isobutene/1-butene	3.40	8.83	17.63		7.70	19.92	4.85
1,3-Butadiene	ND	1.18	0.94		0.72	2.69	ND
n-butane	2.75	19.20	18.60		7.87	94.55	15.04
trans-2-Butene	0.14	1.77	0.82		0.34	9.00	0.15
cis-2-butene	0.10	1.22	0.86		0.29	11.18	0.45
3-Methyl-1-butene	0.06	2.00	ND	a	0.32	5.12	0.51
Isopentane	5.80	42.67	ND	a	25.21	244.63	30.01
1-Pentene	0.24	2.00	1.48		0.67	11.97	1.01
2-Methyl-1-butene	0.54	2.86	0.97		1.65	18.64	1.12
n-Pentane	2.81	19.17	63.81		13.35	101.51	13.60
Isoprene	0.54	1.75	1.70		1.77	1.67	0.86
trans-2-Pentene	0.32	3.34	2.89		1.66	22.31	1.73
cis-2-Pentene	0.35	1.78	1.22		1.08	11.75	1.13
2-Methyl-2-butene	0.81	4.10	8.05		2.53	0.56	2.70
2,2-Dimethylbutane	2.48	3.36	3.83		2.11	18.67	1.76
Cyclopentene	0.63	0.97	0.56		0.69	3.86	0.37
4-Methyl-1-pentene	ND	2.36	1.63		0.34	2.98	ND
Cyclopentane	0.61	2.15	5.20		1.54	9.72	ND
2,3-Dimethylbutane	0.83	5.94	3.84		4.01	20.25	1.31
2-Methylpentane	6.27	36.38	15.92		32.16	148.66	43.90
3-Methylpentane	2.60	9.62	8.85		10.60	35.35	6.70
1-Hexene	ND	ND	ND		ND	ND	ND
2-Methyl-1-pentene	0.37	2.35	1.26		1.33	4.85	0.91
2-Ethyl-1-butene	0.22	0.73	ND		ND	ND	0.17
n-Hexane	2.45	14.66	12.91		8.28	34.08	8.76
trans-2-Hexene	0.24	1.72	1.48		0.46	3.20	0.56
cis-2-Hexene	0.52	1.42	0.89		0.40	2.25	0.28
Methylcyclopentane	1.23	6.98	5.63		4.40	15.06	4.71
2,4-Dimethylpentane	0.43	2.73	2.67		0.51	1.37	0.54
Benzene	2.48	10.08	9.50		8.27	11.00	5.20
Cyclohexane	0.46	2.46	1.60		1.20	2.60	1.12
2-Methylhexane	1.25	7.05	ND		4.87	11.81	3.65
2,3-Dimethylpentane	1.02	3.26	5.41		2.33	6.51	1.01
3-Methylhexane	1.75	12.66	7.60		10.30	18.13	5.57
1-Heptene	0.48	1.83	2.07		1.53	2.79	0.94
2,2,4-Trimethylpentane	1.37	8.66	8.04		7.49	15.74	5.69
n-Heptane	1.07	6.13	5.20		3.57	6.23	3.13
Methylcyclohexane	1.12	3.62	4.02		2.96	4.59	1.37

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06288	06300	06310	06375	06370	06469
Sampling Date:	6/12/96	6/13/96	6/14/96	6/17/96	6/18/96	6/20/96
Analysis Date:	7/11/96	7/12/96	7/14/96	7/15/96	7/16/96	7/17/96
2,2,3-Trimethylpentane	0.27	1.87	1.97	2.00	3.18	1.13
2,3,4-Trimethylpentane	0.55	3.92	3.77	3.12	5.82	2.43
Toluene	8.31	37.21	35.68	28.70	51.73	18.47
2-Methylheptane	0.71	2.27	1.94	1.62	4.99	0.77
1-Octene	0.19	0.83	1.04	1.01	1.04	0.88
3-Methylheptane	0.39	2.30	2.57	1.70	2.65	1.26
n-Octane	0.58	2.11	1.86	1.39	0.62	0.86
Ethylbenzene	1.02	5.59	4.89	4.11	4.76	2.74
m-Xylene/p-Xylene	3.59	19.86	18.29	14.81	15.97	7.81
Styrene	2.97	3.27	3.27	2.91	4.13	1.08
o-Xylene	1.74	7.60	6.84	5.83	5.85	3.55
1-Nonene	ND	0.60	ND	ND	0.33	ND
n-Nonane	0.62	1.87	1.84	1.35	1.56	1.32
Isopropylbenzene	0.19	0.82	0.91	0.68	0.65	2.09
a-Pinene	0.66	2.48	2.33	2.78	7.69	ND
n-Propylbenzene	0.27	3.49	2.84	2.02	2.18	0.68
m-Ethyltoluene	1.57	8.50	6.85	6.00	5.31	3.15
p-Ethyltoluene	0.88	5.09	4.08	2.97	2.99	1.81
1,3,5-Trimethylbenzene	2.23	5.86	3.89	2.99	3.46	1.61
o-Ethyltoluene	0.53	2.81	2.11	2.03	1.67	1.88
b-Pinene	4.62	3.39	2.19	2.38	2.80	0.61
1-Decene	5.31	5.27	3.25	10.20	5.90	1.07
1,2,4-Trimethylbenzene	2.48	12.34	10.46	9.94	7.40	7.09
n-Decane	0.82	2.80	2.79	2.15	2.71	3.57
1,2,3-Trimethylbenzene	2.97	1.37	5.19	3.05	2.19	4.71
m-Diethylbenzene	0.34	1.40	0.94	0.95	0.83	1.08
p-Diethylbenzene	1.61	3.39	2.67	2.22	2.05	1.75
1-Undecene	14.36	8.68	6.23	6.99	6.56	5.27
n-Undecane	1.20	2.46	2.27	1.47	2.28	9.53
1-Dodecene	3.66	2.41	0.97	1.22	2.72	3.29
n-Dodecane	2.46	5.48	3.69	5.38	6.14	15.70
1-Tridecene	0.82	2.15	ND	ND	1.79	2.57
n-Tridecane	0.17	1.07	22.59	0.78	0.57	7.01
TNMOC (w/ unknowns)	203.82	613.96	607.65	499.53	1357.08	462.67
TNMOC (speciated)	140.71	500.53	521.97	371.72	1203.04	327.50

Footnotes:

a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06472	06513	06512		06580	06596D1	06597D2	
Sampling Date:	6/21/96	6/24/96	6/25/96		6/26/96	6/27/96	6/27/96	
Analysis Date:	7/19/96	7/19/96	7/24/96		7/25/96	7/26/96	7/26/96	
Ethylene	7.26	5.27	4.35		6.07	4.55	3.65	
Acetylene/Ethane	15.64	11.71	12.59		12.57	8.86	9.25	
Propylene	6.22	4.02	0.75		4.13	2.15	2.71	
Propane	11.54	7.68	11.64		8.09	8.05	7.29	
Propyne	0.14	0.95	ND		0.29	ND	ND	
Isobutane	5.24	2.12	2.87		4.16	1.80	1.97	
Isobutene/1-butene	3.55	3.61	2.45		3.06	2.24	1.90	
1,3-Butadiene	ND	ND	ND		0.62	0.28	0.28	
n-butane	7.82	4.44	6.11		6.72	4.27	4.42	
trans-2-Butene	ND	ND	ND		0.34	0.31	0.25	
cis-2-butene	ND	ND	ND		0.45	0.14	0.14	
3-Methyl-1-butene	1.16	0.11	0.28		ND	0.11	0.08	
Isopentane	13.90	7.48	7.35		9.99	6.77	6.74	
1-Pentene	0.43	0.09	0.23		0.46	0.18	0.25	
2-Methyl-1-butene	0.89	0.42	ND	a	0.67	0.39	0.56	
n-Pentane	7.26	4.54	ND	a	6.28	4.23	ND	a
Isoprene	1.73	0.64	ND	a	0.56	0.86	ND	a
trans-2-Pentene	0.66	0.65	0.35		0.78	0.43	0.83	
cis-2-Pentene	0.90	0.32	0.31		0.32	0.16	0.30	
2-Methyl-2-butene	1.48	1.05	0.66		3.69	0.64	0.78	
2,2-Dimethylbutane	0.70	0.54	0.53		0.60	0.46	0.56	
Cyclopentene	0.67	ND	ND		0.80	0.10	0.10	
4-Methyl-1-pentene	2.81	0.60	0.72		0.58	0.07	0.68	
Cyclopentane	1.85	0.89	0.52		1.61	0.31	0.42	
2,3-Dimethylbutane	2.06	2.05	0.75		5.74	0.76	0.78	
2-Methylpentane	15.26	9.22	2.77		6.25	3.11	8.04	
3-Methylpentane	6.64	3.49	2.93		3.06	1.89	2.12	
1-Hexene	ND	ND	ND		ND	ND	ND	
2-Methyl-1-pentene	1.15	0.46	0.56		0.57	0.26	0.29	
2-Ethyl-1-butene	ND	ND	ND		ND	ND	ND	
n-Hexane	6.30	2.94	2.80		5.08	2.72	2.63	
trans-2-Hexene	0.38	0.16	0.16		0.26	0.10	0.13	
cis-2-Hexene	ND	ND	0.17		0.15	0.16	0.07	
Methylcyclopentane	2.51	1.45	1.58		2.70	1.49	1.48	
2,4-Dimethylpentane	0.73	0.48	0.43		0.59	0.43	0.59	
Benzene	5.38	3.36	3.03		4.00	3.27	2.66	
Cyclohexane	1.23	0.58	0.67		1.05	0.56	0.53	
2-Methylhexane	2.65	1.38	1.39		2.49	1.43	1.26	
2,3-Dimethylpentane	1.62	1.05	0.49		0.58	0.45	0.37	
3-Methylhexane	5.75	3.99	3.15		3.21	2.79	2.85	
1-Heptene	0.79	0.54	0.44		0.73	0.46	0.46	
2,2,4-Trimethylpentane	3.12	2.17	2.11		3.01	2.06	2.02	
n-Heptane	2.40	1.57	1.65		2.01	1.55	1.53	
Methylcyclohexane	2.46	1.67	0.21		1.69	0.23	0.70	

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06472	06513	06512	06580	06596D1	06597D2
Sampling Date:	6/21/96	6/24/96	6/25/96	6/26/96	6/27/96	6/27/96
Analysis Date:	7/19/96	7/19/96	7/24/96	7/25/96	7/26/96	7/26/96
2,2,3-Trimethylpentane	0.72	0.63	0.39	0.53	0.37	0.41
2,3,4-Trimethylpentane	1.02	0.83	0.73	0.93	0.71	0.82
Toluene	13.50	10.83	8.36	10.70	7.88	7.91
2-Methylheptane	1.39	2.33	1.04	0.42	0.39	0.40
1-Octene	0.33	0.33	0.15	0.27	0.35	0.23
3-Methylheptane	0.52	1.55	0.70	0.58	0.39	0.34
n-Octane	0.73	0.58	0.82	0.83	0.27	0.70
Ethylbenzene	1.99	1.37	1.08	1.92	1.03	1.07
m-Xylene/p-Xylene	6.55	5.10	3.79	6.59	3.45	3.57
Styrene	3.18	2.34	1.41	1.22	0.46	0.37
o-Xylene	2.61	1.80	1.62	2.34	1.51	1.39
1-Nonene	0.35	ND	0.35	0.51	0.37	0.16
n-Nonane	0.77	0.72	0.45	0.65	0.53	0.47
Isopropylbenzene	0.53	0.17	0.17	0.22	ND	0.08
a-Pinene	2.14	1.70	1.79	2.31	2.69	1.55
n-Propylbenzene	1.19	0.99	0.56	0.67	0.47	0.56
m-Ethyltoluene	2.55	2.05	1.45	2.04	1.72	1.56
p-Ethyltoluene	1.59	1.26	0.68	0.92	0.59	0.85
1,3,5-Trimethylbenzene	3.51	2.27	0.65	0.99	0.94	0.96
o-Ethyltoluene	0.89	0.80	1.02	1.40	0.91	0.86
b-Pinene	4.35	4.05	ND	2.03	0.19	0.13
1-Decene	4.46	7.73	3.45	ND	0.80	1.81
1,2,4-Trimethylbenzene	4.33	3.13	2.21	3.04	2.31	2.33
n-Decane	1.39	0.98	3.39	0.87	0.81	0.63
1,2,3-Trimethylbenzene	1.60	0.77	2.85	1.44	1.99	0.41
m-Diethylbenzene	0.31	0.25	0.58	0.28	1.16	0.56
p-Diethylbenzene	1.48	1.30	0.97	0.73	0.67	0.77
1-Undecene	20.22	14.76	10.56	5.17	0.50	6.91
n-Undecane	3.22	1.15	1.12	2.06	1.21	0.47
1-Dodecene	8.10	4.82	3.22	2.03	0.84	2.12
n-Dodecane	5.84	3.19	0.94	4.44	1.14	0.25
1-Tridecene	0.28	1.14	0.12	0.84	0.36	0.64
n-Tridecane	1.54	ND	0.59	2.35	0.56	0.66
TNMOC (w/ unknowns)	320.19	234.13	175.47	303.59	160.85	168.90
TNMOC (speciated)	255.43	174.59	134.20	177.13	108.65	113.62

Footnotes:

a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06440		06625	06653	06712	06738	06745	
Sampling Date:	6/28/96		7/1/96	7/2/96	7/3/96	7/5/96	7/8/96	
Analysis Date:	7/25/96		7/30/96	7/30/96	7/31/96	8/1/96	8/1/96	
Ethylene	2.71		3.79	2.00	6.54	1.85	3.26	
Acetylene/Ethane	9.01		11.26	6.69	19.87	9.88	9.99	
Propylene	1.23		5.35	3.32	15.06	1.28	2.04	
Propane	14.06		16.63	11.43	25.48	13.38	4.51	
Propyne	ND		ND	ND	0.20	ND	ND	
Isobutane	5.26		5.16	5.32	8.27	4.39	1.44	
Isobutene/1-butene	1.86		2.30	1.50	3.38	1.79	3.14	
1,3-Butadiene	0.22		0.10	ND	0.60	ND	0.09	
n-butane	13.75		13.11	13.09	23.01	11.63	2.15	
trans-2-Butene	0.13		ND	ND	0.17	ND	0.13	
cis-2-butene	0.08		ND	0.14	0.37	ND	0.13	
3-Methyl-1-butene	ND		ND	ND	0.19	ND	0.10	
Isopentane	6.81		24.67	20.11	14.15	4.74	5.46	
1-Pentene	1.12		0.60	0.25	0.85	0.19	0.37	
2-Methyl-1-butene	ND	a	0.40	0.35	0.83	0.74	0.49	
n-Pentane	ND	a	4.88	3.44	8.78	2.45	3.11	
Isoprene	ND	a	4.07	ND	0.41	ND	1.32	
trans-2-Pentene	0.27		0.43	0.38	0.86	ND	0.44	
cis-2-Pentene	0.20		0.20	0.07	0.41	ND	0.19	
2-Methyl-2-butene	4.04		3.12	3.27	5.49	3.49	0.33	
2,2-Dimethylbutane	0.71		0.52	ND	0.38	0.37	0.64	
Cyclopentene	0.36		ND	1.02	0.86	0.41	1.19	
4-Methyl-1-pentene	0.69		0.55	ND	0.23	0.73	ND	
Cyclopentane	ND		1.10	0.33	1.06	0.17	0.45	
2,3-Dimethylbutane	ND		5.11	0.60	2.29	0.38	1.30	
2-Methylpentane	ND		4.48	2.60	9.26	0.74	5.32	
3-Methylpentane	3.79		2.08	1.54	4.68	3.50	ND	a
1-Hexene	ND		ND	ND	ND	ND	ND	
2-Methyl-1-pentene	0.24		0.32	0.20	0.61	ND	0.38	
2-Ethyl-1-butene	ND		0.13	ND	ND	ND	ND	
n-Hexane	2.35		2.61	1.85	5.78	1.46	2.25	
trans-2-Hexene	0.09		0.09	0.05	0.31	ND	0.13	
cis-2-Hexene	0.15		ND	0.03	0.19	ND	0.09	
Methylcyclopentane	1.32		1.29	1.17	2.39	0.81	0.91	
2,4-Dimethylpentane	0.47		0.42	0.24	1.06	0.56	0.33	
Benzene	2.68		2.76	2.20	5.06	2.23	2.59	
Cyclohexane	0.46		0.57	0.39	1.10	0.33	0.41	
2-Methylhexane	6.48		2.88	1.11	3.23	0.53	1.27	
2,3-Dimethylpentane	0.46		0.80	0.27	1.03	0.20	0.26	
3-Methylhexane	2.80		4.61	2.27	1.90	0.41	2.70	
1-Heptene	0.36		0.55	0.28	0.90	0.14	0.30	
2,2,4-Trimethylpentane	1.93		2.11	1.42	5.22	1.17	2.18	
n-Heptane	1.24		2.04	0.84	2.46	0.79	0.97	
Methylcyclohexane	0.14		4.01	0.90	1.89	0.56	0.63	

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06440	06625	06653	06712	06738	06745
Sampling Date:	6/28/96	7/1/96	7/2/96	7/3/96	7/5/96	7/8/96
Analysis Date:	7/25/96	7/30/96	7/30/96	7/31/96	8/1/96	8/1/96
2,2,3-Trimethylpentane	0.31	0.50	0.11	0.96	0.20	0.46
2,3,4-Trimethylpentane	0.61	0.72	0.37	1.75	0.31	0.52
Toluene	6.98	8.61	5.72	17.09	4.05	6.99
2-Methylheptane	0.30	2.00	0.16	2.73	0.33	0.45
1-Octene	0.12	1.22	0.21	1.15	0.46	0.37
3-Methylheptane	1.15	0.17	0.14	0.45	0.06	0.20
n-Octane	1.14	0.57	0.92	1.44	0.64	0.53
Ethylbenzene	2.23	2.49	1.99	3.95	1.68	0.89
m-Xylene/p-Xylene	6.72	7.15	5.71	11.42	5.04	3.48
Styrene	1.28	3.64	2.29	4.42	0.77	2.62
o-Xylene	1.93	2.55	1.78	3.65	1.49	1.41
1-Nonene	0.18	0.54	ND	0.16	0.21	1.59
n-Nonane	0.71	1.95	0.54	0.63	0.60	0.56
Isopropylbenzene	0.15	0.34	0.23	0.24	0.13	0.08
a-Pinene	1.47	1.89	1.13	2.41	1.13	1.69
n-Propylbenzene	0.54	0.58	0.57	0.68	0.38	0.36
m-Ethyltoluene	1.67	1.79	1.34	2.85	1.10	1.24
p-Ethyltoluene	1.36	1.00	0.56	1.14	0.51	0.71
1,3,5-Trimethylbenzene	1.73	3.05	1.01	1.34	0.56	2.66
o-Ethyltoluene	1.12	1.09	0.70	0.80	0.60	0.60
b-Pinene	0.57	0.29	3.21	4.76	0.36	5.86
1-Decene	2.15	4.20	ND	0.24	2.18	0.29
1,2,4-Trimethylbenzene	2.18	2.89	1.78	3.81	1.32	2.11
n-Decane	1.98	3.30	0.53	0.92	2.85	0.59
1,2,3-Trimethylbenzene	2.61	0.92	0.77	1.28	0.10	0.54
m-Diethylbenzene	1.00	1.10	0.37	0.81	0.65	0.22
p-Diethylbenzene	0.90	1.59	1.22	1.75	0.67	1.67
1-Undecene	4.90	3.67	4.73	5.22	4.99	16.34
n-Undecane	2.56	3.18	1.83	2.13	1.25	0.99
1-Dodecene	2.49	1.70	2.17	2.52	1.56	6.44
n-Dodecane	2.06	2.19	2.09	4.02	1.22	1.42
1-Tridecene	0.48	0.54	0.46	1.11	0.27	0.86
n-Tridecane	1.41	2.19	1.54	2.34	1.36	1.90
TNMOC (w/ unknowns)	219.76	333.70	227.55	389.99	218.61	210.03
TNMOC (speciated)	144.45	204.75	136.87	277.00	110.35	129.62

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06762		06792		06817		06858D1		06859D2		06861
Sampling Date:	7/9/96		7/10/96		7/11/96		7/12/96		7/12/96		7/15/96
Analysis Date:	8/1/96		8/2/96		8/2/96		8/9/96		8/9/96		8/12/96
Ethylene	2.93		10.99		4.79		4.24		2.31		4.33
Acetylene/Ethane	5.37		13.06		7.24		16.10		17.14		14.96
Propylene	1.30		3.17		3.28		2.89		3.06		6.18
Propane	2.85		7.60		2.31		13.36		13.36		15.14
Propyne	ND		ND		ND		ND		ND		ND
Isobutane	0.84		3.51		1.35		3.57		3.38		14.20
Isobutene/1-butene	1.89		2.11		1.86		1.06		1.51		12.39
1,3-Butadiene	0.10		ND		0.38		ND		ND		0.41
n-butane	1.50		8.02		2.20		6.68		6.84		46.10
trans-2-Butene	0.15		0.18		0.31		0.09		0.08		7.09
cis-2-butene	0.08		0.26		0.22		0.05		0.09		5.51
3-Methyl-1-butene	ND		0.12		0.12		0.07		0.05		2.06
isopentane	3.98		11.77		8.14		6.56		6.47		141.35
1-Pentene	0.49		0.48		0.53		ND		ND		4.58
2-Methyl-1-butene	0.25		0.65		0.51		0.17		0.08		9.59
n-Pentane	2.18		7.09		4.70		3.99		3.74		69.04
Isoprene	0.83		0.50		0.38		0.09		0.09		0.42
trans-2-Pentene	0.26		0.78		ND	a	0.13		0.18		11.55
cis-2-Pentene	0.10		0.30		ND	a	0.07		0.07		5.94
2-Methyl-2-butene	0.41		0.48		0.75		0.16		0.08		14.05
2,2-Dimethylbutane	0.38		0.40		1.05		0.40		0.37		8.24
Cyclopentene	0.52		1.53		0.13		ND		ND		2.03
4-Methyl-1-pentene	ND	a	16.00		0.46		0.26		0.94		1.60
Cyclopentane	ND	a	0.81		0.46		0.24		0.49		4.90
2,3-Dimethylbutane	ND	a	1.89		1.21		0.71		0.71		10.90
2-Methylpentane	ND	a	6.78		11.43		1.95		3.89		81.01
3-Methylpentane	1.46		3.08		4.32		1.42		ND	a	19.67
1-Hexene	ND		ND		ND		ND		ND		ND
2-Methyl-1-pentene	0.20		0.37		0.62		0.27		0.23		2.95
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	1.72		4.10		4.02		2.37		2.67		17.77
trans-2-Hexene	0.08		0.17		0.21		0.13		0.04		1.85
cis-2-Hexene	0.11		0.05		0.15		0.08		0.07		1.40
Methylcyclopentane	0.99		1.93		1.91		1.18		1.18		9.05
2,4-Dimethylpentane	0.38		0.51		0.82		0.29		0.35		3.18
Benzene	2.49		3.55		3.76		2.24		2.53		8.00
Cyclohexane	0.30		0.64		0.49		0.64		0.76		1.38
2-Methylhexane	0.96		1.62		1.80		0.94		0.94		6.26
2,3-Dimethylpentane	0.39		0.30		0.62		0.29		0.30		2.90
3-Methylhexane	1.99		2.85		4.26		1.15		2.37		9.06
1-Heptene	0.29		0.51		0.57		0.12		0.35		1.68
2,2,4-Trimethylpentane	1.46		2.30		3.09		1.30		1.51		9.62
n-Heptane	0.92		1.63		2.00		1.26		1.21		3.74

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06762	06792	06817	06858D1	06859D2	06881
Sampling Date:	7/9/96	7/10/96	7/11/96	7/12/96	7/12/96	7/15/96
Analysis Date:	8/1/96	8/2/96	8/2/96	8/9/96	8/9/96	8/12/96
Methylcyclohexane	0.42	1.44	1.47	0.87	0.82	2.05
2,2,3-Trimethylpentane	0.32	0.54	0.60	0.30	0.32	1.66
2,3,4-Trimethylpentane	0.42	0.64	0.89	0.51	0.51	2.82
Toluene	8.01	9.30	11.80	4.70	4.69	20.91
2-Methylheptane	0.30	0.82	0.69	0.37	0.38	1.87
3-Methylheptane	0.41	0.73	0.68	0.26	0.55	2.23
1-Octene	0.11	0.30	0.31	0.08	0.10	0.66
n-Octane	0.74	0.81	1.05	0.63	0.70	2.10
Ethylbenzene	0.76	1.30	1.76	0.68	0.67	2.60
m-Xylene/p-Xylene	2.88	4.76	6.60	2.54	2.55	7.81
Styrene	0.23	2.62	1.98	0.22	0.20	2.34
o-Xylene	1.02	1.95	2.37	0.86	0.88	2.91
1-Nonene	0.22	0.07	0.13	0.14	0.16	0.19
n-Nonane	0.33	0.57	0.48	0.37	0.43	1.14
Isopropylbenzene	0.09	0.14	0.17	0.06	0.06	1.12
a-Pinene	0.34	0.12	0.30	1.15	1.77	1.11
n-Propylbenzene	0.41	0.37	0.74	0.30	0.29	2.81
m-Ethyltoluene	1.11	1.68	2.43	0.88	0.88	2.16
p-Ethyltoluene	0.42	0.78	1.04	0.39	0.47	0.66
1,3,5-Trimethylbenzene	0.52	0.98	1.18	0.37	0.47	2.14
o-Ethyltoluene	0.69	0.58	1.19	0.48	0.51	0.96
b-Pinene	0.39	4.98	0.06	0.07	3.15	0.43
1-Decene	3.85	0.28	4.00	0.66	ND	2.87
1,2,4-Trimethylbenzene	1.76	2.73	3.91	1.28	1.50	5.02
n-Decane	0.54	1.11	3.70	0.43	0.44	1.26
1,2,3-Trimethylbenzene	0.41	0.87	0.88	0.01	0.30	0.25
m-Diethylbenzene	0.89	0.88	1.26	0.53	0.49	0.57
p-Diethylbenzene	0.97	1.93	1.47	0.47	0.66	1.14
1-Undecene	15.44	16.41	16.34	0.85	17.42	6.99
n-Undecane	1.19	3.81	0.89	0.90	0.88	4.87
1-Dodecene	4.03	5.38	5.01	0.55	2.62	2.39
n-Dodecane	1.47	5.34	0.59	0.94	0.67	4.35
1-Tridecene	0.08	0.94	0.21	0.12	0.37	0.33
n-Tridecane	0.59	2.32	0.34	0.73	0.59	1.34
TNMOC (w/ unknowns)	133.64	298.45	222.45	130.08	165.32	778.33
TNMOC (speciated)	91.47	199.57	158.94	100.20	125.98	686.14

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06965		07056D1		07059D2		07079		07127		07144	
Sampling Date:	7/17/96		7/22/96		7/22/96		7/23/96		7/24/96		7/25/96	
Analysis Date:	8/14/96		8/20/96		8/20/96		8/15/96		8/15/96		8/20/96	
Ethylene	3.11		2.80		2.61		3.12		3.74		3.01	
Acetylene/Ethane	3.63		4.95		3.88		5.57		13.08		7.75	
Propylene	2.88		1.18		1.21		1.24		1.90		3.27	
Propane	2.13		2.38		2.13		2.95		10.14		6.58	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	0.96		0.50		0.51		0.89		2.30		2.02	
Isobutene/1-butene	2.41		1.53		1.29		1.95		4.92		2.19	
1,3-Butadiene	0.12		ND		ND		0.15		0.25		0.16	
n-butane	0.68		1.64		1.19		1.43		4.23		4.59	
trans-2-Butene	ND	a	0.26		0.19		0.14		0.36		0.39	
cis-2-butene	ND	a	0.05		0.05		0.12		0.25		0.33	
3-Methyl-1-butene	ND	a	0.06		0.05		0.08		0.16		0.13	
Isopentane	5.25		3.96		3.95		4.86		10.10		10.64	
1-Pentene	0.66	a	0.58		0.45		0.24		0.57		0.34	
2-Methyl-1-butene	0.28		0.22		0.25		0.50		0.19		0.58	
n-Pentane	1.84		1.77		1.80		ND	a	5.57		7.64	
Isoprene	0.51		0.60		0.62		ND	a	0.70		0.28	
trans-2-Pentene	0.32		0.25		0.25		0.32		0.54		0.68	
cis-2-Pentene	0.26		0.29		ND	a	0.22		0.25		ND	a
2-Methyl-2-butene	0.46		0.45		0.33		0.60		1.73		0.50	
2,2-Dimethylbutane	0.83		0.53		0.29		0.44		ND	a	0.77	
Cyclopentene	0.05		0.05		0.07		ND		ND		0.62	
4-Methyl-1-pentene	0.29		0.51		0.46		0.69		0.12		0.07	
Cyclopentane	0.70		0.29		0.19		0.36		0.42		0.52	
2,3-Dimethylbutane	3.54		0.97		0.48		0.60		1.03		1.01	
2-Methylpentane	4.50		2.50		4.35		2.84		4.77		4.64	
3-Methylpentane	1.88		1.28		1.70		1.70		2.40		2.28	
1-Hexene	ND		ND		ND		0.09		ND		ND	
2-Methyl-1-pentene	ND	a	0.16		0.15		0.12		0.23		0.33	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	1.38		1.64		1.71		1.98		3.30		3.16	
trans-2-Hexene	0.16		0.05		0.13		0.08		0.14		0.18	
cis-2-Hexene	0.10		0.05		0.12		0.11		0.09		0.11	
Methylcyclopentane	0.69		ND	a	0.87		1.04		1.82		1.30	
2,4-Dimethylpentane	0.29		ND	a	0.27		0.35		0.52		0.57	
Benzene	1.58		1.97		1.74		2.12		2.45		2.23	
Cyclohexane	0.24		0.30		0.29		0.31		0.50		0.37	
2-Methylhexane	1.87		0.87		0.79		1.04		1.50		1.58	
2,3-Dimethylpentane	0.33		0.24		0.26		0.26		0.55		0.66	
3-Methylhexane	4.05		1.13		1.64		1.92		1.94		2.28	
1-Heptene	0.43		0.26		0.21		0.31		0.45		0.35	
2,2,4-Trimethylpentane	1.67		1.41		1.37		1.92		2.18		3.21	
n-Heptane	1.15		0.97		0.87		1.06		1.22		1.10	

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	06965	07056D1	07059D2	07079	07127	07144
Sampling Date:	7/17/96	7/22/96	7/22/96	7/23/96	7/24/96	7/25/96
Analysis Date:	8/14/96	8/20/96	8/20/96	8/15/96	8/15/96	8/20/96
Methylcyclohexane	0.36	0.32	0.29	0.40	1.04	0.96
2,2,3-Trimethylpentane	0.52	0.23	0.30	0.46	0.53	0.75
2,3,4-Trimethylpentane	0.96	0.42	0.37	0.48	0.72	1.03
Toluene	5.64	4.06	4.34	5.16	6.12	11.56
2-Methylheptane	0.68	0.84	0.23	0.30	0.51	1.26
3-Methylheptane	0.21	0.32	0.25	0.27	0.52	1.93
1-Octene	0.40	0.20	0.17	0.19	0.20	1.02
n-Octane	0.35	0.49	0.45	0.88	0.50	1.09
Ethylbenzene	1.06	0.74	0.81	0.85	1.29	1.97
m-Xylene/p-Xylene	3.84	2.90	2.86	3.39	4.16	6.48
Styrene	2.99	0.40	0.37	0.25	1.24	1.65
o-Xylene	1.49	1.09	1.08	1.24	1.44	2.25
1-Nonene	0.21	0.21	0.09	0.21	0.42	0.95
n-Nonane	0.70	0.30	0.27	0.33	0.44	0.62
Isopropylbenzene	0.19	0.04	0.06	0.67	0.14	0.10
a-Pinene	2.38	1.85	1.02	1.32	1.16	2.17
n-Propylbenzene	0.47	0.29	0.22	0.41	0.38	0.45
m-Ethyltoluene	1.10	1.08	1.00	1.25	1.53	1.62
p-Ethyltoluene	0.90	0.55	0.59	0.64	0.63	0.85
1,3,5-Trimethylbenzene	0.65	0.44	0.48	0.55	0.73	0.95
o-Ethyltoluene	1.16	0.57	0.56	0.87	0.58	0.50
b-Pinene	4.49	0.29	0.30	0.30	1.72	2.73
1-Decene	0.23	2.01	1.83	2.36	0.14	0.22
1,2,4-Trimethylbenzene	2.35	1.79	1.76	2.11	2.34	2.50
n-Decane	2.31	0.45	0.39	0.61	0.49	0.64
1,2,3-Trimethylbenzene	0.52	1.65	0.36	1.63	0.66	0.56
m-Diethylbenzene	1.53	0.56	0.35	0.37	0.89	1.01
p-Diethylbenzene	1.98	0.79	0.64	0.77	1.26	1.37
1-Undecene	9.39	8.75	7.97	5.54	5.72	7.05
n-Undecane	0.69	0.89	0.90	1.52	0.93	0.97
1-Dodecene	3.22	3.32	1.66	3.00	1.81	2.95
n-Dodecane	0.81	1.64	0.96	1.66	1.58	1.37
1-Tridecene	1.00	ND	ND	0.06	0.36	0.38
n-Tridecane	1.15	0.72	0.31	0.57	1.50	1.77
TNMOC (w/ unknowns)	220.75	118.59	109.86	125.93	171.92	214.06
TNMOC (speciated)	107.14	78.84	71.92	84.38	130.31	142.09

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07171		07195		07212D1		07213D2		07250		07268
Sampling Date:	7/26/96		7/29/96		7/30/96		7/30/96		7/31/96		8/1/96
Analysis Date:	8/20/96		8/22/96		8/28/96		8/28/96		8/28/96		8/28/96
Ethylene	7.96		2.67		2.65		3.34		10.04		6.32
Acetylene/Ethane	21.00		4.64		3.14		5.52		28.44		10.10
Propylene	3.88		1.75		1.29		0.90		8.75		4.05
Propane	18.62		2.18		2.42		2.64		17.24		9.95
Propyne	0.29		ND		ND		ND		ND		ND
Isobutane	4.69		1.02		1.01		0.84		6.44		3.25
Isobutene/1-butene	4.28		2.46		1.69		1.59		ND	a	3.21
1,3-Butadiene	0.67		0.21		0.09		0.10		ND	a	0.25
n-butane	9.09		1.88		1.81		1.70		ND	a	7.32
trans-2-Butene	0.66		0.17		ND	b	ND		ND	a	0.18
cis-2-butene	0.44		0.14		ND	b	0.09		ND	a	0.25
3-Methyl-1-butene	0.24		ND		ND	b	0.12		ND	a	0.18
isopentane	16.73		6.47		5.16		5.16		ND	a	13.15
1-Pentene	ND	a	0.22		0.21		0.65		ND	a	0.45
2-Methyl-1-butene	0.90		0.42		0.23		ND	a	ND	a	0.86
n-Pentane	9.54		ND	a	4.00		2.05		ND	a	7.98
Isoprene	0.58		ND	a	0.12		0.20		ND	a	1.79
trans-2-Pentene	1.06		ND	a	0.21		0.32		5.40		0.81
cis-2-Pentene	0.52		0.22		0.14		0.18		2.83		0.39
2-Methyl-2-butene	1.08		0.54		0.41		0.57		6.09		1.08
2,2-Dimethylbutane	1.19		0.46		ND	a	0.49		3.10		0.87
Cyclopentene	1.27		0.41		0.05		0.10		1.97		0.20
4-Methyl-1-pentene	0.13		ND		0.16		0.44		1.48		0.09
Cyclopentane	ND	a	0.38		0.36		0.29		3.53		0.88
2,3-Dimethylbutane	ND	a	1.11		0.61		0.53		5.28		1.90
2-Methylpentane	6.31		3.61		2.32		5.20		26.09		6.88
3-Methylpentane	4.97		1.85		1.73		1.97		9.83		3.99
1-Hexene	0.38		ND		0.18		ND		0.85		0.25
2-Methyl-1-pentene	0.20		0.32		0.12		0.16		0.54		0.16
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	7.33		2.25		2.03		2.04		11.22		5.57
trans-2-Hexene	0.41		0.11		0.09		0.12		1.07		0.38
cis-2-Hexene	0.25		0.05		0.15		0.11		0.76		0.11
Methylcyclopentane	2.92		1.10		1.00		1.07		5.08		2.22
2,4-Dimethylpentane	0.92		0.41		0.23		0.38		1.82		0.76
Benzene	5.53		2.23		2.18		1.98		7.31		4.60
Cyclohexane	0.96		0.33		0.31		0.31		1.49		0.78
2-Methylhexane	3.75		1.28		1.00		1.05		5.09		2.76
2,3-Dimethylpentane	0.90		0.42		0.30		0.40		1.95		1.11
3-Methylhexane	4.66		1.78		1.46		1.85		5.90		3.27
1-Heptene	0.90		0.38		0.28		0.30		1.50		0.75
2,2,4-Trimethylpentane	4.59		1.97		1.80		1.80		7.71		3.63
n-Heptane	2.94		0.90		1.02		0.91		4.63		2.25

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07171	07195	07212D1	07213D2	07250	07268
Sampling Date:	7/26/96	7/29/96	7/30/96	7/30/96	7/31/96	8/1/96
Analysis Date:	8/20/96	8/22/96	8/28/96	8/28/96	8/28/96	8/28/96
Methylcyclohexane	1.65	0.79	0.48	0.41	2.76	1.38
2,2,3-Trimethylpentane	1.14	0.39	0.39	0.90	1.74	0.92
2,3,4-Trimethylpentane	1.32	0.59	0.48	0.52	2.18	1.00
Toluene	15.31	5.11	5.03	5.04	28.74	11.50
2-Methylheptane	1.29	0.42	0.20	0.34	2.68	1.53
3-Methylheptane	1.39	0.40	0.42	0.33	2.87	1.96
1-Octene	0.61	0.27	0.21	0.22	0.88	0.47
n-Octane	1.33	0.37	0.46	0.56	2.37	1.44
Ethylbenzene	3.49	1.14	0.83	0.85	5.63	3.60
m-Xylene/p-Xylene	11.80	3.65	3.12	3.09	17.93	12.49
Styrene	1.96	1.38	0.20	0.27	3.84	1.29
o-Xylene	4.59	1.46	1.14	1.24	6.21	4.30
1-Nonene	0.24	0.12	0.11	0.23	0.28	0.11
n-Nonane	1.23	0.36	0.28	0.30	1.94	0.72
Isopropylbenzene	0.19	0.09	0.07	0.07	0.26	0.23
a-Pinene	1.85	1.53	0.93	1.33	1.34	0.77
n-Propylbenzene	1.06	0.61	0.33	0.32	1.19	0.69
m-Ethyltoluene	3.94	1.84	1.12	1.10	4.65	2.88
p-Ethyltoluene	1.78	0.75	0.58	0.63	2.36	1.26
1,3,5-Trimethylbenzene	2.20	0.79	0.26	0.62	2.94	1.54
o-Ethyltoluene	1.15	0.60	0.54	0.58	2.27	0.81
b-Pinene	2.54	2.53	0.10	0.15	2.63	1.38
1-Decene	0.52	0.22	1.37	1.48	0.63	0.51
1,2,4-Trimethylbenzene	6.45	2.36	1.92	2.06	7.53	4.59
n-Decane	2.10	0.84	0.89	0.53	2.12	0.97
1,2,3-Trimethylbenzene	1.31	0.70	0.34	0.36	2.26	1.58
m-Diethylbenzene	1.11	0.86	0.31	0.26	2.87	0.98
p-Diethylbenzene	2.69	1.48	0.69	0.58	2.42	1.83
1-Undecene	4.83	6.15	4.79	4.76	3.34	2.26
n-Undecane	3.05	3.56	2.36	0.88	2.97	2.02
1-Dodecene	2.39	2.65	0.99	1.65	2.02	1.43
n-Dodecane	3.28	2.92	1.15	1.12	3.13	1.63
1-Tridecene	0.55	0.56	ND	ND	0.53	0.21
n-Tridecane	2.43	1.16	0.29	0.35	1.91	1.11
TNMOC (w/ unknowns)	331.52	153.24	106.15	112.71	450.87	282.16
TNMOC (speciated)	245.51	94.98	74.35	80.63	322.84	186.41

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07308		07369	07363	07410D1	07411D2	07473	
Sampling Date:	8/2/96		8/5/96	8/6/96	8/7/96	8/7/96	8/8/96	
Analysis Date:	8/29/96		8/29/96	9/3/96	9/3/96	9/3/96	9/4/96	
Ethylene	7.30		2.28	3.69	6.44	8.64	9.34	
Acetylene/Ethane	19.02		2.80	5.48	8.30	16.77	18.87	
Propylene	2.84		1.00	1.60	3.66	3.81	5.24	
Propane	14.32		0.72	2.12	5.25	12.99	16.02	
Propyne	ND		ND	ND	ND	ND	ND	
Isobutane	4.40		0.26	0.55	4.34	7.78	4.77	
Isobutene/1-butene	3.95		1.57	1.98	2.86	3.00	5.21	
1,3-Butadiene	0.29		0.04	0.16	0.37	0.27	0.63	
n-butane	6.35		0.66	1.29	5.36	8.04	10.25	
trans-2-Butene	0.68		0.03	0.17	0.43	0.53	1.23	
cis-2-butene	0.42		0.06	0.13	0.33	0.37	0.91	
3-Methyl-1-butene	0.45		0.05	ND	0.21	0.21	0.41	
isopentane	20.49		3.92	6.38	18.15	15.60	25.93	
1-Pentene	0.46		0.11	0.21	0.46	0.80	ND	a
2-Methyl-1-butene	1.00		0.25	0.41	0.99	0.83	1.71	
n-Pentane	9.67		1.65	2.53	9.94	9.65	10.82	
Isoprene	0.48		0.54	0.90	0.63	0.71	0.52	
trans-2-Pentene	1.07		0.29	0.50	0.91	0.90	2.04	
cis-2-Pentene	0.56		0.13	0.21	0.41	0.41	1.01	
2-Methyl-2-butene	1.21		0.35	0.56	1.20	1.09	2.72	
2,2-Dimethylbutane	1.24		0.22	0.41	0.96	1.12	1.47	
Cyclopentene	0.19		0.12	0.08	0.79	0.97	0.36	
4-Methyl-1-pentene	1.14		0.02	ND	0.10	0.08	1.35	
Cyclopentane	1.04		0.19	0.40	1.16	0.89	0.92	
2,3-Dimethylbutane	ND	a	0.36	1.04	2.04	1.74	2.24	
2-Methylpentane	14.60		1.75	3.18	7.37	6.64	18.57	
3-Methylpentane	6.11		1.17	1.66	4.77	4.59	6.45	
1-Hexene	0.33		ND	0.15	0.31	0.24	ND	a
2-Methyl-1-pentene	0.22		0.21	0.19	0.25	0.26	ND	a
2-Ethyl-1-butene	0.16		ND	ND	ND	ND	ND	
n-Hexane	6.44		1.41	2.12	7.45	7.29	8.55	
trans-2-Hexene	0.30		0.09	0.17	0.25	0.29	0.58	
cis-2-Hexene	0.27		0.04	0.03	0.14	0.11	0.50	
Methylcyclopentane	3.40		0.71	1.03	3.10	2.99	4.15	
2,4-Dimethylpentane	1.21		0.25	0.37	0.75	0.74	1.18	
Benzene	5.31		1.44	1.88	4.96	4.90	6.01	
Cyclohexane	0.77		0.25	0.32	1.09	1.11	0.93	
2-Methylhexane	3.35		0.90	1.45	3.62	3.34	3.87	
2,3-Dimethylpentane	0.94		0.27	0.37	1.10	1.14	1.01	
3-Methylhexane	5.80		1.51	1.95	4.74	4.38	5.76	
1-Heptene	0.85		0.25	0.32	0.83	0.86	1.05	
2,2,4-Trimethylpentane	5.76		1.36	1.85	3.48	3.32	4.96	
n-Heptane	3.14		0.58	1.00	2.91	2.82	3.12	

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07308	07369	07363	07410D1	07411D2	07473
Sampling Date:	8/2/96	8/5/96	8/6/96	8/7/96	8/7/96	8/8/96
Analysis Date:	8/29/96	8/29/96	9/3/96	9/3/96	9/3/96	9/4/96
Methylcyclohexane	1.00	0.48	0.61	2.48	1.78	1.36
2,2,3-Trimethylpentane	1.21	0.22	0.49	1.11	1.03	1.00
2,3,4-Trimethylpentane	1.63	0.44	0.50	0.92	0.86	1.49
Toluene	17.59	3.75	6.01	11.56	11.31	14.60
2-Methylheptane	1.05	0.22	0.27	1.40	1.30	1.16
3-Methylheptane	1.11	0.34	0.29	1.47	1.32	1.33
1-Octene	0.57	0.18	0.35	0.38	0.39	0.41
n-Octane	1.14	0.25	0.44	1.37	1.41	1.46
Ethylbenzene	2.66	0.75	1.23	3.00	3.08	2.87
m-Xylene/p-Xylene	9.52	2.57	4.40	9.81	9.53	10.49
Styrene	0.75	0.97	1.28	1.69	1.32	0.75
o-Xylene	3.57	1.00	1.68	3.36	3.91	3.69
1-Nonene	0.13	0.10	0.11	0.22	0.25	0.18
n-Nonane	0.71	0.19	0.39	1.09	1.17	1.11
Isopropylbenzene	0.26	0.07	0.13	0.36	0.31	0.34
a-Pinene	1.15	1.06	0.66	1.65	1.60	1.57
n-Propylbenzene	0.72	0.25	0.48	0.83	0.66	1.04
m-Ethyltoluene	3.44	0.93	1.62	2.39	2.56	3.99
p-Ethyltoluene	1.54	0.49	0.83	1.38	1.48	1.94
1,3,5-Trimethylbenzene	1.63	0.49	0.95	1.40	1.63	2.12
o-Ethyltoluene	1.79	0.39	0.62	0.85	0.93	1.92
b-Pinene	0.31	1.81	1.63	0.18	0.09	0.17
1-Decene	1.72	0.38	0.47	2.01	1.30	1.83
1,2,4-Trimethylbenzene	5.37	1.53	2.67	3.97	3.99	5.95
n-Decane	1.49	0.37	0.69	1.46	1.72	1.78
1,2,3-Trimethylbenzene	1.55	0.49	1.08	0.55	1.47	2.12
m-Diethylbenzene	0.80	0.69	0.64	0.68	0.83	1.24
p-Diethylbenzene	1.51	0.93	0.58	1.69	2.32	1.43
1-Undecene	2.59	3.61	3.01	2.99	3.56	3.07
n-Undecane	1.40	1.92	0.69	1.42	2.90	1.40
1-Dodecene	0.92	2.17	1.56	1.52	2.18	3.20
n-Dodecane	1.10	2.11	0.62	1.78	2.60	1.11
1-Tridecene	1.13	0.43	0.33	0.42	0.51	0.44
n-Tridecane	0.21	1.50	0.61	1.35	1.36	0.55
TNMOC (w/ unknowns)	292.48	137.15	159.37	270.68	300.30	336.11
TNMOC (speciated)	230.75	62.86	86.73	191.14	215.04	269.76

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07472		07498		07554		07569		07633D1		07634D2	
Sampling Date:	8/9/96		8/12/96		8/13/96		8/14/96		8/15/96		8/15/96	
Analysis Date:	9/4/96		9/9/96		9/9/96		9/10/96		9/12/96		9/12/96	
Ethylene	2.64		1.86		3.09		10.01		10.85		10.58	
Acetylene/Ethane	8.07		5.66		47.02		20.00		24.47		23.29	
Propylene	1.41		1.18		11.67		5.46		5.04		4.42	
Propane	10.26		7.90		45.30		10.98		15.38		15.42	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	2.52		2.57		10.83		8.07		5.58		5.82	
Isobutene/1-butene	2.03		1.95		1.87		ND		6.45		6.53	
1,3-Butadiene	0.05		0.07		0.19		0.67		0.97		0.90	
n-butane	6.00		6.40		24.76		34.51		14.17		14.40	
trans-2-Butene	ND		0.15		0.34		1.35		1.30		1.34	
cis-2-butene	0.17		0.11		0.09		1.05		0.98		0.81	
3-Methyl-1-butene	0.12		0.12		ND	a	1.24		0.54		0.51	
Isopentane	ND	a	7.15		11.26		57.91		31.64		31.33	
1-Pentene	ND	a	1.74		0.16		ND	a	0.61		0.60	
2-Methyl-1-butene	0.29		0.19		0.25		ND	a	1.70		1.76	
n-Pentane	8.47		6.04		11.34		ND	a	ND	a	14.96	
Isoprene	0.11		0.10		0.29		0.59		ND	a	0.40	
trans-2-Pentene	0.47		0.36		0.31		3.57		1.97		2.08	
cis-2-Pentene	0.18		0.18		0.10		2.01		1.02		0.97	
2-Methyl-2-butene	0.42		0.39		ND	a	4.05		2.26		2.22	
2,2-Dimethylbutane	0.48		0.37		0.64		2.46		1.96		1.95	
Cyclopentene	0.11		0.02		0.38		0.40		0.35		0.35	
4-Methyl-1-pentene	0.43		0.05		ND		2.69		1.74		ND	a
Cyclopentane	0.44		0.58		0.55		2.59		1.29		ND	a
2,3-Dimethylbutane	0.90		0.63		0.88		4.12		2.79		2.59	
2-Methylpentane	4.95		2.60		6.09		40.20		24.44		23.27	
3-Methylpentane	1.87		1.27		2.78		12.84		8.41		10.51	
1-Hexene	ND		0.41		0.07		ND		ND		ND	
2-Methyl-1-pentene	0.22		0.25		0.09		1.54		0.69		0.92	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	2.68		1.96		5.34		12.10		10.48		10.34	
trans-2-Hexene	0.12		0.12		0.08		0.85		0.42		0.34	
cis-2-Hexene	0.10		0.05		0.03		0.76		0.19		0.22	
Methylcyclopentane	1.25		0.97		2.30		5.78		4.54		4.54	
2,4-Dimethylpentane	0.52		0.37		0.45		1.92		1.42		1.43	
Benzene	2.21		1.73		1.93		8.70		7.38		7.41	
Cyclohexane	0.48		0.42		2.28		1.38		1.30		1.33	
2-Methylhexane	1.25		0.74		1.87		5.15		4.97		5.08	
2,3-Dimethylpentane	0.49		0.36		0.61		1.32		1.73		1.75	
3-Methylhexane	2.35		1.33		2.66		8.14		7.62		7.84	
1-Heptene	0.35		0.25		0.59		1.37		1.20		1.29	
2,2,4-Trimethylpentane	2.93		2.08		2.32		8.20		5.86		5.97	
n-Heptane	1.61		1.03		2.97		4.88		5.10		5.22	

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07472	07498	07554	07569	07633D1	07634D2
Sampling Date:	8/9/96	8/12/96	8/13/96	8/14/96	8/15/96	8/15/96
Analysis Date:	9/4/96	9/9/96	9/9/96	9/10/96	9/12/96	9/12/96
Methylcyclohexane	1.00	0.67	3.68	2.46	1.97	1.98
2,2,3-Trimethylpentane	0.49	0.60	0.57	1.73	1.54	1.38
2,3,4-Trimethylpentane	0.92	0.64	0.49	2.52	1.59	2.15
Toluene	6.30	4.80	7.61	23.57	18.57	18.35
2-Methylheptane	0.64	0.56	0.99	2.03	2.32	2.61
3-Methylheptane	0.75	0.78	0.65	1.81	3.16	3.24
1-Octene	0.29	0.15	0.17	0.89	0.60	0.68
n-Octane	0.76	0.54	1.31	2.03	2.26	2.12
Ethylbenzene	1.05	0.88	0.89	4.06	4.23	4.20
m-Xylene/p-Xylene	3.88	3.44	3.00	14.79	14.91	14.96
Styrene	0.71	0.20	2.67	2.96	0.79	0.66
o-Xylene	1.24	1.14	1.09	5.20	5.10	4.97
1-Nonene	0.11	0.15	0.12	0.19	0.14	0.14
n-Nonane	0.55	0.42	0.56	1.25	1.31	1.30
Isopropylbenzene	0.06	0.05	0.07	0.67	0.45	0.46
a-Pinene	0.89	1.24	0.79	2.39	1.82	0.90
n-Propylbenzene	0.36	0.10	0.27	1.61	1.35	1.22
m-Ethyltoluene	1.19	0.92	1.02	5.79	4.37	4.39
p-Ethyltoluene	0.57	0.49	0.51	2.93	2.60	2.33
1,3,5-Trimethylbenzene	0.63	0.35	0.56	3.03	2.43	2.41
o-Ethyltoluene	0.63	1.23	0.34	2.71	2.05	2.20
b-Pinene	0.32	0.23	ND	0.39	0.21	0.27
1-Decene	1.40	2.30	2.32	2.22	1.27	0.66
1,2,4-Trimethylbenzene	1.56	1.34	1.47	8.66	7.50	7.25
n-Decane	0.52	0.53	0.39	2.75	1.88	1.91
1,2,3-Trimethylbenzene	0.36	0.47	0.61	2.20	2.94	2.03
m-Diethylbenzene	0.31	0.34	0.34	1.37	1.33	1.34
p-Diethylbenzene	0.32	0.36	0.42	1.51	1.88	1.54
1-Undecene	2.77	5.20	2.86	3.03	1.78	0.54
n-Undecane	0.90	2.76	0.78	2.11	2.10	1.69
1-Dodecene	1.57	2.42	1.91	1.97	0.92	0.73
n-Dodecane	0.98	3.78	0.88	1.04	1.19	0.79
1-Tridecene	0.30	0.41	0.42	0.39	0.26	0.15
n-Tridecane	0.63	0.56	0.67	0.36	1.52	0.46
TNMOC (w/ unknowns)	164.81	170.15	319.43	504.51	400.11	390.73
TNMOC (speciated)	103.91	101.74	244.04	401.45	317.14	322.71

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07655		07699		07739		07731		07776	07794D1	
Sampling Date:	8/16/96		8/19/96		8/20/96		8/21/96		8/22/96	8/23/96	
Analysis Date:	9/10/96		9/17/96		9/16/96		9/17/96		9/17/96	9/18/96	
Ethylene	4.37		8.51		5.91		15.22		9.79	4.33	
Acetylene/Ethane	8.73		13.16		19.37		32.78		27.17	5.54	
Propylene	4.89		3.26		3.00		11.32		9.98	2.12	
Propane	6.92		9.43		12.17		30.58		12.03	5.41	
Propyne	ND		ND		ND		ND		ND	ND	
Isobutane	2.90		2.20		2.96		6.78		3.62	2.72	
Isobutene/1-butene	2.60		4.17		3.09		185.05		4.69	2.54	
1,3-Butadiene	0.32		0.69		0.39		1.37		1.00	0.33	
n-butane	6.71		5.74		6.76		13.44		8.36	6.52	
trans-2-Butene	0.42		0.44		0.11		1.41		0.53	0.33	
cis-2-butene	0.20		0.33		0.28		0.81		0.43	0.22	
3-Methyl-1-butene	ND		0.27		0.22		0.65		ND	0.23	
isopentane	8.66		12.58		12.87		35.76		25.95	14.01	
1-Pentene	ND	a	ND	b	0.39		ND	a	1.06	ND	a
2-Methyl-1-butene	0.57		0.77		0.81		2.16		1.66	0.78	
n-Pentane	8.61		8.58		8.34		18.91		18.65	9.33	
Isoprene	ND	a	0.29		0.50		2.02		1.36	0.19	
trans-2-Pentene	0.55		0.93		0.90		5.30		1.83	0.79	
cis-2-Pentene	0.30		0.44		0.51		0.67		0.95	0.41	
2-Methyl-2-butene	0.64		1.34		0.99		2.14		2.24	1.11	
2,2-Dimethylbutane	0.64		0.83		0.76		1.74		1.54	0.82	
Cyclopentene	0.17		ND	a	0.13		0.43		0.55	0.15	
4-Methyl-1-pentene	0.11		0.47		0.21		1.81		0.40	ND	a
Cyclopentane	0.91		0.70		0.76		1.77		1.31	0.73	
2,3-Dimethylbutane	1.55		1.35		1.25		3.76		2.78	1.35	
2-Methylpentane	4.00		11.73		5.93		33.77		12.75	12.06	
3-Methylpentane	2.61		4.37		3.69		9.77		7.21	4.47	
1-Hexene	0.18		ND	a	ND	a	ND		0.46	ND	
2-Methyl-1-pentene	0.15		ND	a	ND	a	1.06		0.41	0.36	
2-Ethyl-1-butene	ND		ND		ND		ND		ND	ND	
n-Hexane	4.08		6.43		4.93		12.76		9.24	4.28	
trans-2-Hexene	0.16		0.32		0.36		0.75		0.67	0.14	
cis-2-Hexene	0.06		0.13		0.14		0.54		0.29	0.14	
Methylcyclopentane	1.98		3.37		2.51		6.27		4.27	2.32	
2,4-Dimethylpentane	0.48		0.76		0.72		1.81		1.47	0.71	
Benzene	2.58		4.46		4.22		9.48		6.73	3.86	
Cyclohexane	0.86		0.81		0.95		1.69		1.45	0.72	
2-Methylhexane	2.33		2.53		2.94		6.34		5.43	2.04	
2,3-Dimethylpentane	0.64		0.82		0.81		4.76		1.71	0.68	
3-Methylhexane	3.19		4.21		3.52		7.44		6.31	3.61	
1-Heptene	0.52		0.83		0.78		1.56		1.38	0.63	
2,2,4-Trimethylpentane	2.20		3.61		4.04		8.72		6.90	3.32	
n-Heptane	1.68		3.22		2.48		6.01		5.32	2.19	

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07655	07699	07739	07731	07776	07794D1
Sampling Date:	8/16/96	8/19/96	8/20/96	8/21/96	8/22/96	8/23/96
Analysis Date:	9/10/96	9/17/96	9/16/96	9/17/96	9/17/96	9/18/96
Methylcyclohexane	1.33	1.27	1.77	2.67	2.99	0.89
2,2,3-Trimethylpentane	0.47	0.78	1.08	1.90	2.09	0.69
2,3,4-Trimethylpentane	0.70	3.65	1.18	2.60	2.40	0.90
Toluene	7.38	11.37	12.03	27.75	35.87	10.87
2-Methylheptane	2.49	1.54	0.91	1.91	2.30	0.72
3-Methylheptane	0.38	1.97	0.93	1.71	2.07	1.56
1-Octene	0.65	0.43	0.52	1.13	1.89	0.37
n-Octane	0.69	1.62	0.97	1.56	1.95	0.94
Ethylbenzene	1.23	2.69	2.30	5.18	6.12	1.82
m-Xylene/p-Xylene	4.38	9.55	8.45	19.54	22.87	6.88
Styrene	2.21	0.66	1.41	1.23	2.63	0.54
o-Xylene	1.79	3.13	3.14	6.67	8.13	2.46
1-Nonene	0.16	0.23	0.11	0.29	0.39	0.13
n-Nonane	0.46	0.75	0.59	1.17	1.33	0.84
Isopropylbenzene	0.21	0.23	0.27	0.61	0.83	0.23
a-Pinene	4.08	0.84	0.53	1.39	1.68	0.91
n-Propylbenzene	0.75	0.61	0.92	1.88	1.77	0.54
m-Ethyltoluene	1.87	2.76	3.19	6.63	6.66	2.35
p-Ethyltoluene	1.08	1.39	1.46	3.19	3.07	1.25
1,3,5-Trimethylbenzene	1.25	1.60	1.90	3.30	3.55	1.24
o-Ethyltoluene	0.73	1.41	1.06	2.99	2.25	1.07
b-Pinene	2.70	0.25	0.12	0.31	0.28	0.24
1-Decene	0.28	0.81	1.41	2.44	2.04	1.26
1,2,4-Trimethylbenzene	2.71	4.47	4.95	10.33	10.46	3.65
n-Decane	0.71	1.17	0.98	2.66	2.19	1.01
1,2,3-Trimethylbenzene	1.04	1.41	1.57	2.62	3.16	0.64
m-Diethylbenzene	1.71	0.81	0.86	1.52	1.49	0.57
p-Diethylbenzene	1.54	0.79	0.94	1.78	3.12	0.63
1-Undecene	3.50	0.40	1.90	2.91	2.50	2.34
n-Undecane	1.58	0.99	1.05	3.43	3.21	1.32
1-Dodecene	2.46	0.51	1.54	1.27	2.01	1.21
n-Dodecane	2.70	0.59	1.14	2.84	3.23	1.83
1-Tridecene	0.62	0.35	0.42	0.32	0.19	0.20
n-Tridecane	1.15	0.44	1.29	0.94	2.17	1.47
TNMOC (w/ unknowns)	229.22	250.26	262.81	716.79	591.82	213.59
TNMOC (speciated)	145.45	185.55	183.59	617.27	358.73	155.10

Footnotes:
a - Compound not analyzed due to FID flame out
b- Compound not analyzed due to water effects in portion of chromatogram

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07795D1		07873	07888	07936	07943	07973	
Sampling Date:	8/23/96		8/26/96	8/27/96	8/28/96	8/29/96	8/30/96	
Analysis Date:	9/18/96		9/24/96	9/24/96	9/25/96	9/25/96	9/27/96	
Ethylene	4.70		9.83	3.32	4.69	6.75	5.82	
Acetylene/Ethane	10.41		17.54	7.53	9.78	13.13	16.96	
Propytene	2.26		4.25	1.51	2.35	2.98	2.18	
Propane	6.74		12.68	2.20	5.86	6.56	9.74	
Propyne	ND		ND	ND	ND	ND	ND	
Isobutane	2.37		2.32	0.87	1.67	5.53	4.14	
Isobutene/1-butene	2.42		5.01	1.90	3.22	3.92	3.06	
1,3-Buladiene	0.33		0.89	0.17	0.44	0.57	ND	
n-butane	5.87		5.14	1.97	4.17	7.55	8.45	
trans-2-Butene	0.26		0.48	0.32	0.31	0.21	0.29	
cis-2-butene	0.22		0.30	0.18	0.30	0.37	0.36	
3-Methyl-1-butene	0.20		0.29	0.10	0.16	0.35	0.17	
isopentane	13.57		17.33	8.89	3.68	16.14	12.49	
1-Pentene	1.12		0.57	0.26	0.24	0.67	ND	a
2-Methyl-1-butene	ND	a	1.00	0.55	0.61	1.20	ND	a
n-Pentane	7.91		10.06	4.10	4.62	8.41	7.61	
Isoprene	0.20		0.26	0.46	0.44	0.27	0.34	
trans-2-Pentene	0.75		1.18	0.64	0.65	1.21	0.54	
cis-2-Pentene	0.38		0.59	0.30	0.21	0.67	0.36	
2-Methyl-2-butene	0.83		1.53	0.87	0.64	1.65	0.65	
2,2-Dimethylbutane	0.69		1.28	0.62	0.56	0.92	0.75	
Cyclopentene	0.14		0.27	0.17	0.14	0.21	0.15	
4-Methyl-1-pentene	0.44		0.34	0.09	ND	0.30	0.22	
Cyclopentane	0.69		1.56	0.45	0.48	1.05	0.82	
2,3-Dimethylbutane	1.33		2.30	1.00	0.88	1.82	1.17	
2-Methylpentane	10.96		18.68	4.57	3.43	14.41	6.76	
3-Methylpentane	3.73		5.91	3.16	2.46	4.76	3.03	
1-Hexene	ND		0.31	0.17	0.24	0.31	0.27	
2-Methyl-1-pentene	0.37		0.30	0.15	0.12	0.25	0.17	
2-Ethyl-1-butene	ND		ND	ND	ND	ND	ND	
n-Hexane	4.25		7.75	3.70	3.22	5.07	4.35	
trans-2-Hexene	0.25		0.39	0.26	0.25	0.33	0.24	
cis-2-Hexene	0.21		0.37	0.12	0.07	0.25	0.18	
Methylcyclopentane	2.27		4.19	1.72	1.64	2.68	1.87	
2,4-Dimethylpentane	0.64		1.11	0.57	0.44	0.86	0.61	
Benzene	3.65		6.24	2.81	3.02	4.35	4.52	
Cyclohexane	0.64		1.01	0.50	0.59	0.76	1.04	
2-Methylhexane	2.01		3.42	2.34	1.66	2.60	2.40	
2,3-Dimethylpentane	0.63		1.04	0.77	0.58	0.77	0.73	
3-Methylhexane	3.68		6.80	3.20	1.78	3.40	2.69	
1-Heptene	0.65		0.99	0.53	0.49	0.71	0.69	
2,2,4-Trimethylpentane	3.24		5.14	2.93	2.44	4.01	2.68	
n-Heptane	1.95		3.32	1.73	1.55	2.13	2.80	

SNMOC REPORT
SITE CODE: CAMS13
All concentrations reported in ppbC

Sample No.:	07795D1	07873	07886	07936	07943	07973
Sampling Date:	8/23/96	8/26/96	8/27/96	8/28/96	8/29/96	8/30/96
Analysis Date:	9/18/96	9/24/96	9/24/96	9/25/96	9/25/96	9/27/96
Methylcyclohexane	0.85	1.39	0.90	0.84	1.20	1.95
2,2,3-Trimethylpentane	0.54	1.33	0.90	0.62	0.95	1.23
2,3,4-Trimethylpentane	0.97	1.62	0.82	0.94	2.56	0.73
Toluene	10.50	17.05	8.25	8.31	12.58	29.30
2-Methylheptane	0.74	1.58	0.80	0.69	0.77	1.16
3-Methylheptane	0.75	1.81	0.82	0.60	0.83	1.30
1-Octene	0.47	0.70	0.39	0.33	0.51	0.62
n-Octane	0.92	1.43	0.65	0.56	0.91	0.78
Ethylbenzene	1.78	3.76	2.20	1.51	2.00	4.11
m-Xylene/p-Xylene	6.51	13.54	6.60	5.31	7.06	15.08
Styrene	0.50	0.74	1.48	0.65	0.53	0.87
o-Xylene	2.51	4.71	2.62	2.07	2.47	5.11
1-Nonene	0.31	0.13	0.26	0.43	0.23	0.52
n-Nonane	0.64	0.88	0.48	0.39	0.55	0.41
Isopropylbenzene	0.21	0.55	0.10	0.24	0.31	0.12
a-Pinene	0.75	1.62	2.83	0.19	1.13	0.84
n-Propylbenzene	0.66	1.22	0.95	0.62	0.62	0.75
m-Ethyltoluene	2.38	4.12	3.02	2.42	2.51	2.51
p-Ethyltoluene	1.28	2.33	1.29	1.13	1.34	1.10
1,3,5-Trimethylbenzene	1.28	2.36	1.57	1.29	1.48	1.19
o-Ethyltoluene	1.09	2.13	0.95	0.84	1.41	0.77
b-Pinene	0.29	0.21	1.94	0.07	0.29	0.08
1-Decene	1.13	2.61	0.21	0.63	0.70	0.70
1,2,4-Trimethylbenzene	3.52	7.01	4.10	3.91	5.84	3.58
n-Decane	1.12	2.71	1.11	1.68	2.99	0.61
1,2,3-Trimethylbenzene	1.39	2.66	1.73	2.57	2.09	1.49
m-Diethylbenzene	0.66	1.26	0.67	0.54	1.32	0.62
p-Diethylbenzene	0.56	1.13	1.42	1.10	0.87	1.12
1-Undecene	2.13	2.69	3.34	0.79	0.24	0.77
n-Undecane	3.42	2.15	3.39	3.25	4.50	1.54
1-Dodecene	1.41	1.84	1.66	0.67	0.49	0.76
n-Dodecane	2.04	2.82	2.54	1.73	2.19	1.76
1-Tridecene	0.36	0.25	0.43	0.39	0.16	0.18
n-Tridecane	0.99	1.08	1.15	1.15	0.99	0.77
TNMOC (w/ unknowns)	215.60	341.91	20.94	198.40	259.36	285.14
TNMOC (speciated)	157.63	257.45	129.32	116.54	194.73	195.75

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	08007		08079		08117		08116		08190D1		08191D2
Sampling Date:	9/3/96		9/4/96		9/5/96		9/6/96		9/9/96		9/9/96
Analysis Date:	10/3/96		10/3/96		10/4/96		10/4/96		10/7/96		10/7/96
Ethylene	10.78		20.59		5.13		12.19		1.85		1.34
Acetylene/Ethane	16.45		31.76		49.59		17.67		12.24		9.39
Propylene	5.10		19.55		3.42		6.93		2.04		5.20
Propane	16.71		19.49		59.16		8.79		11.95		11.03
Propyne	ND		ND		ND		ND		ND		ND
Isobutane	5.13		7.23		15.04		4.27		3.79		3.57
Isobutene/1-butene	7.16		7.94		4.77		4.47		1.60		1.72
1,3-Butadiene	0.86		1.11		0.41		ND		ND		ND
n-butane	20.26		15.88		37.85		11.64		11.69		12.07
trans-2-Butene	1.12		1.41		0.66		0.53		0.60		0.52
cis-2-butene	0.83		0.91		0.91		0.30		0.58		0.45
3-Methyl-1-butene	0.77		1.06		0.52		0.51		0.38		0.34
Isopentane	40.11		ND	a	32.18		33.27		19.17		23.32
1-Pentene	1.81		2.14		1.28		1.19		0.82		0.84
2-Methyl-1-butene	2.48		2.76		1.62		1.03		1.18		1.18
n-Pentane	19.67		26.68		20.22		24.43		9.51		9.51
Isoprene	0.56		0.83		0.12		0.22		0.34		0.51
trans-2-Pentene	3.02		3.00		2.16		1.18		1.19		1.54
cis-2-Pentene	1.61		1.59		1.01		0.57		0.58		0.78
2-Methyl-2-butene	3.59		3.91		2.55		1.12		ND	a	1.20
2,2-Dimethylbutane	1.77		3.32		1.57		2.28		0.56		0.75
Cyclopentene	0.49		0.78		0.40		0.31		0.18		0.15
4-Methyl-1-pentene	ND	a	0.63		0.41		0.39		0.04		0.16
Cyclopentane	ND	a	2.60		1.41		2.19		0.69		0.76
2,3-Dimethylbutane	ND	a	6.11		2.20		3.92		1.71		1.91
2-Methylpentane	26.26		27.37		ND	a	16.99		7.52		7.82
3-Methylpentane	8.41		13.48		5.86		7.86		2.20		2.22
1-Hexene	ND		1.03		ND		0.30		0.15		0.20
2-Methyl-1-pentene	1.06		0.48		0.55		0.36		0.14		0.18
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND
n-Hexane	9.02		16.04		8.85		9.51		3.01		3.01
trans-2-Hexene	0.69		0.97		0.35		0.32		0.19		0.21
cis-2-Hexene	0.42		0.44		0.24		0.18		0.06		0.10
Methylcyclopentane	4.34		7.66		4.97		4.53		1.56		1.72
2,4-Dimethylpentane	1.61		3.05		0.98		1.90		0.76		0.83
Benzene	7.42		13.80		3.94		8.73		2.07		2.26
Cyclohexane	1.26		2.22		3.50		1.53		0.59		0.59
2-Methylhexane	4.12		8.74		2.77		6.16		1.21		1.40
2,3-Dimethylpentane	1.59		3.27		0.78		2.40		0.90		0.67
3-Methylhexane	6.66		9.81		3.91		8.39		1.77		2.13
1-Heptene	1.13		2.63		1.06		1.54		0.35		0.33
2,2,4-Trimethylpentane	6.39		16.51		4.76		10.59		3.92		3.95
n-Heptane	4.03		7.86		3.93		5.68		1.12		1.26

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	08007	08079	08117	08116	08190D1	08191D2
Sampling Date:	9/3/96	9/4/96	9/5/96	9/6/96	9/9/96	9/9/96
Analysis Date:	10/3/96	10/3/96	10/4/96	10/4/96	10/7/96	10/7/96
Methylcyclohexane	1.90	5.23	4.97	6.22	0.86	0.95
2,2,3-Trimethylpentane	1.07	4.27	0.87	2.39	0.73	0.69
2,3,4-Trimethylpentane	1.94	6.04	1.28	3.28	1.18	1.29
Toluene	18.70	47.40	10.68	33.36	7.79	8.04
2-Methylheptane	1.23	4.05	1.12	1.78	0.50	0.66
3-Methylheptane	1.39	4.55	1.45	2.15	0.48	0.52
1-Octene	0.60	2.85	0.30	1.49	0.27	0.27
n-Octane	1.33	3.63	1.54	1.78	0.47	0.81
Ethylbenzene	3.13	9.21	1.25	6.87	0.92	0.97
m-Xylene/p-Xylene	11.31	32.01	4.20	22.68	2.93	3.02
Styrene	0.76	3.08	0.80	3.18	1.49	2.11
o-Xylene	4.26	11.80	1.49	8.09	1.02	1.09
1-Nonene	0.14	0.63	0.14	0.30	0.08	0.15
n-Nonane	0.93	1.45	0.58	1.20	0.34	0.37
Isopropylbenzene	0.48	0.32	0.15	0.51	0.02	0.14
a-Pinene	1.29	1.22	0.90	4.29	0.73	0.66
n-Propylbenzene	1.11	2.89	0.44	1.77	0.24	0.27
m-Ethyltoluene	4.74	11.17	1.57	6.23	0.70	0.65
p-Ethyltoluene	2.24	4.16	0.77	2.74	0.39	0.29
1,3,5-Trimethylbenzene	2.44	5.38	0.86	2.79	0.36	0.36
o-Ethyltoluene	2.12	4.55	0.85	2.68	0.23	0.30
b-Pinene	0.40	2.21	0.28	5.17	2.60	3.34
1-Decene	1.70	1.04	1.35	0.43	0.13	0.16
1,2,4-Trimethylbenzene	7.81	17.54	2.48	8.69	0.80	0.87
n-Decane	1.74	2.00	3.53	3.91	0.42	0.81
1,2,3-Trimethylbenzene	1.98	4.76	0.50	2.32	0.11	0.30
m-Diethylbenzene	0.98	2.30	0.25	1.44	0.38	0.60
p-Diethylbenzene	1.09	2.42	0.46	2.80	0.34	0.29
1-Undecene	2.11	1.87	2.95	6.45	7.00	9.67
n-Undecane	1.42	2.21	7.86	12.06	0.88	4.39
1-Dodecene	1.45	1.13	1.25	3.53	3.44	4.57
n-Dodecane	1.15	2.16	6.04	10.51	0.73	3.74
1-Tridecene	0.22	0.44	0.17	0.87	0.60	0.60
n-Tridecane	0.93	2.60	1.34	4.65	0.51	1.03
TNMOC (w/ unknowns)	412.65	697.61	437.42	542.19	217.14	261.84
TNMOC (speciated)	330.79	525.22	355.69	404.97	149.91	171.10

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	08185		08213		08219		08261		00822		08313D1	
Sampling Date:	9/10/96		9/11/96		9/12/96		9/13/96		9/16/96		9/17/96	
Analysis Date:	10/9/96		10/10/96		10/10/96		12/13/96		10/15/96		10/15/96	
Ethylene	22.17		14.95		16.57		7.36		1.71		10.10	
Acetylene/Ethane	75.68		22.60		29.97		22.11		20.80		20.36	
Propylene	8.19		7.74		10.13		3.06		0.67		5.13	
Propane	52.27		18.50		18.78		19.67		22.35		12.40	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	9.80		3.79		11.44		3.33		5.17		5.97	
Isobutene/1-butene	9.15		8.43		10.73		4.09		1.65		5.75	
1,3-Butadiene	ND		1.57		ND		ND		ND		0.82	
n-butane	16.37		10.12		47.04		10.07		13.61		22.57	
trans-2-Butene	0.52		0.83		5.99		1.10		ND		0.98	
cis-2-butene	0.82		0.72		6.40		1.03		ND		1.02	
3-Methyl-1-butene	0.83		0.57		3.61		0.58		ND	a	0.89	
Isopentane	43.30		28.46		137.36		34.70		10.84		41.69	
1-Pentene	1.64		1.45		8.67		1.88		0.12		ND	a
2-Methyl-1-butene	2.67		1.38		10.89		2.55		0.11		2.78	
n-Pentane	25.28		15.46		ND	a	23.35		7.03		27.66	
Isoprene	1.39		ND	a	ND	a	0.66		0.07		0.53	
trans-2-Pentene	3.06		1.47		8.18		2.76		0.17		ND	a
cis-2-Pentene	1.46		0.87		5.64		1.34		0.06		1.70	
2-Methyl-2-butene	3.57		2.30		14.17		ND	a	0.11		3.69	
2,2-Dimethylbutane	ND	a	2.07		5.77		1.89		0.37		1.81	
Cyclopentene	0.80		0.46		2.41		0.55		0.04		0.51	
4-Methyl-1-pentene	0.53		0.75		1.42		0.31		0.03		0.59	
Cyclopentane	2.50		1.59		5.28		1.31		0.45		2.67	
2,3-Dimethylbutane	5.34		3.42		10.26		2.67		0.41		3.46	
2-Methylpentane	21.62		28.06		43.45		13.40		3.20		26.19	
3-Methylpentane	14.78		9.77		18.19		5.51		1.74		8.50	
1-Hexene	ND		ND		ND		0.46		ND		0.86	
2-Methyl-1-pentene	1.68		0.82		3.15		0.35		0.10		0.40	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	18.55		11.71		21.16		6.25		3.32		9.58	
trans-2-Hexene	1.14		0.53		2.10		0.51		0.10		0.71	
cis-2-Hexene	0.83		0.48		0.92		0.22		0.07		0.56	
Methylcyclopentane	8.74		5.84		11.39		3.35		1.60		4.92	
2,4-Dimethylpentane	3.00		2.35		4.49		1.33		0.22		1.59	
Benzene	13.54		10.17		16.81		5.96		1.94		7.23	
Cyclohexane	3.82		1.63		2.67		0.95		1.13		1.18	
2-Methylhexane	9.64		5.91		11.80		3.33		1.18		4.39	
2,3-Dimethylpentane	3.48		2.09		4.53		1.50		0.40		1.87	
3-Methylhexane	10.64		11.33		10.11		3.73		1.64		6.98	
1-Heptene	2.78		1.78		2.73		0.86		0.42		1.31	
2,2,4-Trimethylpentane	13.66		9.97		20.05		6.49		1.29		7.71	
n-Heptane	9.69		5.45		7.82		2.90		1.58		4.15	

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	08185	08213	08219	08261	00822	08313D1
Sampling Date:	9/10/96	9/11/96	9/12/96	9/13/96	9/16/96	9/17/96
Analysis Date:	10/9/96	10/10/96	10/10/96	12/13/96	10/15/96	10/16/96
Methylcyclohexane	5.76	2.68	10.44	2.41	1.64	1.63
2,2,3-Trimethylpentane	3.34	1.48	3.95	1.26	0.14	1.48
2,3,4-Trimethylpentane	4.28	3.14	7.56	2.05	1.13	2.18
Toluene	37.52	28.45	52.24	16.87	3.08	19.27
2-Methylheptane	3.10	2.40	4.77	1.05	0.49	1.38
3-Methylheptane	3.10	2.32	6.64	1.04	0.28	1.74
1-Octene	1.46	1.40	4.70	0.57	0.10	0.87
n-Octane	2.61	2.09	4.33	0.87	0.70	1.25
Ethylbenzene	6.29	5.19	11.30	3.03	0.62	3.24
m-Xylene/p-Xylene	22.88	18.32	38.38	9.62	1.72	11.34
Styrene	2.57	1.15	2.91	3.75	1.19	1.33
o-Xylene	11.86	6.86	13.35	3.61	0.78	4.32
1-Nonene	0.57	0.18	0.72	0.16	0.20	0.14
n-Nonane	1.16	0.96	1.49	0.62	0.29	1.15
Isopropylbenzene	1.13	0.80	0.69	0.10	0.08	0.42
a-Pinene	2.30	2.58	2.90	2.31	0.43	0.92
n-Propylbenzene	2.67	2.29	2.31	0.89	0.20	1.34
m-Ethyltoluene	10.98	7.85	8.57	2.96	0.52	5.24
p-Ethyltoluene	4.34	4.03	4.08	1.48	0.30	2.39
1,3,5-Trimethylbenzene	5.47	4.19	4.66	1.38	0.33	2.71
o-Ethyltoluene	4.25	3.40	3.82	1.07	0.11	2.56
b-Pinene	1.96	1.63	3.07	1.48	1.39	0.99
1-Decene	0.99	5.35	0.66	0.43	0.15	ND
1,2,4-Trimethylbenzene	17.21	12.36	13.67	4.58	0.76	7.86
n-Decane	2.02	1.66	3.26	1.20	0.23	1.98
1,2,3-Trimethylbenzene	4.03	4.37	3.72	1.37	0.65	1.67
m-Diethylbenzene	2.15	1.42	1.79	1.02	0.58	1.04
p-Diethylbenzene	4.57	1.73	1.83	1.05	0.51	1.11
1-Undecene	4.26	6.23	2.05	1.88	3.08	1.40
n-Undecane	6.74	1.98	5.38	2.10	0.78	1.60
1-Dodecene	3.51	2.21	1.67	1.93	1.93	0.65
n-Dodecane	7.09	1.76	6.23	1.51	1.17	1.82
1-Tridecene	1.27	0.32	0.17	0.59	0.38	0.36
n-Tridecane	3.22	2.09	3.13	1.68	0.62	1.00
TNMOC (w/ unknowns)	771.30	547.13	1036.96	376.74	195.48	397.07
TNMOC (speciated)	623.57	402.24	788.63	281.37	132.22	349.57

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	08314D2		08321		08338		08354		08378		08399	
Sampling Date:	9/17/96		9/18/96		9/19/96		9/20/96		9/23/96		9/24/96	
Analysis Date:	10/15/96		10/15/96		10/16/96		10/16/96		10/22/96		10/23/96	
Ethylene	9.96		6.94		6.75		4.76		3.40		2.67	
Acetylene/Ethane	20.55		14.48		13.09		15.50		9.37		20.07	
Propylene	4.38		11.65		3.56		4.67		1.04		2.38	
Propane	12.88		ND		8.07		9.95		6.12		24.51	
Propyne	ND		ND		ND		ND		ND		ND	
Isobutane	6.26		7.33		4.26		3.94		3.46		8.16	
Isobutene/1-butene	5.11		4.02		3.73		2.97		2.27		3.08	
1,3-Butadiene	0.70		ND		ND		ND		0.06		0.06	
n-butane	22.57		15.35		10.53		11.69		5.47		32.23	
trans-2-Butene	0.86		0.53		0.46		0.80		0.09		0.96	
cis-2-butene	0.95		0.42		0.32		0.76		0.19		0.72	
3-Methyl-1-butene	0.87		ND	a	0.17		0.39		0.08		0.46	
Isopentane	41.55		25.26		16.52		19.54		7.26		23.23	
1-Pentene	ND	a	1.06		0.46		ND	a	0.11		0.78	
2-Methyl-1-butene	2.67		1.05		0.87		1.30		0.38		ND	a
n-Pentane	27.23		11.59		10.13		9.96		3.35		ND	a
Isoprene	0.48		0.56		0.48		0.37		0.16		ND	a
trans-2-Pentene	3.16		1.15		0.85		1.49		0.36		1.49	
cis-2-Pentene	1.59		0.56		ND	a	0.76		0.11		0.81	
2-Methyl-2-butene	3.72		1.09		ND	a	1.63		0.65		1.64	
2,2-Dimethylbutane	1.86		1.12		1.22		0.91		0.41		0.86	
Cyclopentene	0.47		0.24		0.21		0.28		0.25		0.19	
4-Methyl-1-pentene	0.65		0.14		0.11		0.11		0.06		0.33	
Cyclopentane	ND	a	0.88		0.97		0.88		0.35		1.20	
2,3-Dimethylbutane	3.33		2.08		2.12		1.98		0.62		1.40	
2-Methylpentane	26.77		7.14		8.71		8.03		2.99		11.99	
3-Methylpentane	9.25		4.82		6.68		3.77		2.02		3.63	
1-Hexene	0.60		0.32		0.28		0.31		0.17		0.21	
2-Methyl-1-pentene	0.53		0.24		0.24		0.24		0.11		0.14	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	9.36		6.46		7.19		4.79		2.47		5.25	
trans-2-Hexene	0.53		0.27		0.24		0.32		0.11		0.13	
cis-2-Hexene	0.48		0.09		0.13		0.12		0.02		0.17	
Methylcyclopentane	4.86		2.63		2.97		2.30		1.22		2.76	
2,4-Dimethylpentane	1.75		0.85		0.98		0.92		0.44		0.57	
Benzene	7.14		5.61		5.49		4.04		2.74		2.26	
Cyclohexane	1.12		1.01		0.82		0.70		0.43		1.56	
2-Methylhexane	4.40		2.84		3.46		2.12		1.55		1.80	
2,3-Dimethylpentane	1.72		0.85		1.14		1.08		0.40		0.66	
3-Methylhexane	6.95		3.31		4.45		2.69		2.55		2.41	
1-Heptene	1.23		0.76		0.81		0.60		0.34		0.60	
2,2,4-Trimethylpentane	7.58		3.72		4.29		4.53		2.08		1.88	
n-Heptane	3.46		2.58		3.20		1.88		1.15		2.02	

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	08314D2	08321	08338	08354	08378	08399
Sampling Date:	9/17/96	9/18/96	9/19/96	9/20/96	9/23/96	9/24/96
Analysis Date:	10/15/96	10/15/96	10/16/96	10/16/96	10/22/96	10/23/96
Methylcyclohexane	1.60	1.73	1.49	1.25	0.76	2.09
2,2,3-Trimethylpentane	1.52	0.93	1.22	0.95	0.70	0.35
2,3,4-Trimethylpentane	2.44	0.98	1.15	1.44	0.52	0.79
Toluene	19.67	10.71	12.05	10.25	5.62	5.24
2-Methylheptane	1.30	1.08	1.35	0.91	0.48	1.11
3-Methylheptane	1.57	0.94	0.92	0.93	0.37	0.80
1-Octene	0.78	0.48	0.42	0.67	0.27	0.13
n-Octane	1.57	1.09	0.96	0.90	0.42	0.73
Ethylbenzene	3.14	2.02	1.94	1.72	1.07	0.63
m-Xylene/p-Xylene	11.44	6.97	7.04	5.37	3.32	2.27
Styrene	1.36	0.92	1.45	1.19	1.63	0.34
o-Xylene	4.36	2.90	2.87	2.10	1.28	0.78
1-Nonene	0.24	0.22	0.13	0.13	0.09	0.20
n-Nonane	1.22	0.68	0.71	0.38	0.20	0.37
Isopropylbenzene	0.45	0.10	0.04	0.09	0.13	ND
a-Pinene	1.16	0.36	0.90	0.75	1.11	0.87
n-Propylbenzene	1.46	0.59	1.33	0.50	0.55	0.22
m-Ethyltoluene	5.07	2.85	3.40	2.04	1.49	0.88
p-Ethyltoluene	2.63	1.32	1.41	0.92	0.86	0.47
1,3,5-Trimethylbenzene	2.75	1.32	1.56	1.16	0.84	0.33
o-Ethyltoluene	2.40	1.25	1.25	0.65	0.51	0.32
b-Pinene	1.26	0.61	1.46	1.31	2.55	0.13
1-Decene	ND	0.28	0.21	0.27	0.21	1.30
1,2,4-Trimethylbenzene	8.06	4.27	5.38	3.12	2.27	1.24
n-Decane	2.21	0.72	1.05	0.68	0.37	0.43
1,2,3-Trimethylbenzene	2.27	1.36	1.73	1.51	0.78	0.36
m-Diethylbenzene	1.11	0.68	0.76	0.56	0.37	0.17
p-Diethylbenzene	1.17	0.69	0.83	0.68	1.21	0.33
1-Undecene	1.33	0.95	2.25	2.23	6.05	2.83
n-Undecane	1.23	1.02	2.51	0.70	1.91	1.28
1-Dodecene	0.88	1.10	1.38	1.59	2.72	1.63
n-Dodecane	0.69	0.86	3.00	0.76	7.72	1.07
1-Tridecene	0.18	0.42	0.33	0.48	0.64	0.16
n-Tridecane	0.35	0.79	1.38	0.89	6.26	0.31
TNMOC (w/ unknowns)	415.83	300.44	275.14	270.77	204.72	258.60
TNMOC (speciated)	348.45	204.20	201.81	182.15	121.69	195.44

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	08420		08448		08532		08525
Sampling Date:	9/25/96		9/26/96		9/27/96		9/30/96
Analysis Date:	10/29/96		10/23/96		10/24/96		10/24/96
Ethylene	6.21		6.26		2.31		25.27
Acetylene/Ethane	10.37		4.53		6.19		49.44
Propylene	2.25		1.55		0.86		14.59
Propane	4.30		2.16		7.33		20.29
Propyne	ND		ND		ND		ND
Isobutane	1.59		1.20		2.79		9.70
Isobutene/1-butene	3.22		1.73		1.95		5.99
1,3-Butadiene	ND		0.25		0.10		ND
n-butane	5.19		2.86		17.94		61.89
trans-2-Butene	0.22		0.23		0.62		2.09
cis-2-butene	0.18		0.11		0.56		1.92
3-Methyl-1-butene	0.16		0.07		0.27		1.48
Isopentane	12.05		5.09		12.15		67.20
1-Pentene	0.47		ND	a	0.67		3.47
2-Methyl-1-butene	0.68		ND	a	ND	a	4.99
n-Pentane	6.27		ND	a	ND	a	68.34
Isoprene	0.20		ND	a	ND	a	1.50
trans-2-Pentene	0.68		0.33		1.07		5.60
cis-2-Pentene	0.30		0.13		0.55		2.89
2-Methyl-2-butene	0.80		0.42		1.23		6.80
2,2-Dimethylbutane	0.73		0.41		0.52		3.28
Cyclopentene	0.14		0.35		0.24		1.05
4-Methyl-1-pentene	0.07		0.08		0.10		0.80
Cyclopentane	ND	a	0.25		0.45		5.81
2,3-Dimethylbutane	1.44		0.43		0.80		7.25
2-Methylpentane	6.35		2.34		ND	a	31.45
3-Methylpentane	4.31		1.48		2.21		15.49
1-Hexene	0.17		0.18		0.14		1.39
2-Methyl-1-pentene	0.21		0.17		0.11		0.75
2-Ethyl-1-butene	ND		ND		ND		ND
n-Hexane	4.91		1.79		2.86		18.56
trans-2-Hexene	0.22		0.16		0.19		1.27
cis-2-Hexene	0.11		0.08		0.15		0.58
Methylcyclopentane	2.11		0.87		1.24		8.35
2,4-Dimethylpentane	0.72		0.24		0.45		3.50
Benzene	4.49		3.19		1.51		14.93
Cyclohexane	0.54		0.36		0.35		2.17
2-Methylhexane	2.66		1.24		0.74		9.70
2,3-Dimethylpentane	0.98		0.37		0.41		3.68
3-Methylhexane	3.35		1.94		1.14		11.13
1-Heptene	0.67		0.27		0.21		2.64
2,2,4-Trimethylpentane	4.01		1.53		2.12		18.25
n-Heptane	2.12		0.76		0.80		7.12

SNMOC REPORT
SITE CODE:CAMS13
All concentrations reported in ppbC

Sample No.:	**08420**	**08448**	**08532**	**08525**
Sampling Date:	**9/25/96**	**9/26/96**	**9/27/96**	**9/30/96**
Analysis Date:	**10/29/96**	**10/23/96**	**10/24/96**	**10/24/96**
Methylcyclohexane	1.22	0.65	0.30	4.28
2,2,3-Trimethylpentane	0.84	0.46	0.30	4.14
2,3,4-Trimethylpentane	1.08	0.52	0.85	6.03
Toluene	12.74	4.61	3.03	37.63
2-Methylheptane	1.47	0.42	0.33	3.15
3-Methylheptane	0.72	0.38	0.51	3.10
1-Octene	0.32	0.17	0.33	1.91
n-Octane	0.79	0.38	0.43	2.81
Ethylbenzene	1.81	0.78	0.55	7.09
m-Xylene/p-Xylene	6.29	2.51	1.81	22.91
Styrene	1.29	1.25	1.10	3.69
o-Xylene	2.52	1.14	0.61	9.08
1-Nonene	0.14	0.22	0.18	0.84
n-Nonane	0.59	0.36	0.20	4.17
Isopropylbenzene	0.24	ND	ND	1.21
a-Pinene	0.34	0.77	0.63	4.96
n-Propylbenzene	0.77	0.37	0.09	2.86
m-Ethyltoluene	2.69	1.19	0.55	9.98
p-Ethyltoluene	1.52	0.58	0.37	5.40
1,3,5-Trimethylbenzene	1.35	0.44	0.31	5.72
o-Ethyltoluene	1.03	0.45	0.37	4.48
b-Pinene	0.70	1.49	1.54	3.39
1-Decene	0.15	0.22	ND	0.56
1,2,4-Trimethylbenzene	4.23	1.70	0.97	15.76
n-Decane	1.13	0.41	1.94	7.99
1,2,3-Trimethylbenzene	1.47	0.90	0.44	4.88
m-Diethylbenzene	0.63	0.29	0.11	2.20
p-Diethylbenzene	0.75	0.62	0.27	4.43
1-Undecene	1.07	2.56	2.10	4.54
n-Undecane	2.94	2.23	40.33	19.25
1-Dodecene	0.74	1.69	1.44	1.98
n-Dodecane	3.33	6.02	50.81	14.46
1-Tridecene	0.28	0.55	0.42	1.10
n-Tridecane	1.59	2.22	7.58	3.73
TNMOC (w/ unknowns)	211.82	162.29	246.93	930.82
TNMOC (speciated)	154.22	83.98	194.13	752.30

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	06195	06196	06191	06188	06201	06215
Sampling Date:	6/3/96	6/4/96	6/5/96	6/6/96	6/7/96	6/10/96
Analysis Date:	6/28/96	6/28/96	7/3/96	7/3/96	7/5/96	7/9/96
Ethylene	7.81	5.41	5.11	4.17	4.18	1.65
Acetylene/Ethane	29.23	13.44	23.32	13.87	15.98	9.18
Propylene	8.27	7.84	3.90	3.20	3.10	8.59
Propane	16.01	9.74	19.19	9.52	14.07	5.14
Propyne	ND	0.17	ND	ND	ND	ND
Isobutane	5.11	0.60	5.14	3.11	2.87	3.61
Isobutene/1-butene	4.17	1.60	1.81	1.88	2.20	2.69
1,3-Butadiene	3.07	1.23	ND	0.83	0.35	ND
n-butane	7.38	6.92	9.82	4.99	6.67	5.11
trans-2-Butene	ND	0.36	ND	0.07	0.25	0.32
cis-2-butene	ND	0.26	ND	0.23	0.30	0.58
3-Methyl-1-butene	0.18	0.27	0.17	11.58	0.28	0.36
Isopentane	90.84	16.85	13.15	10.03	10.26	18.99
1-Pentene	0.36	0.76	0.27	0.32	0.35	0.41
2-Methyl-1-butene	ND	8.37	0.60	0.44	2.15	0.68
n-Pentane	7.98	6.73	6.90	4.93	4.89	10.22
Isoprene	0.53	1.50	0.76	0.59	0.79	0.77
trans-2-Pentene	0.96	0.88	0.47	0.44	0.49	0.55
cis-2-Pentene	0.69	0.39	0.23	0.24	0.26	0.30
2-Methyl-2-butene	2.83	0.85	0.44	0.45	0.98	0.73
2,2-Dimethylbutane	1.23	1.19	0.81	0.67	0.77	1.08
Cyclopentene	1.43	1.09	0.83	ND	0.66	1.29
4-Methyl-1-pentene	2.19	ND	ND	ND	ND	ND
Cyclopentane	0.76	0.66	1.41	0.77	0.54	1.04
2,3-Dimethylbutane	10.88	7.89	ND	ND	1.07	7.35
2-Methylpentane	11.42	6.51	7.53	3.67	5.05	6.00
3-Methylpentane	4.66	3.61	2.65	2.17	2.93	3.38
1-Hexene	ND	ND	ND	ND	ND	ND
2-Methyl-1-pentene	1.10	0.66	0.49	0.65	0.50	0.62
2-Ethyl-1-butene	ND	ND	ND	ND	ND	ND
n-Hexane	4.67	4.60	3.38	2.66	4.35	3.91
trans-2-Hexene	0.28	0.07	0.08	ND	ND	0.21
cis-2-Hexene	0.23	0.24	0.18	ND	0.21	0.21
Methylcyclopentane	4.64	3.06	2.76	1.68	2.59	2.08
2,4-Dimethylpentane	1.04	0.91	0.58	0.47	0.64	0.99
Benzene	7.37	5.93	3.82	2.83	4.17	4.55
Cyclohexane	1.08	1.30	0.82	0.68	0.64	1.51
2-Methylhexane	4.97	3.54	2.05	1.85	2.12	3.68
2,3-Dimethylpentane	1.18	1.19	0.55	0.58	1.58	1.73
3-Methylhexane	14.66	8.60	6.32	6.31	8.38	7.83
1-Heptene	3.70	1.20	0.66	0.60	0.76	1.43
2,2,4-Trimethylpentane	4.27	3.10	2.05	1.53	2.03	2.95
n-Heptane	3.27	2.44	2.20	1.44	1.44	2.47
Methylcyclohexane	2.69	1.00	1.14	0.85	0.70	1.23

SNMOC REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	06195	06196	06191	06188	06201	06215
Sampling Date:	6/3/96	6/4/96	6/5/96	6/6/96	6/7/96	6/10/96
Analysis Date:	6/28/96	6/28/96	7/3/96	7/3/96	7/5/96	7/9/96
2,2,3-Trimethylpentane	2.18	0.92	0.72	0.48	0.51	0.51
2,3,4-Trimethylpentane	1.42	1.32	0.51	0.54	0.97	0.78
Toluene	17.18	19.57	10.22	6.93	10.78	12.60
2-Methylheptane	1.83	0.66	0.58	0.40	0.61	0.78
1-Octene	0.81	0.22	0.37	0.27	0.23	0.33
3-Methylheptane	0.75	0.76	0.39	0.25	0.35	0.54
n-Octane	1.88	1.67	0.90	0.78	0.99	1.17
Ethylbenzene	10.42	4.15	2.38	1.70	2.09	3.03
m-Xylene/p-Xylene	10.31	12.70	8.75	4.64	15.37	9.58
Styrene	10.92	5.03	2.85	3.45	3.94	3.43
o-Xylene	4.12	4.54	2.90	2.01	2.52	3.54
1-Nonene	ND	ND	ND	ND	ND	ND
n-Nonane	1.78	1.61	0.94	0.65	0.85	1.39
Isopropylbenzene	0.80	0.46	0.29	0.19	0.17	0.62
a-Pinene	6.30	7.00	2.91	2.16	5.40	1.64
n-Propylbenzene	1.79	1.59	0.79	0.28	0.55	0.90
m-Ethyltoluene	3.42	4.21	1.73	1.49	1.77	3.14
p-Ethyltoluene	2.55	2.23	0.71	0.83	0.97	1.70
1,3,5-Trimethylbenzene	2.49	2.33	0.64	0.88	1.05	1.59
o-Ethyltoluene	1.18	1.45	0.66	0.55	0.71	0.96
b-Pinene	17.66	7.36	5.17	4.94	5.77	5.02
1-Decene	2.86	1.99	2.81	1.47	3.17	2.93
1,2,4-Trimethylbenzene	4.26	5.98	2.47	1.67	2.70	4.38
n-Decane	1.75	2.38	0.99	1.14	1.52	3.36
1,2,3-Trimethylbenzene	1.38	2.25	0.31	0.47	1.08	1.94
m-Diethylbenzene	2.53	0.86	1.50	1.61	1.51	0.92
p-Diethylbenzene	2.85	0.75	0.90	0.89	1.12	1.21
1-Undecene	27.63	10.88	7.38	6.80	7.95	7.95
n-Undecane	2.41	2.42	1.65	2.97	4.99	11.45
1-Dodecene	16.51	4.67	2.32	2.73	2.41	3.59
n-Dodecane	8.82	4.33	3.59	5.32	8.18	17.34
1-Tridecene	0.41	0.55	ND	0.63	0.35	8.81
n-Tridecane	1.14	1.85	44.49	2.60	14.15	6.79
TNMOC (w/ unknowns)	699.90	324.77	375.26	262.22	338.99	327.29
TNMOC (speciated)	445.47	261.65	244.39	162.01	216.23	249.35

SNMOC REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	06237		06283		06314	06327		06389		06399D1	
Sampling Date:	6/11/96		6/12/96		6/14/96	6/17/96		6/18/96		6/19/96	
Analysis Date:	7/11/96		7/12/96		7/14/96	7/16/96		7/16/96		7/16/96	
Ethylene	7.70		3.88		8.77	5.68		11.88		6.20	
Acetylene/Ethane	29.59		11.68		25.01	15.49		35.44		19.47	
Propylene	4.71		4.86		8.94	1.09		8.86		0.98	
Propane	18.45		11.45		15.25	11.36		17.76		9.26	
Propyne	0.21		ND		0.23	ND		0.32		ND	
Isobutane	7.07		3.64		7.32	3.63		4.61		2.27	
Isobutene/1-butene	2.93		2.14		3.40	2.41		5.48		2.41	
1,3-Butadiene	0.71		0.29		0.86	1.11		2.29		0.72	
n-butane	7.12		8.60		14.40	7.54		10.06		5.74	
trans-2-Butene	0.35		0.16		0.44	ND		0.40		ND	
cis-2-butene	0.21		ND		0.29	ND		0.41		ND	
3-Methyl-1-butene	0.15		0.71		0.31	ND		ND	a	ND	
Isopentane	ND	a	ND	a	21.12	13.86		25.56		10.11	
1-Pentene	0.28		ND	a	0.61	0.33		1.46		0.30	
2-Methyl-1-butene	0.69		0.33		1.22	0.62		2.10		0.45	
n-Pentane	7.54		28.87		11.43	7.97		12.62		4.80	
Isoprene	0.90		4.88		1.22	0.84		1.56		0.69	
trans-2-Pentene	0.72		1.16		1.41	0.73		2.34		0.52	
cis-2-Pentene	0.70		0.95		0.82	0.50		1.11		0.34	
2-Methyl-2-butene	1.51		0.98		1.86	0.57		2.54		0.47	
2,2-Dimethylbutane	1.26		3.81		1.76	0.35		2.43		0.54	
Cyclopentene	1.82		0.37		ND	ND	a	0.60		0.41	
4-Methyl-1-pentene	0.41		0.43		2.84	ND	a	0.55		ND	
Cyclopentane	1.03		1.32		0.86	1.19		2.55		0.59	
2,3-Dimethylbutane	1.70		0.87		2.27	1.48		1.44		1.46	
2-Methylpentane	13.11		9.59		16.99	4.76		2.59		4.14	
3-Methylpentane	4.93		6.14		5.44	ND	a	2.36		2.71	
1-Hexene	ND		1.64		ND	ND	a	ND		ND	
2-Methyl-1-pentene	1.55		1.69		0.82	ND	a	1.07		0.67	
2-Ethyl-1-butene	0.31		1.03		ND	ND	a	0.25		ND	
n-Hexane	5.42		3.71		6.80	ND	a	8.92		3.27	
trans-2-Hexene	0.48		0.60		0.55	ND	a	0.96		0.24	
cis-2-Hexene	0.35		0.65		0.26	ND	a	0.65		0.13	
Methylcyclopentane	2.39		1.64		3.18	2.25		3.92		ND	a
2,4-Dimethylpentane	1.17		0.62		1.25	0.59		1.41		ND	a
Benzene	5.64		3.45		6.41	4.31		7.73		ND	a
Cyclohexane	0.89		0.93		0.99	0.85		1.19		0.63	
2-Methylhexane	2.30		1.78		3.30	2.58		5.15		1.25	
2,3-Dimethylpentane	1.32		1.87		2.33	0.98		2.60		0.63	
3-Methylhexane	4.03		6.55		11.03	3.72		14.20		2.28	
1-Heptene	0.83		0.76		0.68	0.60		1.59		ND	
2,2,4-Trimethylpentane	2.77		2.00		5.58	2.93		6.71		2.20	
n-Heptane	2.48		1.55		5.02	2.91		9.90		1.84	
Methylcyclohexane	1.13		1.37		2.68	1.10		5.52		0.92	

SNMOC REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	06237	06283	06314	06327	06389	06399D1
Sampling Date:	6/11/96	6/12/96	6/14/96	6/17/96	6/18/96	6/19/96
Analysis Date:	7/11/96	7/12/96	7/14/96	7/16/96	7/16/96	7/16/96
2,2,3-Trimethylpentane	1.01	0.35	1.17	0.62	2.36	0.76
2,3,4-Trimethylpentane	1.36	0.99	2.02	1.19	3.14	1.13
Toluene	15.88	8.46	19.08	10.67	27.39	11.57
2-Methylheptane	0.67	0.25	1.11	0.43	3.59	0.37
1-Octene	0.22	ND	0.19	ND	0.73	ND
3-Methylheptane	0.49	0.35	0.88	0.67	4.20	0.66
n-Octane	1.08	0.60	1.42	0.68	1.77	0.47
Ethylbenzene	3.05	1.54	3.31	1.51	9.60	2.33
m-Xylene/p-Xylene	10.33	4.76	10.34	5.11	29.11	6.49
Styrene	3.73	3.78	5.13	0.46	8.11	0.78
o-Xylene	3.70	1.89	3.78	4.01	9.79	3.44
1-Nonene	ND	ND	ND	ND	1.19	ND
n-Nonane	0.90	0.64	1.26	0.72	3.42	0.81
Isopropylbenzene	0.36	ND	0.56	ND	1.05	ND
a-Pinene	4.70	5.16	6.38	6.05	8.79	1.91
n-Propylbenzene	1.02	1.00	1.91	0.63	2.51	0.48
m-Ethyltoluene	2.52	1.67	3.97	2.19	7.18	2.12
p-Ethyltoluene	1.32	1.09	2.11	2.18	4.16	1.48
1,3,5-Trimethylbenzene	0.89	1.12	2.49	1.43	4.46	1.40
o-Ethyltoluene	1.00	0.79	1.53	1.09	2.34	1.02
b-Pinene	5.03	4.60	6.84	1.83	7.95	0.67
1-Decene	2.50	3.21	2.58	4.47	4.27	2.21
1,2,4-Trimethylbenzene	3.89	2.53	5.44	5.51	10.31	4.55
n-Decane	1.26	0.99	3.19	1.66	4.68	2.06
1,2,3-Trimethylbenzene	1.59	1.15	2.49	6.18	2.45	2.65
m-Diethylbenzene	0.41	0.77	0.57	2.32	0.83	0.76
p-Diethylbenzene	1.04	0.31	1.56	1.84	2.55	0.89
1-Undecene	6.56	5.30	8.72	9.01	9.59	5.99
n-Undecane	1.58	1.65	10.73	3.12	7.02	14.21
1-Dodecene	1.50	0.95	11.15	4.39	1.61	3.57
n-Dodecane	4.23	3.54	10.44	2.77	10.67	22.13
1-Tridecene	0.53	ND	0.63	0.93	0.69	0.41
n-Tridecane	4.77	11.39	1.67	3.88	4.72	10.53
TNMOC (w/ unknowns)	308.74	284.22	436.43	312.17	626.39	299.80
TNMOC (speciated)	237.95	209.83	340.62	191.88	433.29	196.48

Footnotes:
a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	06400D2		06438		06479		06494		06519		06528
Sampling Date:	6/19/96		6/20/96		6/21/96		6/24/96		6/25/96		6/26/96
Analysis Date:	7/16/96		7/16/96		7/18/96		7/24/96		7/24/96		7/26/96
Ethylene	5.90		9.88		5.66		5.06		6.29		4.99
Acetylene/Ethane	13.09		32.29		16.84		9.91		13.74		9.60
Propylene	0.84		4.50		6.19		2.53		2.62		3.47
Propane	8.10		16.81		10.30		9.61		9.54		8.44
Propyne	ND		0.47		ND		ND		ND		0.19
Isobutane	2.48		4.29		3.89		2.44		3.40		4.46
Isobutene/1-butene	2.48		2.90		2.63		ND		ND		2.23
1,3-Butadiene	0.65		0.44		0.98		ND		ND		1.90
n-butane	5.88		7.56		5.98		3.83		4.45		4.36
trans-2-Butene	ND		0.76		0.45		ND		ND		0.22
cis-2-butene	ND		1.20		0.25		ND		ND		0.10
3-Methyl-1-butene	ND		0.36		ND	a	ND		ND		0.26
Isopentane	9.87		18.00		9.98		6.04		6.36		8.40
1-Pentene	0.38		3.77		0.50		ND		0.13		0.28
2-Methyl-1-butene	0.52		1.08		0.79		0.31		0.46		0.66
n-Pentane	4.95		9.38		5.86		3.75		5.11		4.43
Isoprene	0.67		2.07		2.30		ND	a	0.41		0.61
trans-2-Pentene	0.54		1.46		0.89		ND	a	0.41		0.36
cis-2-Pentene	0.42		0.79		0.64		0.20		0.12		0.26
2-Methyl-2-butene	0.62		2.06		1.20		0.59		0.52		0.52
2,2-Dimethylbutane	0.69		1.45		1.11		0.50		0.68		6.17
Cyclopentene	0.53		ND	a	0.35		0.86		0.10		0.22
4-Methyl-1-pentene	ND	a	ND	a	2.23		0.36		1.17		1.19
Cyclopentane	ND	a	0.65		0.97		0.59		0.70		0.70
2,3-Dimethylbutane	ND	a	2.01		1.27		ND		1.14		ND
2-Methylpentane	ND	a	ND	a	11.88		4.43		5.57		2.86
3-Methylpentane	ND	a	10.18		4.76		4.16		4.48		1.71
1-Hexene	ND	a	0.57		ND		ND		ND		ND
2-Methyl-1-pentene	ND	a	0.40		0.77		0.72		0.61		0.76
2-Ethyl-1-butene	ND	a	ND		ND		ND		ND		ND
n-Hexane	3.31		5.93		4.10		2.23		2.91		2.82
trans-2-Hexene	0.16		0.33		0.34		ND		ND		ND
cis-2-Hexene	ND		1.74		0.35		ND		ND		0.25
Methylcyclopentane	2.02		3.89		1.51		1.26		1.12		1.45
2,4-Dimethylpentane	0.49		1.07		1.53		0.63		ND	a	0.51
Benzene	3.62		7.63		4.38		2.42		3.02		3.08
Cyclohexane	0.69		1.18		0.76		0.59		0.88		0.72
2-Methylhexane	1.58		3.13		1.91		1.14		1.50		1.44
2,3-Dimethylpentane	0.70		0.99		1.43		0.64		0.58		0.47
3-Methylhexane	2.25		5.75		7.25		5.44		5.55		5.44
1-Heptene	ND		ND		0.63		0.45		0.54		0.41
2,2,4-Trimethylpentane	2.28		4.03		2.49		1.82		2.38		2.21
n-Heptane	2.01		3.29		2.41		1.35		1.84		1.82
Methylcyclohexane	2.41		2.03		4.10		1.97		1.62		1.14

SNMOC REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	06400D2	06438	06479	06494	06519	06528
Sampling Date:	6/19/96	6/20/96	6/21/96	6/24/96	6/25/96	6/26/96
Analysis Date:	7/16/96	7/16/96	7/18/96	7/24/96	7/24/96	7/25/96
2,2,3-Trimethylpentane	0.53	1.17	0.72	0.14	0.56	0.68
2,3,4-Trimethylpentane	1.10	2.25	0.90	0.80	0.73	0.96
Toluene	11.88	20.43	14.43	6.71	10.01	8.54
2-Methylheptane	0.38	0.88	0.41	0.21	0.25	0.13
1-Octene	ND	0.59	0.60	0.39	ND	0.20
3-Methylheptane	0.62	1.24	10.21	0.23	0.35	0.28
n-Octane	0.54	1.19	0.35	0.77	0.88	1.22
Ethylbenzene	2.28	2.91	2.41	1.36	1.67	1.84
m-Xylene/p-Xylene	6.56	10.61	8.31	4.46	5.55	4.43
Styrene	0.93	1.14	4.37	3.16	2.57	2.44
o-Xylene	5.25	4.61	3.23	1.61	2.18	1.39
1-Nonene	ND	ND	ND	0.18	0.23	0.41
n-Nonane	0.65	1.27	1.01	0.43	0.62	0.13
Isopropylbenzene	ND	0.28	0.40	0.18	0.11	0.38
a-Pinene	1.82	5.15	4.47	1.85	1.64	2.07
n-Propylbenzene	0.47	1.54	1.92	0.57	0.52	1.04
m-Ethyltoluene	2.00	4.23	2.74	1.59	2.03	2.55
p-Ethyltoluene	1.82	2.69	2.01	0.89	1.13	1.11
1,3,5-Trimethylbenzene	1.35	2.45	2.11	0.67	0.82	1.17
o-Ethyltoluene	1.03	2.40	1.09	2.02	1.10	1.47
b-Pinene	0.64	1.41	5.63	0.77	0.64	0.82
1-Decene	2.69	4.86	2.96	4.67	3.69	4.62
1,2,4-Trimethylbenzene	4.61	7.77	3.69	1.93	2.31	2.52
n-Decane	1.78	2.49	1.43	1.70	0.74	0.75
1,2,3-Trimethylbenzene	7.56	7.71	2.47	4.12	4.97	3.54
m-Diethylbenzene	1.07	2.08	0.85	2.18	1.10	1.25
p-Diethylbenzene	0.58	1.94	0.42	1.13	1.14	0.51
1-Undecene	7.42	8.94	8.04	6.40	6.02	5.42
n-Undecane	10.10	3.37	2.10	1.19	1.40	2.76
1-Dodecene	4.69	4.95	2.62	1.59	1.88	2.67
n-Dodecane	14.52	5.46	5.01	2.39	1.12	5.15
1-Tridecene	1.08	2.31	0.63	0.26	0.35	1.67
n-Tridecane	11.42	7.72	1.97	1.14	1.08	3.24
TNMOC (w/ unknowns)	302.62	444.75	313.14	199.75	205.01	252.32
TNMOC (speciated)	187.51	304.35	231.39	133.56	149.46	158.44

Footnotes:

a - Compound not analyzed due to FID flame out

SNMOC REPORT
SITE CODE: DLTX
All concentrations reported in ppbC

Sample No.:	06577D1		06578D2		06614		06644		06676		06717	
Sampling Date:	6/27/96		6/27/96		6/28/96		7/1/96		7/2/96		7/4/96	
Analysis Date:	7/26/96		7/26/96		7/26/96		7/30/96		7/31/96		7/30/96	
Ethylene	3.35		6.05		5.40		6.25		5.88		0.49	
Acetylene/Ethane	8.62		19.57		9.44		20.00		16.50		2.05	
Propylene	2.86		2.74		13.03		4.55		3.78		1.00	
Propane	6.62		15.23		8.96		16.44		10.58		2.15	
Propyne	ND		ND		0.16		ND		ND		ND	
Isobutane	3.50		4.74		4.33		4.09		3.27		0.82	
Isobutene/1-butene	1.78		2.32		2.85		3.08		2.50		0.43	
1,3-Butadiene	1.23		3.39		1.18		ND		ND		ND	
n-butane	3.74		6.95		5.80		9.36		4.71		1.22	
trans-2-Butene	0.18		0.22		ND		ND		0.28		ND	
cis-2-butene	0.08		0.13		0.30		0.27		0.15		ND	
3-Methyl-1-butene	ND		ND		0.23		0.19		0.23		ND	
Isopentane	6.14		8.71		17.93		26.12		9.16		1.80	
1-Pentene	0.47		2.13		0.70		0.67		0.64		0.43	
2-Methyl-1-butene	0.66		ND	a	ND	a	ND		ND	a	0.56	
n-Pentane	ND	a	ND	a	ND	a	ND	a	ND	a	2.57	
Isoprene	ND	a	ND	a	2.23		ND	a	0.55		ND	
trans-2-Pentene	ND	a	ND	a	0.85		0.61		0.18		ND	
cis-2-Pentene	0.09		ND	a	0.77		0.35		0.20		ND	a
2-Methyl-2-butene	0.32		ND	a	0.38		1.67		0.48		ND	a
2,2-Dimethylbutane	0.98		0.75		ND	a	0.68		0.68		0.19	
Cyclopentene	0.11		0.63		2.17		ND	a	0.58		ND	
4-Methyl-1-pentene	0.79		0.44		0.86		ND	a	0.99		0.25	
Cyclopentane	0.63		0.94		2.08		0.47		0.41		0.06	
2,3-Dimethylbutane	ND		ND		7.42		1.48		0.89		0.12	
2-Methylpentane	5.36		8.66		5.70		8.10		9.33		0.55	
3-Methylpentane	3.32		4.92		3.22		ND	a	2.36		0.29	
1-Hexene	ND		ND		ND		ND		ND		ND	
2-Methyl-1-pentene	0.27		0.52		0.58		0.66		0.39		0.11	
2-Ethyl-1-butene	ND		ND		ND		ND		ND		ND	
n-Hexane	2.20		3.11		3.83		4.93		3.02		0.56	
trans-2-Hexene	0.10		0.10		0.25		0.25		0.18		ND	
cis-2-Hexene	0.25		0.07		0.25		0.09		0.09		ND	
Methylcyclopentane	1.18		1.55		2.15		1.78		1.25		0.13	
2,4-Dimethylpentane	0.33		1.16		0.60		0.70		0.58		0.23	
Benzene	2.33		3.01		4.89		5.86		3.83		1.03	
Cyclohexane	0.48		0.68		0.74		0.81		0.56		0.06	
2-Methylhexane	0.98		1.65		2.71		2.91		1.90		0.14	
2,3-Dimethylpentane	0.42		0.66		0.79		0.92		0.45		0.02	
3-Methylhexane	3.20		5.86		5.48		5.48		5.37		0.33	
1-Heptene	0.33		0.50		0.68		0.79		0.55		0.03	
2,2,4-Trimethylpentane	1.72		2.40		2.78		3.50		2.48		0.43	
n-Heptane	1.37		2.10		2.20		2.34		1.95		0.40	
Methylcyclohexane	1.09		1.21		2.28		6.04		0.78		0.10	