1998 Urban Air Toxics

Monitoring Program (UATMP)

Final Report for Program Year 1998-1999

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1998 Urban Air Toxics Monitoring Program (UATMP)

Final Report for Program Year 1998-1999

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LIST OF ABBREVIATIONS

AIRS	Aerometric Information and Retrieval System
AQS	Air Quality Subsystem (of the Aerometric Information and Retrieval System)
ATSDR	Agency for Toxic Substances and Disease Registry
BTEX	benzene, toluene, ethylbenzene, and xylenes (*o*-, *m*-, and *p*-xylene)
CFC	chlorofluorocarbon
CO	carbon monoxide
DNPH	2,4-dinitrophenylhydrazine
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
HPMS	Highway Performance Monitoring System
MEK	methyl ethyl ketone
MSD	mass selective detection
MTBE	methyl *tert*-butyl ether
NCDC	National Climatic Data Center
ND	non-detect
NO_x	oxides of nitrogen
ppbC	parts per billion Carbon
ppbv	parts per billion (by volume)
PM	particulate matter
RPD	relative percent difference
SIC	Standard Industrial Classification
SNMOC	Speciated Nonmethane Organic Compound
TRI	Toxics Release Inventory
UATMP	Urban Air Toxics Monitoring Program
VOC(s)	volatile organic compound(s)

Monitoring Stations

B2LA	Baton Rouge, Louisiana
BRVT	Brattleboro, Vermont
BUND	Beulah, North Dakota
BUVT	Burlington, Vermont
CANJ	Camden, New Jersey
EPTX	El Paso, Texas
GALA	Garyville, Louisiana
GREY	Texarkana, Arkansas
HALA	Hahnville, Louisiana

LIST OF ABBREVIATIONS (Continued)

PARR	North Little Rock, Arkansas
RUVT	Rutland, Vermont
UNVT	Underhill, Vermont

ABOUT THIS REPORT

This report presents the results and conclusions of the ambient air monitoring conducted as part of the 1998 Urban Air Toxics Monitoring Program (UATMP)—a program designed to characterize the magnitude and composition of potentially toxic air pollution in, or near, urban locations. The 1998 UATMP included 12 monitoring stations that collected 24-hour air samples, typically on a biweekly basis. These samples were analyzed for concentrations of 59 volatile organic compounds (VOC) and 16 carbonyls. Overall, nearly 28,000 ambient air concentrations were measured during the 1998 UATMP. The summary presented in this report uses various graphical, numerical, and statistical analyses to put the vast amount of ambient air monitoring data collected into perspective.

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

The ambient air monitoring data collected during the 1998 UATMP serve a wide range of purposes. Not only do these data characterize the nature and extent of urban air pollution close to the 12 monitoring stations participating in this study, but they also indicate some trends and patterns that may be common to all urban environments. Therefore, this report presents some results that are specific to particular monitoring locations and present other results that are apparently common to urban environments. These results ultimately should provide additional insight into the complex nature of urban air pollution. The final data are also included in the appendices to this report.

It should be noted that this is the last reporting year for acrolein, a carbonyl compound. An Addendum to the Compendium Method TO-11A for the Determination of Formaldehyde in Ambient Air using Adsorbent Cartridge Followed by High Performance Liquid Chromatography (HPLC) was presented on April 15, 1999. It states that "*TO-11A is **not** applicable for acrolein.*" Crotonaldehyde is another compound that appears to decompose rapidly after being introduced to the cartridge. At this time, however, the U.S. EPA National Program is not deleting crotonaldehyde from the carbonyl target list.

1.0 Introduction

Air pollution in urban locations contains many components that originate from a wide range of industrial, motor vehicle, and natural emissions sources. Because some of these components include toxic compounds known or suspected to be carcinogenic, the U.S. Environmental Protection Agency (EPA) continues to encourage state and local agencies to understand and appreciate the nature and extent of potentially toxic air pollution in urban locations. To achieve this goal, EPA sponsors the Urban Air Toxics Monitoring Program (UATMP), a program designed to characterize the composition and magnitude of urban air pollution through extensive ambient air monitoring. Since the inception of the UATMP in 1987, many environmental and health agencies have participated in the UATMP to assess the causes and effects of air pollution within their jurisdictions. This report summarizes and interprets the 1998 UATMP monitoring effort, which included 1 year of biweekly measurements of ambient air quality in or near 12 urban locations. Much of the analysis and data interpretation in this report focuses on compound-specific data trends.

Note: Each "year" of UATMP sampling typically begins in September and ends in August of the following calendar year. According to convention, the UATMP assigns each "program year" to the calendar year during which sampling begins. For this reason, the 1998–1999 program is titled the "1998 UATMP," even though a majority of its samples were collected in 1999.

The contents of this report provide both a qualitative overview of air pollution at selected urban locations and a quantitative analysis of the factors that appear to affect urban air quality most significantly. This information should offer participating agencies useful insight into important air quality issues. For example, participating agencies can use trends and patterns in the UATMP monitoring data to determine whether levels of air pollution present public health concerns, to identify which emissions sources most strongly contribute to air pollution, or to forecast whether proposed pollution control initiatives might significantly improve air quality.

To facilitate examination of the 1998 UATMP monitoring data, the complete set of measured concentrations is presented in appendices of this report. In addition, these data are publicly available in electronic format from the Air Quality Subsystem (AQS) of EPA's Aerometric Information Retrieval System (AIRS) at http://www.epa.gov/ttn/airs/.

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

Table 1-1
Organization of the 1998 UATMP Report

Report Section	Section Title	Overview of Contents
2	The 1998 UATMP	This section provides background information on the scope of the 1998 UATMP and includes information about the: • Monitoring locations • Compounds selected for monitoring • Sampling and analytical methods • Sampling schedules • Completeness of the air monitoring program.
3	Background Information: Ambient Air Monitoring Data Analysis and Interpretation	This section provides background information on the methodology used to present and analyze the 1998 UATMP data. The section also describes the factors that affect urban air quality such as emissions sources and atmospheric fate and transport.
4	Summary of the 1998 UATMP Monitoring Data	This section provides a general overview of the results of the 1998 UATMP.
5	Data Interpretation: Hydrocarbons	These sections present and discuss significant trends and relationships in the UATMP data. These sections characterize how ambient air concentrations varied with monitoring location and with time, then interpret the significance of the observed spatial and temporal variations.
6	Data Interpretation: Halogenated Hydrocarbons	
7	Data Interpretation: Polar Compounds	
8	Data Interpretation: Carbonyls	
9	Data Quality	This section defines and discusses the concepts of precision and accuracy. Based on quantitative and qualitative analyses, this section comments on the precision and accuracy of the 1998 UATMP ambient air monitoring data.
10	Conclusions and Recommendations	This section summarizes the most significant findings of the report and makes several recommendations for future projects that will involve ambient air monitoring in urban locations.
11	References	This section lists the references cited throughout the report.

2.0 The 1998 UATMP

The 1998 UATMP included 12 monitoring stations that collected 24-hour integrated canister and cartridge samples of ambient air on a biweekly basis for 12 months. These samples were analyzed in a central laboratory for concentrations of selected hydrocarbons, halogenated hydrocarbons, and polar compounds from the canister samples and carbonyls from the cartridge samples. The following discussion reviews the monitoring locations, the compounds selected for monitoring, the sampling schedules, the completeness of the 1998 UATMP, and the sampling and analytical methods.

2.1 Monitoring Locations

Although EPA sponsors the UATMP, EPA does not dictate where the UATMP monitoring stations are located. Rather, representatives from the state and local agencies that voluntarily participate in the program and contribute to the overall monitoring costs select the monitoring locations. Some monitors were placed near the centers of heavily populated cities (e.g., Baton Rouge, Camden, and El Paso), while others were placed in moderately populated areas (e.g., Garyville and Hahnville). One site was intentionally placed many miles distant from urban centers (Underhill) because it was used by the State of Vermont as a background site. The monitoring stations participating in the UATMP program are listed in Table 2-1.

Figure 2-1 shows the 12 monitoring locations of the 1998 program. The maps in Figures 2-2 through 2-25 and the site descriptions in Table 2-2 and in Appendix A provide detailed information on the surroundings at the 12 1998 UATMP monitoring locations. Figures 2-2 through 2-13 illustrate the locations and surroundings of each monitoring site. Figures 2-14 through 2-25 show the numbers and locations of facilities within 10 miles of the monitoring sites that reported to the Toxics Release Inventory (TRI) in 1997.

As Figure 2-1 shows, most of the 1998 UATMP monitors were located either near the coast of the Gulf of Mexico or in the state of Vermont. Although this spatial distribution of monitoring stations clearly is not a statistically significant sample of urban locations in the

United States, the monitoring data from these stations may indicate certain air quality trends that are common to all urban environments. The analyses in this report differentiate those trends that appear to be site-specific from those that appear to be common to urban environments.

Chemical concentrations measured during the 1998 UATMP varied significantly from monitoring location to monitoring location. As discussed throughout this report, the proximity of the monitoring locations to different emissions sources, especially industrial facilities and heavily traveled roadways, often explains the observed spatial variations in ambient air quality. To provide a first approximation of the respective contributions of motor vehicle emissions and industrial emissions on each site's ambient air quality, Table 2-3 lists the number of people living within 10 miles of each monitoring location, as well as the number of industrial facilities that meet EPA's TRI reporting requirements.

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

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

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

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

2.2 Compounds Selected for Monitoring

Urban air pollution typically contains hundreds of components, including, but not limited to, volatile organic compounds (VOCs), metals, inorganic acids, and particulate matter. Because sampling and analysis to monitor for every component of air pollution has been prohibitively expensive, the UATMP instead focuses on measuring ambient levels of 59 VOCs (13 hydrocarbons, 37 halogenated hydrocarbons, and 9 polar compounds) and 16 carbonyls. Tables 2-4, 2-5, and 2-6 identify the specific compounds of interest.

2.3 Sampling Schedules

Table 2-7 presents the dates on which sampling began and ended for each monitoring location. With the following exceptions, the monitoring locations began the 1998 UATMP sampling in September 1998 and stopped sampling in September 1999:

- Because the monitoring station was not ready at the beginning of the study period, the Beulah, North Dakota, site did not begin sampling until February 1999. Sampling at this site continued until September 1999.
- As planned by the State that sponsored these stations, sampling was discontinued at the Arkansas sites (Texarkana and North Little Rock) at the end of March 1999.

According to the UATMP schedule, 24-hour integrated samples were to be collected at every monitoring location once every 12 days and each sample collection began and ended at midnight, local standard time. At each test site, VOC and carbonyl samples were collected concurrently. As part of the sampling schedule, site operators were instructed to collect duplicate samples on roughly 10 percent of the sampling days. In cases where monitors failed to collect valid samples on a scheduled sampling day, site operators sometimes rescheduled samples for other days. This practice explains why some monitoring locations periodically strayed from the 12-day sampling schedule.

The12-day sampling schedule permits cost effective data collection for characterization (annual-average concentrations) of toxic compounds in ambient air and ensures that sampling

days are evenly distributed among the 7 days of the week which allows for comparison of air quality on weekdays to air quality on weekends.

2.4 Completeness

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

Appendices B (VOC) and C (carbonyl) identify samples that were invalidated and list the specific reasons why the samples were invalidated. Table 2-7 summarizes the completeness of the VOC and carbonyl data sets collected during the 1998 UATMP:

- For VOC sampling, the completeness ranged from 58 to 106 percent, with an overall completeness of 91 percent.
- For carbonyl sampling, the completeness ranged from 55 to 110 percent with an overall completeness of 88 percent.

According to the UATMP data quality objectives (USEPA, 1988), at least 15 ambient air samples from a given monitoring station must be analyzed successfully to generate a sufficiently complete data set for estimating annual average air concentrations. The data in Table 2-6 show that all of the 1998 UATMP monitoring stations met this data quality objective. Because the samples taken in Beulah, ND, Texarkana and North Little Rock, AR, were collected for only 7 months of the 12 month sampling period, the monitoring data from these stations do not characterize seasonal variations in air quality. Thus, central tendency concentrations for these stations might not represent actual annual average levels.

2.5 Sampling and Analytical Methods

During the 1998 UATMP, two EPA-approved methods were used to characterize urban air pollution:

- *Compendium Method TO-15* was used to measure ambient air concentrations of 58 VOCs;
- *Compendium Method TO-11A* was used to measure ambient air concentrations of 16 carbonyl compounds.

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

2.5.1 VOC Sampling and Analytical Method

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

By analyzing each sample with gas chromatographic analysis incorporating mass selective detection and flame ionization detection (GC/MSD-FID), laboratory staff determined ambient air concentrations of 59 VOCs (13 hydrocarbons, 37 halogenated hydrocarbons, and

9 polar compounds) within the sample. Because *m*-xylene and *p*-xylene elute from the GC column at the same time, the VOC analytical method reports only the sum of the concentrations for these two compounds, and not the separate concentrations for each compound.

Table 2-4 lists the method detection limits for the laboratory analysis of the VOC samples. Although the sensitivity of the analytical method varies from compound to compound, the detection limit reported by the analytical laboratory for every compound is lower than 0.25 parts per billion by volume (ppbv); most of the detection limits were below 0.1 ppbv. VOC detection limits ranged from 0.02 to 0.21 ppbv. Speciated Nonmethane Organic Compound (SNMOC) detection limits are expressed in parts per billion Carbon (ppbC) and ppbv.

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

This year, the first reportable SNMOC analysis option was presented with the standard VOC sampling. The only state that applied for this option was Vermont. Data analysis will begin for the SNMOCs when there are 2 years of data collected. These data are presented in Appendix F, with the VOCs. Table 2-5 lists the method detection limits for the laboratory analysis of the SNMOC samples.

2.5.2 Carbonyl Sampling and Analytical Method

Following the specifications of EPA Compendium Method TO-11A, ambient air samples for carbonyl analysis were collected by passing ambient air over silica gel cartridges coated with 2,4-dinitrophenylhydrazine (DNPH), a compound known to react selectively and reversibly with

many aldehydes and ketones. Carbonyls in ambient air remain within the sampling cartridge, while other compounds pass through the cartridge without reacting with the DNPH-coated matrix. As with the VOC sampling, the central laboratory distributed the silica gel cartridges to the monitoring locations, and site operators connected the cartridges to the air sampling equipment. After each 24-hour sampling period, site operators returned the cartridges to the central laboratory for chemical analysis.

To quantify concentrations of carbonyls in the sampled ambient air, laboratory analysts eluted the exposed silica gel cartridges with acetonitrile. This solvent elution liberated a solution of DNPH derivatives of the aldehydes and ketones collected from the ambient air. High-performance liquid chromatography (HPLC) analysis and ultraviolet detection of these solutions determined the relative amounts of individual carbonyls present in the original air sample. Because butyraldehyde and isobutyraldehyde elute from the HPLC column at the same time, the carbonyl analytical method can report only the sum of the concentrations for these compounds, and not the separate concentrations for each compound. For the same reason, the analytical method reports only the sum of the concentrations for the three tolualdehyde isomers, as opposed to reporting separate concentrations for the three individual compounds.

Appreciating Detection Limits

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

Table 2-6 lists the detection limits reported by the analytical laboratory for measuring concentrations of 14 carbonyls. Although the sensitivity of the analytical method varies from compound to compound, the detection limit reported by the analytical laboratory for every compound is less than or equal to 0.005 ppbv. Carbonyl detection limits ranged from 0.002 to 0.005 ppbv.

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

Figure 2-1
Locations of the 1998 UATMP Monitoring Stations

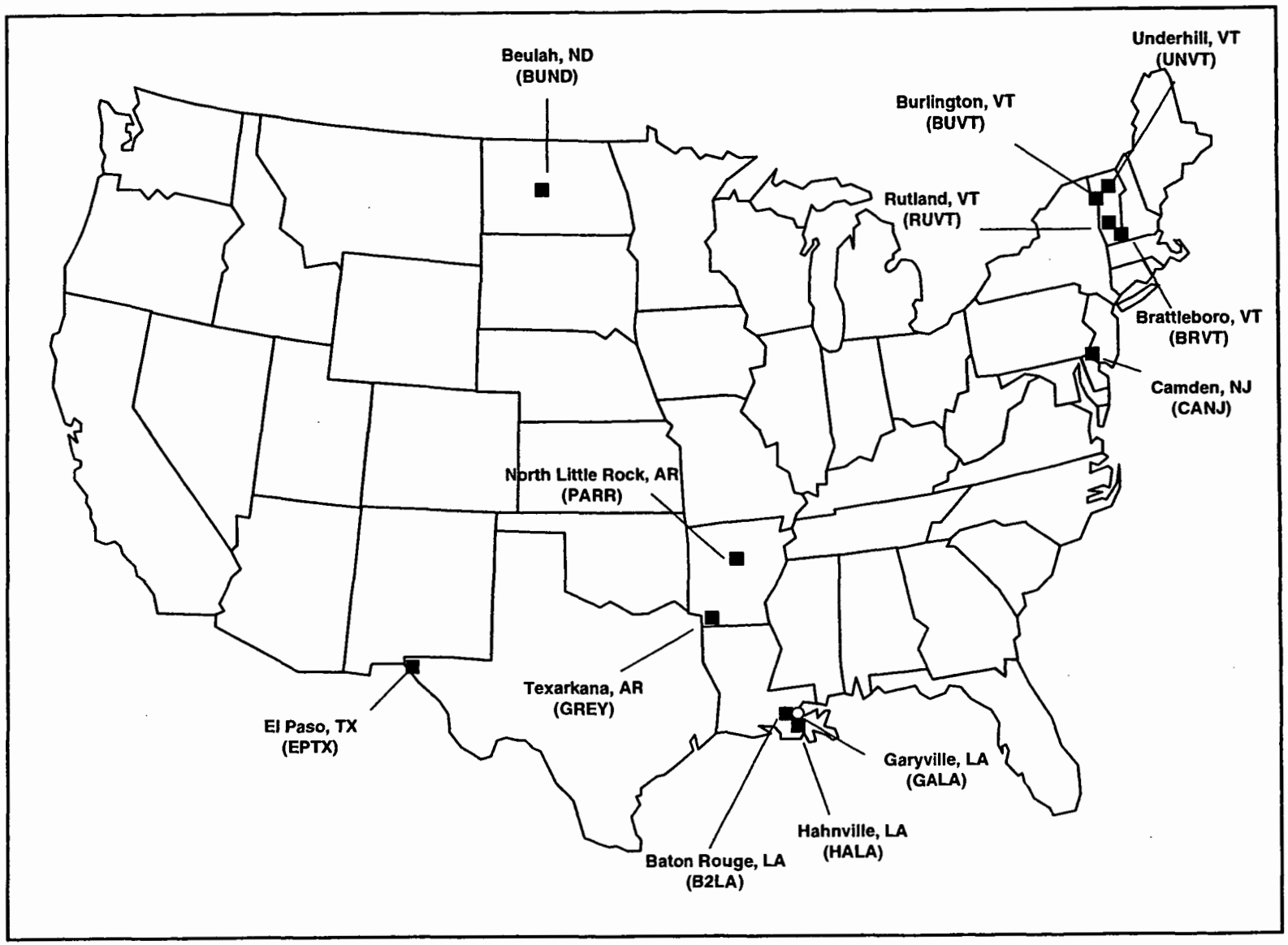
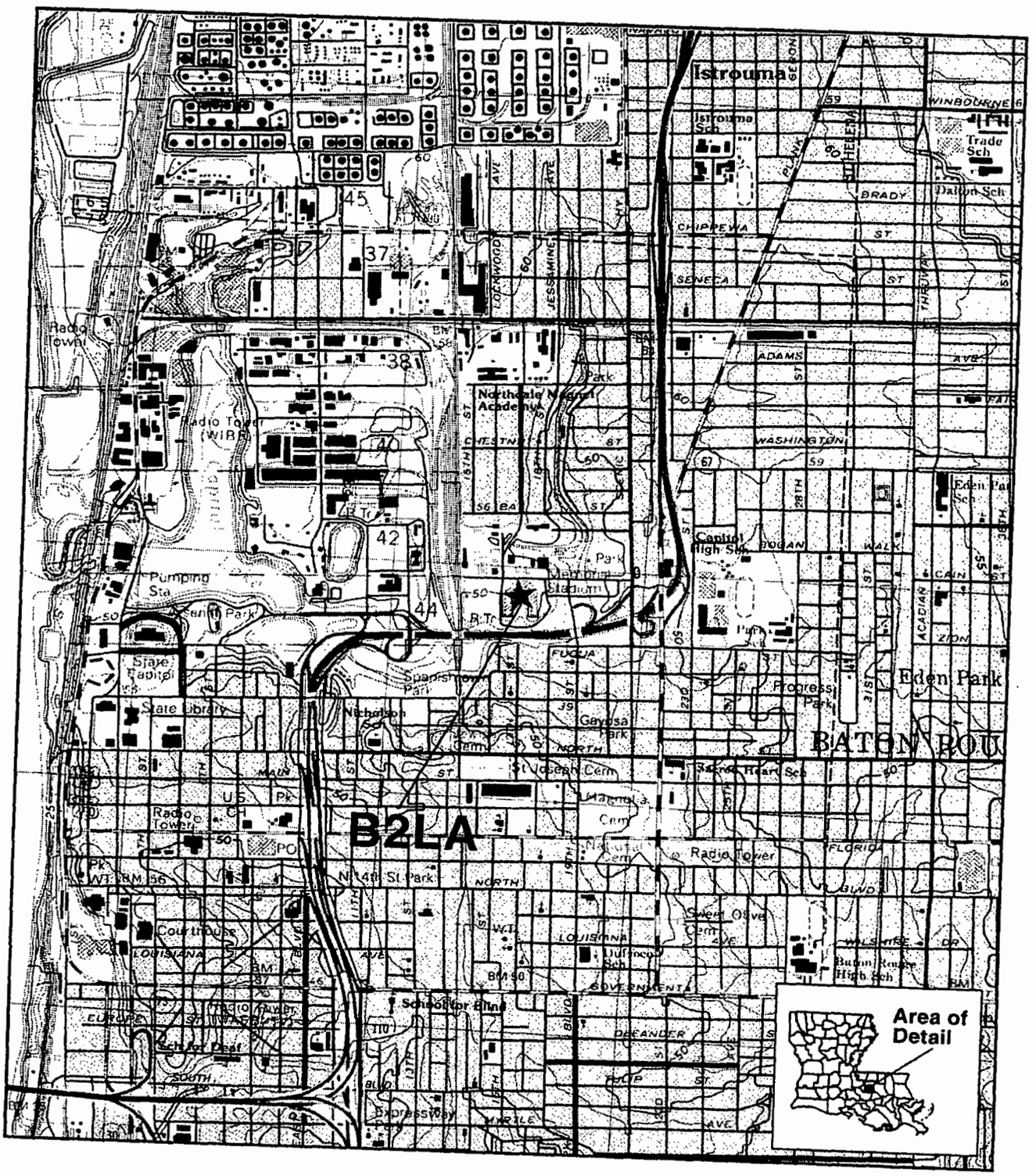


Figure 2-2
Baton Rouge, Louisiana (B2LA) Monitoring Station



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

Figure 2-3
Brattleboro, Vermont (BRVT) Monitoring Station

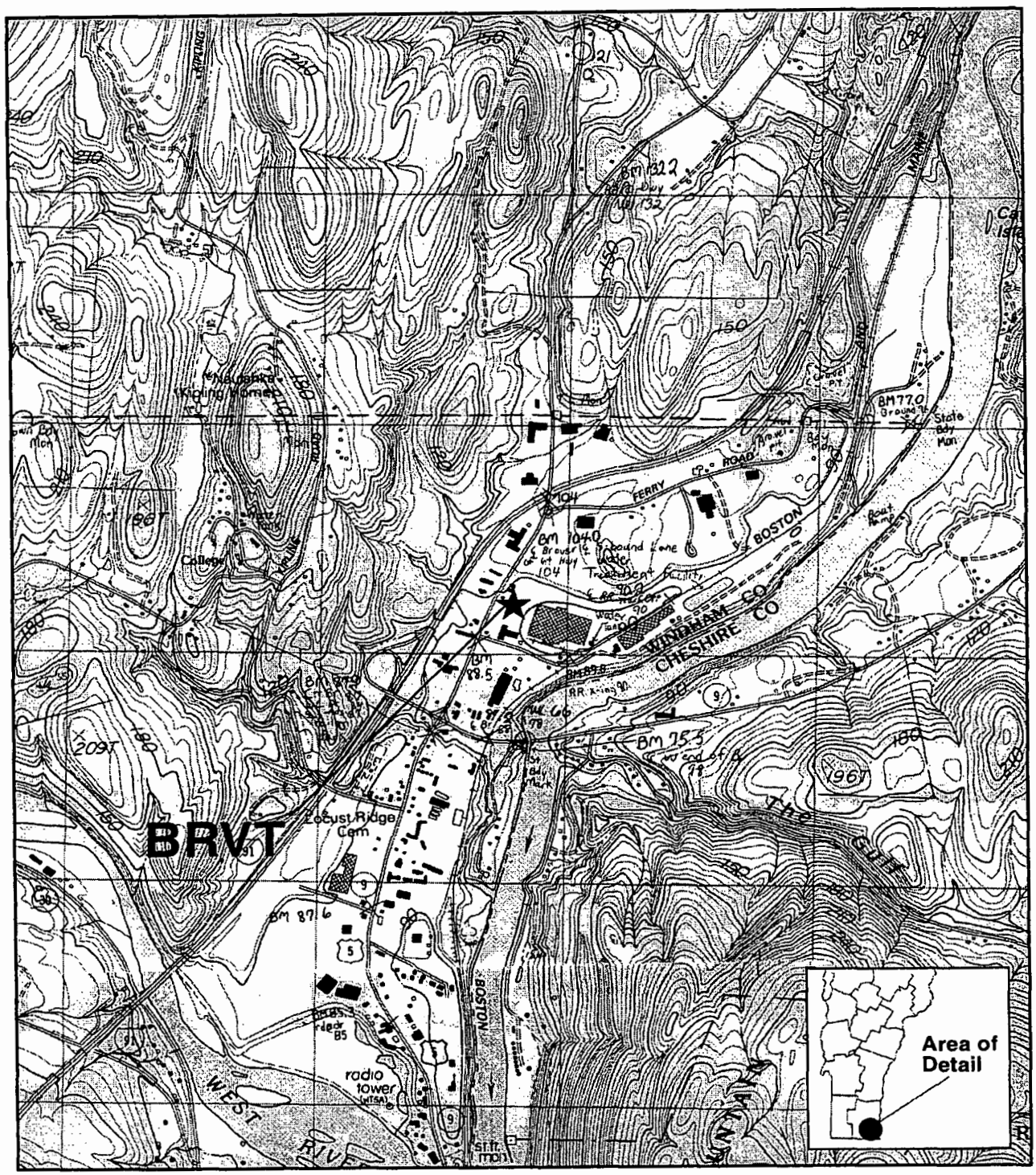
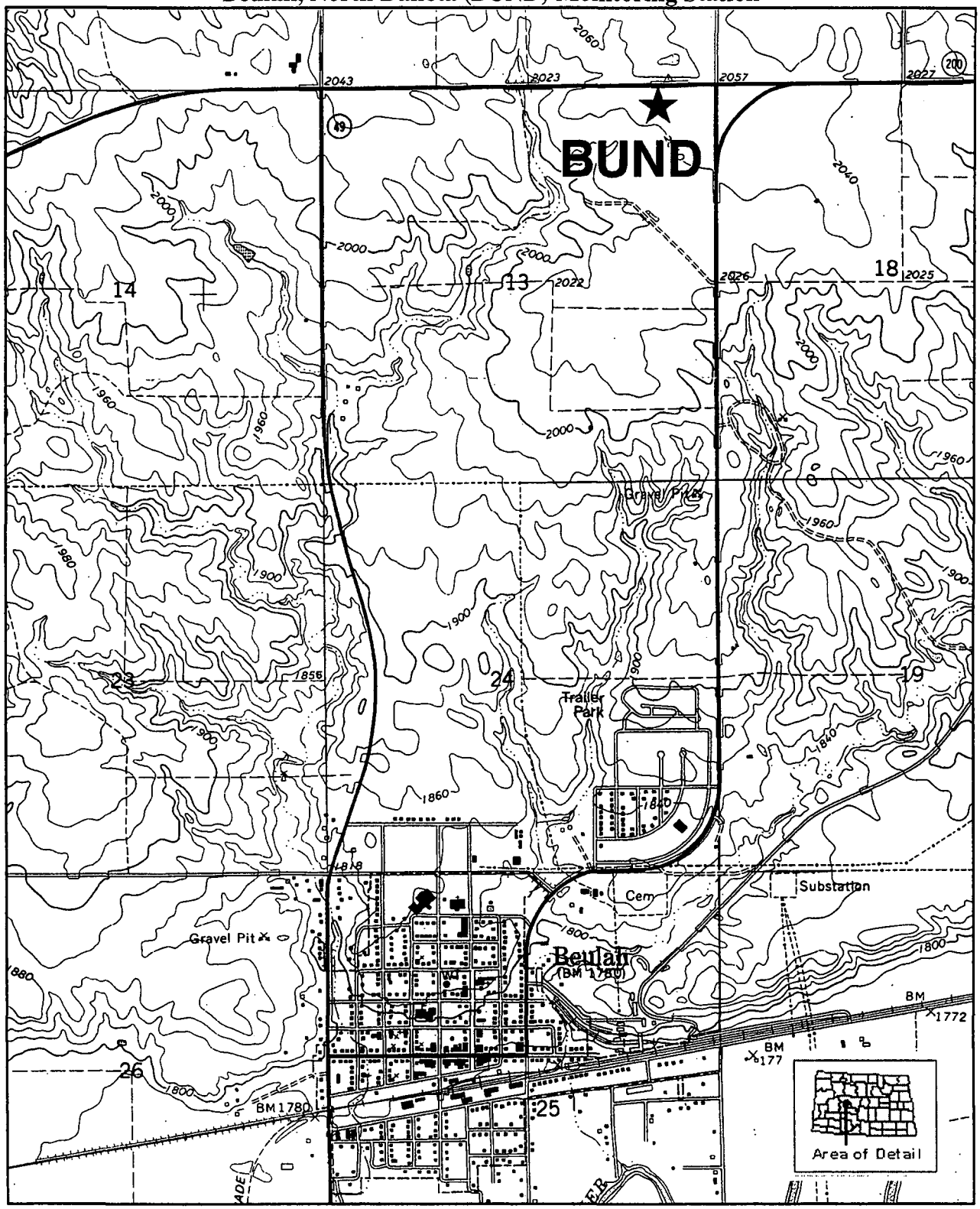
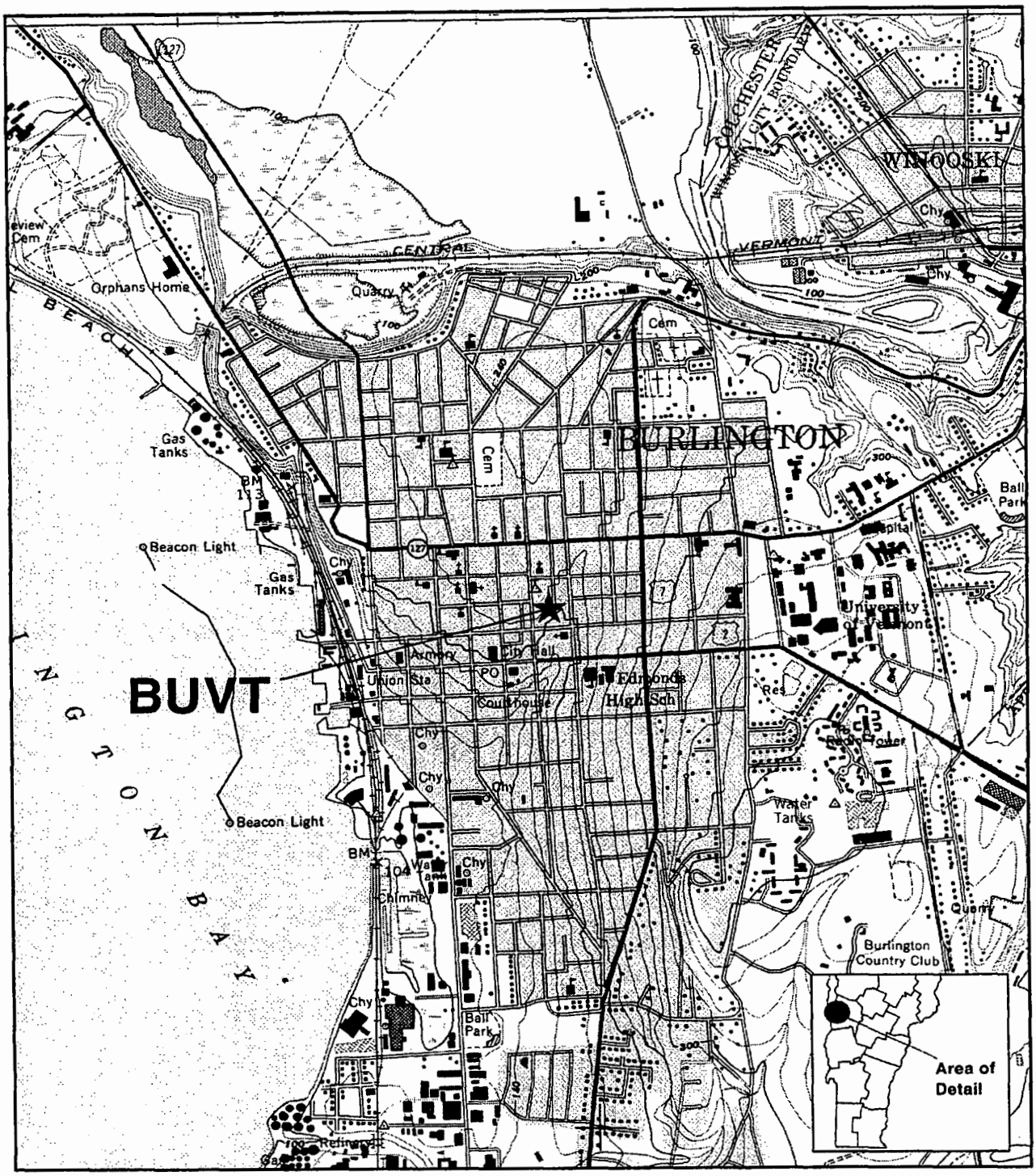

BRVT
Area of Detail
BM 1322
BM 1040
BM 755
BM 770
BM 879
BM 876
BM 885
Locust Ridge Cem
radio tower
College
Water Tank
Ground Level Water Treatment Facility
Boat Ramp
Gravel Pit
Rec Area
Sand Pit
Boy Mon
State Boy Mon
Sta. Mon
Rec Area
Rec Area
Rec Area

Figure 2-4
Beulah, North Dakota (BUND) Monitoring Station



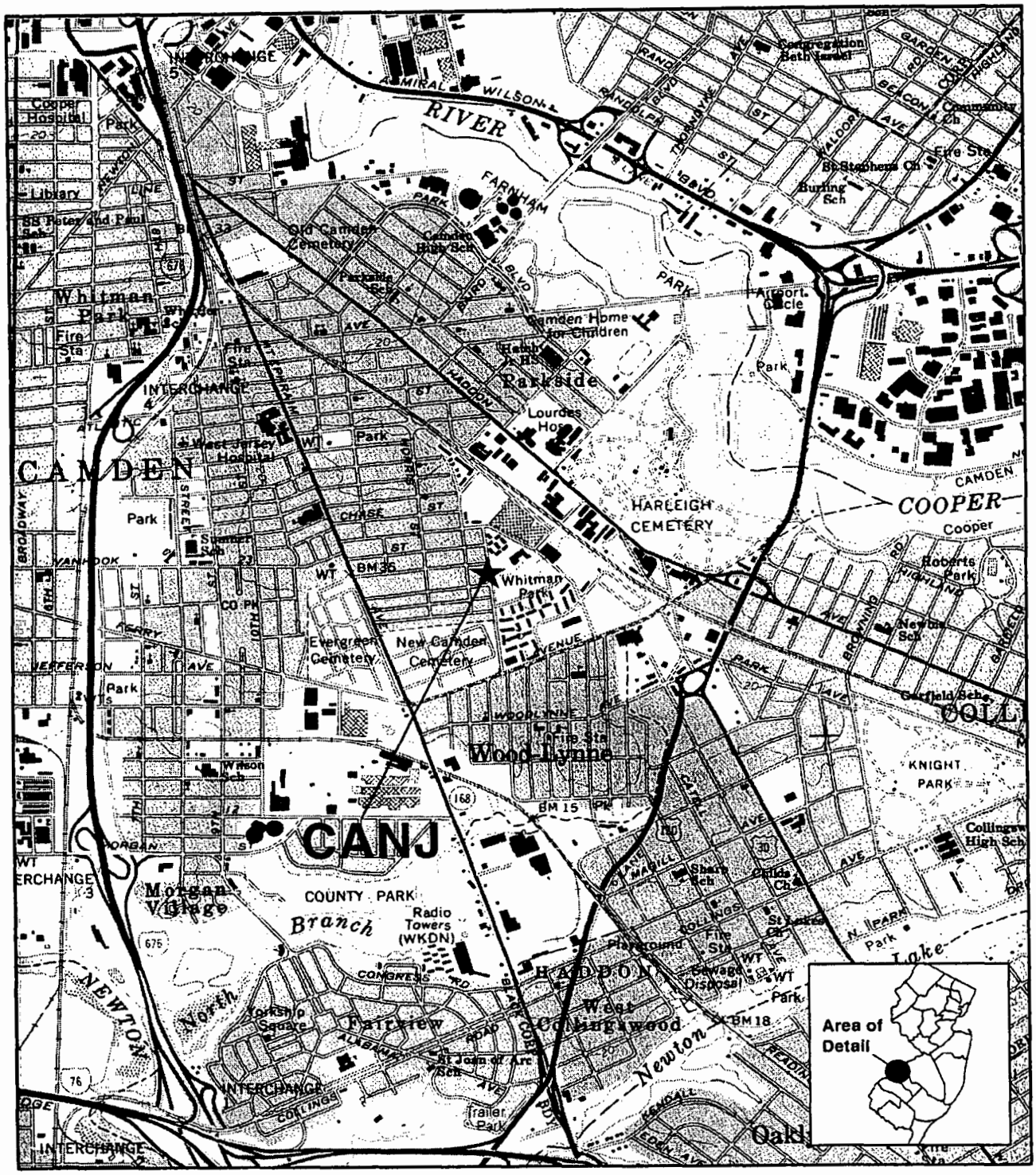
Source: USGS 7.5 X 15 Minute Series (metric). Map Scale: 1:24,000.

Figure 2-5
Burlington, Vermont (BUVT) Monitoring Station



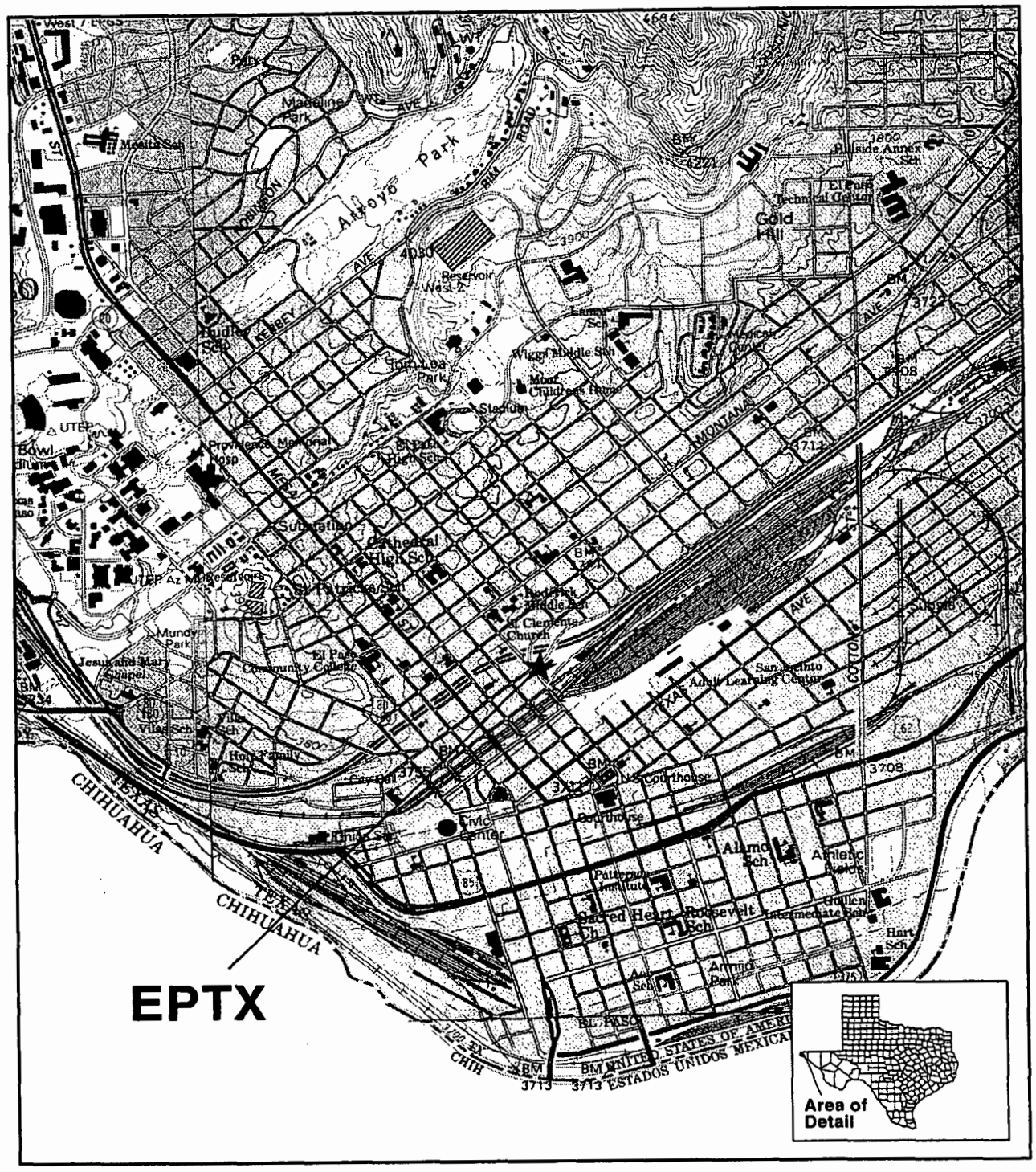
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-6
Camden, New Jersey (CANJ) Monitoring Station



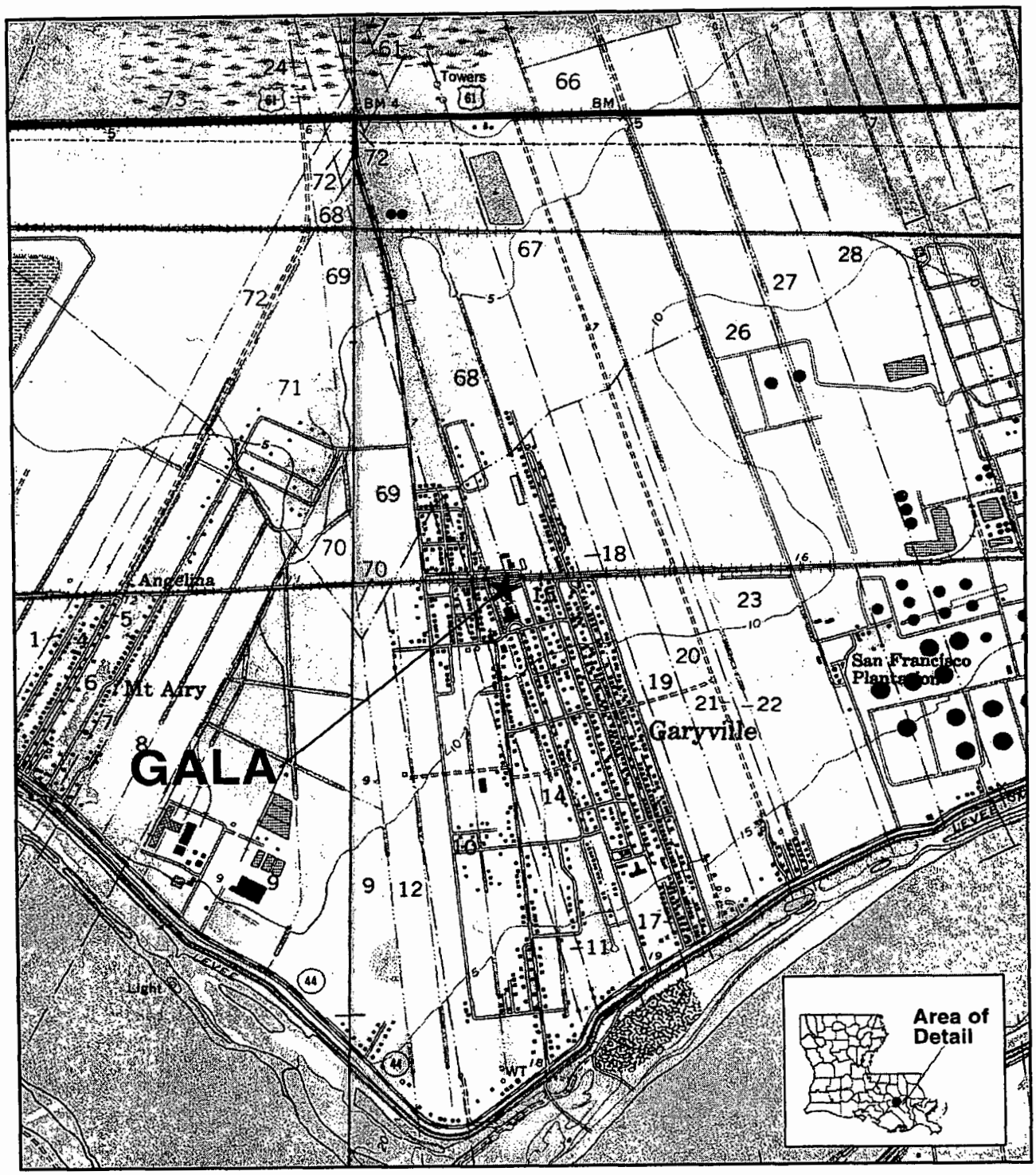
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-7
El Paso, Texas (EPTX) Monitoring Station



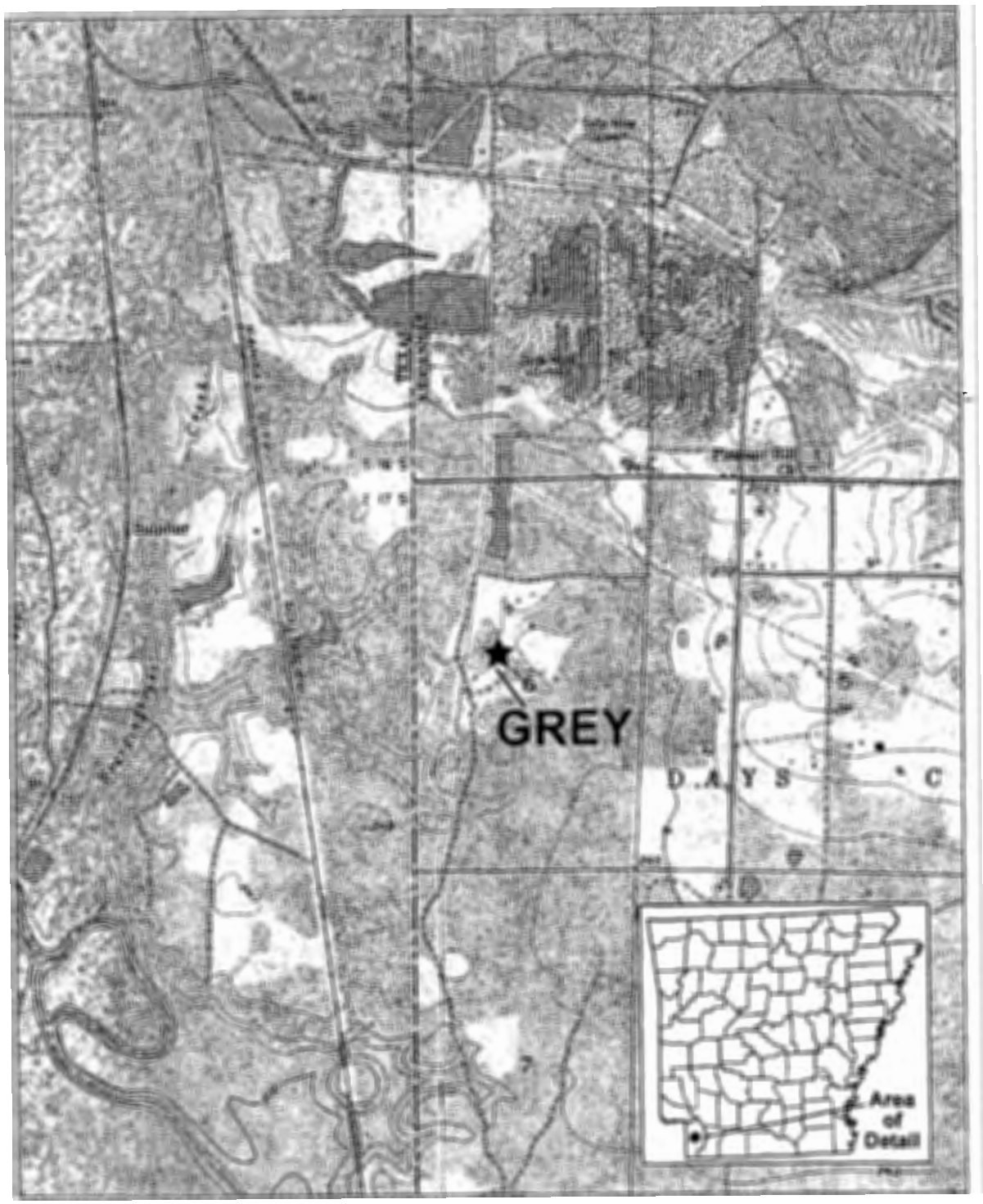
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-8
Garyville, Louisiana (GALA) Monitoring Station



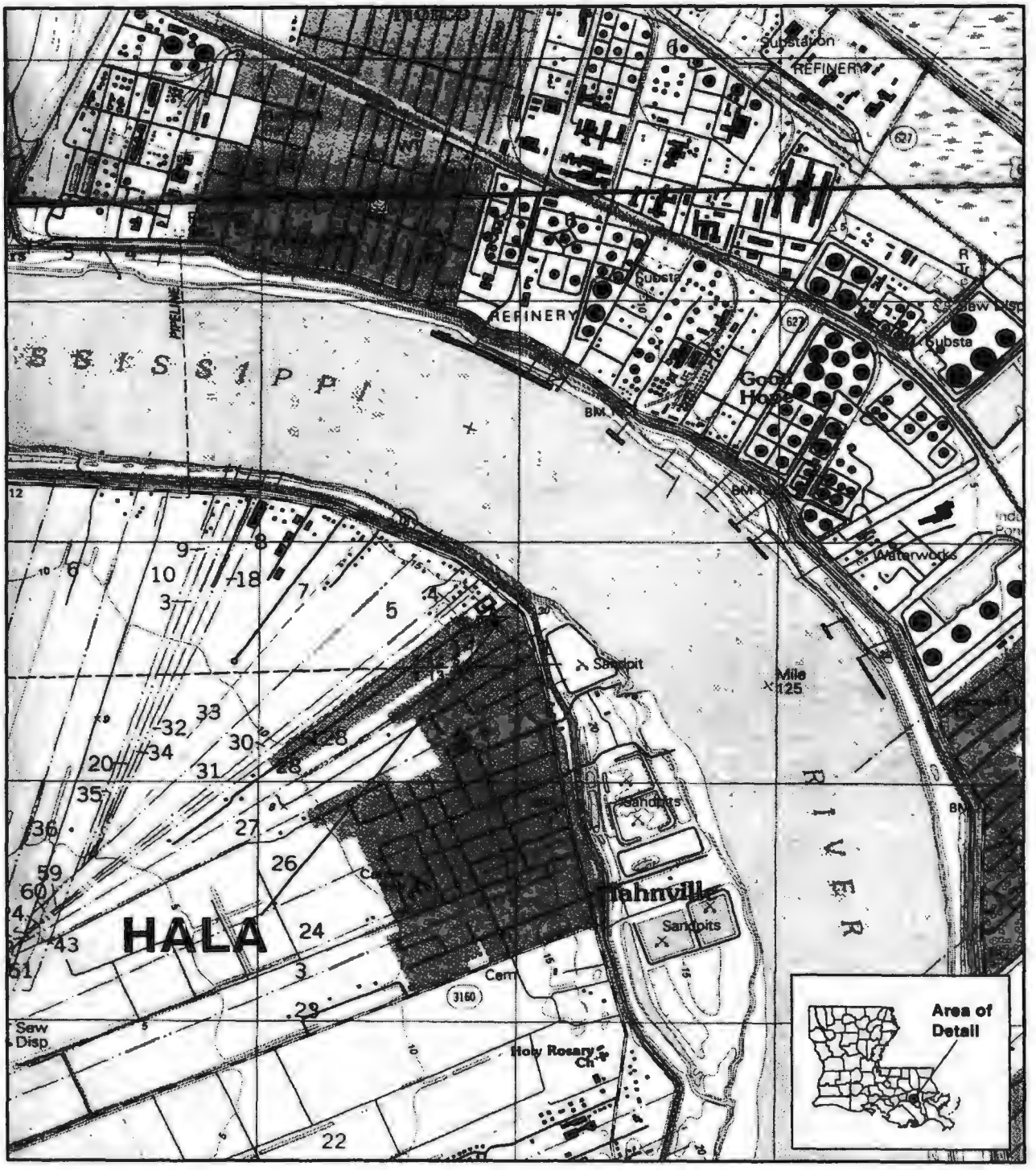
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-9
Texarkana, Arkansas (GREY) Monitoring Station



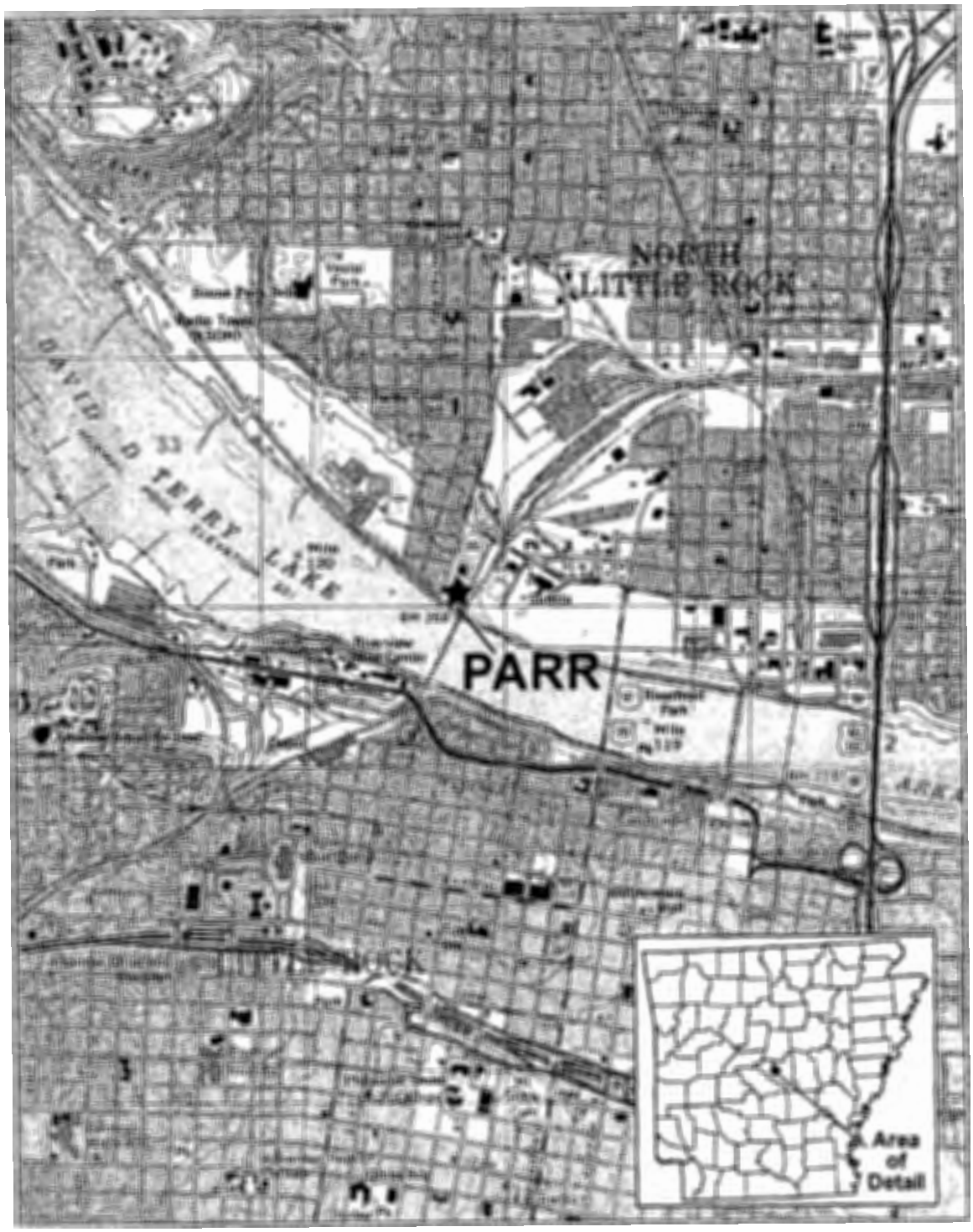
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-10
Hahnville, Louisiana (HALA) Monitoring Station



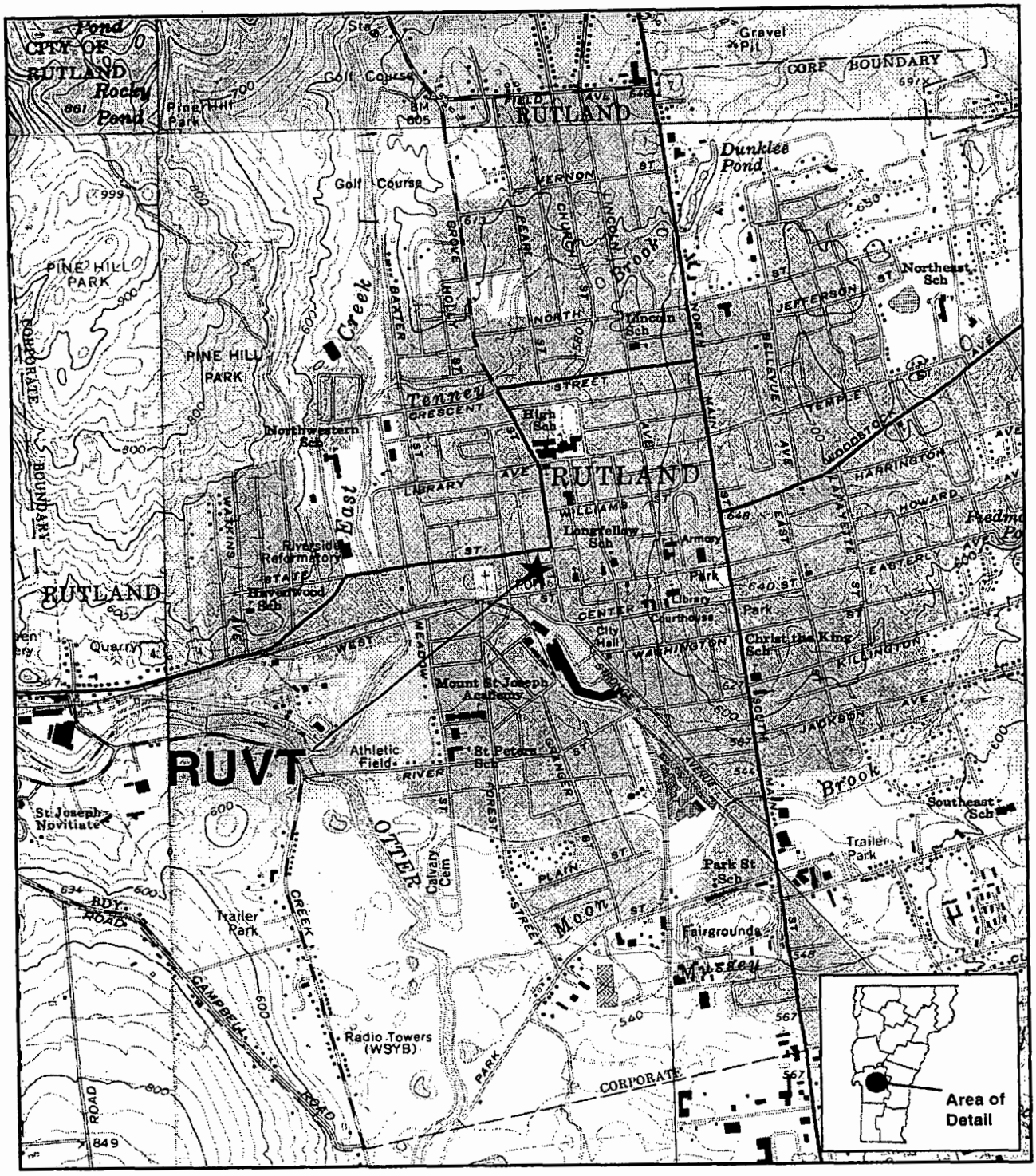
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-11
North Little Rock, Arkansas (PARR) Monitoring Station



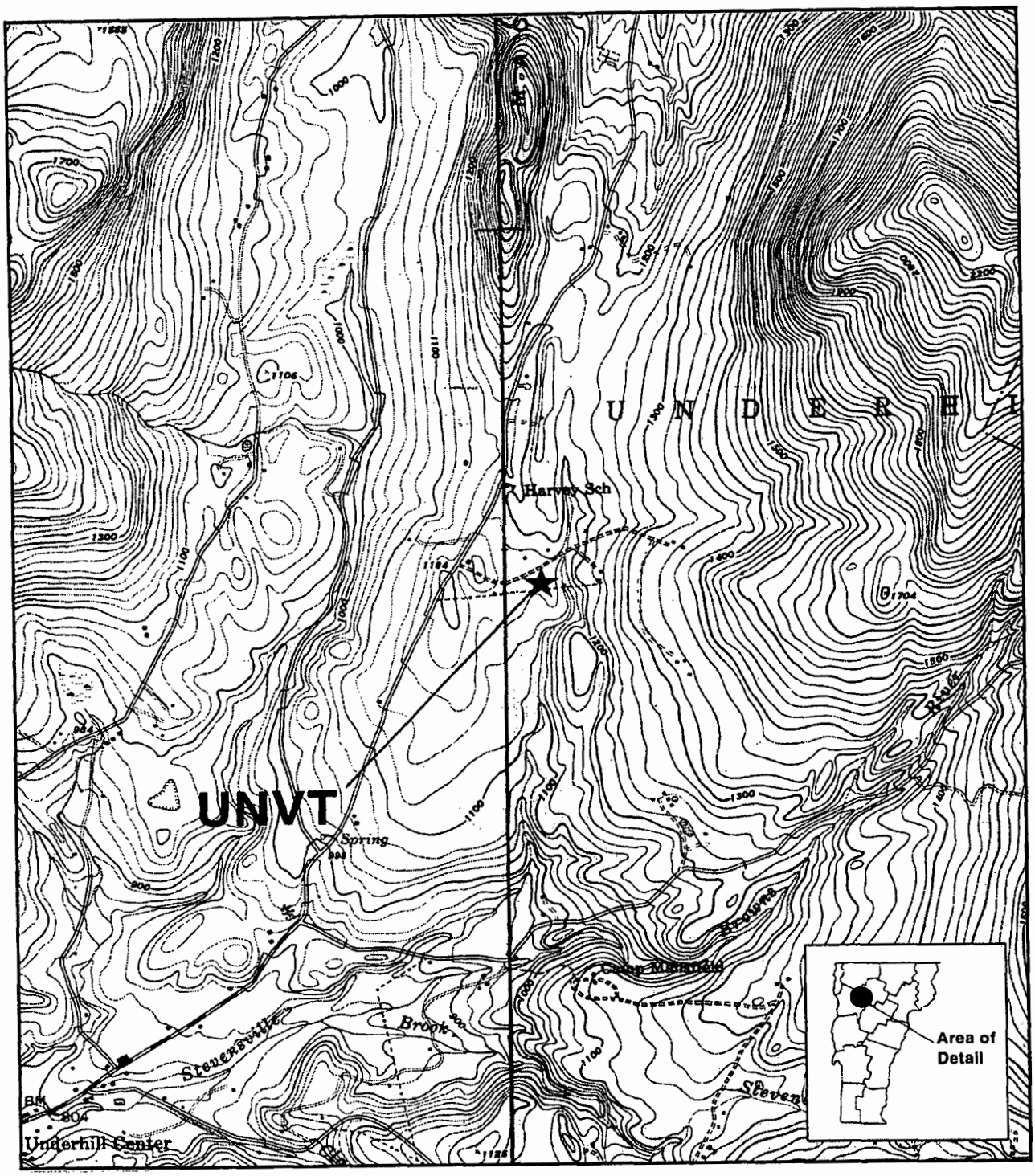
Source: USGS 7.5 Minute Series. Map Scale: 1:24,000.

Figure 2-12
Rutland, Vermont (RUVT) Monitoring Station



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

Figure 2-13
Underhill, Vermont (UNVT) Monitoring Station



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

Figure 2-14
Facilities Within 10 Miles of B2LA That Reported to TRI in 1997

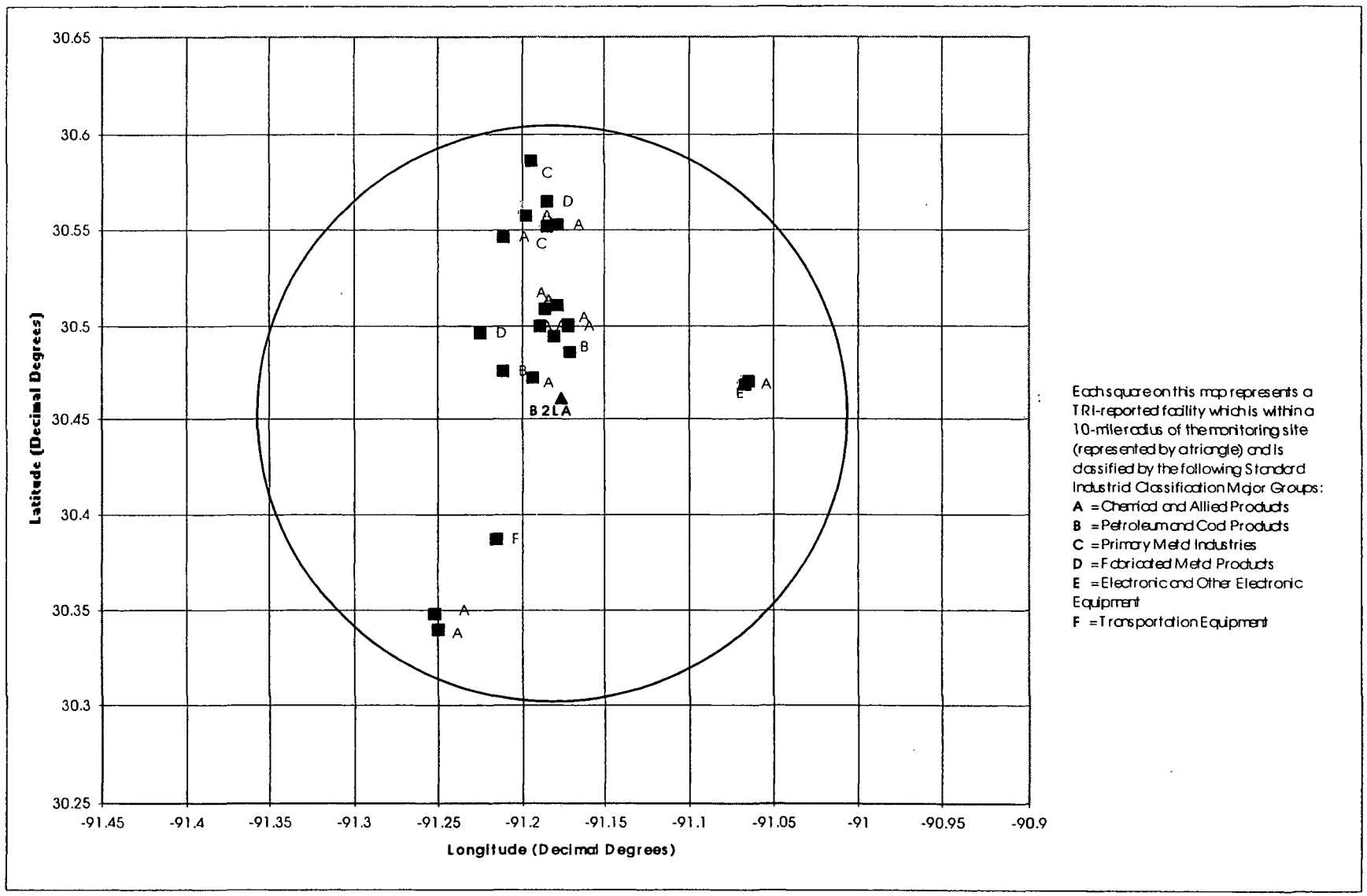


Figure 2-15
Facilities Within 10 Miles of BRVT That Reported to TRI in 1997

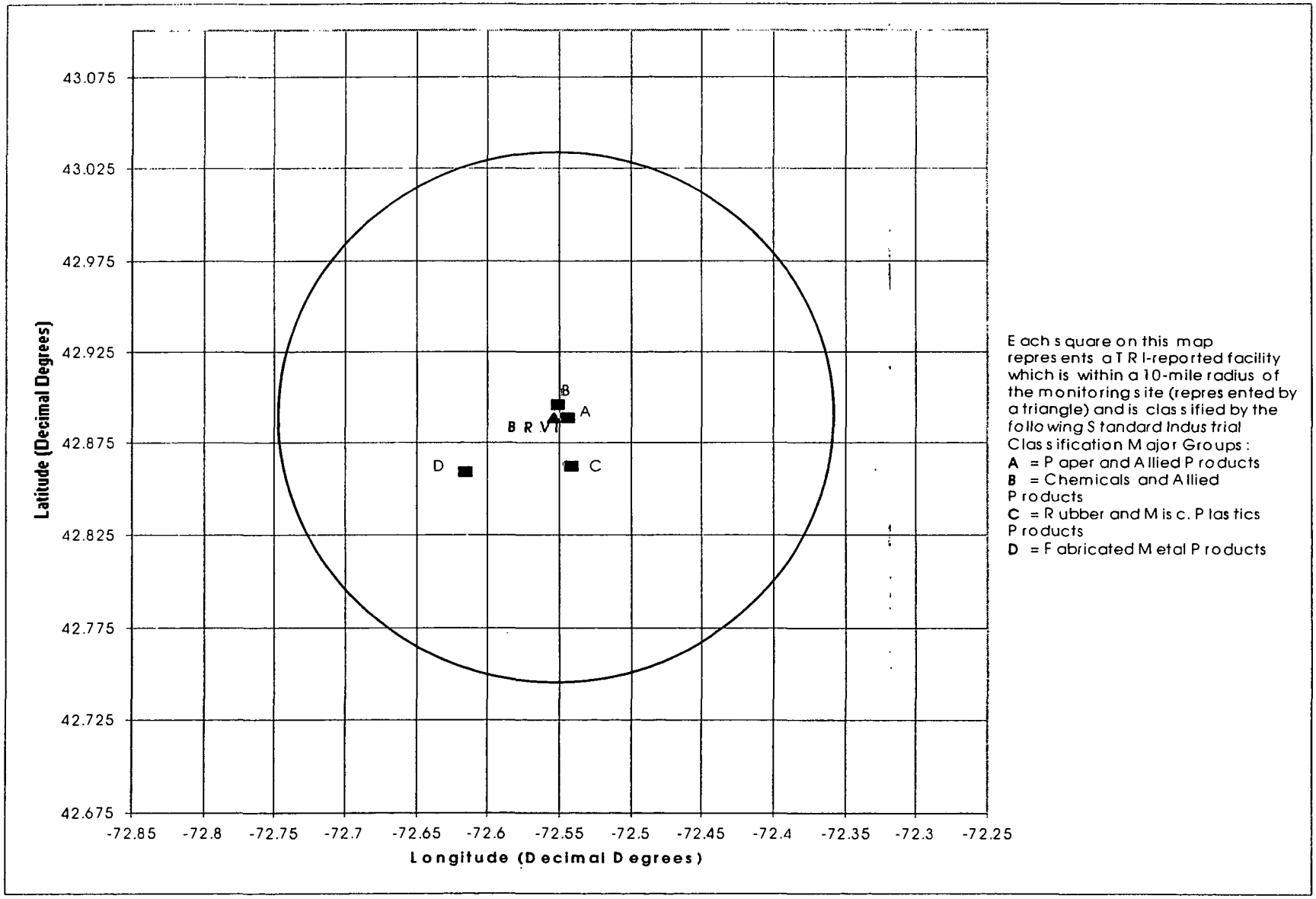


Figure 2-16
Facilities Within 10 Miles of BUND That Reported to TRI in 1997

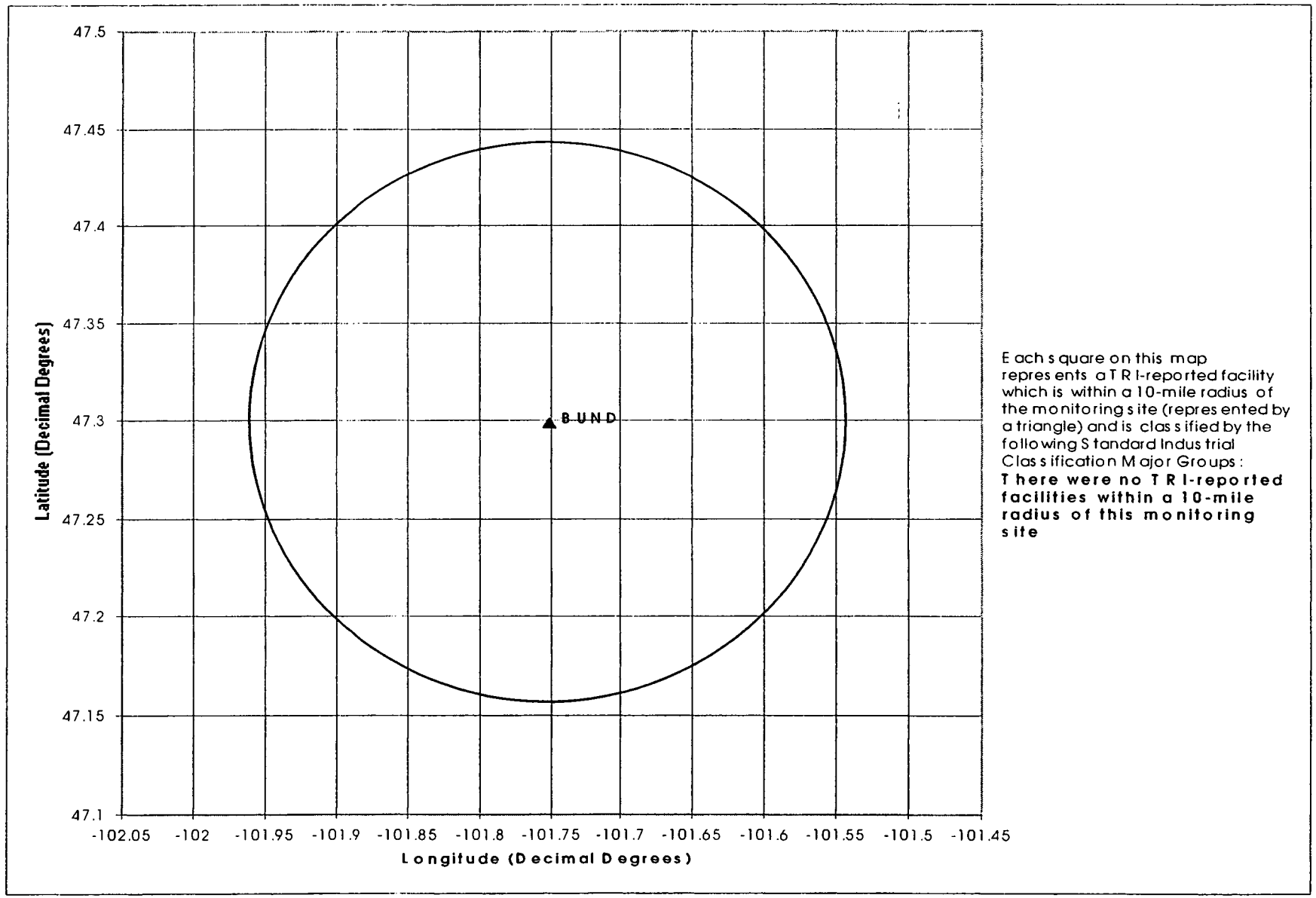


Figure 2-17
Facilities Within 10 Miles of BUVT That Reported to TRI in 1997

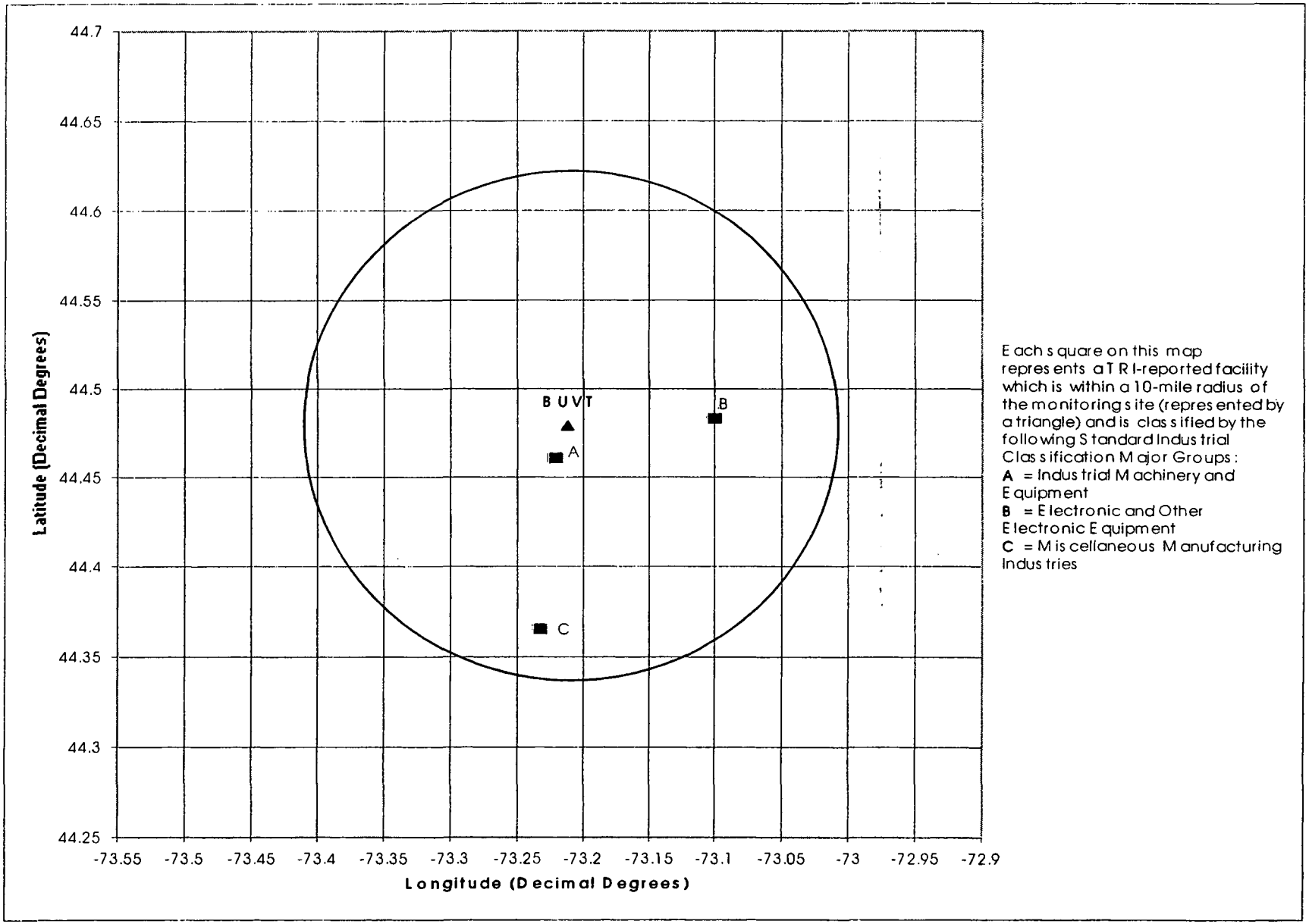


Figure 2-18
Facilities Within 10 Miles of CANJ That Reported to TRI in 1997

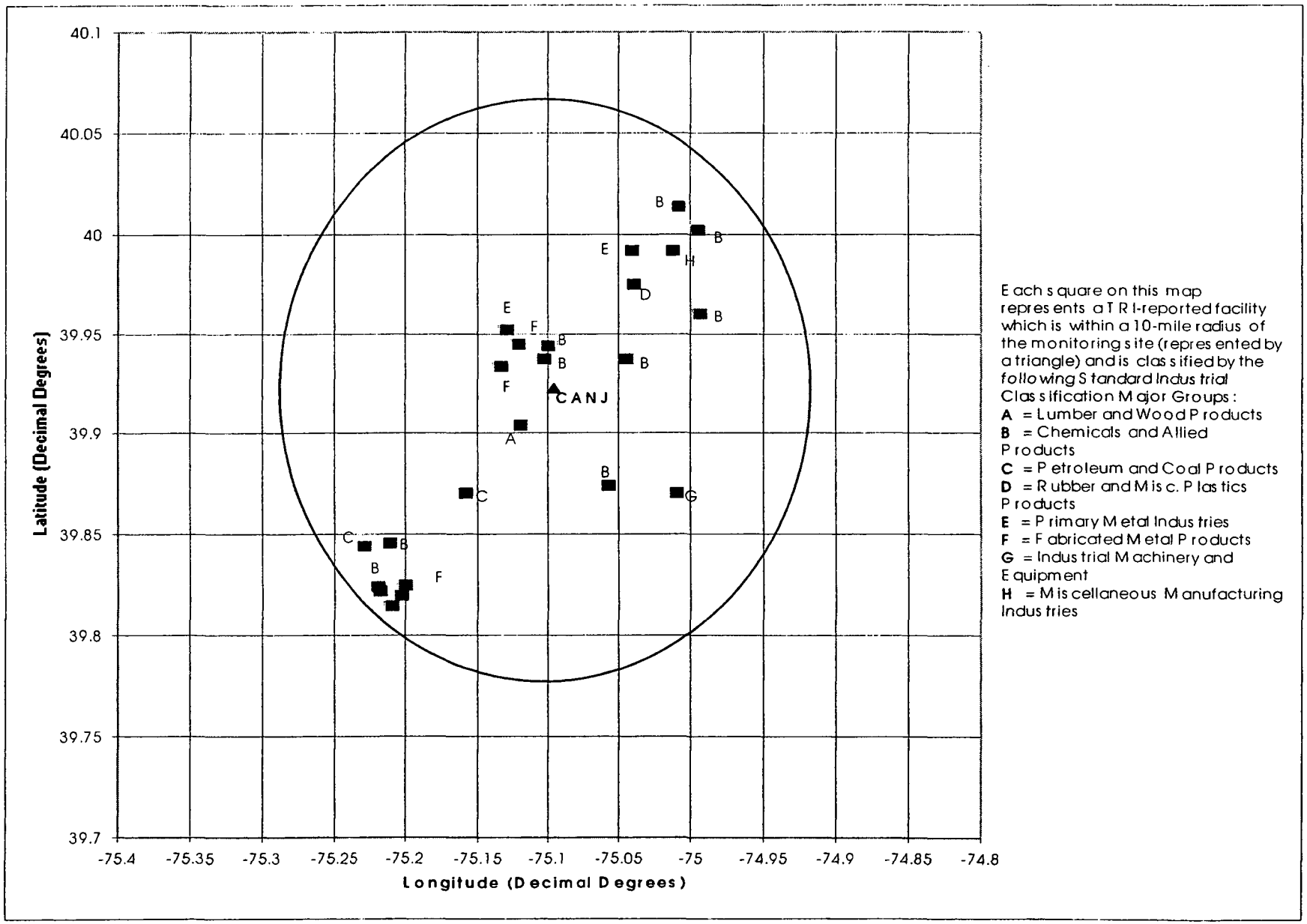


Figure 2-19
Facilities Within 10 Miles of EPTX That Reported to TRI in 1997

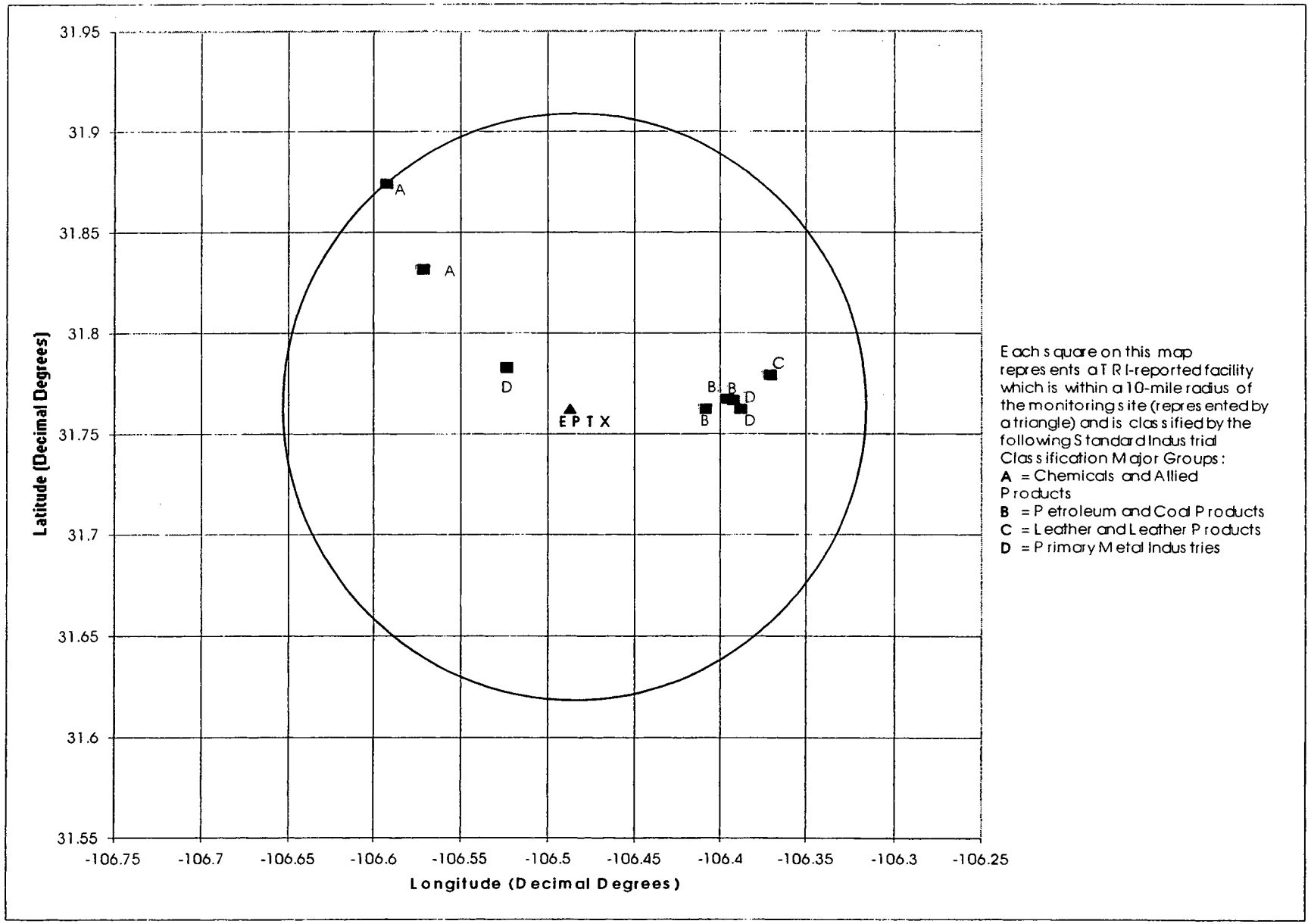


Figure 2-20
Facilities Within 10 Miles of GALA That Reported to TRI in 1997

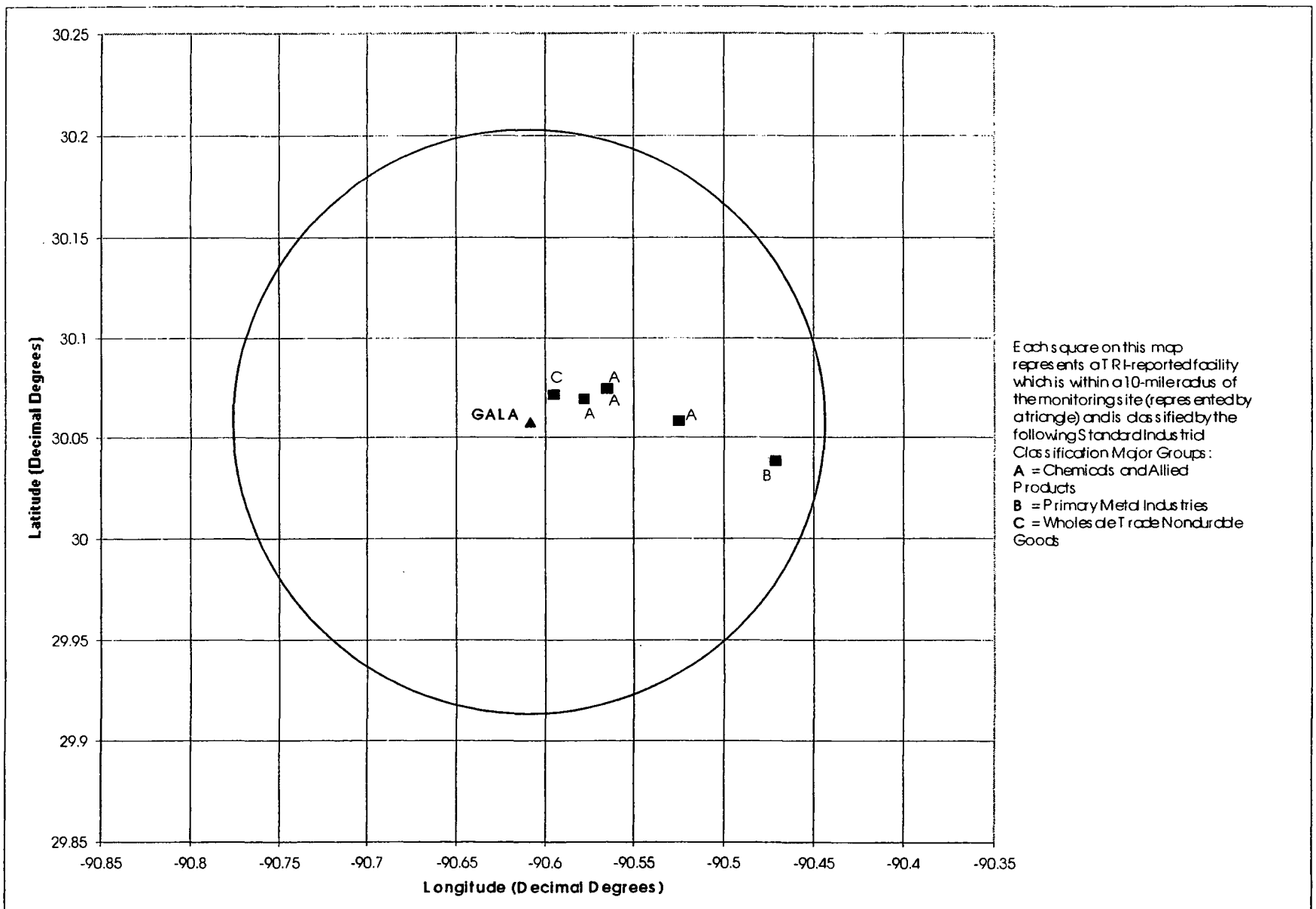


Figure 2-21
Facilities Within 10 Miles of GREY That Reported to TRI in 1997

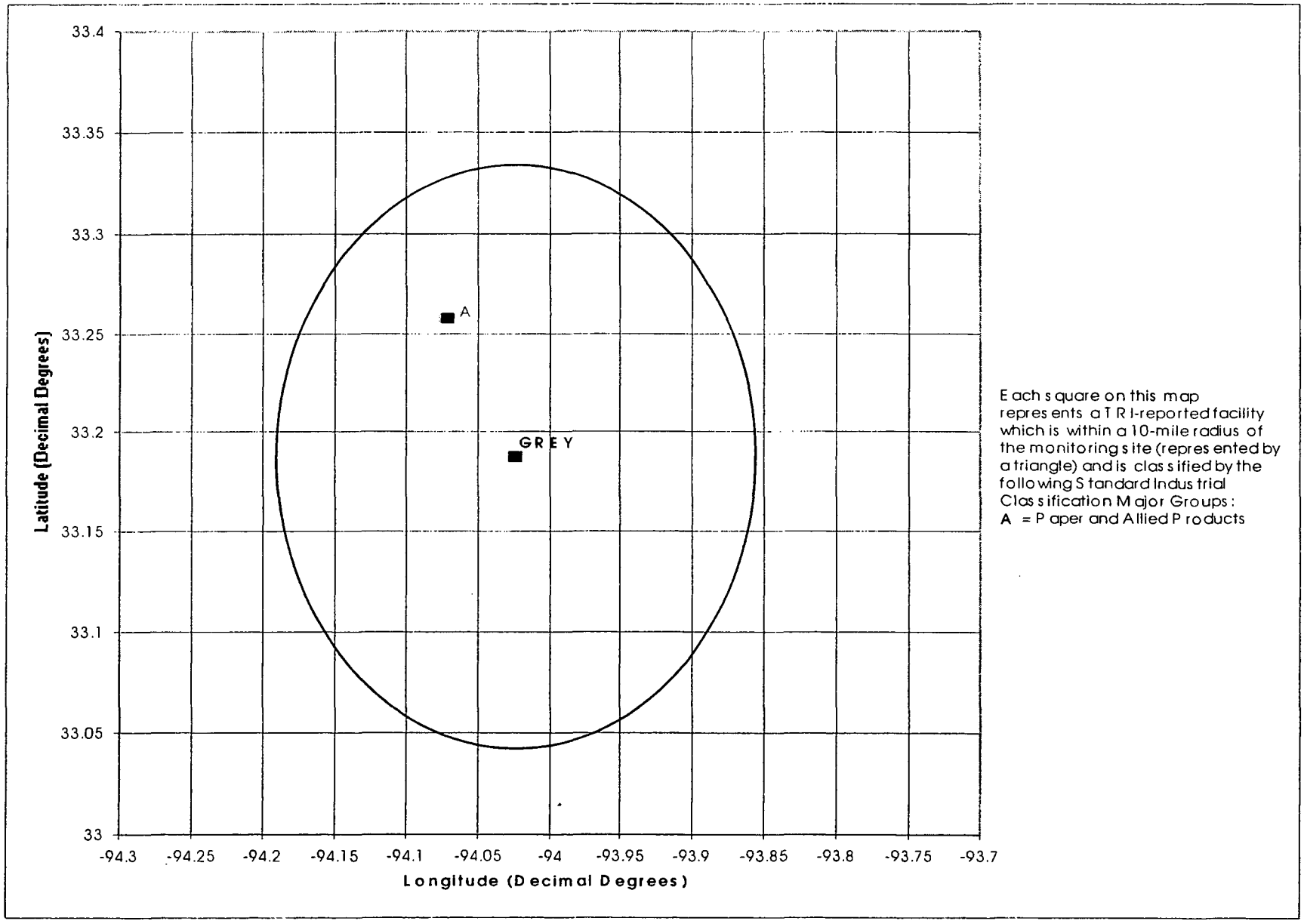


Figure 2-22
Facilities Within 10 Miles of HALA That Reported to TRI in 1997

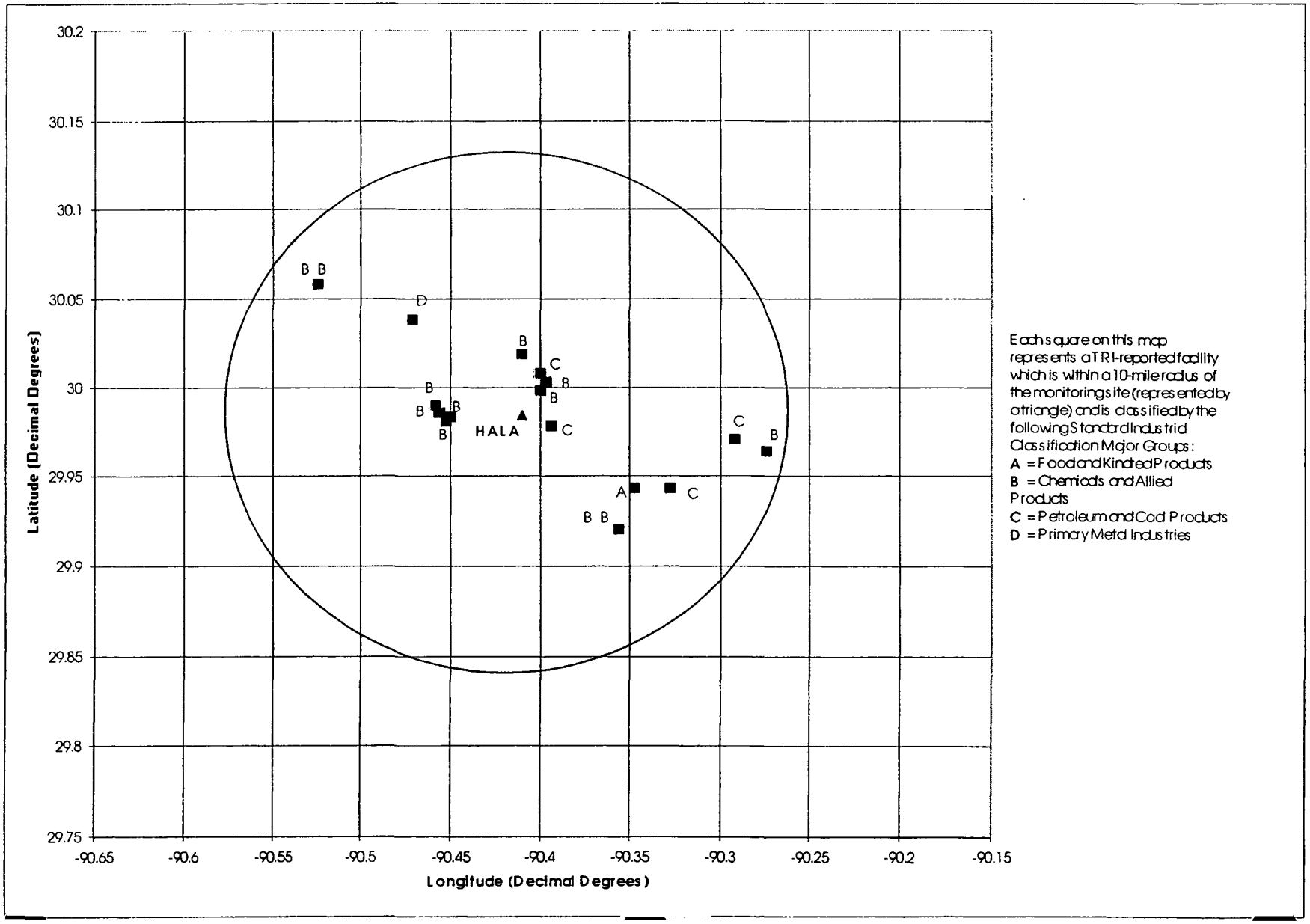


Figure 2-23
Facilities Within 10 Miles of PARR That Reported to TRI in 1997

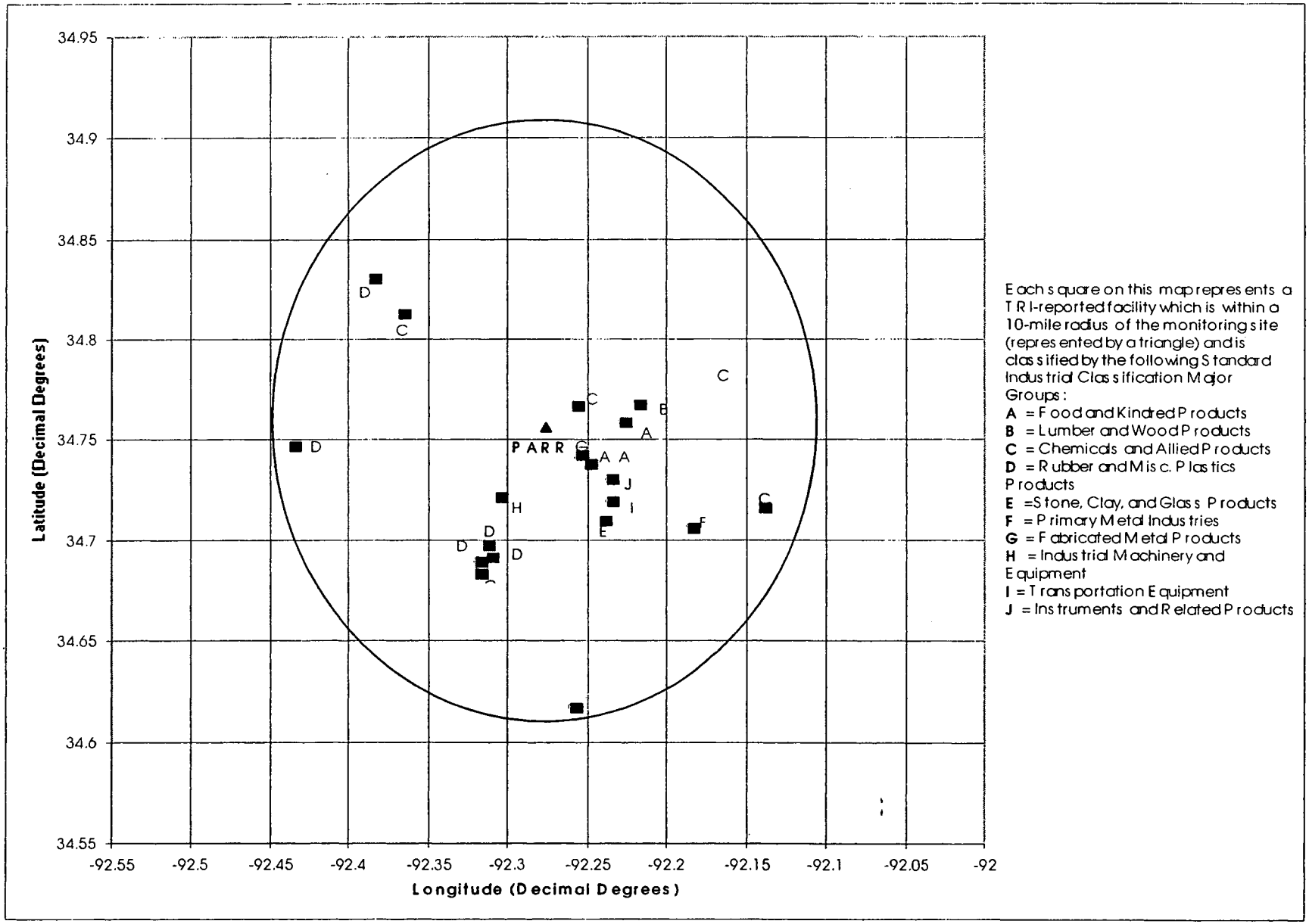


Figure 2-24
Facilities Within 10 Miles of RUVT That Reported to TRI in 1997

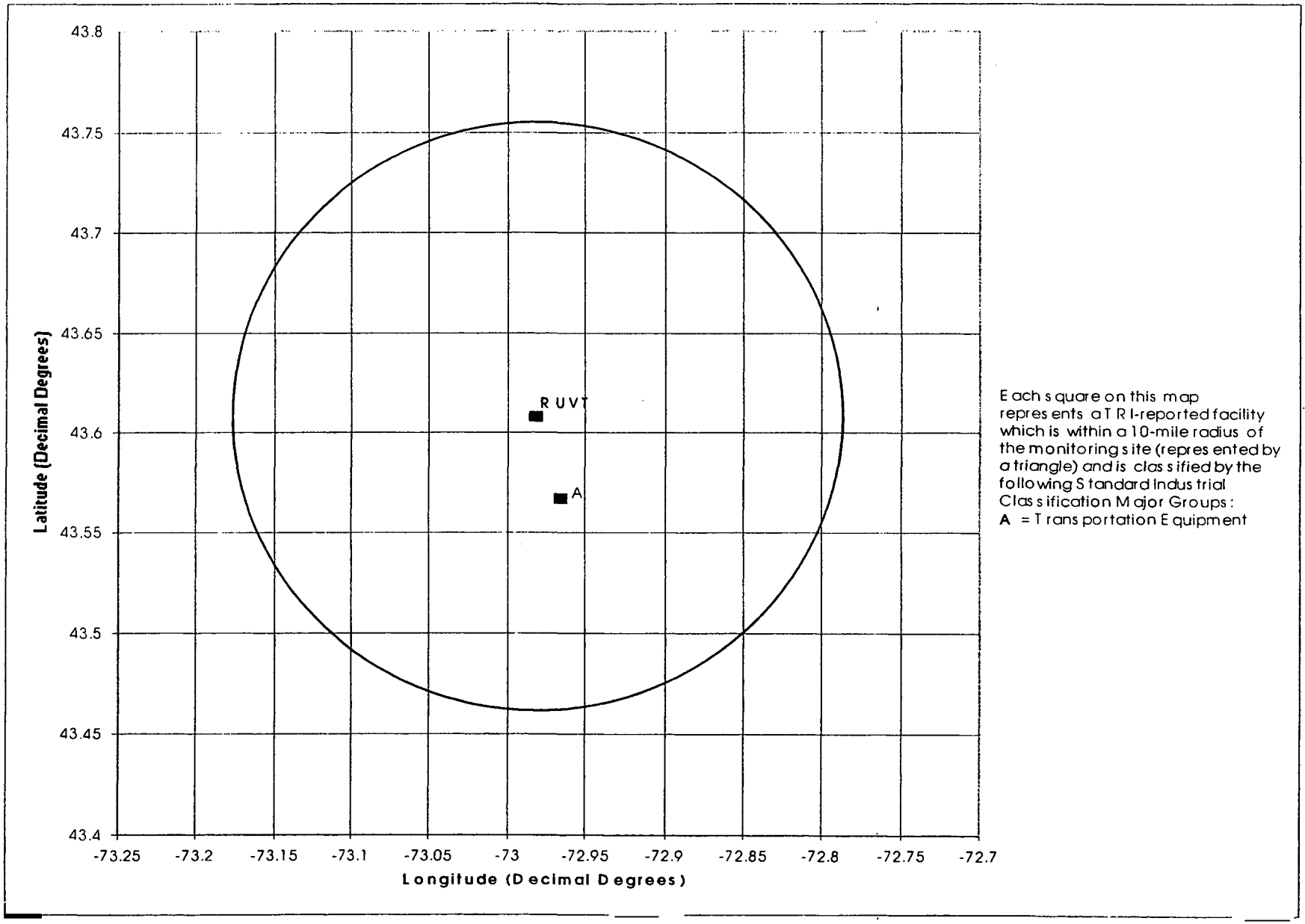


Figure 2-25
Facilities Within 10 Miles of UNVT That Reported to TRI in 1997

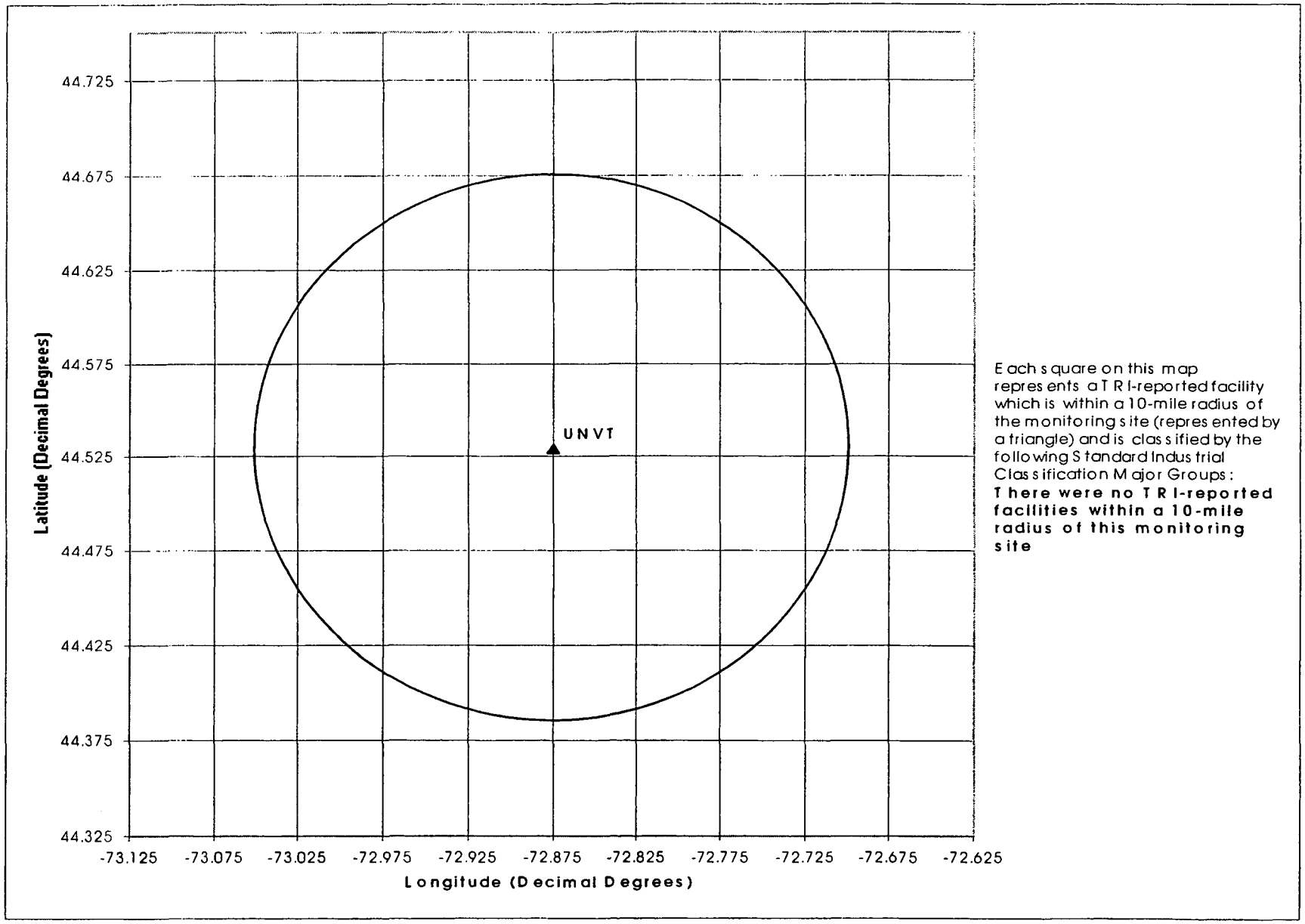


Table 2-1
Monitoring Station Participation in the UATMP

Monitoring Station	Program Years During Which Station Participated in the UATMP				
	1994	1995	1996	1997	1998
Baton Rouge, LA (B2LA)		✓	✓	✓	✓
Beulah, ND (BUND)					✓
Brattleboro, VT (BRVT)		✓	✓	✓	✓
Burlington, VT (BUVT)		✓	✓	✓	✓
Camden, NJ (CANJ)	✓	✓	✓	✓	✓
El Paso, TX (EPTX)		✓	✓	✓	✓
Garyville, LA (GALA)		✓	✓	✓	✓
Hahnville, LA (HALA)		✓	✓	✓	✓
North Little Rock, AR (PARR)				✓	✓
Rutland, VT (RUVT)		✓	✓	✓	✓
Texarkana, AR (GREY)				✓	✓
Underhill, VT (UNVT)		✓	✓	✓	✓

Note: Some of the stations shown in the table participated in UATMPs prior to the 1994 program. However, this report only considers ambient air monitoring data collected during the current and previous procurements (i.e., UATMP program years 1994 through 1998).

Table 2-2
Text Descriptions of the 1998 UATMP Monitoring Locations

Monitoring Location	Description of the Immediate Surroundings
Baton Rouge, LA	Of the 1998 UATMP monitoring locations, Baton Rouge has the third highest population density within ten miles of the monitoring station. Located in downtown Baton Rouge, the monitoring site is in the back parking lot of an office building, directly across from the city motor pool. Numerous industrial facilities, including refineries and chemical manufacturing plants, are located within a ten mile radius. Interstate Highway 110 passes within two blocks of the monitoring station.
Beulah, ND	Beulah, North Dakota, located in Mercer County, is a rural, agricultural area with primarily wheat, small grains, and cattle farms. There are six lignite coal-fired power plants within thirty miles of Beulah, one to the east-southeast; one to the northeast; two to the east; one to the northwest; and one to the southwest. There is a petroleum refinery and a lignite coal-fired power plant fifty miles southeast of Beulah. There is a lignite coal mine located north of the town, one to the south-southwest of town and one to the southeast of town. The monitoring station is located in the approximate area of two coal-fired power plants and a coal gasification plant (the only functioning one in the nation). There is one power plant seven miles to the southwest of the monitoring station; another is six miles to the northwest; and the gasification plant is five miles to the northwest.
Brattleboro, VT	Brattleboro, a small city in southern Vermont, has the second lowest population density of the 1998 UATMP monitoring locations. The monitoring station is located north of town in a vacant lot adjacent to a farm and garden center. The monitoring station is in a moderately industrial area, not immediately adjacent to heavily traveled roadways. Interstate Highway 91 passes within one mile of the monitoring station.
Burlington, VT	Burlington is Vermont's largest city, but it is moderately sized by national standards. The monitoring site is in the center of downtown Burlington, near several heavily traveled streets, two large parking lots, and two gas stations.
Camden, NJ	A suburb of Philadelphia, Pennsylvania, Camden has the highest population density of the 1998 UATMP monitoring locations. Although the monitoring site is in a residential area, numerous industrial facilities and busy roadways are located within a ten mile radius. The monitors are situated in a parking lot of a business complex.
El Paso, TX	Located in western Texas, just across the border from Mexico and near the border of New Mexico, the region surrounding the El Paso monitoring station has the second highest population density of the 1998 UATMP monitoring locations. The monitoring site is located downtown, in a high-traffic area.

Table 2-2 (Continued)
Text Descriptions of the 1998 UATMP Monitoring Locations

Monitoring Location	Description of the Immediate Surroundings
Garyville, LA	Garyville is a small town located on the Mississippi River between the cities of Baton Rouge and New Orleans. The monitoring site is located on the property of the Garyville Elementary School. A large refinery and other industrial facilities are located nearby.
Hahnville, LA	Hahnville, another Mississippi River town, is located approximately 15 miles southeast of Garyville. A large refinery is located directly across the river from the monitoring station, and many other industrial facilities are located in close proximity. Total TRI-reported emissions from facilities near the Hahnville monitoring station were second highest among TRI emissions associated with the 1998 UATMP monitoring locations.
North Little Rock, AR	The downtown area of the largest city in Arkansas, Little Rock, is directly across the Arkansas River from the monitoring station. Three interstate highways (I-30, I-40, and I-630), and numerous heavily traveled streets pass within approximately one mile of the monitoring station. The monitors are adjacent to a railroad track, a diesel tank farm, vacant land, a residential neighborhood, and the river.
Rutland, VT	Rutland is a moderately sized city in central Vermont. The monitoring station is located in a parking lot in downtown Rutland. A heavily traveled state highway and several busy city streets run within 1 mile of the monitoring station.
Texarkana, AR	The monitoring station is located in a cow pasture, about ten miles south of Texarkana, Arkansas, and less than one mile east of the Texas-Arkansas border, in an area with low density population and minimal effects of motor vehicle traffic. There are no interstate highways and very few heavily traveled roads in the immediate vicinity of the monitors. Some large industrial facilities include a paper mill and a natural gas purification plant located within several miles of the monitoring station.
Underhill, VT	The Underhill monitoring site is located in a rural area, about 20 miles east of Burlington. The site is at the base of Mount Mansfield, in a remote field surrounded by forest over 10 miles from a city with population greater than 10,000. Not surprisingly, the area surrounding the Underhill monitoring station has very low population density and the lowest total emissions from industrial facilities of the 1998 UATMP monitoring locations. Consequently, this site is viewed as a background site by the State of Vermont.

Table 2-3
Site Descriptions for the 1998 UATMP Monitoring Stations

1998 UATMP Code	AIRS Site Code	Location	Population Residing Within 10 Miles of the Monitoring Station [a]	Number of Facilities Located Within 10 Miles of the Monitoring Station That Reported Air Releases of UATMP Compounds to the TRI[b]	Closest National Weather Service Station
B2LA	22-033-0009	Baton Rouge, LA	349,914	18	Baton Rouge/Ryan
BRVT	50-025-0004	Brattleboro, VT	30,556	1	Springfield
BUND	38-057-004	Beulah, ND	7,589	0	Bismarck Municipal Airport
BUVT	50-007-0003	Burlington, VT	116,731	3	Burlington
CANJ	34-007-0003	Camden, NJ	2,031,811	22	Philadelphia NE
EPTX	48-141-0027	El Paso, TX [c]	489,834	8	El Paso International Airport
GALA	22-095-0002	Garyville, LA	61,075	6	Baton Rouge/Ryan
GREY	05-091-0096	Texarkana, AR	95,148	1	Texarkana RGNL/Webb
HALA	22-089-0003	Hahnville, LA	82,191	20	New Orleans
PARR	05-119-0007	North Little Rock, AR	168,601	15	Little Rock Adams
RUVT	50-021-0002	Rutland, VT	30,876	1	Rutland State
UNVT	50-007-0007	Underhill, VT[d]	31,960	0	Burlington

[a] Reference: http://link-usa.com/zipcode/pop.htm
[b] Reference: TRI, 1997.
[c] The El Paso, Texas, monitoring station is located less than 10 miles from the United States–Mexico border. Because only U.S. census and industry data were reviewed for this study, the listed site characteristics may understate the actual population and number of industrial sources near these monitoring stations.
[d] The center of the City of Essex Junction (population 18,489) is 11.1 miles from the Underhill monitoring site. The population within 10 miles of UNVT includes one half of the Essex Junction population.

Table 2-4
VOC Detection Limits

Compound	Method Detection Limit (ppbv)
Hydrocarbons	
Acetylene	0.07
Benzene	0.06
1,3-Butadiene	0.05
Ethylbenzene	0.10
n-Octane	0.09
Propylene	0.03
Styrene	0.11
Toluene	0.10
1,2,4-Trimethylbenzene*	0.09
1,3,5-Trimethylbenzene*	0.08
m-,*p*-Xylene	0.08
o-Xylene	0.03
Halogenated Hydrocarbons	
Bromochloromethane	0.04
Bromodichloromethane	0.05
Bromoform	0.12
Bromomethane	0.04
Carbon Tetrachloride	0.09
Chlorobenzene	0.04
Chloroethane	0.06
Chloroform	0.04
Chloromethane	0.06
Chloromethylbenzene*	0.18
Chloroprene	0.03
Dibromochloromethane	0.04
1,2-Dibromoethane*	0.05
m-Dichlorobenzene	0.09
o-Dichlorobenzene	0.10
p-Dichlorobenzene	0.08
1,1-Dichloroethane	0.03
1,2-Dichloroethane	0.08
1,1-Dichloroethene*	0.04
cis-1,2-Dichloroethylene*	0.07
trans-1,2-Dichloroethylene	0.05
1,2-Dichloropropane	0.09
cis-1,3-Dichloropropene	0.03

Table 2-4 (Continued)
VOC Detection Limits

Compound	Method Detection Limit (ppbv)
Halogenated Hydrocarbons (Continued)	
trans-1,3-Dichloropropene	0.03
Dichlorodifluoromethane*	0.04
Dichlorotetrafluoroethane*	0.03
Hexachloro-1,3-Butadiene*	0.11
Methylene Chloride	0.10
1,1,2,2-Tetrachloroethane	0.05
Tetrachloroethylene	0.10
1,2,4-Trichlorobenzene*	0.09
1,1,1-Trichloroethane	0.06
1,1,2-Trichloroethane	0.03
Trichloroethylene	0.06
Trichlorofluoromethane*	0.02
Trichlorotrifluoroethane*	0.02
Vinyl Chloride	0.07
Polar Compounds	
Acetonitrile	0.21
Acrylonitrile	0.06
Ethyl Acrylate	0.04
Ethyl *tert*-Butyl Ether	0.05
Methyl Ethyl Ketone	0.03
Methyl Isobutyl Ketone	0.07
Methyl Methacrylate	0.06
Methyl *tert*-Butyl Ether	0.03
tert-Amyl Methyl Ether	0.06

*Data for these compounds have not been reported in previous UATMP reports. Because *m*-xylene and *p*-xylene elute from the GC column at the same time, the VOC analytical method can only report the sum of *m*-xylene and *p*-xylene concentrations and not concentrations of the individual compounds.

Table 2-5
SNMOC Method Detection Limits

Compound	Method Limit		Compound	Method Limit	
	ppbC	ppbv		ppbC	ppbv
Acetylene/Ethane	0.87	0.44	Methylcyclohexane	0.68	0.10
Benzene	0.78	0.13	Methylcyclopentane	0.78	0.13
1,3-Butadiene	0.72	0.18	2-Methylheptane	0.86	0.11
n-Butane	0.72	0.18	3-Methylheptane	0.86	0.11
cis-2-Butene	0.72	0.18	2-Methylhexane	0.68	0.10
trans-2-Butene	0.72	0.18	3-Methylhexane	0.68	0.10
Cyclohexane	0.78	0.13	2-Methylpentane	0.78	0.13
Cyclopentane	0.55	0.11	3-Methylpentane	0.78	0.13
Cyclopentene	0.55	0.11	2-Methyl-1-Pentene	0.78	0.13
n-Decane	0.57	0.06	4-Methyl-1-Pentene	0.78	0.13
1-Decene	0.57	0.06	*n*-Nonane	0.69	0.08
m-Diethylbenzene	0.57	0.07	1-Nonene	0.69	0.08
p-Diethylbenzene	0.57	0.07	*n*-Octane	0.86	0.11
2,2-Dimethylbutane	0.78	0.13	1-Octene	0.86	0.11
2,3-Dimethylbutane	0.78	0.13	*n*-Pentane	0.55	0.11
2,3-Dimethylpentane	0.68	0.10	1-Pentene	0.55	0.11
2,4-Dimethylpentane	0.68	0.10	*cis*-2-Pentene	0.55	0.11
n-Dodecane	0.85	0.07	*trans*-2-Pentene	0.55	0.11
1-Dodecene	0.85	0.07	α-Pinene	0.69	0.07
2-Ethyl-1-Butene	0.78	0.11	β-Pinene	0.69	0.07
Ethylbenzene	0.86	0.10	Propane	0.76	0.25
Ethylene	0.87	0.44	*n*-Propylbenzene	0.69	0.08
m-Ethyltoluene	0.69	0.08	Propylene	0.76	0.25

Table 2-5 (Continued)
SNMOC Method Detection Limits

Compound	Method Limit		Compound	Method Limit	
	ppbC	ppbv		ppbC	ppbv
o-Ethyltoluene	0.69	0.08	Propyne	0.76	0.25
p-Ethyltoluene	0.69	0.08	Styrene	0.86	0.11
n-Heptane	0.68	0.10	Toluene	0.68	0.10
1-Heptene	0.68	0.10	*n*-Tridecane	0.85	0.07
n-Hexane	0.78	0.13	1-Tridecene	0.85	0.07
1-Hexene	0.78	0.13	1,2,3-Trimethylbenzene	0.69	0.08
cis-2-Hexene	0.78	0.13	1,2,4-Trimethylbenzene	0.69	0.08
trans-2-Hexene	0.78	0.13	1,3,5-Trimethylbenzene	0.69	0.08
Isobutane	0.72	0.18	2,2,3-Trimethylpentane	0.86	0.11
Isobutene/1-Butene	0.72	0.18	2,2,4-Trimethylpentane	0.86	0.11
Isopentane	0.55	0.11	2,3,4-Trimethylpentane	0.86	0.11
Isoprene	0.55	0.11	*n*-Undecane	0.85	0.08
Isopropylbenzene	0.69	0.08	1-Undecene	0.85	0.08
2-Methyl-1-Butene	0.55	0.11	*m*-,*p*-Xylene	0.86	0.05
2-Methyl-2-Butene	0.55	0.11	*o*-Xylene	0.86	0.11
3-Methyl-1-Butene	0.55	0.11			

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

Table 2-6
Carbonyl Detection Limits

Compound	Method Detection Limit (ppbv)
Acetaldehyde	0.005
Acetone	0.002
Acrolein*	0.002
Benzaldehyde	0.002
Butyr/Isobutyraldehyde	0.003
Crotonaldehyde	0.002
2,5-Dimethylbenzaldehyde	0.002
Formaldehyde	0.004
Hexaldehyde	0.002
Isovaleraldehyde	0.002
Propionaldehyde	0.002
Tolualdehydes	0.004
Valeraldehyde	0.004

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

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

* Acrolein was deleted from the Compendium Method TO-11A half way through the 1998 sampling season. Acrolein will therefore no longer be analyzed for the annual UATMP reports.

Table 2-7
Sampling Schedules and Completeness

Code	Monitoring Location	Sampling Period		VOC Data			Carbonyl Data		
		Starting Date	Ending Date	Days When Samples Were Collected	Days With Valid Samples	Completeness (Percent)	Days When Samples Were Collected	Days With Valid Samples	Completeness (Percent)
B2LA	Baton Rouge, LA	9/8/98	9/30/99	31	18	58	33	17	55
BRVT	Brattleboro, VT	9/2/98	9/21/99	33	31	100	33	31	100
BUND	Beulah, ND	2/3/99	9/27/99	36	32	103	37	34	110
BUVT	Burlington, VT	9/2/98	9/21/99	34	31	100	34	32	103
CANJ	Camden, NJ	9/8/98	9/15/99	31	29	94	31	29	94
EPTX	El Paso, TX	9/14/98	9/3/99	35	32	103	35	30	97
GALA	Garyville, LA	9/2/98	9/3/99	33	28	90	33	29	94
GREY	Texarkana, AR	9/1/98	3/31/99	19	12	63	19	11	58
HALA	Hahnville, LA	9/14/98	9/3/99	32	25	81	31	21	68
PARR	North Little Rock, AR	9/3/98	3/31/99	22	20	91	21	18	86
RUVT	Rutland, VT	9/2/98	9/21/99	35	31	100	33	28	90
UNVT	Underhill, VT	9/2/98	9/21/99	34	33	106	34	33	106
---	**Overall**	---	---	**375**	**321**	**91%**	**374**	**314**	**88%**

Note: The completeness data only indicate the number of days when samples were collected (maximum number of valid samples on a 12-day schedule for one year = 31). The actual number of samples collected exceeds the number of sampling days, because each site collected several duplicate samples.

3.0 Background Information: Ambient Air Monitoring Data Analysis and Interpretation

This section presents a general overview of the methodology used to summarize and interpret the ambient air monitoring data. In addition, basic information is presented concerning emissions sources and various factors that potentially impact ambient air quality.

3.1 Air Monitoring Data Summary Parameters

Because no single parameter can characterize the results of an extensive air monitoring program, four parameters are used together in this report to indicate the nature and extent of air pollution:

- Prevalence;
- Concentration range;
- Central tendency; and
- Variability.

Because these same four parameters were also used to summarize 1995-1997 UATMP monitoring data, readers can directly compare the data summaries in this section to those in previous final UATMP reports.

3.1.1 Prevalence

In the context of the UATMP, *prevalence* refers to the frequency with which an air pollutant is found at levels detectable by the corresponding sampling and analytical method. By indicating the frequency of detection, prevalence can help participating agencies identify compounds of concern in urban air pollution. Because this report is organized to evaluate trends in ambient air quality primarily on the basis of compound groups, the prevalent compounds are identified on a program-wide, not site-specific, basis.

More importantly, the number of nondetects for a given compound (indicated by low prevalence) must be considered when interpreting air monitoring results. Specifically, annual average concentrations cannot be accurately estimated for compounds that are not detected in a majority of samples (see Section 3.1.3). Other limitations posed by compounds having low prevalence are discussed throughout this report.

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

For the purposes of this report, a group of program-wide prevalent compounds was identified for each of the compound groups (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyls). These groups of program-wide prevalent compounds are discussed in detail in Sections 5 through 8 of this report. Because the UATMP does not characterize every component of air pollution, many compounds known to be prevalent in urban air (e.g., ozone and nitrous oxides) are not considered in this report. Readers should be careful not to confuse the most program-wide prevalent compounds identified by the 1998 UATMP with the most prevalent compounds in urban air pollution.

Program-wide prevalent compounds were identified using two statistical parameters: the count of the number of nondetects (ND); and the percent contribution of their mass concentrations. If a compound was detected in at least 75 percent of all the samples, and if the compound contributed to at least 90 percent of the mass concentration within a compound group, then that compound was initially considered "program-wide prevalent". Twenty compounds met both of these criteria (7 halogenated hydrocarbons, 8 hydrocarbons, 1 polar compound, and 4 carbonyls).

In order to provide a more statistically significant analysis, the following changes were made to the list of compounds initially identified as "program-wide prevalent":

- Because only one polar compound was initially classified as program-wide prevalent (methyl ethyl ketone), the next two highest polar compounds (acetonitrile and methyl-*tert*-butyl ether) were added.
- Because the number of halogenated hydrocarbons considered in the UATMP is more than twice for hydrocarbons (28 to 12), the next two highest halogenated hydrocarbons were added (tetrachloroethylene and *p*-dichlorobenzene), while the lowest "program-wide prevalent" hydrocarbon was removed (1,2,4-trimethylbenzene).

3.1.2 Concentration Range

For a given compound, *concentration range* refers to the span of measured concentrations, from lowest to highest. To indicate concentration range, the summary tables in Appendices D and E present the lowest and highest concentrations measured for each compound at each monitoring location. For most compounds, at least one sample at a given site resulted in a nondetect, so the lowest concentration reported is "ND." For compounds not detected in any samples at a site, both the lowest and the highest concentrations are reported as "ND."

Participating agencies might use these ranges to assess worst-case air pollution episodes, which can result from large one-time releases from industrial facilities or from atypical meteorological conditions. Peak concentrations also are useful for determining whether ambient air concentrations of acutely toxic compounds ever reach unsafe levels. However, because samples were collected only once every 12 days, it is possible that ambient air concentrations on some nonsampling days were higher than the "highest" concentration cited in the data summary tables. As a result, the highest concentrations cited in the UATMP summary tables are only estimates of the actual concentration peaks.

3.1.3 Central Tendency (Annual Average Concentrations)

Annual average ambient air concentrations are useful for many purposes, such as comparing air quality to environmental regulatory standards, evaluating what health effects might result from long-term exposure to air pollution, and assessing long-term trends in urban air quality. Although the UATMP does not directly *measure* annual average concentrations, these concentrations can be estimated as the *central tendency* of the distribution of a sufficient number of 24-hour average measurements. As discussed in Section 2.4, with the exceptions of the Beulah, ND, Texarkana and North Little Rock, AR, monitoring sites, all of the annual UATMP monitoring stations collected valid 24-hour average ambient air samples on at least 15 days during the 1998 program. This level of completeness ensures an adequate number of sampling days for *estimating* annual averages, according to the UATMP data quality objectives (USEPA, 1988).

Ambient air monitoring studies typically cite medians, arithmetic means, or geometric means as estimates of the central tendency of concentration distributions. Despite their common use, these three parameters can have significantly different values for the same distribution of ambient air monitoring data. By definition:

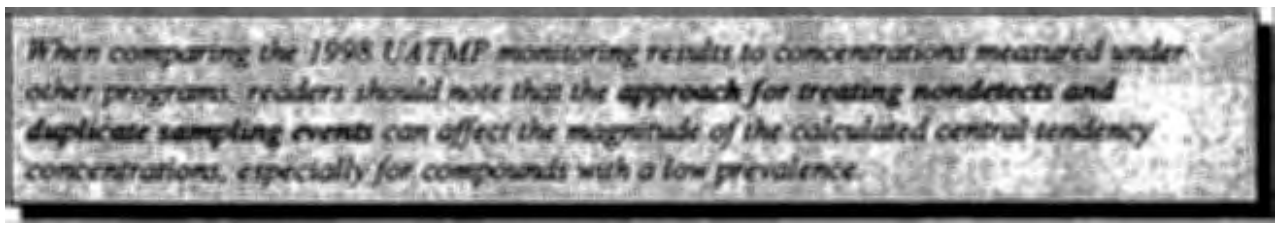
- ***Arithmetic means*** are the central tendencies of normally distributed data;
- ***Geometric means*** are the central tendencies of lognormally distributed data; and
- ***Medians*** are the midpoints of any data set.

Extensive analyses of the 1995 UATMP monitoring data showed that ambient air monitoring data for both VOCs and carbonyls generally fit lognormal distributions more closely than they fit normal distributions (ERG, 1997). This finding suggests that the geometric mean is a more appropriate measure of central tendency concentrations than either arithmetic means or medians. This conclusion has been reported in several other ambient air monitoring studies (Radian, 1990; Radian, 1991; Gilbert, 1987). Nonetheless, the ambient air monitoring summary tables in Appendices D and E include arithmetic mean, median, and geometric mean concentrations to

allow readers to compare UATMP results with monitoring studies that use these other data summary parameters.

To calculate representative arithmetic mean, median, and geometric mean concentrations, all nondetects and duplicate sampling results in the UATMP monitoring database were processed to assign each compound just one numerical concentration for each successful sampling day. Following the approach used to process the 1995, 1996, and 1997 UATMP monitoring data:

- Data analysts first *replaced all nondetect observations with concentrations equal to one-half of the compound's corresponding detection limit.* This approach is recommended for risk assessments involving environmental monitoring data (USEPA, 1989).
- Due to replicate analyses of duplicate samples, some sampling dates may have produced four different concentrations. For these dates, data analysts *entered the average of the concentrations from duplicate sampling and replicate analyses, so that the UATMP monitoring database included just one concentration for each compound for each sampling date.*



The accuracy of the central tendency concentrations ultimately depends on the accuracy of the individual measurements. As Section 9 describes, the carbonyl and VOC sampling and analytical methods measured ambient air concentrations of most compounds accurately, but the methods were least accurate for compounds consistently found at levels near their detection limits.

Furthermore, because nondetect observations cannot be assigned an accurate concentration, the number of nondetect results for a given compound limits the accuracy of the central tendency calculation. As an extreme example, a compound never detected during the UATMP has arithmetic mean, geometric mean, and median concentrations all exactly equal to one-half of the compound's detection limit, even though the actual central tendency concentration could be anywhere between zero and the detection limit. This observation suggests that central tendency concentrations for compounds with low prevalence (i.e., a large number of nondetects) should be interpreted with caution.

3.1.4 Variability

Variability refers to the spread of data observations about their central tendency value. Because emissions in urban areas and local meteorological conditions constantly change, ambient air quality also changes from one day to the next. By comparing data variability from compound to compound, however, participating agencies might better characterize the emissions sources that most significantly contribute to measured air concentrations for specific compounds.

For example, varying wind speeds and wind directions can cause emissions from *particular* industrial facilities to impact the air quality at a monitoring location at some times and not at other times. Therefore, compounds emitted primarily from such sources would be expected to have relatively high data variability. Because motor vehicle emissions are typically found *throughout* an urban area (as opposed to being found at only discrete locations), emissions from motor vehicles are almost always expected to impact the air quality at monitoring locations, with the extent of impact determined mainly by local meteorological conditions. Accordingly, compounds emitted primarily from sources ubiquitous to urban environments (such as motor vehicles) would be expected to have relatively low data variability.

This report uses two common measures of data variability to characterize fluctuations in the UATMP air monitoring data:

- ***Standard deviations*** represent an absolute measure of variability, meaning that standard deviations are usually higher for data distributions on higher values.

- ***Coefficients of variation*** provide a relative measure of variability by expressing variations relative to the magnitude of the mean concentration. Thus, the coefficient of variation is an appropriate (but not ideal) descriptive statistic for comparing variabilities across distributions for different monitoring locations.

Both standard deviations and coefficients of variation in this report were calculated from the processed UATMP monitoring database: *nondetect observations were assigned values equal to one-half their corresponding detection limit and duplicate samples and replicate analyses were replaced with a single average value.*

3.2 Air Monitoring Data Interpretation Parameters

3.2.1 Pearson Correlation Coefficients

Data correlations measure the strength and direction of relationships between variables. Applied to the UATMP monitoring data, these correlations can identify notable trends and patterns in the large volume of data that may not be readily apparent from the data summary parameters. These trends and patterns, or lack thereof, ultimately characterize those factors that most strongly affect levels of air pollution. This section presents a general overview of the statistical methodology used to calculate data correlations; additional information regarding their calculation can be found in most introductory statistics texts.

This report uses Pearson correlation coefficients to measure the degree of correlation between two variables, specifically to answer these basic questions:

- To what extent are 24-hour average concentrations of one compound related to 24-hour average concentrations of other compounds measured at the same time at the same monitoring location?

- To what extent are ambient air concentrations of VOCs and carbonyls related to meteorological parameters (temperature, wind information, and amount of sunshine)?

By definition, Pearson correlation coefficients always lie between -1 and 1:

- *A correlation coefficient of -1 indicates a perfectly "negative" relationship, indicating that increases in the magnitude of one variable are associated with proportionate decreases in the magnitude of the other variable, and vice versa.*
- *A correlation coefficient of 1 indicates a perfectly "positive" relationship, indicating that the magnitudes of two variables both increase and both decrease proportionately.*
- *Data that are completely uncorrelated have Pearson correlation coefficients of zero.*

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

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

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

- Data correlations were calculated only for the most program-wide prevalent compounds listed in Sections 5 through 8. Because the UATMP monitoring data are least precise for compounds having many nondetect observations (see Section 9), eliminating the less program-wide prevalent compounds improves the correlation analysis.

- Correlations were calculated from the processed UATMP monitoring database in which each compound has just one numerical concentration for each successful sampling date. Section 3.1 discussed the significance of using this processed database, in which nondetect observations, duplicate sampling events, and replicate laboratory analyses were all replaced with appropriate surrogate values. With these data quality measures, data analysts ensured that the calculated correlations characterize actual trends in the UATMP air monitoring data.

3.2.2 Correlations Between Concentrations of Different Compounds

For each sampling event at each monitoring location, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1998 UATMP. Trends in the strength and direction (positive or negative) of the correlations between the concentrations of compounds can lead to insights concerning common emissions sources. Comparison of site-specific and general trends can help determine if single or different factors impact ambient air concentrations of pollutants. Sections 5 through 8 describe general trends among the calculated correlation coefficients to offer insight into the origin of air pollution in urban locations.

3.2.3 Correlations Between Concentrations and Meteorological Parameters

The correlation between the measured ambient air concentration of a compound and the corresponding daily temperature provides a measure of how ambient air concentrations vary with temperature and how they vary with season. Compounds that tend to have higher concentrations in the summer months generally have positive correlations with temperature; compounds with higher concentrations during the winter months have negative correlations with temperature; and compounds with ambient air concentrations unaffected by season are usually uncorrelated with temperature. Ultimately, the magnitude and direction of seasonal variations in ambient air monitoring data provide insight into the factors that most strongly affect air quality. Sections 5 through 8 describe general trends among these calculated correlation coefficients.

To characterize the relationship between temperature and the 1998 UATMP monitoring data, a set of temperature-concentration Pearson correlation coefficients was calculated for each compound group at each monitoring location. These correlations evaluated how ambient air concentrations of each of the most program-wide prevalent compounds varied with the daily maximum, minimum, and average temperature on the corresponding sampling dates. The temperature data representative of each UATMP monitoring location were obtained from the National Climatic Data Center (NCDC), an organization that oversees a network of meteorological stations across the country.

Wind, sea level pressure, dew point temperature, and visibility data were also obtained for each UATMP monitoring location with the goal of determining if these meteorological parameters could be correlated with the compound concentrations. The wind speed and sea level pressure are good indications of the ability of the atmosphere to mix. Typically, slow-moving stagnating air will favor the mechanisms of increased VOC and carbonyl production. Dew point temperature can be an indication of the amount of moisture in the air, while the visibility (measured in miles) provides a good indication of haziness.

3.3 Emissions and Atmospheric Processes

Pollutants found in urban air come from a wide range of emissions sources. Industrial, motor vehicle, and natural emissions sources account for most pollutants found in urban air (Graedel, 1978). The nature and magnitude of these emissions largely determine the chemical composition of urban air pollution. Local meteorology and atmospheric chemistry, on the other hand, determine how quickly emitted chemicals disperse and react in ambient air.

3.3.1 Industrial Emissions Sources

Airborne chemical emissions from industrial facilities significantly contribute to air pollution in urban centers. Industrial air emissions are generally classified into two categories:

- ***Stack emissions*** from industrial facilities include all chemical releases through confined air streams, such as process vents and smoke stacks. Depending on the stack height and exit velocity, stack emissions may have maximum impacts on air quality at points close to, or several miles from, the point of release.

- ***Fugitive emissions*** account for all other chemical releases to the air from industrial facilities; typically, fugitive emissions result from evaporative losses and equipment leaks in chemical processing areas. Because fugitive emissions generally have no appreciable exit velocity and often occur close to ground level, these emissions have the greatest effect on air quality at locations closest to the point of release.

The total amount of chemicals released from industrial sources into the air through stack and fugitive emissions varies from urban area to urban area. Federal, state, and local agencies

have prepared inventories of emissions data to estimate total quantities of air releases within their jurisdictions. At the federal level, the TRI contains extensive emissions data for a wide range of industries and provides an excellent reference for evaluating how industrial emissions might impact ambient air concentrations of selected pollutants in different parts of the country. The accuracy of TRI data is not known, but TRI data accuracy is certainly dependent upon the accuracy of emissions estimates provided by industrial facilities. Sections 5 through 8 compare trends and patterns in TRI data to trends and patterns in the ambient air concentrations measured during the 1998 UATMP. Readers interested in more closely evaluating ambient air quality measured at specific monitoring locations should also refer to inventories of emissions data compiled by state and local agencies.

Toxics Release Inventory

Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) requires selected industrial facilities to disclose information characterizing environmental releases of, and waste management practices for, over 600 different hazardous chemicals. The TRI reporting requirements for reporting year 1995—the most recent year for which data were publicly available at the writing of this report—applied to facilities that:

- Have at least 10 full-time employees.
- Fall into Standard Industrial Classification (SIC) codes 20 through 39 (these include most industrial manufacturing facilities).
- Manufacture, process, or otherwise use hazardous chemicals in quantities exceeding established thresholds over the course of a calendar year.

Facilities meeting these criteria must submit to EPA either (1) "Form R" reports that specify the quantities of hazardous chemical released to the environment or transferred to offsite locations or (2) "Form A" reports that certify that chemical releases and waste management quantities total no more than 500 pounds. Every year, nearly 80,000 "Form R" and "Form A" reports are submitted to EPA and loaded into the TRI database. This report considers TRI emissions data almost exclusively from reporting year 1995. Emissions data from 1996 and 1997 are not yet publicly available on compact disk—the data release format that allows for the most sophisticated queries of emissions data (USEPA, 1997a).

3.3.2 Motor Vehicle Emissions Sources

Like industrial emissions sources, motor vehicles contribute significantly to air pollution in urban environments, so thorough analyses of urban air monitoring data must consider contributions from motor vehicle sources. Pollutants found in motor vehicle exhaust generally are combustion products or result from incomplete combustion of vehicle fuels. Although modern vehicles and, more recently, vehicle fuels have been engineered to minimize air emissions, all motor vehicles with internal combustion engines emit a wide range of chemical pollutants. The magnitude of these emissions in urban areas primarily depends on the volume of traffic, while the chemical profile of these emissions depends more on vehicle design and fuel content. Several studies have generated chemical profiles of motor vehicle exhaust (Conner et al., 1995), and such profiles provide additional context for analyzing spatial variations in ambient air monitoring data.

3.3.3 Natural Emissions Sources

Many natural processes release volatile compounds to the air. These processes include, but are not limited to, natural decay and biosynthesis in oceans and forests, fires in forests and grasslands, and volcanic eruptions. Some studies have reported that natural emissions may exceed both industrial and motor vehicle emissions on a global scale. In urban areas, however, the contributions of industrial and motor vehicle sources to air pollution probably outweigh the contribution of natural emissions. Accordingly, the data interpretations throughout this report focus on how emissions from motor vehicles and industry affect air quality, with a much lighter emphasis on the effect of emissions from natural sources.

3.3.4 Atmospheric Fate and Transport

Atmospheric fate and transport processes provide the link between emissions and ambient air quality. More specifically, atmospheric dispersion and photochemical reactions primarily determine the fate of chemicals emitted into the air. Atmospheric dispersion refers to the natural phenomena by which chemical emissions gradually move to regions of lower concentration by convection and diffusion. The rate at which emissions disperse depends on characteristics of the

emissions source (such as stack height and exit velocity) and on local meteorological conditions (such as cloud cover and wind velocity). Photochemical reactions both consume and produce pollutants in urban environments, and rates for the various reactions vary with temperature, solar radiation, and chemical composition.

Because atmospheric dispersion and photochemical reactions strongly affect the composition and magnitude of air pollution, both factors should be considered in a thorough review of ambient air monitoring data. Although sophisticated fate and transport computer models allow for a detailed quantitative analysis of these factors (USEPA, 1986), extensive site-specific modeling analyses are beyond the scope of this report.

4.0 Summary of 1998 UATMP Data

This section uses four parameters—prevalence, concentration range, central tendency, and variability—to provide an overview of the ambient air monitoring data collected during the 1998 UATMP. Sections 5 through 8 present more detailed interpretations of the trends and correlations in the 1998 UATMP data. Refer to the appendices for a complete presentation of the data:

- Appendix D: Summary Tables for VOC Monitoring
- Appendix E: Summary Tables for Carbonyl Monitoring
- Appendix F: VOC Raw Monitoring Data
- Appendix G: Carbonyl Raw Monitoring Data

Because the same four parameters were also used to summarize 1995-1997 UATMP monitoring data, readers can directly compare the data summaries in this section to those in previous final UATMP reports.

4.1 Data Summary Parameters for VOCs

Tables D-1 through D-12 in Appendix D use the four data summary parameters defined above to summarize the VOC monitoring results for the 1998 UATMP. The following paragraphs review the basic findings indicated by the VOC data summary tables.

4.1.1 Prevalence

While the prevalence of VOCs in ambient air varied significantly from compound to compound and from monitoring location to monitoring location, the majority of VOCs were present at a prevalence greater than 75 percent at most of the monitoring locations. To simplify data presentation and interpretation, for the purposes of this report, program-wide prevalent compounds were identified within each compound group (hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyls). As discussed in Section 3.1.1, the most

program-wide prevalent compounds are defined as the top compounds measured across the sampling sites in both number of nondetects and percentage contribution. The analyses and interpretations throughout this report focus primarily on these most program-wide prevalent compounds. For the 1998 UATMP, the program-wide prevalent VOCs are:

HYDROCARBONS
Acetylene
Benzene
Ethylbenzene
m-,*p*-xylene
o-xylene
Propylene
Toluene
HALOGENATED HYDROCARBONS
Carbon Tetrachloride
Chloromethane
p-Dichlorobenzene
Dichlorodifluoromethane
Methylene Chloride
Tetrachloroethylene
1,1,1-Trichloroethane
Trichlorofluoromethane
Trichlorotrifluoroethane
POLAR COMPOUNDS
Acetonitrile
Methyl Ethyl Ketone
Methyl *tert*-Butyl Ether

Because these compounds were consistently present at detectable levels, the UATMP monitoring data characterize ambient levels for these compounds much more accurately than they

characterize ambient levels for the VOCs with lower prevalence. Further, the high prevalence allows for a meaningful statistical analysis of data correlations and a thorough review of spatial variations and temporal variations in ambient air quality.

Readers interested in examining data trends for the less program-wide prevalent compounds more closely should refer to the summary tables in Appendix D and the raw monitoring data in Appendix F, but also should note the limitations posed by data sets with many nondetect observations.

4.1.2 Concentration Range

To efficiently summarize the concentration ranges cited in Appendix D, Table 4-1 indicates the number of monitoring stations that detected peak VOC concentrations within certain ranges. These data show that peak concentrations, like prevalence, varied significantly among compounds and monitoring stations. During the 1998 UATMP, measured ambient air concentrations of more than 80 percent of the *VOCs* identified by the analytical method never exceeded 1 ppbv. Specifically:

- More than 85 percent of the *hydrocarbon compounds* identified by the analytical method never exceeded 5 ppbv. Only *n*-octane never exceeded 1 ppbv.
- More than 94 percent of the *halogenated hydrocarbon compounds* identified by the analytical method never exceeded 1 ppbv; 99 percent never exceeded 5 ppbv. Only chloromethane and methylene chloride exceeded 1ppbv in greater than 50 percent of the samples.
- More than 70 percent of the *polar compounds* identified by the analytical method never exceeded 1 ppbv; more than 90 percent never exceeded 5 ppbv. Only methyl ethyl ketone exceeded 1 ppbv in 100 percent of the samples at all sampling locations.

4.1.3 Central Tendency

Figures 4-1 through 4-3 illustrate how central tendency concentrations for the program-wide prevalent VOCs varied from one monitoring location to the next. Although the spatial variations differ for each compound, the figure indicates several general data trends:

Figures 4-1 through 4-4 are presented in different scales due to variation in the ambient air concentrations of the compounds. Readers should carefully note the scale of each figure before making any comparisons.

- The geometric mean concentrations of some compounds (particularly carbon tetrachloride, *p*-dichlorobenzene, dichlorodifluoromethane, and trichlorofluoromethane) are nearly uniform across the 12 UATMP monitoring locations, while the geometric mean concentrations for most other compounds exhibit significant spatial variations.

- The profiles of geometric mean concentrations of the program-wide prevalent hydrocarbons (Figure 4-1) are nearly identical across all monitoring stations, with relatively higher concentrations consistently occurring at the El Paso, Texas, and Burlington, Vermont, monitoring stations and with the lowest concentrations consistently occurring at the Underhill, Vermont, and Beulah, North Dakota, monitoring stations.

- The geometric mean concentration profiles for the program-wide prevalent polar compounds (Figure 4-3) exhibit dramatic differences. Acetonitrile is present in relatively high concentrations at only one monitoring location (Baton Rouge, Louisiana) and at or near the detection limit at the remaining 11 monitoring locations. Methyl *tert*-butyl ether is present in relatively high concentrations at only one site (Camden, New Jersey), at moderate concentrations at three other locations, and at or near the detection limit at the remaining monitoring sites. Methyl ethyl ketone was reported from the Beulah, North Dakota monitoring location due to sampler contamination.

- The geometric mean concentrations of many compounds varied significantly, even among stations located in close proximity (e.g., Burlington, Brattleboro, Rutland, and Underhill; Baton Rouge, Garyville, and Hahnville).

To allow readers to compute summary statistics other than those shown in the data summary tables, the raw VOC monitoring data are included as Appendix F.

4.1.4 Variability

Table 4-2 lists, for each monitoring location, the three program-wide prevalent compounds with lowest coefficients of variation and the three program-wide prevalent compounds with highest. Only program-wide prevalent compounds are considered in this table because nondetect observations strongly influence variability. As with the trends in central tendency, the trends in variability vary from one site to the next, but some general trends are apparent:

- Ambient air concentrations of dichlorodifluoromethane, carbon tetrachloride, and chloromethane had very low variability at most of the monitoring locations.
- Concentrations of acetonitrile, toluene, and methylene chloride consistently varied greatly during the 1998 UATMP.

4.2 Data Summary Parameters for Carbonyls

Using the same four data summary parameters discussed in Section 4.1, the tables in Appendix E provide an overview of the carbonyl monitoring results from the 1998 UATMP. The raw monitoring data are included in Appendix G. The following paragraphs review the basic findings indicated by the carbonyl data summary tables.

4.2.1 Prevalence

Like the VOCs, prevalence of carbonyls in ambient air varied significantly from compound to compound and from monitoring location to monitoring location. With the exceptions of 2,5-dimethylbenzaldehyde, crotonaldehyde, and isovaleraldehyde, the carbonyls were generally present at a prevalence greater than 75 percent at all of the monitoring locations. For the purposes of this report, program-wide prevalent carbonyl compounds were identified. In the 1998 UATMP, the program-wide prevalent carbonyls are acetaldehyde, acetone, butyl/isobutyaldehyde, and formaldehyde. As noted in Section 2.5.2, the carbonyl sampling and analytical method cannot separate butyraldehyde and isobutryaldehyde, and instead reports the

sum of the concentrations for these two compounds, rather than reporting separate concentrations for each compound.

Readers interested in examining ambient air levels of less program-wide prevalent carbonyl compounds should refer to the raw monitoring data in Appendix G and the data interpretation methodologies in Section 8.

4.2.2 Concentration Range

Table 4-3 summarizes the highest concentrations of carbonyls measured during the 1998 UATMP. Like the VOCs, most carbonyls (greater than 75 percent) had concentration peaks of less than 1 ppbv. Specific trends identified include:

- At 11 of the 12 monitoring sites, acetone and acetaldehyde had peak concentrations greater than 1 ppbv.
- Formaldehyde had peaks greater than 1 ppbv at all of the monitoring stations and peaks greater than 5 ppbv at 6 of the 12 monitoring stations.

4.2.3 Central Tendency

Figure 4-4 illustrates how central tendency concentrations of the program-wide prevalent carbonyl compounds varied among the 1998 UATMP monitoring locations. Like the spatial variations shown for VOC central tendency concentrations, the spatial variations for carbonyl central tendency concentrations differ for each compound. Nonetheless, some general trends are apparent:

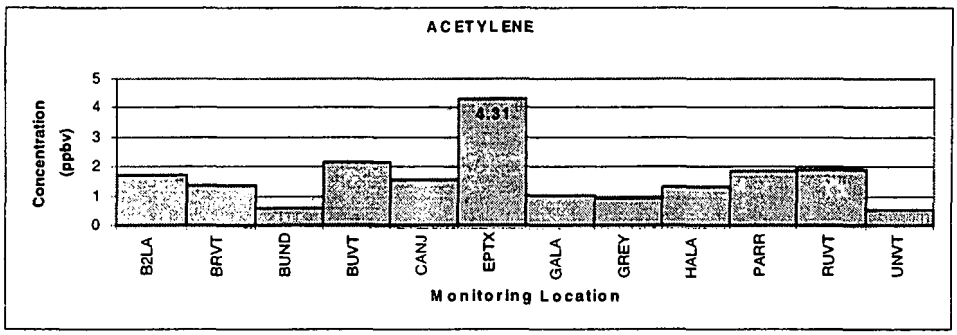
- The profiles of central tendency concentrations illustrate that the highest concentrations typically occurred at Camden, New Jersey, and El Paso, Texas. This tendency of high concentrations of the compounds of interest in the samples from the El Paso monitoring site is also seen in the VOCs.
- No strong central tendency of low concentrations at a particular monitoring site is seen in the figure.

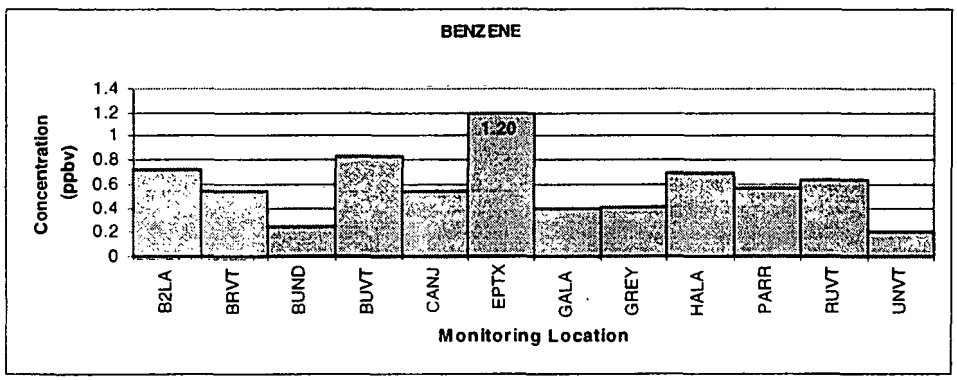
4.2.4 Variability

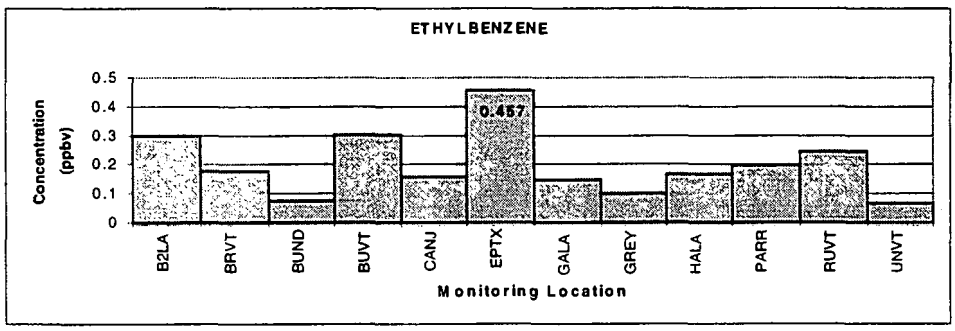
Along with the VOCs, Table 4-2 lists, for each monitoring location, the three compounds with lowest coefficients of variation and the three with highest. Butyr/isobutyraldehyde is among the least variable, while acetaldehyde is among the most variable, but these variability trends for the carbonyl data are not as strong as those for the VOC data.

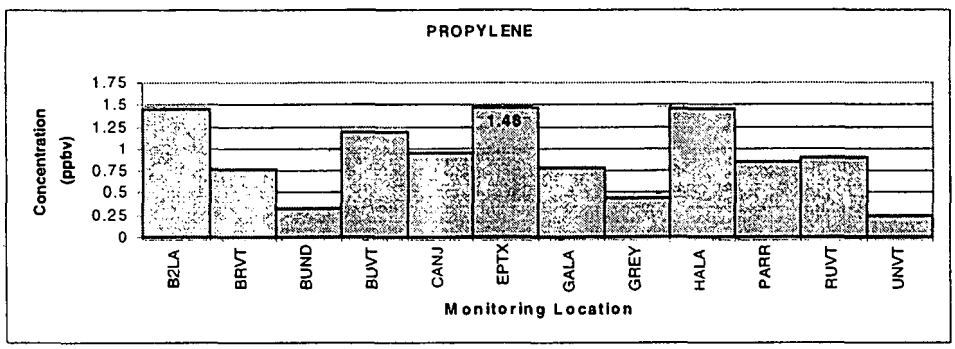
When interpreting the data summary parameters for the UATMP, readers should be careful not to confuse the most program-wide prevalent compounds identified by the UATMP with the most program-wide prevalent compounds in urban air pollution. Because the UATMP does not characterize every component of air pollution, many compounds known to be program-wide prevalent in urban air are not considered in this report. Further, participating agencies should interpret any reference to "spatial variations" in proper context. The spatial variations discussed above and throughout this report compare air quality measured in or near only 12 urban locations, which clearly is only a small subset of urban settings in the United States.

Figure 4-1
Geometric Mean Concentrations of the Program-Wide Prevalent Hydrocarbons, by Monitoring Location, by Compound



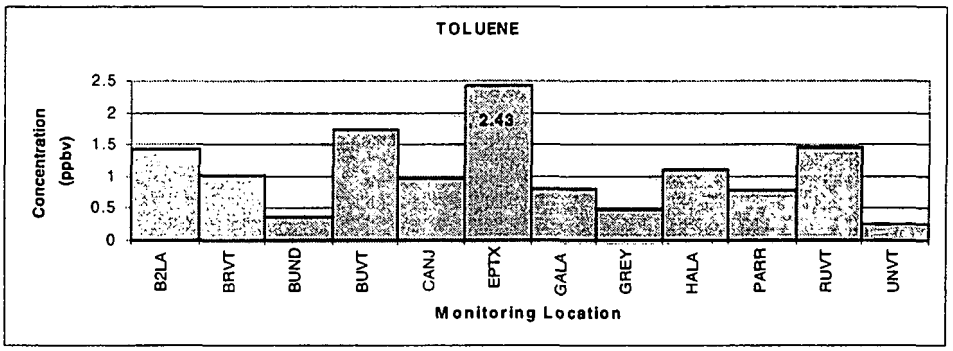


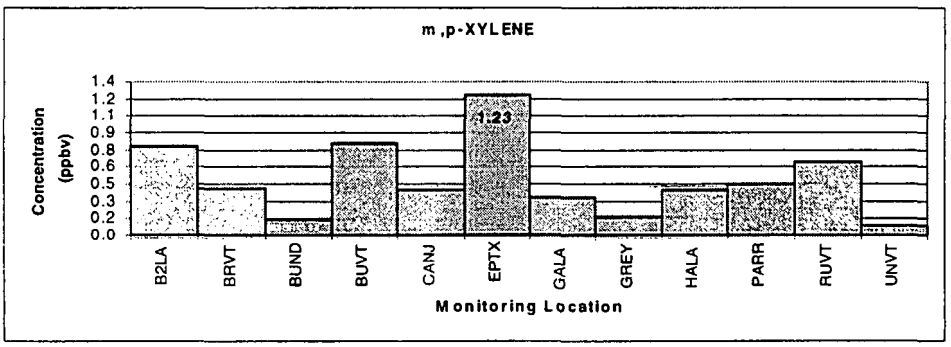


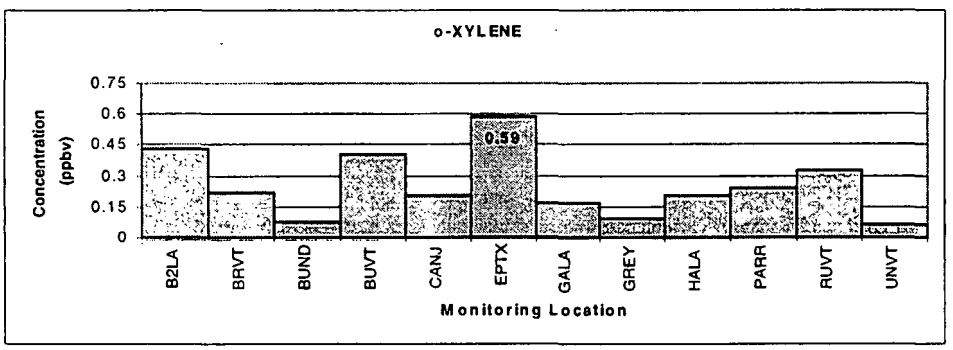


Note: These figures are presented in different scales and show the numerical value of the highest geometric mean concentration calculated for the 1998 UATMP sites.

Figure 4-1 (Continued)
Geometric Mean Concentrations of the Program-Wide Prevalent Hydrocarbons, by Monitoring Location, by Compound

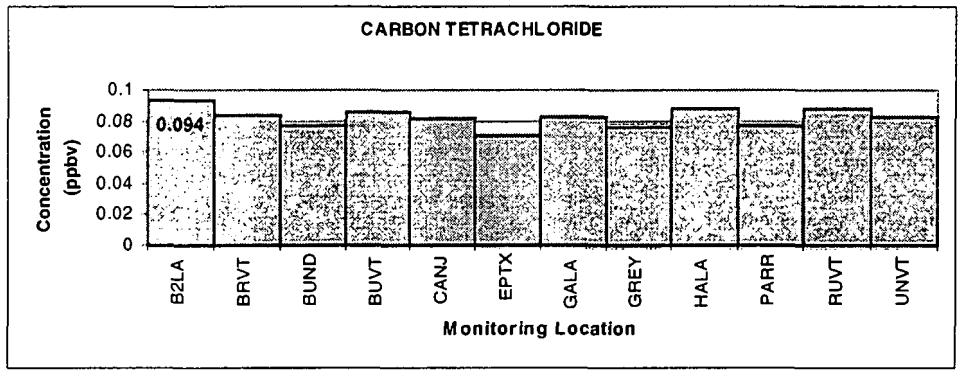


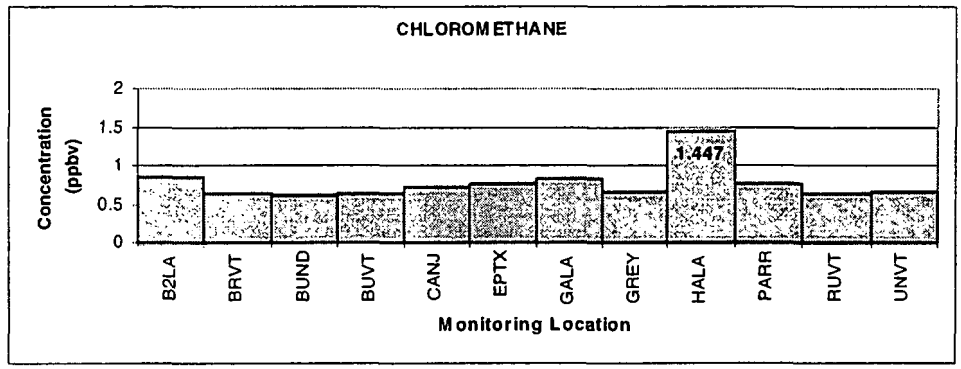


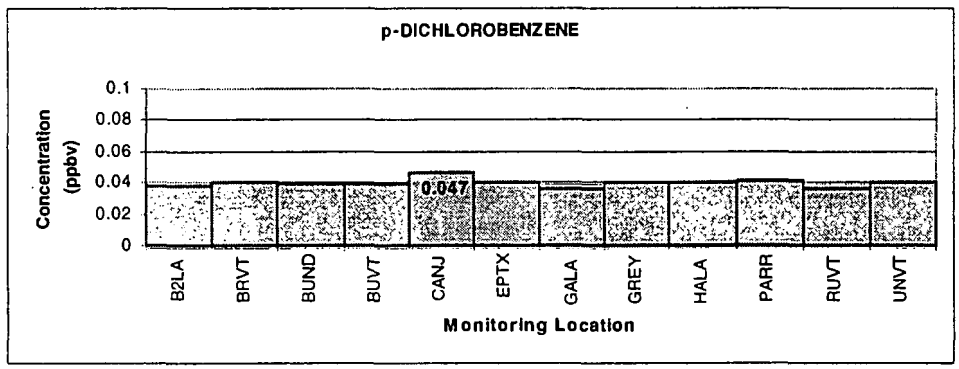


Note: These figures are presented in different scales and show the numerical value of the highest geometric mean concentration calculated for the 1998 UATMP sites.

Figure 4-2
Geometric Mean Concentrations of the Program-Wide Prevalent Halogenated Hydrocarbons, by Monitoring Location, by Compound

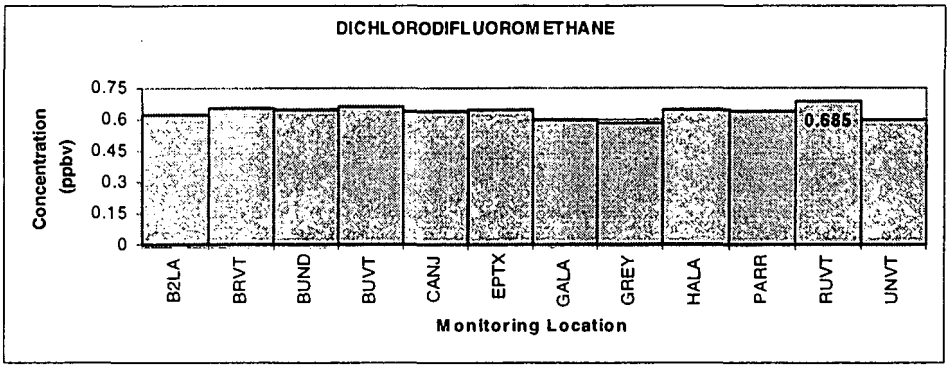


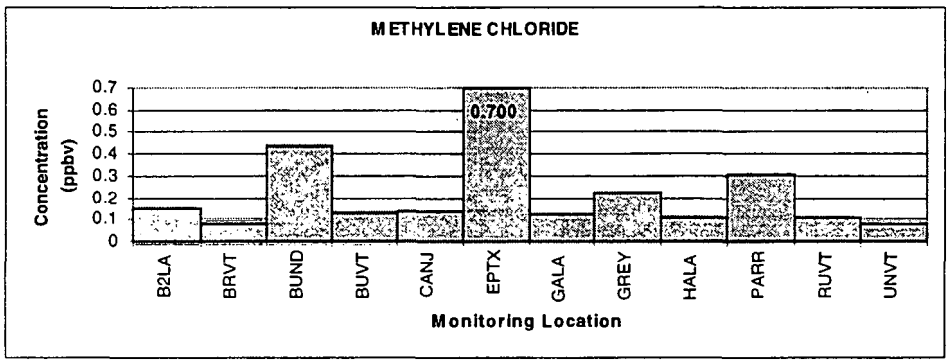


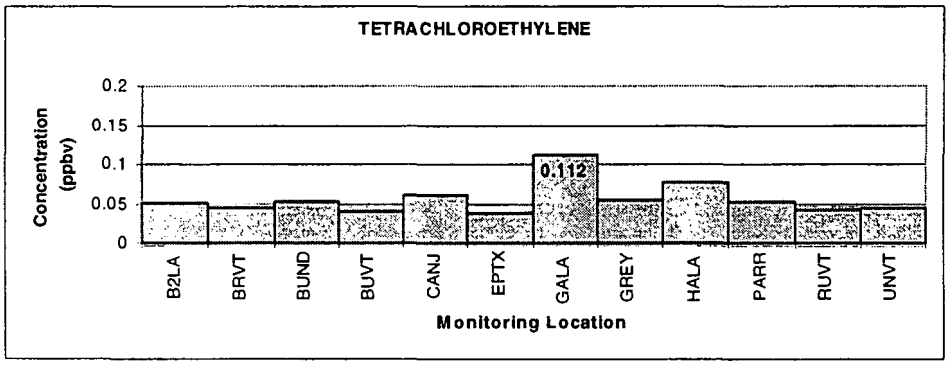


Note: These figures are presented in different scales and show the numerical value of the highest geometric mean concentration calculated for the 1998 UATMP sites.

Figure 4-2 (Continued)
Geometric Mean Concentrations of the Program-Wide Prevalent Halogenated Hydrocarbons, by Monitoring Location, by Compound

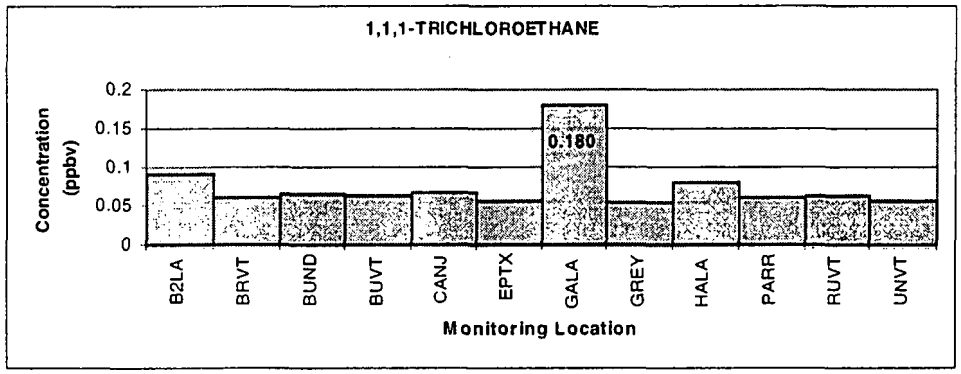


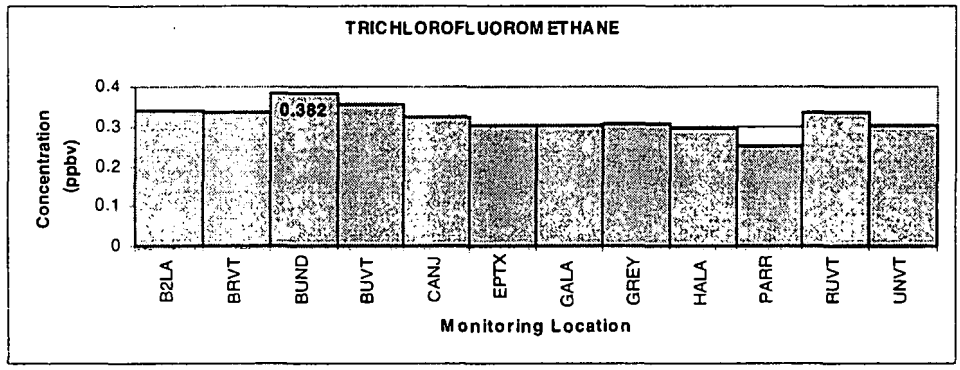


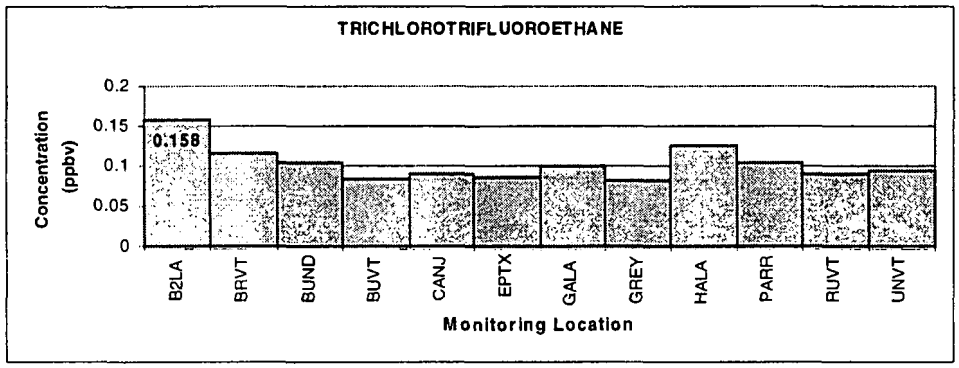


Note: These figures are presented in different scales and show the numerical value of the highest geometric mean concentration calculated for the 1998 UATMP sites.

Figure 4-2 (Continued)
Geometric Mean Concentrations of the Program-Wide Prevalent Halogenated Hydrocarbons, by Monitoring Location, by Compound

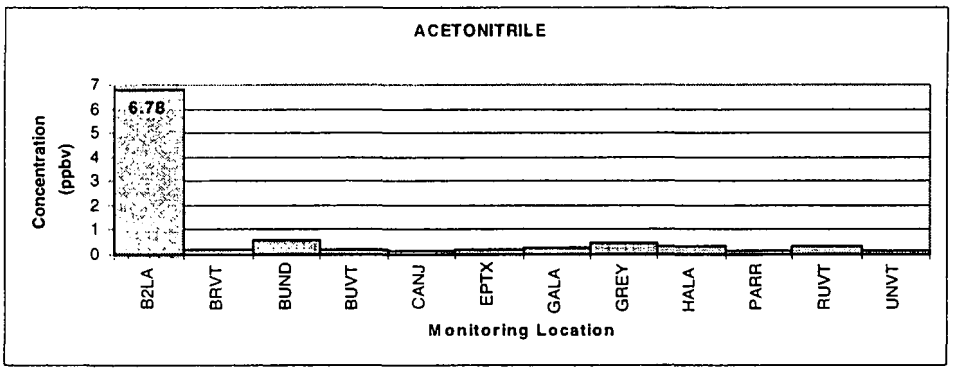


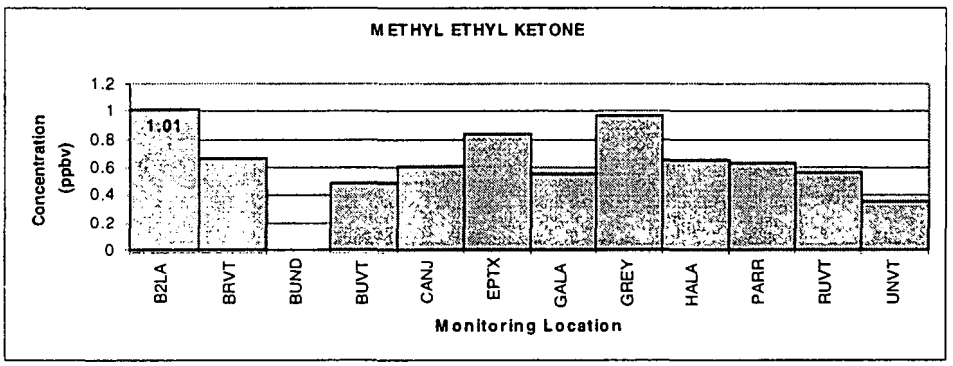


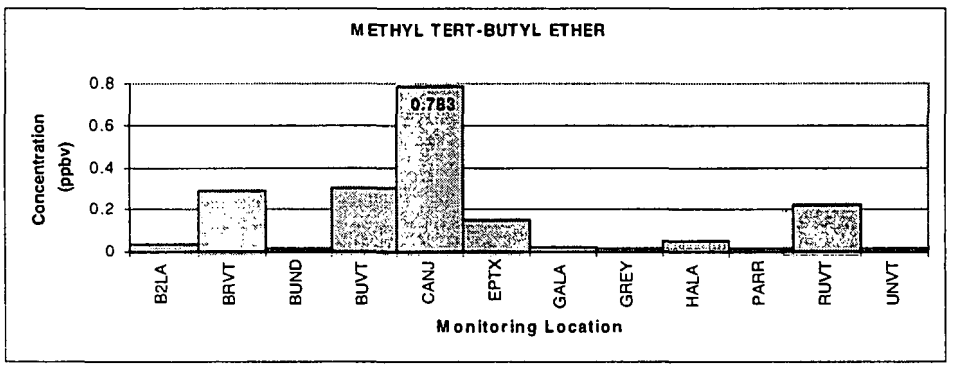


Note: These figures are presented in different scales and show the numerical value of the highest geometric mean concentration calculated for the 1998 UATMP sites.

Figure 4-3
Geometric Mean Concentrations of the Program-Wide Prevalent Polar Compounds by Monitoring Location, by Compound

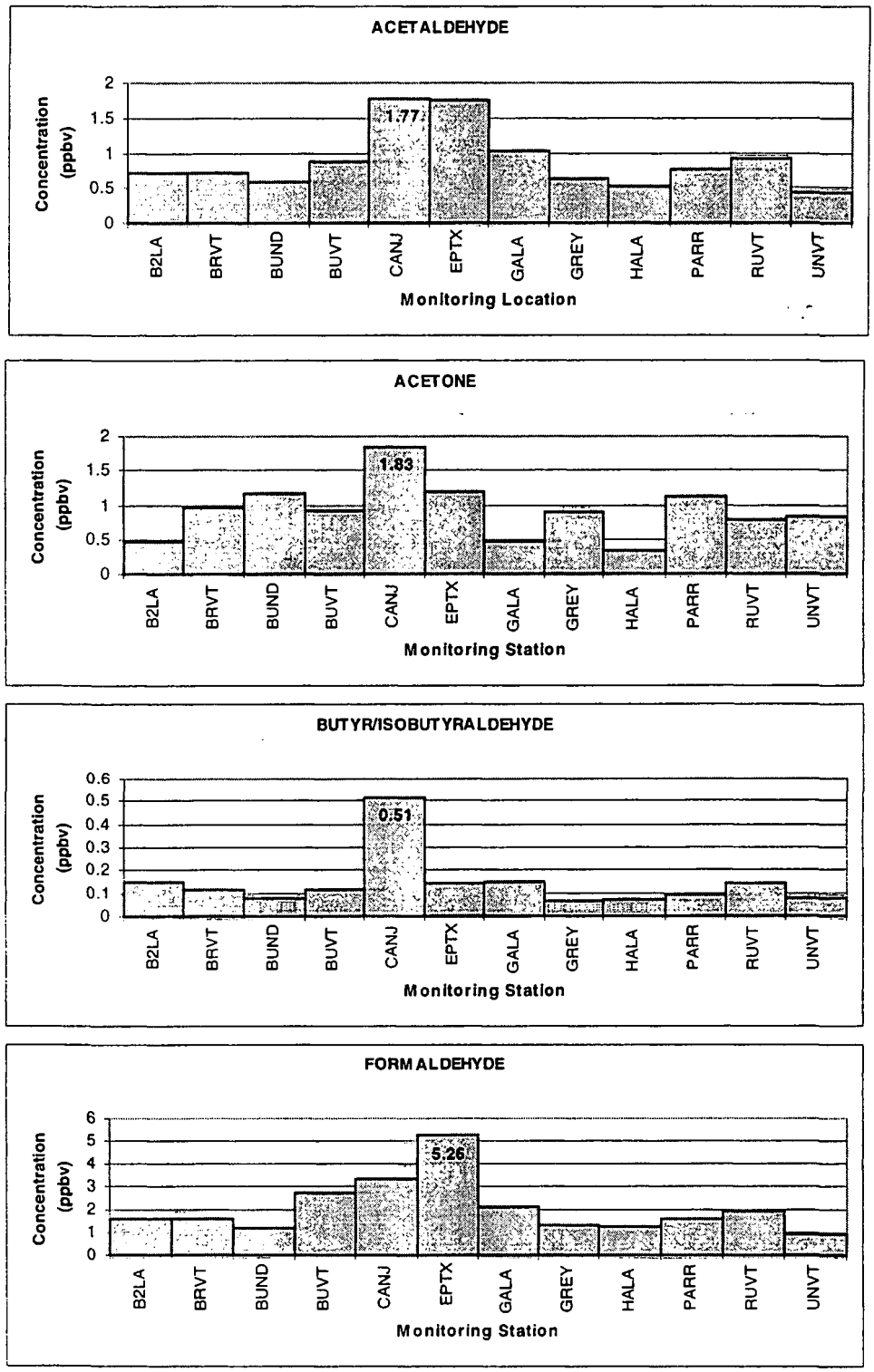






Note: These figures are presented in different scales and show the numerical value of the highest geometric mean concentration calculated for the 1998 UATMP sites.

Figure 4-4
Geometric Mean Concentrations of the Program-Wide Prevalent Carbonyls, by Monitoring Location, by Compound



Note: These figures are presented in different scales and show the numerical value of the highest geometric mean concentration calculated for the 1998 UATMP sites.

Table 4-1
Summary of Highest VOC Concentrations
Number of Monitoring Stations With Highest Concentration in Listed Range

Chemical	Samples with Conc. >DL	Number of Stations			
		Concentration <1 ppbv	Concentration ≥1 but <5 ppbv	Concentration ≥5 but <10 ppbv	Concentration ≥10 ppbv
Hydrocarbons					
Acetylene	**322**	**0**	**7**	**4**	**1**
Benzene	**322**	**3**	**9**	**0**	**0**
1,3-Butadiene	188	11	1	0	0
Ethylbenzene	**311**	**10**	**1**	**0**	**1**
n-Octane	270	12	0	0	0
Propylene	**322**	**2**	**7**	**2**	**1**
Styrene	217	8	4	0	0
Toluene	**322**	**0**	**6**	**4**	**2**
1,2,4-Trimethylbenzene	317	9	2	1	0
1,3,5-Trimethylbenzene	263	11	1	0	0
***m*-,*p*-Xylene**	**320**	**4**	**7**	**0**	**1**
***o*-Xylene**	**320**	**10**	**1**	**0**	**1**
Halogenated Hydrocarbons					
Bromochloromethane	0	12	0	0	0
Bromodichloromethane	0	12	0	0	0
Bromoform	0	12	0	0	0
Bromomethane	25	12	0	0	0
Carbon Tetrachloride	**309**	**12**	**0**	**0**	**0**
Chlorobenzene	2	12	0	0	0
Chloroethane	11	12	0	0	0
Chloroform	27	12	0	0	0
Chloromethane	**321**	**6**	**5**	**1**	**0**
Chloromethylbenzene	0	12	0	0	0
Chloroprene	9	10	2	0	0
Dibromochloromethane	0	12	0	0	0
1,2-Dibromoethane	1	12	0	0	0
m-Dichlorobenzene	4	12	0	0	0
o-Dichlorobenzene	3	12	0	0	0
***p*-Dichlorobenzene**	**30**	**12**	**0**	**0**	**0**

Table 4-1 (Continued)
Summary of Highest VOC Concentrations
Number of Monitoring Stations With Highest Concentration in Listed Range

Chemical	Samples with Conc. >DL	Number of Stations			
		Concentration <1 ppbv	Concentration ≥1 but <5 ppbv	Concentration ≥5 but <10 ppbv	Concentration ≥10 ppbv
Halogenated Hydrocarbons (Continued)					
1,1-Dichloroethane	1	12	0	0	0
1,2-Dichloroethane	5	12	0	0	0
1,1-Dichloroethene	3	12	0	0	0
cis-1,2-Dichloroethylene	1	12	0	0	0
trans-1,2-Dichloroethylene	0	12	0	0	0
1,2-Dichloropropane	0	12	0	0	0
cis-1,3-Dichloropropene	0	12	0	0	0
trans-1,3-Dichloropropene	0	12	0	0	0
Dichlorodifluoromethane	**322**	**7**	**5**	**0**	**0**
Dichlorotetrafluoroethane	14	12	0	0	0
Hexachloro-1,3-Butadiene	3	12	0	0	0
Methylene Chloride	**269**	**5**	**6**	**1**	**0**
1,1,2,2-Tetrachloroethane	3	12	0	0	0
Tetrachloroethylene	**64**	**10**	**2**	**0**	**0**
1,2,4-Trichlorobenzene	5	12	0	0	0
1,1,1-Trichloroethane	**314**	**11**	**0**	**0**	**1**
1,1,2-Trichloroethane	1	12	0	0	0
Trichloroethylene	20	12	0	0	0
Trichlorofluoromethane	**321**	**8**	**4**	**0**	**0**
Trichlorotrifluoroethane	**321**	**12**	**0**	**0**	**0**
Vinyl Chloride	5	12	0	0	0
Polar Compounds					
Acetonitrile	**100**	**0**	**2**	**3**	**7**
Acrylonitrile	50	7	5	0	0
Ethyl Acrylate	4	12	0	0	0
Ethyl *tert*-Butyl Ether	0	12	0	0	0
Methyl Ethyl Ketone*	**287**	**0**	**11**	**0**	**0**
Methyl Isobutyl Ketone	64	12	0	0	0
Methyl Methacrylate	6	12	0	0	0
Methyl *tert*-Butyl Ether	**164**	**9**	**2**	**1**	**0**
tert-Amyl Methyl Ether	22	11	1	0	0

* Methyl Ethyl Ketone was not reported at the Beulah, ND, site due to sampler contamination problems.

Table 4-2
Compounds With Highest and Lowest Coefficients of Variation, by Monitoring Location

Monitoring Location	Three Compounds With **Highest** Coefficients of Variation (Value)	Three Compounds With **Lowest** Coefficients of Variation (Value)
B2LA	Methyl *tert*-Butyl Ether (1.33) Toluene (1.14) Ethylbenzene (0.99)	Carbon Tetrachloride (0.27) *p*-Dichlorobenzene (0.16) Dichlorodifluoromethane (0.14)
BRVT	Acetonitrile (2.89) Toluene (1.10) Trichlorotrifluoroethane (1.04)	1,1,1-Trichloroethane (0.19) Chloromethane (0.15) *p*-Dichlorobenzene (0.09)
BUND	Acetonitrile (1.07) Butyr/Isobutyraldehyde (1.03) Tetrachloroethylene (0.99)	Carbon Tetrachloride (0.21) Chloromethane (0.10) *p*-Dichlorobenzene (0.10)
BUVT	Acetonitrile (3.51) Methylene Chloride (1.46) Methyl Ethyl Ketone (1.11)	1,1,1-Trichloroethane (0.15) Chloromethane (0.14) Dichlorodifluoromethane (0.14)
CANJ	Acetonitrile (1.82) Propylene (0.90) Methylene Chloride (0.58)	Carbon Tetrachloride (0.24) Trichlorotrifluoroethane (0.24) Dichlorodifluoromethane (0.20)
EPTX	*m*-,*p*-Xylene (3.97) *o*-Xylene (3.91) Ethylbenzene (3.65)	Carbon Tetrachloride (0.31) Chloromethane (0.28) Trichlorotrifluoroethane (0.27)
GALA	1,1,1-Trichloroethane (4.09) Acetonitrile (2.79) Propylene (2.32)	Acetaldehyde (0.31) Carbon Tetrachloride (0.26) *p*-Dichlorobenzene (0.20)

Note: As the summary tables in Appendix D show, compounds with low prevalence also have low variability, because a large fraction of the sampling results (i.e., the nondetects) have the exact same value: one-half the detection limit. Therefore, ***the summary of coefficients of variation in this table only considers the compounds identified as prevalent for the 1998 UATMP*** (see Sections 4.1.1 abd 4.2.1 for these lists).

Table 4-2 (Continued)
Compounds With Highest and Lowest Coefficients of Variation, by Monitoring Location

Monitoring Location	Three Compounds With **Highest** Coefficients of Variation (Value)	Three Compounds With **Lowest** Coefficients of Variation (Value)
GREY	Toluene (1.64) Acetonitrile (1.40) Butyr/isobutyraldehyde (1.09)	Trichlorotrifluoroethane (0.11) Dichlorodifluoromethane (0.08) *p*-Dichlorobenzene (<0.01)
HALA	Acetonitrile (3.92) Methyl *tert*-Butyl Ether (3.16) Tetrachloroethylene (2.22)	Trichlorotrifluoroethane (0.31) Carbon Tetrachloride (0.18) Dichlorodifluoromethane (0.12)
PARR	Methylene Chloride (1.76) Acetonitrile (1.47) Butyr/isobutyraldehyde (1.09)	1,1,1-Trichloroethane (0.21) *p*-Dichlorobenzene (0.18) Dichlorodifluoromethane (0.17)
RUVT	Acetonitrile (2.88) Methylene Chloride (1.03) Butyr/isobutyraldehyde (0.68)	Trichlorotrifluoroethane (0.17) 1,1,1-Trichloroethane (0.17) Chloromethane (0.15)
UNVT	Acetonitrile (2.46) Methylene Chloride (1.69) Toluene (1.24)	Tetrachloroethylene (0.20) Chloromethane (0.17) Dichlorodifluoromethane (0.11)

Notes: As the summary tables in Appendix D show, compounds with low prevalence also have low variability, because a large fraction of the sampling results (i.e., the nondetects) have the exact same value: one-half the detection limit. Therefore, ***the summary of coefficients of variation in this table only considers the compounds identified as prevalent for the 1998 UATMP*** (see Sections 4.1.1 and 4.2.1 for these lists).

Table 4-3
Summary of Highest Carbonyl Concentrations
Number of Monitoring Stations With Highest Concentration in Listed Range

Chemical	Samples with Conc. >DL	Number of Stations			
		Concentration <1 ppbv	Concentration ≥1 but <5 ppbv	Concentration ≥5 but <10 ppbv	Concentration ≥10 ppbv
Acetaldehyde	**315**	**1**	**10**	**1**	**0**
Acetone	**314**	**1**	**11**	**0**	**0**
Acrolein	220	12	0	0	0
Benzaldehyde	307	12	0	0	0
Butyr/Isobutyraldehyde	**309**	**11**	**1**	**0**	**0**
Crotonaldehyde	142	12	0	0	0
2,5-Dimethylbenzaldehyde	48	12	0	0	0
Formaldehyde	**315**	**0**	**6**	**5**	**1**
Hexaldehyde	311	12	0	0	0
Isovaleraldehyde	186	12	0	0	0
Propionaldehyde	314	11	1	0	0
Tolualdehydes	270	12	0	0	0
Valeraldehyde	305	12	0	0	0

5.0 Data Interpretation: Hydrocarbons

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

As stated above, hydrocarbons in the atmosphere originate from natural sources and from various anthropogenic sources, such as combustion of fuel and biomass, petroleum refining, petrochemical manufacturing, solvent use, and gas and oil production and use. Studies have shown that emissions from different anthropogenic sources vary significantly from location to location. For example, on a nationwide basis, EPA estimates that 50 percent of anthropogenic nonmethane volatile organic compound releases in 1996 came from industrial processes, 42 percent from transportation, 6 percent from fuel combustion, and the rest from other sources (USEPA, 1997). In urban areas, however, the estimated contributions of different source categories differ from these national averages. For instance, a 1987 study in the Los Angeles area estimated that 49 percent of nonmethane hydrocarbon emissions come from vehicle exhaust, 11 percent from liquid gasoline, 10 percent from gasoline vapor, and 30 percent from sources other than motor vehicles (Fujita et al., 1994). These figures suggest that motor vehicles may play a greater role in hydrocarbon emissions in urban areas than national statistics indicate.

As noted in Section 2, the sampling and analytical methods used in the 1998 UATMP measure concentrations of 12 hydrocarbons, all of which have fewer than ten carbon atoms. These 12 hydrocarbons tend to be gases or volatile liquids under standard atmospheric conditions and are commonly referred to as VOCs. The discussions in this chapter center on the general trends observed for 7 program-wide prevalent hydrocarbons and consider hydrocarbon concentrations quantified at the 12 monitoring locations, with respect to:

- Correlations between concentrations of the program-wide prevalent hydrocarbons and concentrations of other compounds measured at the same time at the same monitoring location;
- Correlations between concentrations of the program-wide prevalent hydrocarbons and temperature;
- Correlations between concentrations of the program-wide prevalent hydrocarbons and meteorological parameters.
- Temporal (annual) variations in hydrocarbon concentrations measured during the 1994 through 1998 UATMPs;
- Spatial variations in hydrocarbon concentrations measured during the 1998 UATMP;
- Relationship between spatial variations in hydrocarbon concentrations measured during the 1998 UATMP and estimates of motor vehicle emissions; and
- Relationship between spatial variations in hydrocarbon concentrations measured during the 1998 UATMP and estimates of industrial emissions.

This report presents only pairwise correlations (i.e., correlations between two variables). Although multivariate correlation analyses may identify more complex, but noteworthy, trends and patterns in the UATMP data, such detailed analyses were not included in the scope of this work.

5.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1998 UATMP (i.e., hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyls). The following discussion summarizes the calculated correlations.

5.1.1 Correlations Between Halogenated Hydrocarbons and Hydrocarbons

Figure 5-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent hydrocarbons.

As the distribution of Pearson correlation coefficients in Figure 5-1 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1998 UATMP were weakly correlated with ambient air concentrations of the program-wide prevalent hydrocarbons. Approximately 25 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Nearly 42 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. However, the average correlation is statistically significant (0.250 ± 0.174) across the 12 sites. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of hydrocarbons.

5.1.2 Correlations Between Hydrocarbons and Polar Compounds

Figure 5-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 5-1 shows, ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1998 UATMP were very weakly correlated with ambient air concentrations of the program-wide prevalent polar compounds. Approximately 16 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Nearly 58 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. However, the average correlation was statistically significant across the 12 sites (0.199 ± 0.152). These weak correlations generally suggest that the factors that most strongly affect levels of hydrocarbons in

ambient air are different from the factors that affect ambient air concentrations of polar compounds.

5.1.3 Correlations Between Carbonyls and Hydrocarbons

Figure 5-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent carbonyls and program-wide prevalent hydrocarbons.

The distribution of Pearson correlation coefficients in Figure 5-1 shows that ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1998 UATMP were weakly correlated with ambient air concentrations of the program-wide prevalent carbonyls. Approximately 17 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Less than 50 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. The average correlation was not statistically significant across the 12 sites (0.160 ± 0.175). These weak correlations generally suggest that the factors that most strongly affect levels of hydrocarbons in ambient air are from the factors that affect ambient air concentrations of carbonyl compounds.

5.2 Correlations Between Concentrations and Temperature

5.2.1 Temperature

According to Table 5-1, the program-wide prevalent hydrocarbons generally had negative correlations with maximum, minimum, and average temperature across all 12 sites. This type of correlation would suggest that increasing temperature would relate to decreasing measured concentration of hydrocarbons. The Brattleboro, VT, site had the strongest negative correlation of hydrocarbon concentration for all three temperature parameters (-0.476, -0.549, and -0.554, respectively). The highest positive correlations of hydrocarbon concentration with these meteorological parameters occurred at the Beulah, ND, site (0.318 and 0.134, respectively) while the Little Rock site had the highest correlation with average temperature (0.228).

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

Statistical significance of the correlations between the temperature parameters and the measured hydrocarbon concentrations at the 95 percent confidence interval was also calculated for all of the sites. As Table 5-1 shows, none of these correlations were statistically significant with ambient hydrocarbon concentrations.

5.2.2 Wind and Sea Level Pressure Information

According to Table 5-1, the program-wide prevalent hydrocarbons had a significantly negative correlation across all 12 sites (-0.254 ± 0.130). As the wind speed increases, the hydrocarbon concentrations tend to decrease. This observation suggests that stagnant, slow-moving air correlates with higher hydrocarbon concentrations. The strongest negative correlation of hydrocarbon concentration with the wind speed was found at the Little Rock, AR, site (-0.6347) while the Hahnville, LA, site had the highest positive correlation with the wind speed (0.140).

Correlations with sea level pressure and hydrocarbon concentrations were also calculated, but there was no statistical significance to the relationship between the two parameters (0.020 ± 0.103).

5.2.3 Dew Point Temperature and Visibility

According to Table 5-1, the program-wide prevalent hydrocarbons had a negative correlation with the dew point temperature. The strongest negative correlation occurred at the Burlington, VT, site (-0.471). The highest positive correlation of hydrocarbon concentration with dew point temperature occurred at the Beulah, ND site (0.186). Visibility also had a negative correlation with the program-wide prevalent hydrocarbons (-0.158 ± 0.106). The strongest negative correlation occurred at the Baton Rouge, LA, site (-0.4762), while the highest positive correlation occurred at the El Paso, TX, site (0.108).

Statistical significance of the correlation between the dew point temperature and visibility with the measured hydrocarbon concentrations at the 95 percent confidence interval was also calculated across all 12 sites. As Table 5-1 shows, only the visibility parameter was statistically significant, suggesting that as the visibility decreases (or haziness increases), the ambient concentrations of hydrocarbons decrease.

5.3 Annual Variations

Table 5-2 presents average concentrations of program-wide prevalent hydrocarbons at each of the 12 monitoring stations for the 1994 through 1998 UATMPs. In very few cases are consistent positive or negative trends seen for the concentration of a specific hydrocarbon compound across the entire 4 year period (e.g., an annual decrease in the concentration of a compound in *each* year). Readers should note that changes in concentrations can result from shifting prevailing winds and might not necessarily indicate increases or decreases in emissions. In general, concentrations of total program-wide prevalent hydrocarbons have decreased annually since 1995.

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

5.4 Spatial Variations

To provide a sense of how overall levels of hydrocarbons varied among the UATMP monitoring locations, Figure 5-2 compares the geometric means of the sums of the program-wide prevalent hydrocarbon concentrations for each monitoring location. These data are provided for comparison purposes only and should not be confused with concentrations of total nonmethane organic compounds, which is another common air quality measurement.

Figure 5-2 clearly indicates that levels of the program-wide prevalent hydrocarbons at El Paso, Texas (EPTX), were significantly higher than the levels measured at any of the other monitoring stations. The figure also indicates that levels of the most program-wide prevalent hydrocarbons were lowest at Underhill, Vermont (UNVT), and Beulah, North Dakota (BUND).

5.5 The Impact of Motor Vehicle Emissions on Spatial Variations

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

Car ownership data; and

Motor vehicle emissions profiles.

5.5.1 Car Ownership Data

As an indicator of motor vehicle emissions near the UATMP monitoring locations, Table 5-3 presents estimates of the number of cars owned by residents within 10 miles of each monitoring location. The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 260,000,000 and total number of cars in U.S. of 193,400,0000).

For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent hydrocarbons are presented in Table 5-3, ranked in descending order. The data in the table indicate a positive linear correlation between car ownership data and ambient air concentrations of hydrocarbons. However, readers should keep in mind other factors that might impact the reliability of car ownership data as an indicator of ambient air monitoring data results:

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

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

5.5.2 Motor Vehicles Emissions Profiles

The *magnitude* of emissions from motor vehicles generally depends on the volume of traffic in urban areas, but the *composition* of these emissions depends more on vehicle design. Because the distribution of vehicle design (i.e., the relative number of cars of different styles) is probably quite similar from one urban area to the next, the composition of air pollution resulting from motor vehicle emissions is not expected to exhibit significant spatial variations. In support

of this hypothesis, previous air monitoring studies have observed relatively constant compositions of ambient air samples collected along heavily traveled urban roadways (Conner et al., 1995). Roadside studies have found particularly consistent proportions of four hydrocarbons (benzene, toluene, ethylbenzene, and the xylene isomers - the "BTEX" compounds) both in motor vehicle exhaust and in ambient air near roadways.

To examine the impact of motor vehicle emissions on air quality at the 1998 UATMP monitoring sites, Figure 5-3 compares concentration ratios for the BTEX compounds measured during the 1998 UATMP to the ratios reported in a roadside study (Conner et al., 1995). This comparison provides a qualitative depiction of how greatly motor vehicle emissions affect air quality at the UATMP monitoring locations: the more similar the concentration ratios at a particular monitoring location are to those of the roadside study, the more likely that motor vehicle emissions impact ambient levels of hydrocarbons at that location.

As Figure 5-3 shows, the concentration ratios for BTEX compounds measured at every UATMP monitoring station bear some resemblance to the ratios reported in the roadside study. The BTEX ratio for the Baton Rouge monitoring location is most similar to the roadside study profile. For all monitoring locations except El Paso, Texas, the toluene:ethylbenzene ratio is clearly the largest value of the four ratios and the xylene:ethylbenzene ratio is clearly the smallest value of the ratios. This observation suggests, though certainly does not prove, that emissions from motor vehicles significantly affect levels of hydrocarbons in urban ambient air. It should be noted that BTEX concentration ratios for El Paso, Texas deviate from the roadside study profile. This deviation indicates that emissions from sources other than motor vehicles in these locations may have a strong influence on local air quality.

5.6 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 5-3 summarizes emissions data for each monitoring location, and ranks each data set with the highest value assigned the rank of one. For each monitoring location, Table 5-3 includes:

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

- The sum of emissions of 6 of the 7 program-wide prevalent hydrocarbons detected during the 1998 UATMP reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations. The table does not account for emissions of acetylene because industries are not required to disclose releases of this compound to TRI.

- Total emissions reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations.

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

- The Baton Rouge, LA, monitoring site had high concentrations of program-wide prevalent hydrocarbons, high emissions of program-wide prevalent hydrocarbons reported to TRI, and high emissions of total hydrocarbons reported to TRI.

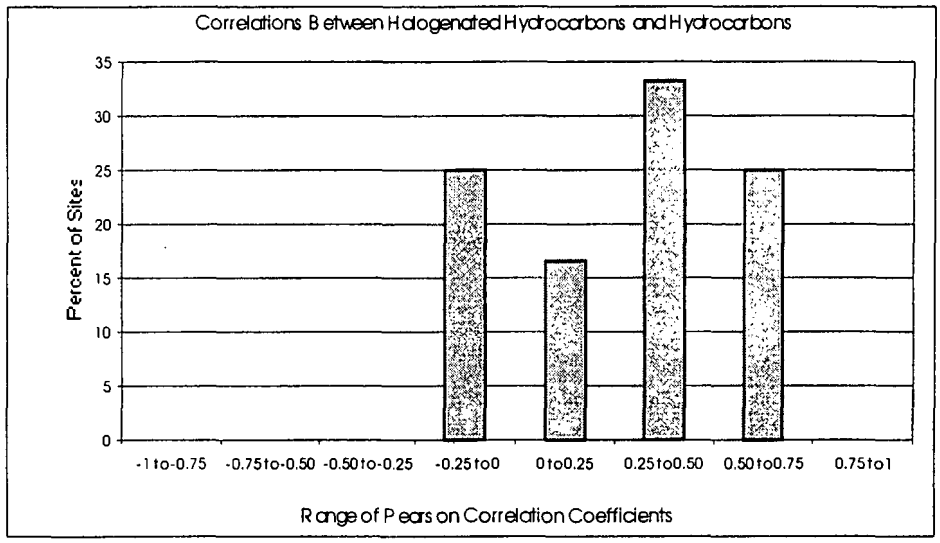
- Some monitoring locations (e.g., Burlington and Rutland, VT and El Paso, TX) had relatively high concentrations of the program-wide prevalent hydrocarbons, but had relatively low levels of both program-wide prevalent hydrocarbon and total industrial emissions reported to TRI.

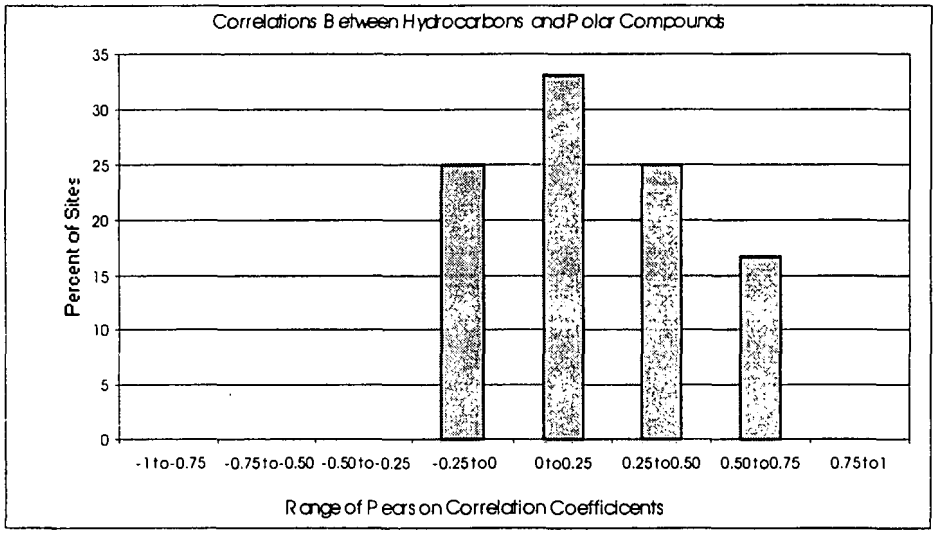
- Other monitoring locations (e.g., Hahnville and Garyville, LA) had relatively low concentrations of hydrocarbons, but had relatively high levels of emissions reported to TRI.

To examine the TRI emissions data more closely, Table 5-4 compares the reported air releases for the individual program-wide prevalent hydrocarbons (excluding acetylene) to the corresponding geometric mean concentrations measured during the 1998 UATMP. For ease of interpretation, Table 5-4 lists the monitoring locations in order of decreasing geometric mean concentration for each compound. Readers should keep in mind that the concentrations of these compounds are quite low in all cases, 0.20 to 3 ppbv, and conclusions regarding spatial variation should be made cautiously.

The El Paso, TX, monitoring site reported the highest concentrations for all three of the hydrocarbon compounds presented in Table 5-4. However, low to moderate levels of these compounds are reported to TRI by facilities within 10 miles of the facilities. The Texarkana, AR, Beulah, ND, and Underhill, VT, sites consistently reported low pollutant concentrations and no program-wide prevalent hydrocarbon emissions were reported to TRI by facilities with 10 miles of these sites.

Figure 5-1
Summary of Data Correlations Between Groups of Compounds





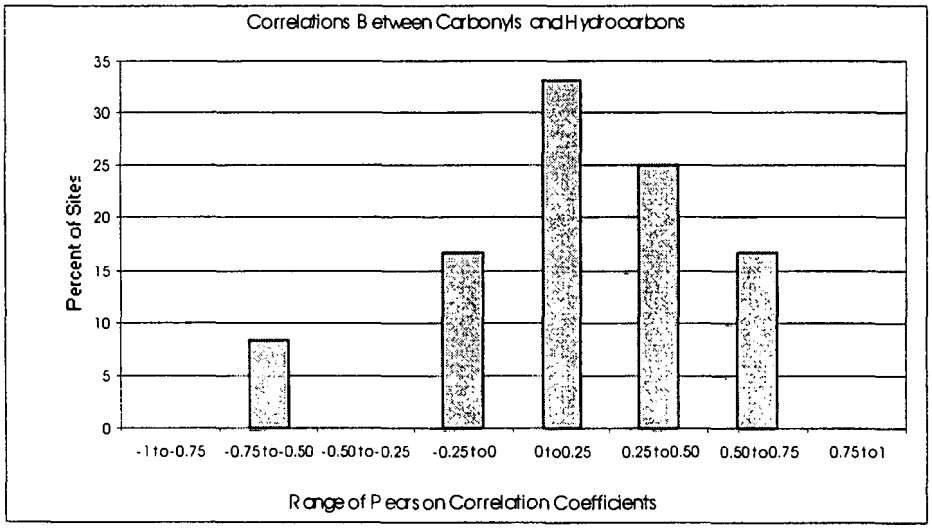


Figure 5-2
Geometric Mean of the Daily Concentration of the Prevalent Hydrocarbons

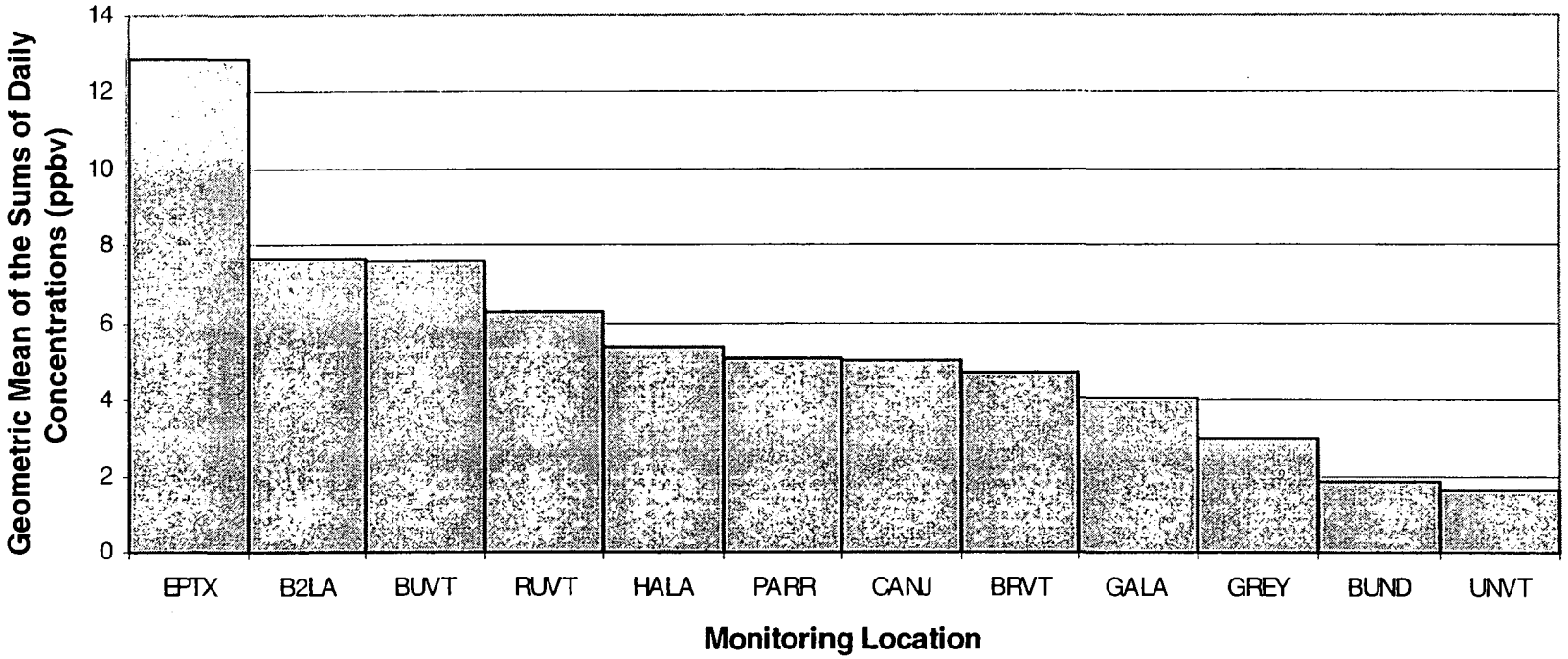


Figure 5-3
Comparison of 1998 UATMP BTEX Concentration Profiles to Conner et al. (1995) Profiles

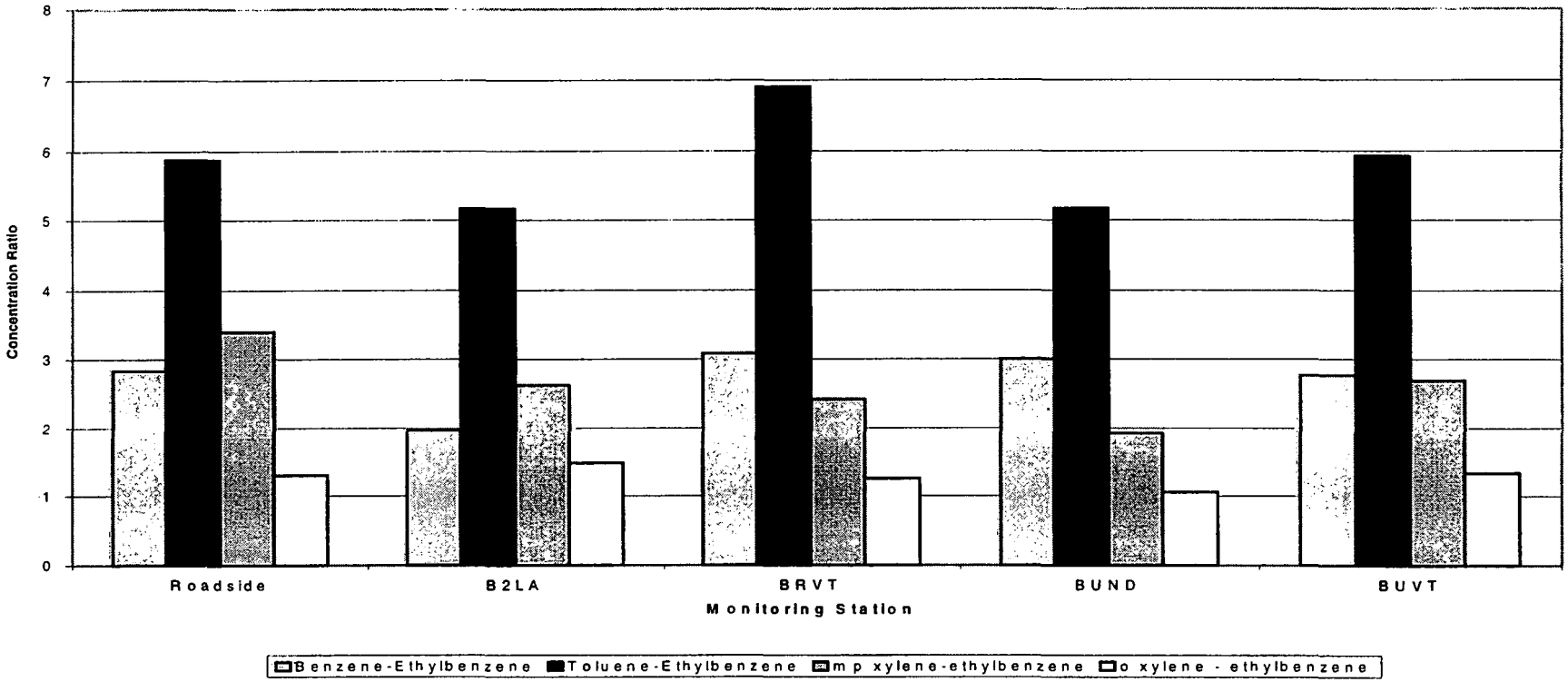


Figure 5-3 (Continued)
Comparison of 1998 UATMP BTEX Concentration Profiles to Conner et al. (1995) Profiles

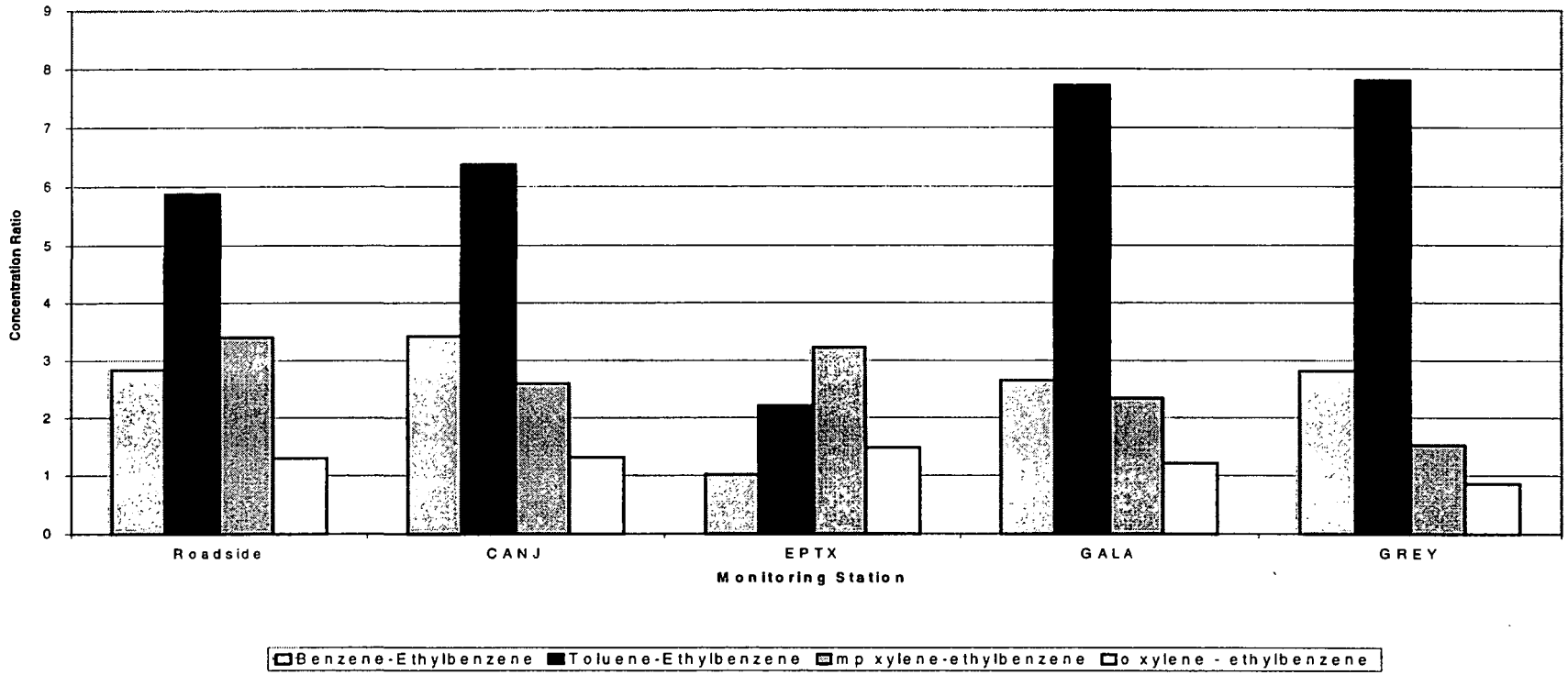


Figure 5-3 (Continued)
Comparison of 1998 UATMP BTEX Concentration Profiles to Conner et al. (1995) Profiles

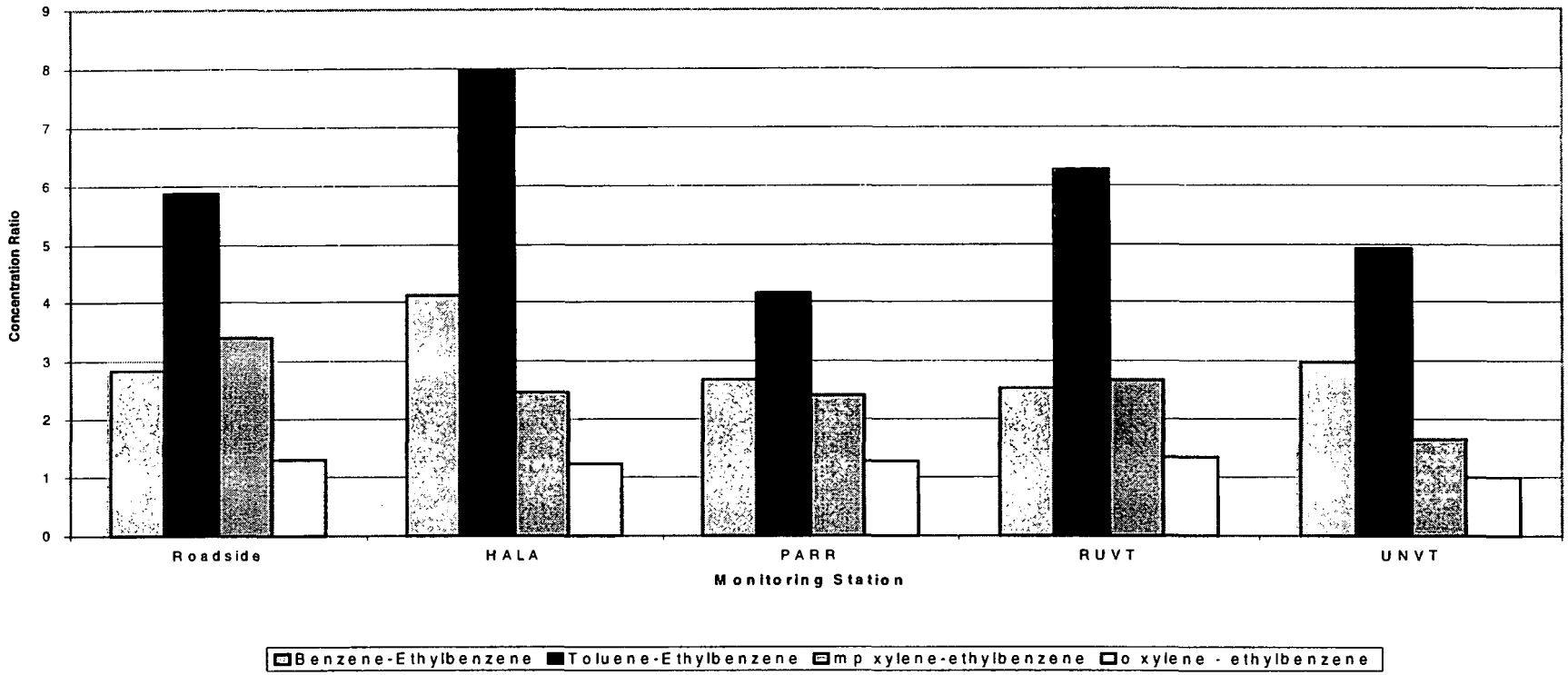


Table 5-1
Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Hydrocarbon Concentrations

Meteorological Parameter	Average Correlation	Highest Positive Correlation Site (Value)	Strongest Negative Correlation Site (Value)
Maximum Temperature	-0.040 ± 0.136	Beulah, ND (0.318)	Brattleboro, VT (-0.476)
Minimum Temperature	-0.119 ± 0.126	Beulah, ND (0.134)	Brattleboro, VT (-0.549)
Average Temperature	-0.088 ± 0.134	Little Rock, AR (0.222)	Brattleboro, VT (-0.554)
Wind Speed*	-0.254 ± 0.130	Hahnville, LA (0.140)	Little Rock, AR (-0.6347)
Sea level pressure	0.020 ± 0.103	Texarkana, AR (0.267)	Beulah, ND (-0.277)
Dew Point Temperature	-0.057 ± 0.112	Beulah, ND (0.186)	Burlington, VT (-0.471)
Visibility*	-0.158 ± 0.106	El Paso, TX (0.103)	Baton Rouge, LA (-0.4762)

* Statistically significant across the 12 sites.

Table 5-2
Average Concentrations (ppbv) of Program-Wide Prevalent Hydrocarbons for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
B2LA					
Acetylene	-	3.50	1.92	1.80	1.97
Benzene	-	0.60	0.67	0.59	0.77
Ethylbenzene	-	0.18	0.22	0.26	0.39
m-,*p*-Xylene	-	0.78	0.63	0.71	1.03
o-Xylene	-	0.31	0.32	0.35	0.58
Propylene	-	1.84	1.39	1.30	1.77
Toluene	-	1.14	1.19	0.99	2.02
BRVT					
Acetylene	-	1.24	2.45	1.52	1.66
Benzene	-	0.30	0.55	0.52	0.58
Ethylbenzene	-	0.15	0.20	0.17	0.19
m-,*p*-Xylene	-	0.47	0.60	0.47	0.46
o-Xylene	-	0.16	0.24	0.24	0.24
Propylene	-	0.60	0.90	0.79	0.84
Toluene	-	1.34	1.26	1.04	1.30
BUND					
Acetylene	-	-	-	-	0.62
Benzene	-	-	-	-	0.26
Ethylbenzene	-	-	-	-	0.09
m-,*p*-Xylene	-	-	-	-	0.17
o-Xylene	-	-	-	-	0.09
Propylene	-	-	-	-	0.35
Toluene	-	-	-	-	0.45
BUVT					
Acetylene	-	4.80	3.29	2.84	2.38
Benzene	-	0.66	0.79	0.92	0.86
Ethylbenzene	-	0.26	0.29	0.35	0.31
m-,*p*-Xylene	-	1.08	0.86	1.03	0.84
o-Xylene	-	0.43	0.40	0.51	0.42
Propylene	-	1.31	1.12	1.27	1.22
Toluene	-	1.52	1.59	1.87	1.85
CANJ					
Acetylene	5.69	3.62	3.22	2.22	1.75
Benzene	0.57	0.69	0.65	0.67	0.58
Ethylbenzene	0.29	0.17	0.20	0.20	0.17

- Indicates compound was not included in the UATMP for that year.

Table 5-2 (Continued)
Average Concentrations (ppbv) of Program-Wide Prevalent Hydrocarbons for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
m-,*p*-Xylene	1.0	0.79	0.67	0.62	0.44
o-Xylene	0.24	0.28	0.29	0.30	0.22
Propylene	2.36	1.87	1.74	1.56	1.22
Toluene	2.23	1.26	1.47	1.29	1.08
EPTX					
Acetylene	-	9.90	5.49	4.61	5.14
Benzene	-	1.28	1.25	1.56	1.35
Ethylbenzene	-	0.47	0.41	0.54	1.33
m-,*p*-Xylene	-	1.89	1.29	1.26	4.28
o-Xylene	-	0.74	0.56	0.54	1.97
Propylene	-	2.18	1.57	1.62	1.77
Toluene	-	2.90	2.67	3.14	2.93
GALA					
Acetylene	-	2.69	1.15	1.18	1.29
Benzene	-	0.36	0.47	0.50	0.48
Ethylbenzene	-	0.13	0.15	0.15	0.18
m-,*p*-Xylene	-	0.49	0.32	0.40	0.42
o-Xylene	-	0.16	0.13	0.21	0.22
Propylene	-	0.66	0.63	0.91	1.79
Toluene	-	0.81	0.71	1.18	1.39
GREY					
Acetylene	-	-	-	-	1.04
Benzene	-	-	-	-	0.42
Ethylbenzene	-	-	-	0.14	0.15
m-,*p*-Xylene	-	-	-	0.21	0.23
o-Xylene	-	-	-	0.12	0.13
Propylene	-	-	-	-	0.48
Toluene	-	-	-	-	1.16
HALA					
Acetylene	-	1.41	1.25	0.98	1.49
Benzene	-	0.48	0.62	0.50	0.77
Ethylbenzene	-	0.20	0.11	0.15	0.32
m-,*p*-Xylene	-	0.84	0.34	0.40	0.46
o-Xylene	-	0.33	0.14	0.20	0.23
Propylene	-	0.92	1.26	1.52	1.70
Toluene	-	5.73	0.77	0.90	1.50

- Indicates compound was not included in the UATMP for that year.

Table 5-2 (Continued)
Average Concentrations (ppbv) of Program-Wide Prevalent Hydrocarbons for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
PARR					
Acetylene	-	-	-	1.32	2.13
Benzene	-	-	-	0.44	0.63
Ethylbenzene	-	-	-	0.18	0.23
m-,*p*-Xylene	-	-	-	0.41	0.56
o-Xylene	-	-	-	0.21	0.30
Propylene	-	-	-	0.65	0.98
Toluene	-	-	-	0.74	0.97
RUVT					
Acetylene	-	4.41	2.60	2.25	2.15
Benzene	-	0.51	0.66	0.75	0.68
Ethylbenzene	-	0.27	0.24	0.28	0.27
m-,*p*-Xylene	-	0.94	0.74	0.80	0.72
o-Xylene	-	0.36	0.33	0.40	0.36
Propylene	-	0.83	0.91	1.05	0.96
Toluene	-	1.55	1.40	1.71	1.69
UNVT					
Acetylene	-	0.82	0.85	0.58	0.62
Benzene	-	0.13	0.24	0.21	0.22
Ethylbenzene	-	0.27	0.08	0.06	0.07
m-,*p*-Xylene	-	0.18	0.21	0.10	0.12
o-Xylene	-	0.09	0.11	0.06	0.07
Propylene	-	0.08	0.23	0.26	0.26
Toluene	-	0.33	0.36	0.24	0.36

- Indicates compound was not included in the UATMP for that year.

Table 5-3
Ranking of Monitoring Stations by Levels of Total Program-Wide Prevalent Hydrocarbons

Monitoring Location	Geometric Means the of Total Program-Wide Prevalent Hydrocarbon Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Hydrocarbons*** within a 10-Mile Radius of the Monitoring Location[b]		***Total*** Industrial Emissions within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 1998	Conc. Rank	Pounds in 1997	Emissions Rank	Pounds in 1997	Emissions Rank	Total Cars	Rank of Total Cars
B2LA	7.65	2	527,478	2	3,471,078	1	256,716	3
BRVT	4.72	8	14,586	6	37,511	8	22,611	11
BUND	1.88	11	0	9	0	11	5,616	12
BUVT	7.61	3	12,768	7	25,073	9	86,381	5
CANJ	5.00	7	190,232	3	443,296	5	1,503,540	1
EPTX	12.87	1	52,026	4	147,020	7	360,257	2
GALA	4.07	9	35,533	5	511,797	4	45,196	8
GREY	3.01	10	0	9	2,296,884	3	70,410	6
HALA	5.36	5	2,014,611	1	3,463,330	2	60,821	7
PARR	5.07	6	7,609	8	345,472	6	124,765	4
RUVT	6.28	4	0	9	940	10	22,848	10
UNVT	1.59	12	0	9	0	11	23,650	9

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

[b] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997). The emissions reported in the table are the total air releases of the hydrocarbons found to be program-wide prevalent in the 1998 UATMP. Acetylene was not reportable to TRI in 1997.

[c] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997).

[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 260,000,000 and total cars in U.S. of 193,400,000) Information from "Statistical Abstract of the United States", 1999, and the internet link at http://link-usa.com/zipcode/pop.htm

Table 5-4
Comparison of Geometric Means of Program-Wide Prevalent Hydrocarbons with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Benzene			Propylene			Toluene		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
EPTX	1.20	14,120	EPTX	1.48	2,500	EPTX	2.43	31,506
BUVT	0.84	0	B2LA	1.45	206,982	BUVT	1.75	12,768
B2LA	0.72	103,342	HALA	1.45	1,346,441	RUVT	1.45	0
HALA	0.69	105,655	BUVT	1.19	0	B2LA	1.43	171,389
RUVT	0.64	0	CANJ	0.95	70,902	HALA	1.10	277,466
PARR	0.57	0	RUVT	0.90	0	BRVT	1.02	13,836
CANJ	0.54	30,956	PARR	0.84	650	CANJ	0.98	78,187
BRVT	0.54	0	GALA	0.78	0	GALA	0.81	34,811
GREY	0.41	0	BRVT	0.78	0	PARR	0.79	4,590
GALA	0.40	632	GREY	0.44	0	GREY	0.48	0
BUND	0.24	0	BUND	0.32	0	BUND	0.36	0
UNVT	0.20	0	UNVT	0.25	0	UNVT	0.25	0

Table 5-4 (Continued)
Comparison of Geometric Means of Program-Wide Prevalent Hydrocarbons with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Ethylbenzene			*m*-,*p*-Xylene			*o*-Xylene		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
EPTX	0.46	3,900	EPTX	1.23	0	EPTX	0.59	0
BUVT	0.30	0	BUVT	0.81	0	B2LA	0.43	1,980
B2LA	0.30	43,785	B2LA	0.78	0	BUVT	0.40	0
RUVT	0.25	0	RUVT	0.65	0	RUVT	0.33	0
PARR	0.20	1,359	PARR	0.45	510	PARR	0.24	500
BRVT	0.18	750	BRVT	0.42	0	BRVT	0.22	0
HALA	0.17	8,952	CANJ	0.40	0	CANJ	0.21	0
CANJ	0.16	10,187	HALA	0.40	276,097	HALA	0.20	0
GALA	0.15	90	GALA	0.33	0	GALA	0.17	0
GREY	0.10	0	GREY	0.17	0	GREY	0.09	0
BUND	0.08	0	BUND	0.14	0	BUND	0.08	0
UNVT	0.07	0	UNVT	0.10	0	UNVT	0.06	0

6.0 Data Interpretation: Halogenated Hydrocarbons

Halogenated hydrocarbons are organic compounds that contain carbon, hydrogen, and halogens—the chemical group that includes chlorine, bromine, and fluorine. Most halogenated hydrocarbons are used for industrial purposes and as solvents, though some are produced naturally (Godish, 1997). Once emitted to the air, many volatile halogenated hydrocarbons resist photochemical breakdown and therefore persist in the atmosphere for relatively long periods of time (Godish, 1997; Ramamoorthy and Ramamoorthy, 1997). These compounds can cause chronic health effects as well as contribute to the formation of tropospheric ozone. Like hydrocarbons, only the halogenated hydrocarbons with lower molecular weights are volatile, and the sampling and analytical methods used in the 1998 UATMP measure a subset of 37 of these volatile compounds.

The discussions in this chapter center on the general trends observed for the nine program-wide prevalent halogenated hydrocarbons and consider halogenated hydrocarbon concentrations quantified at the 12 monitoring locations, with respect to:

- Correlations between concentrations of the program-wide prevalent halogenated hydrocarbons and concentrations of other compounds measured at the same time at the same monitoring location;
- Correlations between concentrations of the program-wide prevalent halogenated hydrocarbons and temperature;
- Correlations between concentrations of the program-wide prevalent halogenated hydrocarbons and meteorological parameters;
- Temporal (annual) variations in halogenated hydrocarbon concentrations measured during the 1994 through 1998 UATMPs;
- Spatial variations in halogenated hydrocarbon concentrations measured during the 1998 UATMP; and
- Relationship between spatial variations in halogenated hydrocarbon concentrations measured during the 1998 UATMP and estimates of industrial emissions.

This report presents only pairwise correlations (i.e., correlations between two variables). Although multivariate correlation analyses may identify more complex, but noteworthy, trends and patterns in the UATMP data, such detailed analyses were not included in the scope of this work.

6.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1998 UATMP (i.e., hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyls). The following discussion summarizes the calculated correlations.

6.1.1 Correlations Between Halogenated Hydrocarbons and Hydrocarbons

Figure 6-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent hydrocarbons.

As the distribution of Pearson correlation coefficients in Figure 6-1 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1998 UATMP were weakly correlated with ambient air concentrations of the program-wide prevalent hydrocarbons. Approximately 25 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Nearly 42 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. However, the average correlation is statistically significant (0.250 ± 0.174) across the 12 sites. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of hydrocarbons.

6.1.2 Correlations Between Halogenated Hydrocarbons and Polar Compounds

Figure 6-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 6-1 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1998 UATMP were very weakly correlated with ambient air concentrations of the program-wide prevalent polar compounds. Across all 12 sites, there was no statistical significance in the correlations (0.146 ± 0.192). Less than 10 percent of the correlation coefficients were between either +0.75 and +1, indicating few strong correlations. Nearly 58 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of polar compounds.

6.1.3 Correlations Between Halogenated Hydrocarbons and Carbonyls

Figure 6-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent carbonyls.

The distribution of Pearson correlation coefficients in Figure 6-1 shows that ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1998 UATMP were correlated with ambient air concentrations of the program-wide prevalent carbonyls. Across all 12 sites, there was no statistical significance in the correlations (0.160 ± 0.175). Less than 10 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Approximately 42 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated

hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of carbonyls.

6.2 Correlations Between Concentrations and Temperature

6.2.1 Temperature

According to Table 6-1, the program-wide prevalent halogenated hydrocarbons had positive correlations with maximum, minimum, and average temperature across all twelve sites. This observation would suggest that increasing temperature would relate to increasing measured concentration of halogenated hydrocarbons. The highest positive correlations of halogenated hydrocarbon concentration with maximum, minimum, and average temperature occurred at the Hahnville, LA, site (0.570, 0.686, and 0.596, respectively). The Brattleboro, VT, site had the strongest negative correlation of halogenated hydrocarbon concentration with minimum temperature (-0.089).

Statistical significance of the correlation between the temperature parameters and the measured halogenated hydrocarbon concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 6-1 shows, all of these correlations were statistically significant.

6.2.2 Wind and Sea Level Pressure Information

According to Table 6-1, the program-wide prevalent halogenated hydrocarbons had a negative correlation with the wind speed across the 12 sites. This observation would suggest that high wind speeds tend to decrease the measured concentration of halogenated hydrocarbons. The correlation between sea level pressure and the measured halogenated hydrocarbon concentration was negative (-0.078 ± 0.100).

Statistical significance of the correlation between the wind speed and sea level pressure and the measured halogenated hydrocarbon concentrations at the 95 percent confidence interval

was also calculated for each of the sites. As Table 6-1 shows, only the correlation with the wind speed was statistically significant. This observation suggests that increasing wind speeds reduce the concentrations of the halogenated hydrocarbons, either by dilution or by removing the compounds from the area where the measurements are being made.

6.2.3 Dew Point Temperature and Visibility

According to Table 6-1, the program-wide prevalent halogenated hydrocarbons generally had positive correlations with both the dew point temperature and visibility. The highest positive correlation of halogenated hydrocarbon concentration with dew point temperature and visibility occurred at the Hahnville, LA, site (0.668) and the Baton Rouge (0.281) sites, respectively. The strongest negative correlations for these two parameters occurred at the Texarkana, AR, site (-0.003) and Camden, NJ (-0.223) sites, respectively.

Statistical significance of the correlation between the dew point temperature and visibility and the measured halogenated hydrocarbon concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 6-1 shows, only the dew point temperature exhibits a statistically significant positive correlation with measured halogenated hydrocarbon concentration. This observation would suggest that halogenated hydrocarbons may increase with increasing moisture.

6.3 Annual Variations

Table 6-2 presents average concentrations of program-wide prevalent halogenated hydrocarbons at each of the 12 monitoring stations for the 1994 through 1998 UATMPs. Overall, there is a general pattern of decreased concentrations of halogenated hydrocarbons from 1995 through 1998.

Readers should note that changes in concentrations can result from shifting prevailing winds and might not necessarily indicate increases or decreases in emissions. In addition, readers

should keep in mind that the concentrations of these compounds are quite low, generally less than 0.40 ppbv, and conclusions regarding annual variation should be made cautiously.

6.4 Spatial Variations

To provide a sense of how overall levels of halogenated hydrocarbons varied among the UATMP monitoring locations, Figure 6-2, presents the geometric means of the sampling event sums of the program-wide prevalent halogenated hydrocarbon concentrations for each monitoring location. Unlike the concentration range seen for the hydrocarbons, little variation is demonstrated for the concentrations and no strong trend is exhibited in geometric means data presented in Figure 6-2. In addition, the geometric means for the halogenated compounds are considerably lower (maximum of 3.2 ppbv) at all locations in comparison to the geometric means for hydrocarbons and carbonyls.

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

6.5 The Impact of Motor Vehicle Emissions on Spatial Variations

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

For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent halogenated hydrocarbons are presented in Table 6-3, each ranked in descending order. The data in this table show no relationship between car ownership as an indicator of motor vehicle emissions and concentrations of halogenated hydrocarbons in ambient air.

6.6 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 6-3 summarizes emissions data for each monitoring location and ranks each data set with the highest value assigned the rank of one. For each monitoring location, Table 6-3 includes:

- The geometric mean of the sum of the program-wide prevalent halogenated hydrocarbon concentrations for each sampling event.
- The sum of emissions of the 9 program-wide prevalent halogenated hydrocarbons detected during the 1998 UATMP reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations.
- Total emissions reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations.

As the table shows, the TRI emissions ranks for the 12 sites were fairly consistent with the respective ranks of the total ambient air concentrations of the program-wide prevalent halogenated hydrocarbons. Unique trends in the data presented in Table 6-3 include:

- Two monitoring locations (i.e., Hahnville and Garyville, LA) had the highest concentrations of halogenated hydrocarbons and among the highest emissions for *total* industrial emissions reported to TRI. A distinct difference in the levels of industrial emissions of *program-wide prevalent* hydrocarbons reported to TRI is seen between these sites, despite the similarity in *total* TRI emissions. These two facilities are located within 13 miles of each other. Many of the facilities with 10 miles of the Hahnville site are within 15 miles of the Garyville site and may impact the air quality at the Garyville monitoring station. The difference in the industrial emissions of *program-wide prevalent* halogenated hydrocarbons reported to TRI is due to greater than 30,000 pounds of chloromethane reported by the one facility that is within 10 miles of the Hahnville site, but not within 10 miles of the Garyville site.
- One monitoring location (i.e., Texarkana, AR) had among the lowest concentrations of the program-wide prevalent hydrocarbons, but had relatively high levels of total industrial emissions reported to TRI, and moderate emissions of program-wide prevalent hydrocarbons.

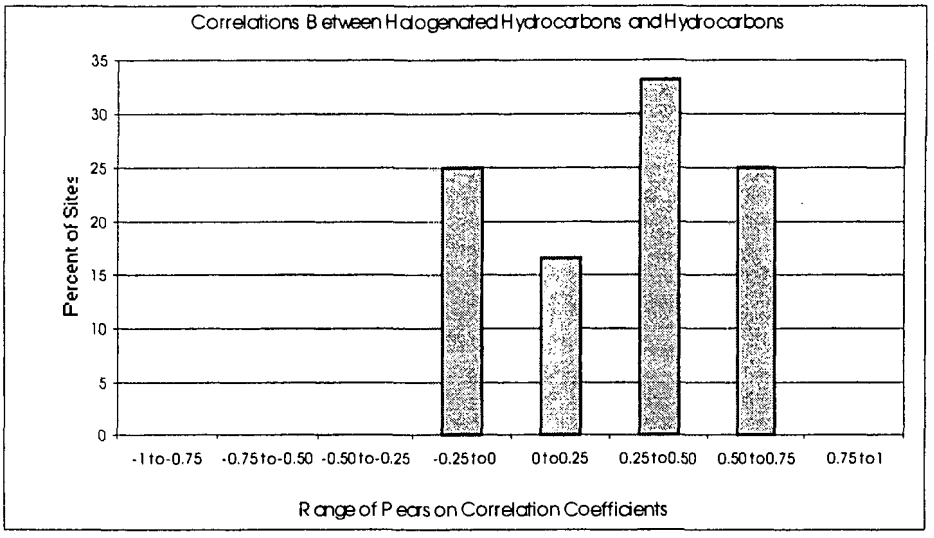
To examine the TRI emissions data more closely, Table 6-4 compares the reported air releases for the individual program-wide prevalent hydrocarbons (excluding acetylene) to the corresponding geometric mean concentrations measured during the 1998 UATMP. For ease of interpretation, Table 6-4 lists the monitoring locations in order of decreasing geometric mean concentration for each compound. In general, the data in Table 6-4 indicate that industrial emissions are not a dominating factor influencing levels of halogenated hydrocarbons in ambient air. Readers should keep in mind that the concentrations of these compounds are quite low in most cases, generally less than 1 ppbv, and conclusions regarding spatial variation should be made cautiously.

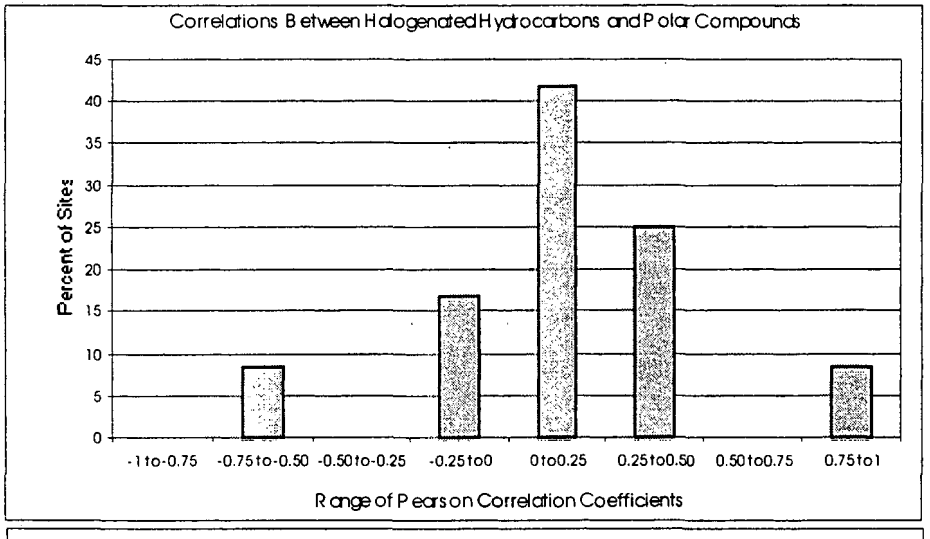
Only two compounds, chloromethane and trichlorotrifluoroethane, appear to exhibit a positive relationship between concentrations of pollutant detected at the monitoring site and industrial emissions. In each case, the site with the highest reported concentration is also the site with the highest reported industrial emissions. However, it should be noted that:

- While the Baton Rouge, LA, site has the highest ambient concentration of trichlorotrifluoroethane and is the only monitoring site for which the pollutant was reported as an industrial emission, the levels of trichlorotrifluoroethane at Baton Rouge (geometric mean of 0.16 ppbv) are not significantly different from the emissions at Hahnville, LA (geometric mean of 0.13 ppbv).

- Hahnville and Baton Rouge, LA, have the highest geometric mean concentrations of chloromethane and are the only monitoring sites for which the pollutant was reported as an industrial emission. However, the levels of chloromethane at Baton Rouge and Hahnville are not significantly different from the emissions at the rest of the monitoring sites. In addition, Hahnville has the highest geometric mean concentrations of chloromethane (1.45 ppbv), but reported emissions of chloromethane are less than half the emissions reported for Baton Rouge (geometric mean concentration of chloromethane of 0.85 ppbv).

Figure 6-1
Summary of Data Correlations Between Groups of Compounds





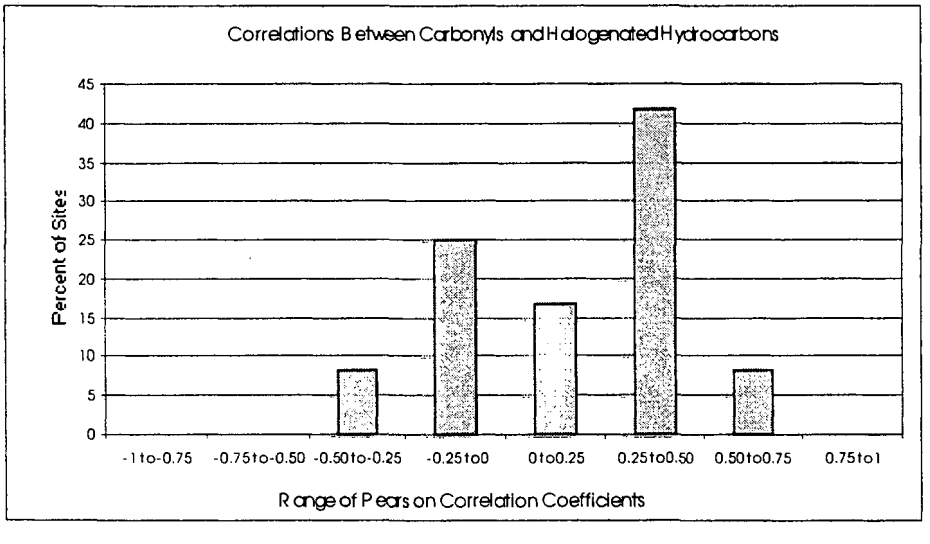


Figure 6-2
Geometric Mean of the Sums of Daily Concentrations (ppbv) of the Prevalent Halogenated Hydrocarbons

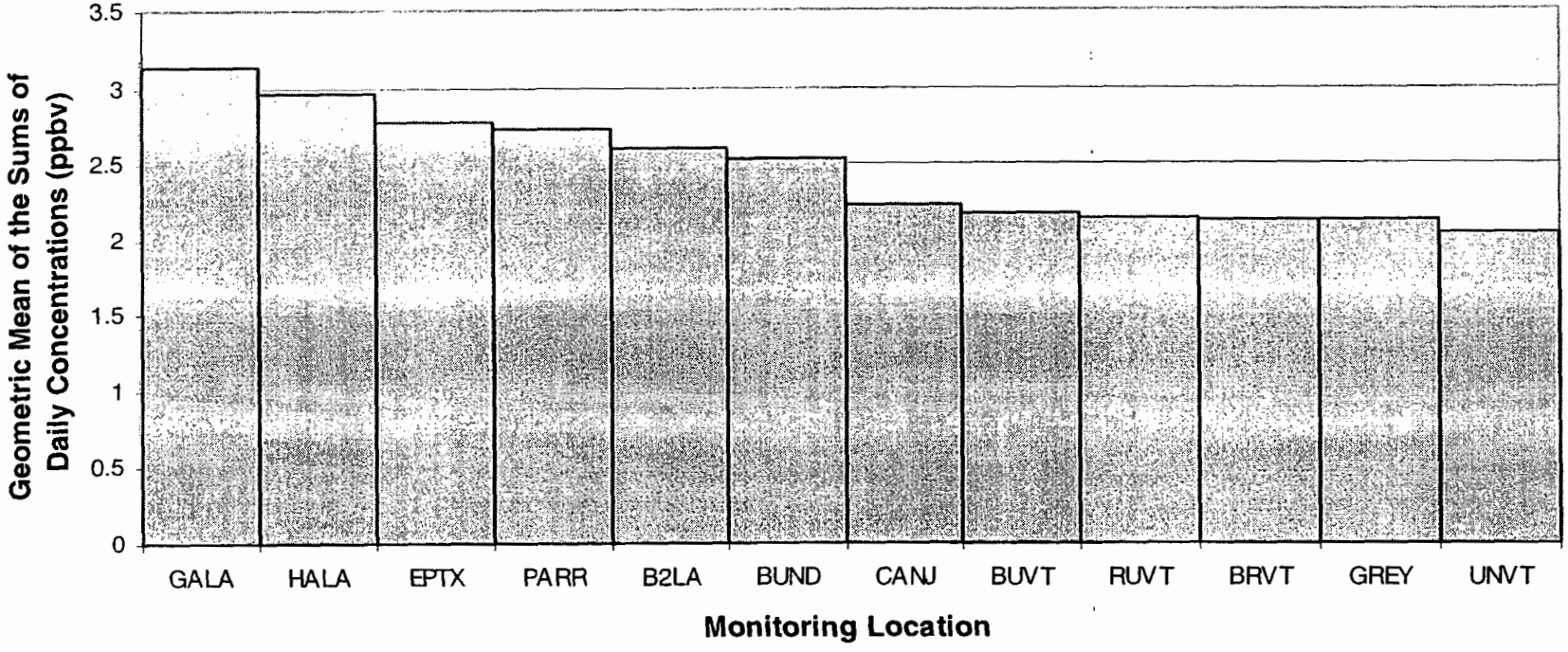


Table 6-1
Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Halogenated Hydrocarbon Concentrations

Meteorological Parameter	Average Correlation	Site with Highest Positive Correlation (Value)	Site with Lowest Negative Correlation (Value)
Maximum Temperature*	0.328 ± 0.108	Hahnville, LA (0.570)	None
Minimum Temperature*	0.265 ± 0.130	Hahnville, LA (0.686)	Brattleboro, VT (-0.089)
Average Temperature*	0.299 ± 0.114	Hahnville, LA (0.596)	None
Wind Speed*	-0.179 ± 0.046	None	Hahnville, LA (-0.284)
Sea Level Pressure	-0.078 ± 0.100	Texarkana, AR (0.218)	Beulah, ND (-0.296)
Dew Point Temperature*	0.276 ± 0.122	Hahnville, LA (0.668)	Texarkana, AR (-0.003)
Visibility	0.014 ± 0.102	Baton Rouge, LA (0.281)	Camden, NJ (-0.223)

* Statistically significant across the 12 sites.

Table 6-2
Average Concentrations (ppbv) of Program-Wide Prevalent Halogenated Hydrocarbons for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
B2LA					
1,1,1-Trichloroethane	-	0.31	0.15	0.13	0.10
Carbon Tetrachloride	-	0.08	0.09	0.09	0.10
Chloromethane	-	0.84	0.57	0.61	1.08
Dichlorodifluoromethane	-	-	-	-	0.63
Methylene Chloride	-	0.23	0.13	0.15	0.20
p-Dichlorobenzene	-	0.04	0.04	0.06	0.04
Tetrachloroethylene	-	0.08	0.06	0.07	0.06
Trichlorofluoromethane	-	-	-	-	0.40
Trichlorotrifluoroethane	-	-	-	-	0.19
BRVT					
1,1,1-Trichloroethane	-	0.20	0.10	0.10	0.06
Carbon Tetrachloride	-	0.10	0.08	0.08	0.09
Chloromethane	-	0.58	0.54	0.49	0.64
Dichlorodifluoromethane	-	-	-	-	0.67
Methylene Chloride	-	0.20	0.77	0.41	0.11
p-Dichlorobenzene	-	0.03	0.04	0.06	0.04
Tetrachloroethylene	-	0.03	0.05	0.07	0.05
Trichlorofluoromethane	-	-	-	-	0.35
Trichlorotrifluoroethane	-	-	-	-	0.14
BUND					
1,1,1-Trichloroethane	-	-	-	-	0.07
Carbon Tetrachloride	-	-	-	-	0.08
Chloromethane	-	-	-	-	0.62
Dichlorodifluoromethane	-	-	-	-	0.67
Methylene Chloride	-	-	-	-	0.54
p-Dichlorobenzene	-	-	-	-	0.04
Tetrachloroethylene	-	-	-	-	0.06
Trichlorofluoromethane	-	-	-	-	0.40
Trichlorotrifluoroethane	-	-	-	-	0.11

- Indicates compound was not included in the UATMP for that year.

Table 6-2 (Continued)
Average Concentrations (ppbv) of Program-Wide Prevalent Halogenated Hydrocarbons for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
BUVT					
1,1,1-Trichloroethane	-	0.21	0.10	0.11	0.06
Carbon Tetrachloride	-	0.08	0.08	0.08	0.09
Chloromethane	-	0.64	0.51	0.56	0.64
Dichlorodifluoromethane	-	-	-	-	0.67
Methylene Chloride	-	0.15	0.09	0.13	0.21
p-Dichlorobenzene	-	0.03	0.04	0.06	0.04
Tetrachloroethylene	-	0.03	0.03	0.07	0.04
Trichlorofluoromethane	-	-	-	-	0.37
Trichlorotrifluoroethane	-	-	-	-	0.09
CANJ					
1,1,1-Trichloroethane	0.44	0.25	0.14	0.14	0.07
Carbon Tetrachloride	0.07	0.09	0.08	0.09	0.09
Chloromethane	0.72	0.76	0.59	0.71	0.77
Dichlorodifluoromethane	-	-	-	-	0.66
Methylene Chloride	1.18	0.44	0.15	0.28	0.16
p-Dichlorobenzene	0.05	0.08	0.06	0.07	0.05
Tetrachloroethylene	0.09	0.07	0.10	0.08	0.07
Trichlorofluoromethane	-	-	-	-	0.33
Trichlorotrifluoroethane	-	-	-	-	0.09
EPTX					
1,1,1-Trichloroethane	-	0.26	0.10	0.11	0.06
Carbon Tetrachloride	-	0.08	0.08	0.09	0.08
Chloromethane	-	0.71	0.70	0.67	0.81
Dichlorodifluoromethane	-	-	-	-	0.69
Methylene Chloride	-	0.30	0.11	0.78	0.83
p-Dichlorobenzene	-	0.09	0.07	0.06	0.05
Tetrachloroethylene	-	0.06	0.06	0.07	0.05
Trichlorofluoromethane	-	-	-	-	0.34
Trichlorotrifluoroethane	-	-	-	-	0.09

- Indicates compound was not included in the UATMP for that year.

Table 6-2 (Continued)
Average Concentrations (ppbv) of Program-Wide Prevalent Halogenated Hydrocarbons for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
GALA					
1,1,1-Trichloroethane	-	0.22	0.13	6.94	1.21
Carbon Tetrachloride	-	0.10	0.08	0.09	0.09
Chloromethane	-	1.03	0.65	1.07	1.10
Dichlorodifluoromethane	-	-	-	-	0.71
Methylene Chloride	-	0.12	0.06	0.48	0.33
p-Dichlorobenzene	-	0.03	0.05	0.05	0.04
Tetrachloroethylene	-	0.02	0.07	0.07	0.29
Trichlorofluoromethane	-	-	-	-	0.37
Trichlorotrifluoroethane	-	-	-	-	0.11
GREY					
1,1,1-Trichloroethane	-	-	-	-	0.06
Carbon Tetrachloride	-	-	-	-	0.08
Chloromethane	-	-	-	-	0.66
Dichlorodifluoromethane	-	-	-	-	0.59
Methylene Chloride	-	-	-	-	0.26
p-Dichlorobenzene	-	-	-	0.06	0.04
Tetrachloroethylene	-	-	-	0.07	0.06
Trichlorofluoromethane	-	-	-	-	0.31
Trichlorotrifluoroethane	-	-	-	-	0.08
HALA					
1,1,1-Trichloroethane	-	0.23	0.16	0.17	0.09
Carbon Tetrachloride	-	0.09	0.09	0.09	0.09
Chloromethane	-	0.88	0.61	1.13	1.83
Dichlorodifluoromethane	-	-	-	-	0.66
Methylene Chloride	-	1.78	0.07	0.12	0.17
p-Dichlorobenzene	-	0.04	0.04	0.05	0.04
Tetrachloroethylene	-	0.04	0.06	0.07	0.17
Trichlorofluoromethane	-	-	-	-	0.35
Trichlorotrifluoroethane	-	-	-	-	0.13

- Indicates compound was not included in the UATMP for that year.

Table 6-2 (Continued)
Average Concentrations (ppbv) of Program-Wide Prevalent Halogenated Hydrocarbons for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
PARR					
1,1,1-Trichloroethane	-	-	-	0.11	0.06
Carbon Tetrachloride	-	-	-	0.10	0.08
Chloromethane	-	-	-	0.91	0.80
Dichlorodifluoromethane	-	-	-	-	0.65
Methylene Chloride	-	-	-	0.19	1.01
p-Dichlorobenzene	-	-	-	0.05	0.04
Tetrachloroethylene	-	-	-	0.06	0.06
Trichlorofluoromethane	-	-	-	-	0.29
Trichlorotrifluoroethane	-	-	-	-	0.11
RUVT					
1,1,1-Trichloroethane	-	0.18	0.14	0.10	0.06
Carbon Tetrachloride	-	0.08	0.08	0.09	0.09
Chloromethane	-	0.55	0.49	0.52	0.64
Dichlorodifluoromethane	-	-	-	-	0.70
Methylene Chloride	-	0.44	0.08	0.16	0.15
p-Dichlorobenzene	-	0.03	0.04	0.05	0.04
Tetrachloroethylene	-	0.05	0.05	0.06	0.05
Trichlorofluoromethane	-	-	-	-	0.34
Trichlorotrifluoroethane	-	-	-	-	0.09
UNVT					
1,1,1-Trichloroethane	-	0.23	0.08	0.09	0.06
Carbon Tetrachloride	-	0.07	0.08	0.08	0.08
Chloromethane	-	0.56	0.52	0.56	0.68
Dichlorodifluoromethane	-	-	-	-	0.61
Methylene Chloride	-	0.15	0.06	0.08	0.13
p-Dichlorobenzene	-	0.03	0.04	0.06	0.04
Tetrachloroethylene	-	0.02	0.05	0.09	0.05
Trichlorofluoromethane	-	-	-	-	0.33
Trichlorotrifluoroethane	-	-	-	-	0.10

- Indicates compound was not included in the UATMP for that year.

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

Monitoring Location	Geometric Means of the Total Program-Wide Prevalent Halogenated Hydrocarbon Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Halogenated Hydrocarbons*** within a 10-Mile Radius of the Monitoring Location[b]		***Total Industrial Emissions*** within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 1998	Conc. Rank	Pounds in 1997	Emissions Rank	Pounds in 1997	Emissions Rank	Total Cars	Rank of Total Cars
B2LA	2.61	5	346,586	1	3,471,078	1	256,716	3
BRVT	2.13	10	5,391	5	37,511	8	22,611	11
BUND	2.54	6	0	6	0	11	5,616	12
BUVT	2.17	8	0	6	25,073	9	86,381	5
CANJ	2.23	7	18,831	3	443,296	5	1,503,540	1
EPTX	2.77	3	0	6	147,020	7	360,257	2
GALA	3.14	1	0	6	511,797	4	45,196	8
GREY	2.12	11	0	6	2,296,884	3	70,410	6
HALA	2.96	2	35,057	2	3,463,330	2	60,821	7
PARR	2.73	4	13,000	4	345,472	6	124,765	4
RUVT	2.14	9	0	6	940	10	22,848	10
UNVT	2.04	12	0	6	0	11	23,650	9

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

[b] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997). The emissions reported are the total air releases of the halogenated hydrocarbons identified as program-wide prevalent for the 1998 UATMP.

[c] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997).

[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 260,000,000 and total cars in U.S. of 193,400,000). Information from "Statistical Abstract of the United States", 1999, and the internet link at http://link-usa.com/zipcode/pop.htm

Table 6-4
Comparison of Geometric Means of Program-Wide Prevalent Halogenated Hydrocarbons with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

1,1,1-Trichloroethane			Carbon Tetrachloride			Chloromethane		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
GALA	0.18	0	B2LA	0.09	5,083	HALA	1.45	35,057
B2LA	0.09	4,505	HALA	0.09	0	B2LA	0.85	87,296
HALA	0.08	0	RUVT	0.09	0	GALA	0.83	0
CANJ	0.07	18,630	BUVT	0.09	0	PARR	0.77	0
BUND	0.07	0	BUND	0.08	0	EPTX	0.76	0
RUVT	0.06	0	BRVT	0.08	0	CANJ	0.73	0
BUVT	0.06	0	GALA	0.08	0	UNVT	0.67	0
BRVT	0.06	0	UNVT	0.08	0	GREY	0.66	0
PARR	0.06	0	CANJ	0.08	0	BRVT	0.64	0
UNVT	0.06	0	PARR	0.08	0	BUVT	0.63	0
EPTX	0.06	0	GREY	0.08	0	BUND	0.62	0
GREY	0.05	0	EPTX	0.07	0	RUVT	0.63	0
p-Dichlorobenzene			Dichlorodifluoromethane			Methylene Chloride		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
CANJ	0.05	0	RUVT	0.69	0	EPTX	0.70	0
PARR	0.04	0	BUVT	0.66	0	BUND	0.44	0
EPTX	0.04	0	BRVT	0.65	0	PARR	0.31	13,000
BRVT	0.04	0	HALA	0.65	0	GREY	0.23	0
HALA	0.04	0	BUND	0.65	0	B2LA	0.15	9,176
UNVT	0.04	0	EPTX	0.64	0	CANJ	0.14	201
GREY	0.04	0	PARR	0.64	0	BUVT	0.13	0
BUND	0.04	0	CANJ	0.64	0	GALA	0.12	0
BUVT	0.04	0	B2LA	0.62	14,595	RUVT	0.11	0
B2LA	0.04	0	GALA	0.60	0	HALA	0.11	0
RUVT	0.04	0	UNVT	0.60	0	BRVT	0.08	5,391
GALA	0.04	0	GREY	0.59	0	UNVT	0.08	0

Table 6-4 (Continued)
Comparison of Geometric Means of Program-Wide Prevalent Halogenated Hydrocarbons with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Tetrachloroethylene			Trichlorofluoromethane			Trichlorotrifluoroethane		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
GALA	0.11	0	BUND	0.38	0	B2LA	0.16	185,500
HALA	0.08	0	BUVT	0.36	0	HALA	0.13	0
CANJ	0.06	0	B2LA	0.34	37,070	BRVT	0.12	0
GREY	0.05	0	BRVT	0.34	0	PARR	0.10	0
BUND	0.05	0	RUVT	0.34	0	BUND	0.10	0
PARR	0.05	0	CANJ	0.32	0	GALA	0.10	0
B2LA	0.05	3,361	GREY	0.31	0	UNVT	0.09	0
BRVT	0.05	0	UNVT	0.30	0	RUVT	0.09	0
UNVT	0.05	0	GALA	0.30	0	CANJ	0.09	0
RUVT	0.04	0	EPTX	0.30	0	EPTX	0.09	0
BUVT	0.04	0	HALA	0.29	0	BUVT	0.08	0
EPTX	0.04	0	PARR	0.25	0	GREY	0.08	0

7.0 Data Interpretation: Polar Compounds

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

The discussions in this chapter center on the general trends observed for the three program-wide prevalent polar compounds and consider polar compound concentrations quantified at the 12 monitoring locations, with respect to:

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

- Correlations between concentrations of the program-wide prevalent polar compounds and temperature;
- Correlations between concentrations of the program-wide prevalent polar compounds and meteorological parameters.
- Temporal (annual) variations in polar compound concentrations measured during the 1994 through 1998 UATMPs;
- Spatial variations in polar compound concentrations measured during the 1998 UATMP; and
- Relationship between spatial variations in polar compound concentrations measured during the 1998 UATMP and estimates based on the estimation of industrial emissions.

7.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1998 UATMP (i.e., hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyls). The following discussion summarizes the calculated correlations.

7.1.1 Correlations Between Hydrocarbons and Polar Compounds

Figure 7-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 7-1 shows, ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1998 UATMP were very weakly correlated with ambient air concentrations of the program-wide prevalent polar compounds. Approximately 16 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Nearly 58 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. However, the average correlation was statistically significant across the 12 sites (0.199 ± 0.152). These weak correlations generally suggest that the factors that most strongly affect levels of hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of polar compounds.

7.1.2 Correlations Between Halogenated Hydrocarbons and Polar Compounds

Figure 7-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent halogenated hydrocarbons and program-wide prevalent polar compounds.

As the distribution of Pearson correlation coefficients in Figure 7-1 shows, ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1998 UATMP were very weakly correlated with ambient air concentrations of the program-wide prevalent polar compounds. Across all 12 sites, there was no statistical significance in the correlations (0.146 ± 0.192). Less than 10 percent of the correlation coefficients were between either +0.75 and +1, indicating few strong correlations. Nearly 58 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of polar compounds.

7.1.3 Correlations Between Carbonyls and Polar Compounds

Figure 7-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for pairs of the program-wide prevalent polar compounds and program-wide prevalent carbonyls.

The distribution of Pearson correlation coefficients in Figure 7-1 indicates a weak correlation between ambient air concentrations of the program-wide prevalent carbonyls measured during the 1998 UATMP and those of program-wide prevalent polar compounds. Approximately 25 percent of the correlation coefficients were between -0.25 and -0.50, indicating a moderate negative correlation. Approximately 58 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation.

7.2 Correlations Between Concentrations and Temperature

7.2.1 Temperature

According to Table 7-1, the program-wide prevalent polar compounds had a positive correlation for maximum temperature and negative correlations for minimum and average temperature across all 12 sites. The highest positive correlations of polar compound

concentrations with maximum and average temperature occurred at the Little Rock, AR, site (0.401 and 0.366, respectively), while the Burlington, VT, site had the highest positive correlation for minimum temperature (0.321). The Baton Rouge, LA, site had the strongest negative correlation of polar compound concentration with all three temperature parameters (-0.478, -0.326, and -0.406, respectively).

Statistical significance of the correlation between the temperature parameters and the measured polar compound concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 7-1 shows, none of these correlations were statistically significant.

7.2.2 Wind and Sea Level Pressure Information

According to Table 7-1, the program-wide prevalent polar compounds had positive correlations with the wind speed across the 12 sites. The highest positive correlation of polar hydrocarbon concentration with the wind speed occurred at the Rutland, VT, site (-0.524) while the Texarkana, AR, site had the strongest negative correlation with the wind speed (-0.516).

The correlation between sea level pressure and polar compound concentrations was negative across the 12 sites. The Burlington, VT, site had the strongest negative correlation (-0.462), while the Beulah, ND, site had the highest positive correlation (0.271).

Statistical significance of the correlation between the wind speed and sea level pressure with the measured polar compound concentrations at the 95 percent confidence interval was also calculated across the 12 sites. As Table 7-1 shows, neither of these correlations were statistically significant.

7.2.3 Dew Point Temperature and Visibility

According to Table 7-1, the program-wide prevalent polar compounds had a positive correlation with the dew point temperature. The highest positive correlation of polar compound

concentrations with the dew point temperature occurred at the Camden, NJ, site (0.388), while the strongest negative correlation for this parameter occurred at the Garryville, LA, site (-0.369).

Visibility showed a negative correlation with the polar compound concentrations across the 12 sites. The strongest negative correlation occurred at the Texarkana, AR, site (-0.518), while the highest positive correlation occurred at the Garyville, LA, site (0.134).

Statistical significance of the correlation between the dew point temperature and the visibility with the measured polar compound concentrations at the 95 percent confidence interval was also calculated across the 12 sites. As Table 7-1 shows, only the visibility correlation was statistically significant, suggesting that as the visibility decreases (indicating increased haziness) the polar compound concentrations increase.

7.3 Annual Variations

This section briefly describes the annual variation in ambient air concentrations of the program-wide prevalent polar compounds. Readers should note that changes in concentrations can result from shifting prevailing winds and might not necessarily indicate increases or decreases in emissions. Table 7-2 presents average concentrations of program-wide prevalent polar compounds at each of the 12 monitoring stations for the 1997 and 1998 UATMPs. These data illustrate the following general trends:

- With the exception of the Baton Rouge, LA, monitoring site, acetonitrile concentrations are lower in 1998 than in 1997. It should be noted that the Baton Rouge, LA, acetonitrile concentrations are orders of magnitude greater than at any other monitoring site.
- With the exception of the Baton Rouge and Garyville, LA, monitoring sites, methyl ethyl ketone concentrations are higher in 1998 than in 1997. Readers should keep in mind that the concentrations of this compound are quite low, generally less than 1 ppbv, and conclusions regarding annual variation should be made cautiously.

7.4 Spatial Variations

To provide a sense of how overall levels of polar compounds varied among the UATMP monitoring locations, Figure 7-2 presents the geometric means of the sampling event sums for the program-wide prevalent polar compound concentrations at each monitoring location. With the exception of the large peak seen for the Baton Rouge, LA, site, little variation is demonstrated for the concentrations and no strong trend is exhibited in geometric means data presented in Figure 7-2. Aside from the Baton Rouge, LA, site, the geometric means for the polar compounds are considerably lower (maximum of 1.9 ppbv) at all locations in comparison to the geometric means for hydrocarbons and carbonyls.

The large peak seen for the Baton Rouge, LA, site is the result of very high concentrations of acetonitrile in some of the samples. Considerable variation is seen in the levels of acetonitrile at this monitoring site, with values ranging from 110 ppbv to concentrations below the method detection limit.

7.5 The Impact of Motor Vehicle Emissions on Spatial Variations

For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent polar compounds are presented in Table 7-3, each ranked in descending order. The data in this table indicate a possible correlation between car ownership as an indicator of motor vehicle emissions and concentrations of polar compounds in ambient air, but exceptions are also seen:

- Concentrations of program-wide prevalent polar compounds were lowest at the Beulah, ND, monitoring site. This is also the site with the lowest total number of cars.
- Concentrations of program-wide prevalent polar compounds were highest at the Baton Rouge, LA, monitoring site. This site has the third highest total number of cars.
- Conversely, the Texarkana, AR, site has the second highest concentrations of program-wide prevalent polar compounds, but ranks in middle level for number of cars.

7.6 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 7-3 summarizes emissions data for each monitoring location, and ranks each data set with the highest value assigned the rank of one. For each monitoring location, Table 7-3 includes:

- The geometric mean of the sum of the program-wide prevalent polar compound concentrations for each sampling event.
- The sum of emissions for 8 of the 9 program-wide prevalent polar compounds detected during the 1998 UATMP, as reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations. The table does not account for emissions of bromoform because industries are not required to disclose releases of this compound to TRI.
- Total emissions reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations.

As the table shows, the TRI emissions ranks for the 12 sites were very consistent with the respective rank of the total ambient air concentration of the program-wide prevalent polar compounds. It should be noted that 6 of the 12 monitoring sites did not report any industrial emissions of program-wide prevalent polar compounds. The relationship between ambient air concentrations and industrial emissions is illustrated by the following:

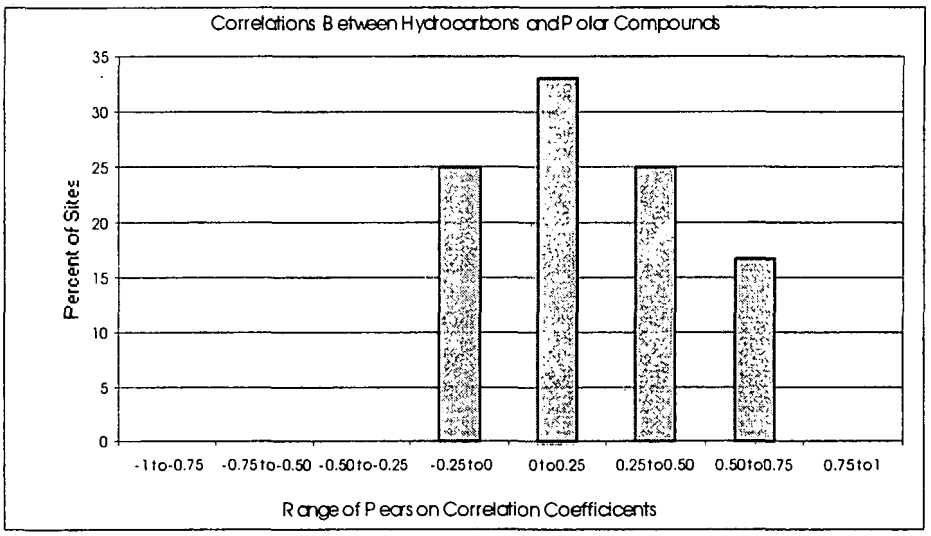
- The Baton Rouge, LA, monitoring site reported the highest concentrations of program-wide prevalent polar compounds as well as the highest industrial emissions of both program-wide prevalent and total polar compounds.
- The Beulah, ND, and Underhill, VT, monitoring sites reported the lowest concentrations of program-wide prevalent polar compounds as well as the lowest industrial emissions of total polar compounds and no industrial emissions of program-wide prevalent polar compounds.

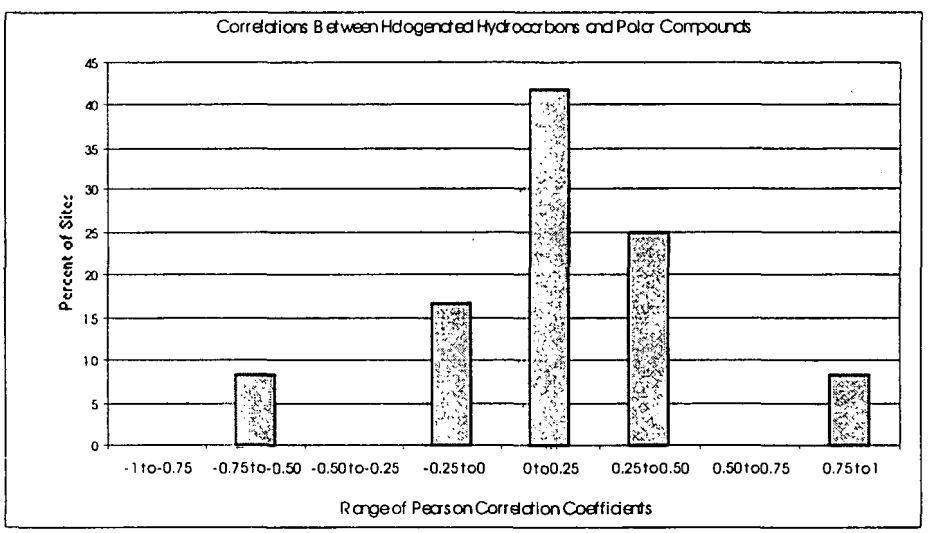
To examine the TRI emissions data more closely, Table 7-4 compares the reported air releases for acetonitrile, methyl ethyl ketone (MEK), and methyl *tert*-butyl ether (MTBE) to the corresponding geometric mean concentrations measured during the 1998 UATMP. For ease of

interpretation, Table 7-4 lists the monitoring locations in order of decreasing geometric mean concentration for each compound. At first glance, it appears that there may be a relationship between industrial emissions and ambient air concentrations, but it must be noted that:

- While the acetonitrile emissions at Baton Rouge are significantly higher than at any other site, higher levels of industrial emissions of acetonitrile are reported for the Hahnville, LA, monitoring location.
- While industrial emissions of MEK are reported for the monitoring sites with the two highest levels of MEK ambient air concentrations, significant levels of MEK are reported by industrial facilities near three other monitoring locations.
- Facilities within 10 miles of Baton Rouge, LA, report high levels of industrial emissions of MTBE, but concentrations of MTBE measured at Baton Rouge are near or below the detection limit.

Figure 7-1
Summary of Data Correlations Between Groups of Compounds





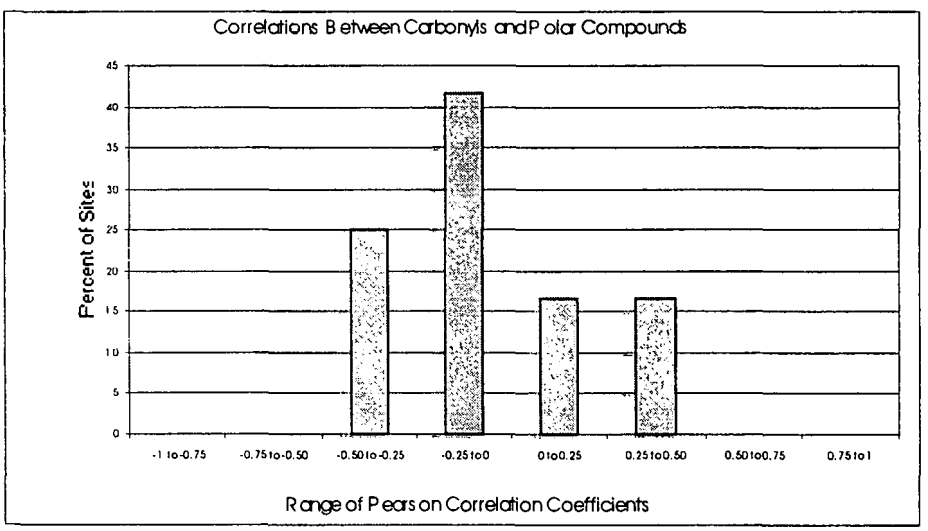


Figure 7-2
Geometric Mean of the Sums of Daily Concentrations (ppbv) of the Prevalent Polar Compounds

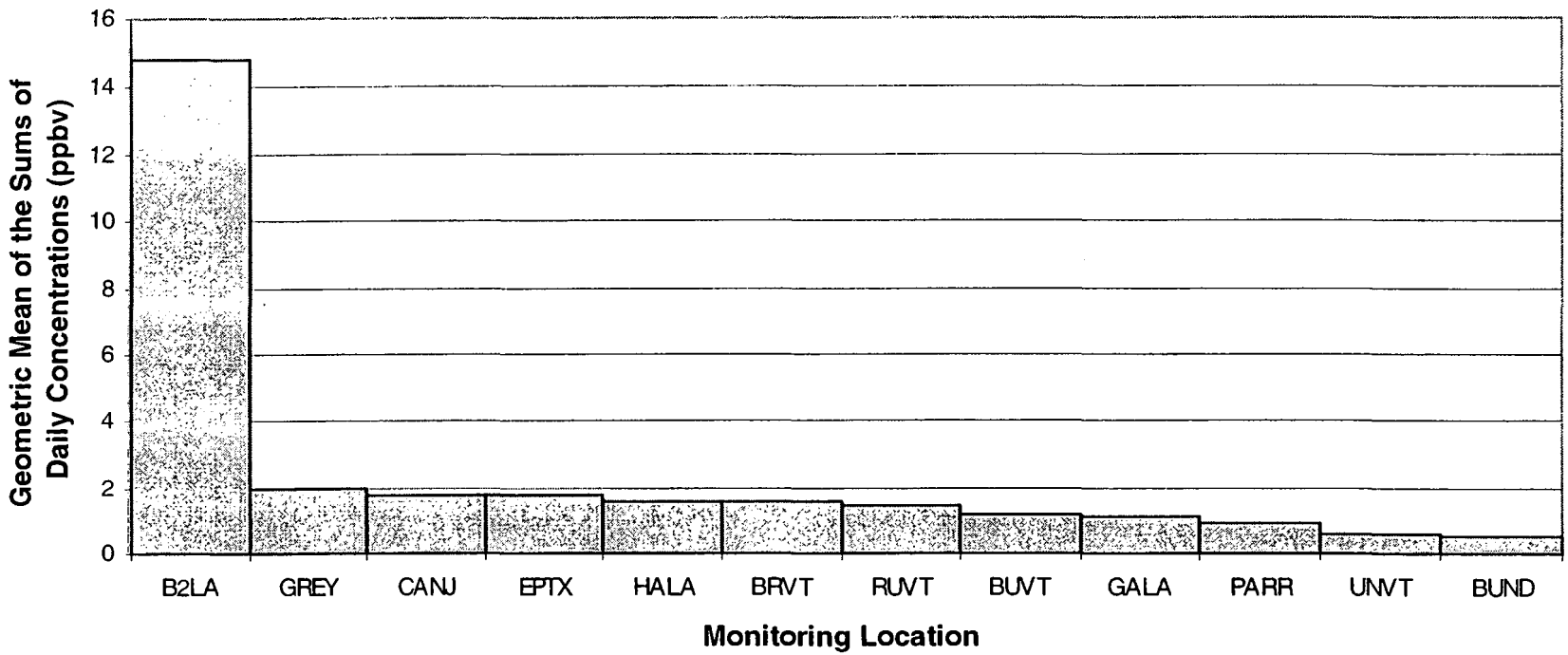


Table 7-1
Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Polar Hydrocarbon Concentrations

Meteorological Parameter	Average Correlation	Site with Highest Positive Correlation (Value)	Site with Strongest Negative Correlation (Value)
Maximum Temperature	-0.002 ± 0.157	Little Rock, AR (0.401)	Baton Rouge, LA (-0.478)
Minimum Temperature	0.020 ± 0.164	Burlington, VT (0.321)	Baton Rouge, LA (-0.326)
Average Temperature	0.007 ± 0.161	Little Rock, AR (0.366)	Baton Rouge, LA (-0.406)
Wind Speed	0.030 ± 0.168	Rutland, VT (0.524)	Texarkana, AR (-0.516)
Sea Level Pressure	-0.058 ± 0.109	Beulah, ND (0.271)	Burlington, VT (-0.463)
Dew Point Temperature	0.018 ± 0.158	Camden, NJ (0.388)	Garyville, LA (-0.369)
Visibility*	-0.165 ± 0.137	Garyville, LA (0.134)	Texarkana, AR (-0.518)

* Statistically significant across all 12 sites.

Table 7-2
Average Concentrations (ppbv) of Program-Wide Prevalent Polar Compounds for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
B2LA					
Acetonitrile	-	-	-	139.50	39.60
Methyl Ethyl Ketone	-	-	-	1.13	1.07
Methyl *tert*-Butyl Ether	-	-	-	0.13	0.07
BRVT					
Acetonitrile	-	-	-	0.24	1.04
Methyl Ethyl Ketone	-	-	-	0.46	0.94
Methyl *tert*-Butyl Ether	-	-	-	0.30	0.36
BUND					
Acetonitrile	-	-	-	-	0.04
Methyl Ethyl Ketone	-	-	-	-	*
Methyl *tert*-Butyl Ether	-	-	-	-	0.02
BUVT					
Acetonitrile	-	-	-	0.31	0.89
Methyl Ethyl Ketone	-	-	-	0.41	0.66
Methyl *tert*-Butyl Ether	-	-	-	0.31	0.36
CANJ					
Acetonitrile	-	-	-	0.31	0.35
Methyl Ethyl Ketone	-	-	-	0.63	0.73
Methyl *tert*-Butyl Ether	-	-	-	1.19	0.92
EPTX					
Acetonitrile	-	-	-	0.24	2.36
Methyl Ethyl Ketone	-	-	-	0.65	0.98
Methyl *tert*-Butyl Ether	-	-	-	0.09	0.39
GALA					
Acetonitrile	-	-	-	1.33	1.72
Methyl Ethyl Ketone	-	-	-	1.79	0.69
Methyl *tert*-Butyl Ether	-	-	-	0.03	0.04
GREY					
Acetonitrile	-	-	-	-	2.51
Methyl Ethyl Ketone	-	-	-	-	1.18
Methyl *tert*-Butyl Ether	-	-	-	0.02	0.02
HALA					
Acetonitrile	-	-	-	0.66	5.86
Methyl Ethyl Ketone	-	-	-	0.74	0.79
Methyl *tert*-Butyl Ether	-	-	-	0.04	0.19

- Indicates compound was not included in the UATMP for that year.
*Analytical results are considered invalid.

Table 7-2 (Continued)
Average Concentrations (ppbv) of Program-Wide Prevalent Polar Compounds for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
PARR					
Acetonitrile	-	-	-	0.25	0.26
Methyl Ethyl Ketone	-	-	-	0.71	0.73
Methyl *tert*-Butyl Ether	-	-	-	0.03	0.02
RUVT					
Acetonitrile	-	-	-	0.65	1.24
Methyl Ethyl Ketone	-	-	-	0.51	0.62
Methyl *tert*-Butyl Ether	-	-	-	0.23	0.28
UNVT					
Acetonitrile	-	-	-	0.31	0.44
Methyl Ethyl Ketone	-	-	-	0.35	0.43
Methyl *tert*-Butyl Ether	-	-	-	0.05	0.02

- Indicates compound was not included in the UATMP for that year.
*Analytical results are considered invalid.

Table 7-3
Ranking of Monitoring Stations by Levels of Total Program-Wide Prevalent Polar Compounds

Monitoring Location	Geometric Means of the Total Program-Wide Prevalent Polar Compound Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Polar Compounds*** within a 10-Mile Radius of the Monitoring Location[b]		***Total Industrial Emissions*** within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 1998	Conc. Rank	Pounds in 1997	Emissions Rank	Pounds in 1997	Emissions Rank	Total Cars	Rank of Total Cars
B2LA	14.82	1	350,568	1	3,471,078	1	256,716	3
BRVT	1.58	6	0	7	37,511	8	22,611	11
BUND	0.55	12	0	7	0	11	5,616	12
BUVT	1.19	8	0	7	25,073	9	86,381	5
CANJ	1.78	3	110,625	3	443,296	5	1,503,540	1
EPTX	1.76	4	2,560	6	147,020	7	360,257	2
GALA	1.11	9	0	3	511,797	4	45,196	8
GREY	1.98	2	15,230	5	2,296,884	3	70,410	6
HALA	1.60	5	143,640	2	3,463,330	2	60,821	7
PARR	0.90	10	15,458	4	345,472	6	124,765	4
RUVT	1.43	7	0	7	940	10	22,848	10
UNVT	0.62	11	0	7	0	11	23,650	9

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

[b] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997). The emissions reported are the total air releases of the polar compounds identified as program-wide prevalent for the 1998 UATMP.

[c] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997).

[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 260,000,000 and total cars in U.S. of 193,400,000). Information from "Statistical Abstract of the United States", 1999, and the internet link at http://link-usa.com/zipcode/pop.htm

Table 7-4
Comparison of Geometric Means of Program-Wide Prevalent Polar Compounds with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Acetonitrile			Methyl Ethyl Ketone			Methyl *tert*-Butyl Ether		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
B2LA	6.78	7,000	B2LA	1.01	186,282	CANJ	0.78	103,680
BUND	0.58	0	GREY	0.97	15,230	BUVT	0.30	0
GREY	0.45	0	EPTX	0.84	0	BRVT	0.29	0
HALA	0.33	15,140	BRVT	0.66	0	RUVT	0.22	0
RUVT	0.33	0	HALA	0.65	101,000	EPTX	0.15	2,560
GALA	0.23	0	PARR	0.63	15,458	HALA	0.05	27,500
BRVT	0.20	0	CANJ	0.61	6,945	B2LA	0.03	157,286
EPTX	0.20	0	RUVT	0.56	0	GALA	0.02	0
BUVT	0.17	0	GALA	0.56	0	BUND	0.02	0
CANJ	0.16	0	BUVT	0.49	0	GREY	0.02	0
UNVT	0.16	0	UNVT	0.36	0	PARR	0.02	0
PARR	0.15	0	BUND	(a)	NA	UNVT	0.02	0

(a) MEK is not reported for the Beulah, ND, site due to sample contamination.

8.0 Data Interpretation: Carbonyls

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

- Combustion sources, motor vehicles, and various industrial processes that emit carbonyls directly to the atmosphere;
- Photochemical reactions that *form* carbonyls in the air, typically from airborne hydrocarbons; and
- Photochemical reactions that *consume* carbonyls in the air, generally by photolysis or by reaction with hydroxyl radicals (Seinfeld, 1986).

As noted in Section 2, the 1998 UATMP sampling and analytical methods measured concentrations of 16 carbonyl compounds. The discussions in this chapter center on the general trends observed for four program-wide prevalent carbonyls and consider carbonyl concentrations quantified at the 12 monitoring locations, with respect to:

- Correlations between concentrations of the program-wide prevalent carbonyls and concentrations of other compounds measured at the same time at the same monitoring location;
- Correlations between concentrations of the program-wide prevalent carbonyls and temperature;
- Correlations between concentrations of the program-wide prevalent carbonyls and meteorological parameters;
- Temporal (annual) variations in carbonyl concentrations measured during the 1994 through 1998 UATMPs;
- Spatial variations in carbonyl concentrations measured during the 1998 UATMP;
- Relationship between spatial variations in carbonyl concentrations measured during the 1998 UATMP and estimates based on estimation of motor vehicle emissions; and

Relationship between spatial variations in carbonyl concentrations measured during the 1998 UATMP and estimates based on estimation of industrial emissions.

This report presents only pairwise correlations (i.e., correlations between two variables). Although multivariate correlation analyses may identify more complex, but noteworthy, trends and patterns in the UATMP data, such detailed analyses were not included in the scope of this work.

8.1 Correlations Between Concentrations of Different Compounds

From the ambient air monitoring data collected for each sampling event at each site, Pearson correlation coefficients were calculated to compare concentrations of the program-wide prevalent compounds from the four groups of chemicals studied in the 1998 UATMP (i.e., hydrocarbons, halogenated hydrocarbons, polar compounds, and carbonyls). The following discussion summarizes the calculated correlations.

8.1.1 Correlations Between Carbonyls and Hydrocarbons

Figure 8-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent hydrocarbons and program-wide prevalent carbonyls.

The distribution of Pearson correlation coefficients in Figure 8-1 shows that ambient air concentrations of the program-wide prevalent hydrocarbons measured during the 1998 UATMP were weakly correlated with ambient air concentrations of the program-wide prevalent carbonyls. Approximately 17 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Less than 50 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. The average correlation was not statistically significant across the 12 sites (0.160 ± 0.175). These weak correlations generally suggest that the factors that most strongly affect levels of hydrocarbons in ambient air are not the same as or similar to the factors that affect ambient air concentrations of carbonyl

compounds, or that the program-wide prevalent hydrocarbon and carbonyl species originate from different sources.

8.1.2 Correlations Between Carbonyls and Halogenated Hydrocarbons

Figure 8-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent carbonyls and program-wide prevalent halogenated hydrocarbons.

The distribution of Pearson correlation coefficients in Figure 8-1 shows that ambient air concentrations of the program-wide prevalent halogenated hydrocarbons measured during the 1998 UATMP were correlated weakly with ambient air concentrations of the program-wide prevalent carbonyls. Across all 12 sites, there was no statistical significance in the correlations (0.160 ± 0.175). Less than 10 percent of the correlation coefficients were between +0.50 and +0.75, indicating a moderate positive correlation. Approximately 42 percent of the correlation coefficients were between -0.25 and +0.25, indicating very weak or no correlation. These weak correlations generally suggest that the factors that most strongly affect levels of halogenated hydrocarbons in ambient air are different from the factors that affect ambient air concentrations of carbonyls.

8.1.3 Correlations Between Carbonyls and Polar Compounds

Figure 8-1 shows the distribution of Pearson correlation coefficients calculated from the ambient air monitoring data for the program-wide prevalent carbonyls and program-wide prevalent polar compounds.

The distribution of Pearson correlation coefficients in Figure 8-1 indicates a weak correlation between ambient air concentrations of the program-wide prevalent carbonyls measured during the 1998 UATMP and those of program-wide prevalent polar compounds. Approximately 25 percent of the correlation coefficients were between -0.25 and -0.50, indicating a moderate negative correlation. Approximately 58 percent of the correlation

coefficients were between -0.25 and +0.25, indicating very weak or no correlation. These weak correlations generally suggest that the factors that most strongly affect levels of polar compounds in ambient air are different from the factors that affect ambient air concentrations of carbonyls.

8.2 Correlations Between Concentrations and Meteorological Parameters

8.2.1 Temperature

According to Table 8-1, the program-wide prevalent carbonyls had positive correlations with maximum, minimum, and average temperature across all twelve sites. This observation would suggest that increasing temperature would relate to increasing measured concentration of carbonyls. The highest positive correlations of carbonyl concentrations with these meteorological parameters all occurred at the Beulah, ND, site (0.681, 0.618, and 0.698, respectively). The Hahnville, LA, site had the strongest negative correlation of carbonyl concentrations with the three temperature parameters (-0.417, -0.484, -0.419, respectively).

Statistical significance of the correlation between the temperature parameters and the measured carbonyl concentrations at the 95 percent confidence interval was also calculated across the 12 sites. As Table 8-1 shows, all of these correlations were statistically significant, suggesting that air temperature is a key component in the measured carbonyl concentrations tendency.

8.2.2 Wind and Sea Level Pressure Information

According to Table 8-1, the program-wide prevalent carbonyls had a negative correlation with wind speed across the 12 sites. The Baton Rouge, LA, site had the strongest negative correlation (0.494). This observation would suggest that slow-moving air tends to increase the measured concentrations of carbonyls. The strongest negative correlation of carbonyl concentration with the sea level pressure occurred at the Beulah, ND, site (-0.344) while the Hahnville, LA, site had the highest positive correlation (0.568).

Statistical significance of the correlation between the wind speed and sea level pressure with the measured carbonyl concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 8-1 shows, only the correlation with wind speed was statistically significant. This observation suggests that increasing wind speeds reduce the concentrations of the carbonyls, either by dilution or by removing the compounds from the area where the measurements are being made.

8.2.3 Dew Point Temperature and Visibility

According to Table 8-1, the program-wide prevalent carbonyls generally had positive correlations with both the dew point temperature and visibility. The highest positive correlation of carbonyl concentration with the dew point temperature and the visibility occurred at the Beulah, ND, site (0.643) and the Texarkana, AR, (0.349) site. The Hahnville site had the strongest negative correlations for both parameters (-0.457 and -0.551, respectively).

Statistical significance of the correlation between these parameters and the measured carbonyl concentrations at the 95 percent confidence interval was also calculated for each of the sites. As Table 8-1 shows, only the dew point temperature was statistically significant, which suggests that carbonyl concentrations may increase with increasing moisture.

8.3 Annual Variations

This section briefly describes the annual variation in ambient air concentrations of the program-wide prevalent carbonyls. Readers should note that changes in concentrations can result from shifting prevailing winds and might not necessarily indicate increases or decreases in emissions. Table 8-2 presents average concentrations of program-wide prevalent carbonyls at each of the 12 monitoring stations for the 1994 through 1998 UATMPs. These data illustrate the following general trends:

With only a few exceptions, the concentrations of acetaldehyde and formaldehyde have decreased every year at every monitoring site.

- No annual variation trend is apparent for acetone concentrations.
- With the exception of Camden, NJ, butyr/isobutyraldehyde concentrations have exhibited a trend of decreasing concentrations from 1995 through 1998.

8.4 Spatial Variations

To provide a sense of how overall levels of polar compounds varied among the UATMP monitoring locations, Figure 8-2 presents the geometric means of the sampling event sums for the program-wide prevalent carbonyl concentrations at each monitoring location.

To examine the TRI emissions data more closely, Table 8-3 compares the reported air releases for the individual program-wide prevalent carbonyls (excluding acetone) to the corresponding geometric mean concentrations measured during the 1998 UATMP. For ease of interpretation, Table 8-3 lists the monitoring locations in order of decreasing geometric mean concentration for each compound. No clear relationship between industrial emissions and ambient air concentrations of carbonyls is demonstrated by the data presented in Table 8-3.

8.5 The Impact of Motor Vehicle Emissions on Spatial Variations

Motor vehicles are thought to contribute to variations in carbonyl concentrations in ambient air. This report uses two parameters to evaluate the impact of motor vehicle emissions on ambient air quality:

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

8.5.1 Car Ownership Data

As an indicator of motor vehicle emissions near the UATMP monitoring locations, Table 8-4 presents estimates of the number of cars owned by residents within 10 miles of each monitoring location. For purposes of comparison, both car ownership data and the observed levels of total program-wide prevalent carbonyls are presented in Table 8-4, ranked in

descending order. The data in the table indicate some correlation between car ownership data and ambient air concentrations of carbonyls:

- The monitoring sites at El Paso, TX, and Camden, NJ, reported the highest concentrations of program-wide prevalent carbonyls and also have the highest numbers of cars within 10 miles of the sites.

- The Beulah, ND, and Underhill, VT, sites report low concentrations of program-wide prevalent carbonyls and low numbers of cars within 10 miles of the sites. However, very little correlation can be seen between reported concentrations and car ownership at the remaining monitoring sites.

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

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

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

8.5.2 Motor Vehicles Emissions Profiles

While the roadside study cited in Section 5 did not consider concentrations of carbonyls, analysis of concentration ratios for selected carbonyls indicates that motor vehicle emissions influence ambient levels of these compounds. More specifically, if motor vehicles indeed significantly affect ambient air concentrations of carbonyls, it would be expected that ratios of concentrations of carbonyls to concentrations of any BTEX compound would be consistent across monitoring locations. As a test of this hypothesis, Figure 8-3 shows ratios between the concentrations of four carbonyls—acrolein, benzaldehyde, and butyr/isobutyraldehyde—and concentrations of *m*-,*p*-xylene for the 1998 UATMP monitoring locations. With the exception of El Paso, TX, the ratios shown in Figure 8-3 are somewhat similar for the 12 monitoring

locations, which suggests that emissions from motor vehicles may affect airborne levels of these three carbonyl compounds.

8.6 The Impact of Industrial Emissions on Spatial Variations

For purposes of comparison, Table 8-4 summarizes emissions data for each monitoring location and ranks each data set with the highest value assigned the rank of one. For each monitoring location, Table 8-4 includes:

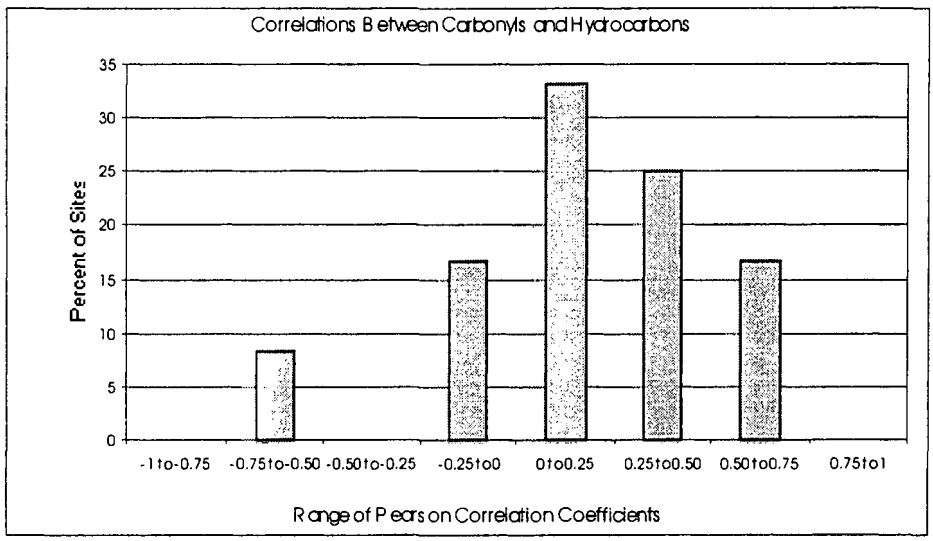
- The geometric mean of the sum of the program-wide prevalent carbonyl concentrations for each sampling event.
- The sum of emissions of 3 of the 4 program-wide prevalent carbonyls detected during the 1998 UATMP (acetaldehyde, butyr/isobutyraldehyde, and formaldehyde) as reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations. The table does not account for emissions of acetone because industries are not required to disclose releases of these compounds to TRI.
- Total emissions reported to TRI in 1997 by facilities within 10 miles of the 1998 UATMP monitoring locations.

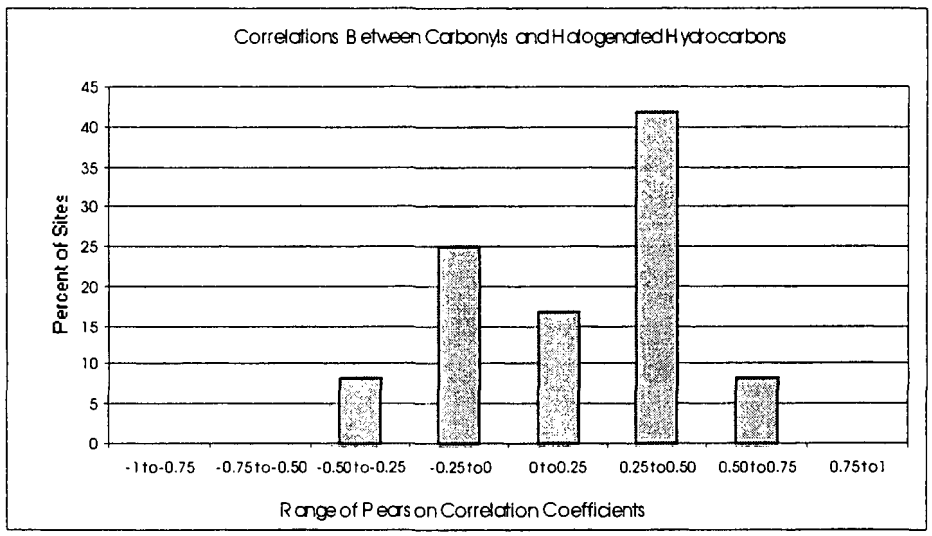
As the table shows, the TRI emissions ranks for the 12 sites were not consistent with the respective rank of the total ambient air concentration of the program-wide prevalent carbonyls. It should be noted that 8 of the 12 monitoring sites did not report any industrial emissions of program-wide prevalent carbonyl compounds. To examine the TRI emissions data more closely, Table 8-4 compares the reported air releases for the individual program-wide prevalent carbonyls (excluding acetone) to the corresponding geometric mean concentrations measured during the 1998 UATMP. The weakness of the relationship between ambient air concentrations and industrial emissions is illustrated by the following:

- El Paso, TX, and Camden, NJ, reported the highest concentrations of the program-wide prevalent carbonyls, but had moderate levels of total industrial emissions reported to TRI and no industrial emissions of program-wide prevalent carbonyl compounds.

Other monitoring locations (e.g., Hahnville and Baton Rouge, LA) had relatively low concentrations of carbonyls, but relatively high levels of emissions reported to TRI.

Figure 8-1
Summary of Data Correlations Between Groups of Compounds





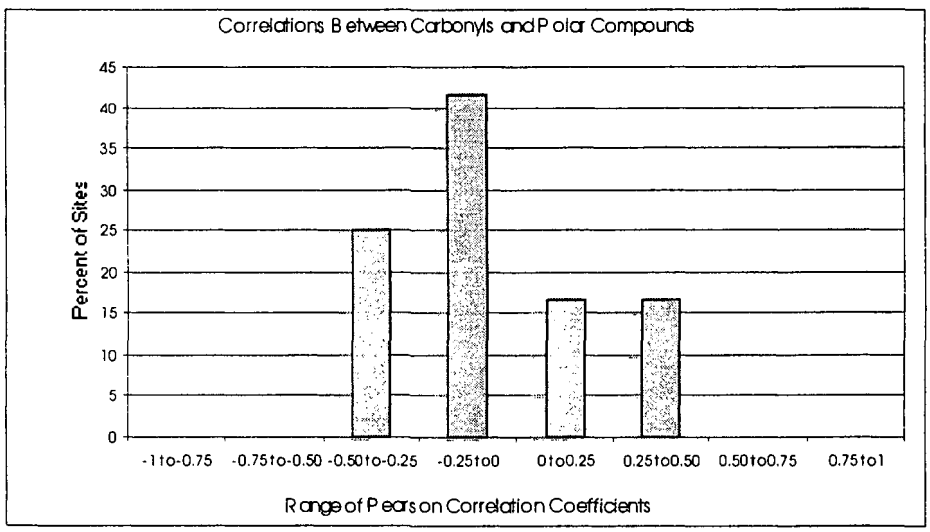


Figure 8-2

Sum of the Geometric Means of the Concentrations of the Prevalent Carbonyls

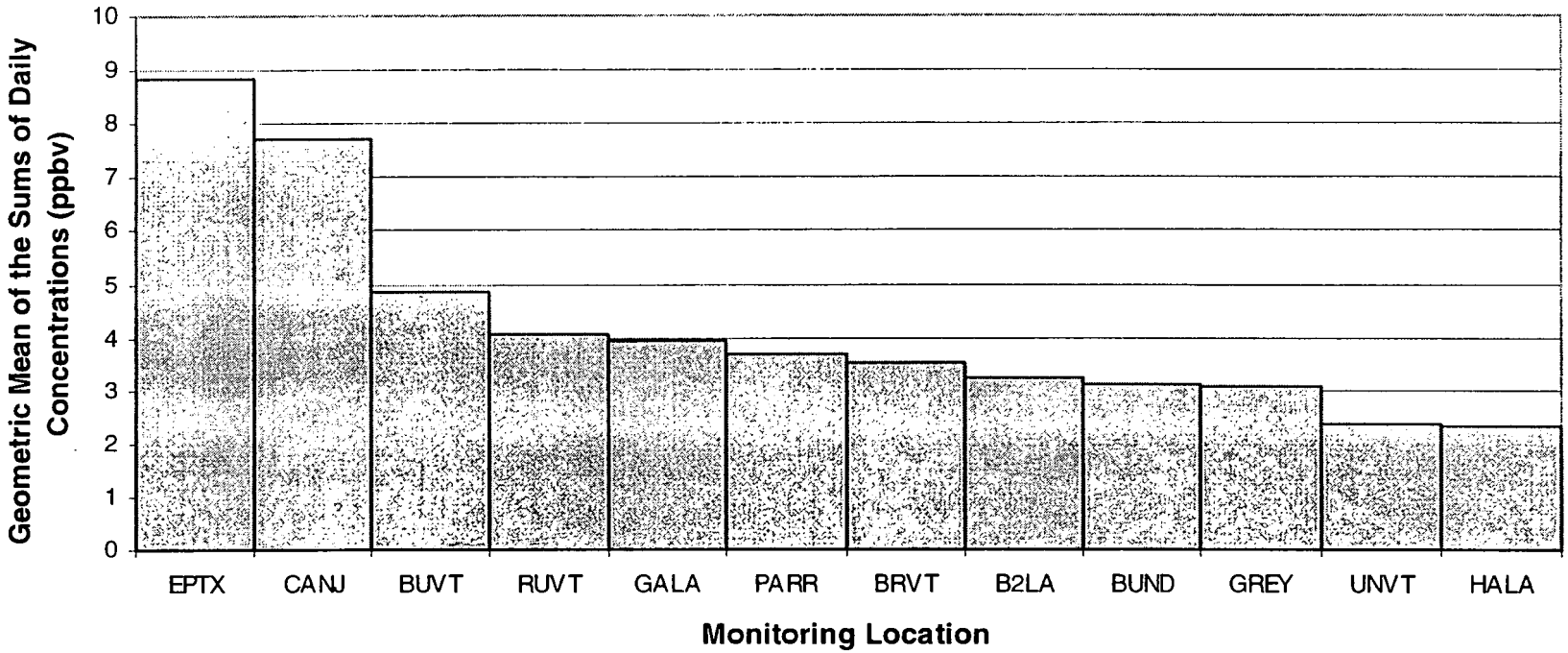
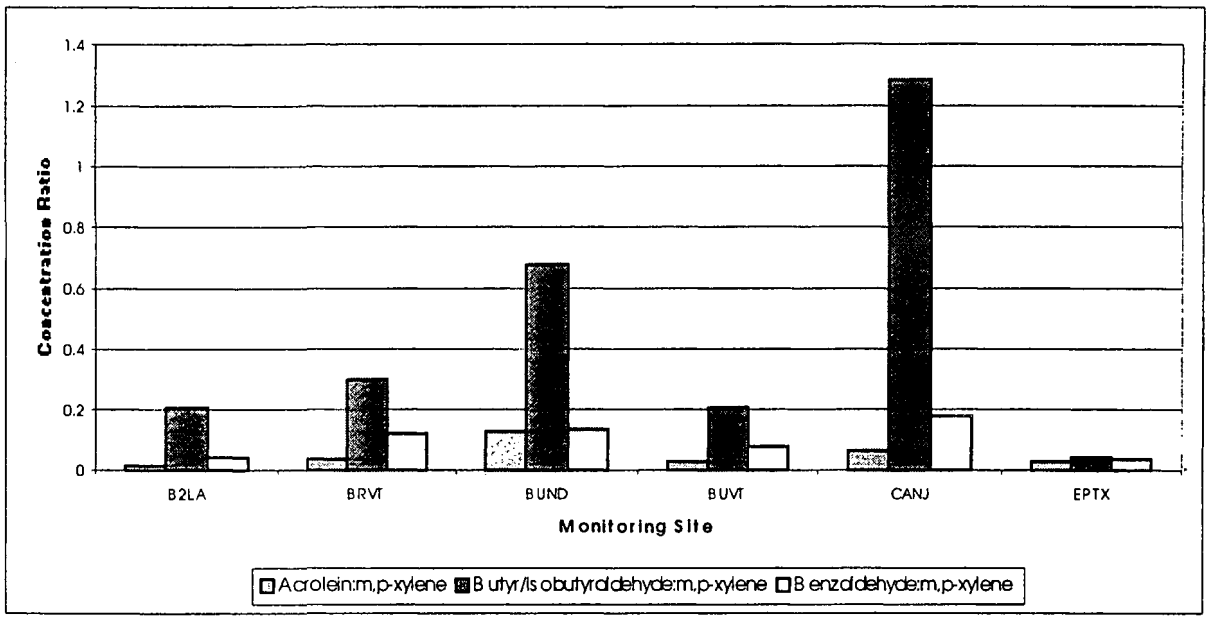


Figure 8-3
Comparison of BTEX Concentration Profiles to Carbonyl Compounds



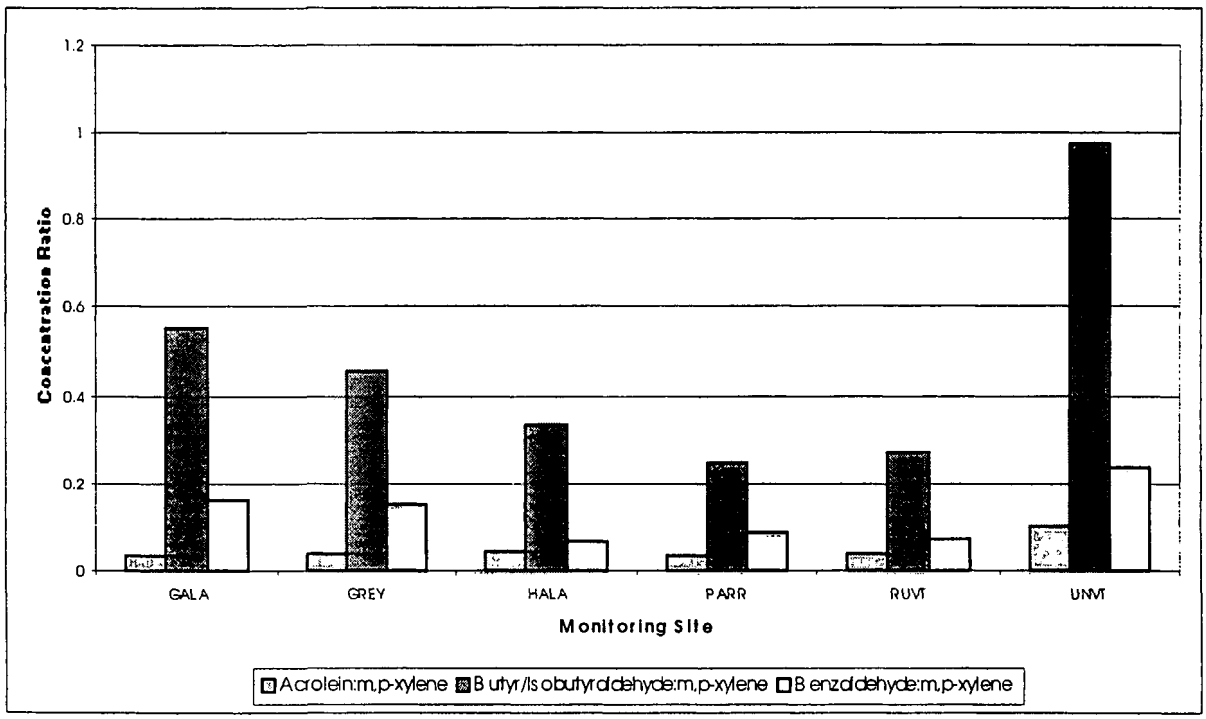


Table 8-1
Summary of Pearson Correlations for Selected Meteorological Parameters and Measured Carbonyl Concentrations

Meteorological Parameter	Average Correlation	Site with Highest Positive Correlation (Value)	Site with Strongest Negative Correlation (Value)
Maximum Temperature*	0.398 ± 0.188	Beulah, ND (0.681)	Hahnville, LA (-0.417)
Minimum Temperature*	0.261 ± 0.182	Beulah, ND (0.618)	Hahnville, LA (-0.484)
Average Temperature*	0.361 ± 0.185	Beulah, ND (0.555 ± 0.378)	Little Rock, AR (-0.339 ± 0.368)
Wind Speed*	0.258 ± 0.082	None	Baton Rouge, LA (-0.494)
Sea Level Pressure	-0.015 ± 0.164	Hahnville, LA (0.568)	Beulah, ND (-0.344)
Dew Point Temperature*	0.240 ± 0.194	Beulah, ND (0.643)	Hahnville, LA (-0.457)
Visibility	0.003 ± 0.150	Texarkana, AR (0.349)	Hahnville, LA (-0.551)

* Statistically significant across the 12 sites.

Table 8-2
Average Concentrations (ppbv) of Program-Wide Prevalent Carbonyls for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
B2LA					
Acetaldehyde	-	5.30	1.25	0.75	0.78
Acetone	-	0.99	1.08	0.96	0.79
Butyr/Isobutryaldehyde	-	0.46	0.15	0.12	0.21
Formaldehyde	-	27.63	2.34	1.83	1.80
BRVT					
Acetaldehyde	-	2.60	1.29	0.86	0.76
Acetone	-	0.78	1.75	1.36	1.10
Butyr/Isobutryaldehyde	-	0.21	0.17	0.12	0.14
Formaldehyde	-	2.23	2.74	1.93	1.74
BUND					
Acetaldehyde	-	-	-	-	0.64
Acetone	-	-	-	-	1.30
Butyr/Isobutryaldehyde	-	-	-	-	0.11
Formaldehyde	-	-	-	-	1.36
BUVT					
Acetaldehyde	-	3.42	1.62	1.22	0.96
Acetone	-	2.54	1.91	1.22	1.08
Butyr/Isobutryaldehyde	-	0.28	0.19	0.15	0.17
Formaldehyde	-	7.22	3.55	3.49	2.95
CANJ					
Acetaldehyde	-	0.52	2.05	1.59	1.88
Acetone	-	0.71	1.30	1.69	1.95
Butyr/Isobutryaldehyde	-	0.04	0.19	0.23	0.57
Formaldehyde	-	1.75	9.14	3.84	3.66
EPTX					
Acetaldehyde	-	6.85	3.91	2.75	2.28
Acetone	-	8.29	2.63	2.18	1.37
Butyr/Isobutryaldehyde	-	0.67	0.39	0.27	0.02
Formaldehyde	-	11.45	10.88	8.68	7.54
GALA					
Acetaldehyde	-	4.47	1.09	0.95	1.08
Acetone	-	1.94	0.53	0.87	0.51
Butyr/Isobutryaldehyde	-	1.14	0.19	0.18	0.23
Formaldehyde	-	17.05	2.22	2.30	2.32

- Indicates compound was not included in the UATMP for that year.

Table 8-2 (Continued)
Average Concentrations (ppbv) of Program-Wide Prevalent Carbonyls for the 1998 UATMP Compared to the Same Compounds for Previous Years

	1994	1995	1996	1997	1998
GREY					
Acetaldehyde	-	-	-	-	0.70
Acetone	-	-	-	-	0.95
Butyr/Isobutryaldehyde	-	-	-	-	0.10
Formaldehyde	-	-	-	-	1.64
HALA					
Acetaldehyde	-	5.50	1.65	1.15	0.67
Acetone	-	2.20	0.98	0.85	0.62
Butyr/Isobutryaldehyde	-	1.13	0.25	0.23	0.15
Formaldehyde	-	27.20	3.20	3.46	1.72
PARR					
Acetaldehyde	-	-	-	0.83	0.81
Acetone	-	-	-	1.03	1.23
Butyr/Isobutryaldehyde	-	-	-	0.15	0.14
Formaldehyde	-	-	-	3.10	1.80
RUVT					
Acetaldehyde	-	3.30	1.69	1.36	0.97
Acetone	-	3.59	2.05	1.51	1.07
Butyr/Isobutryaldehyde	-	0.40	0.19	0.16	0.19
Formaldehyde	-	6.36	3.67	3.51	2.11
UNVT					
Acetaldehyde	-	0.82	0.77	0.81	0.46
Acetone	-	0.81	1.09	1.17	0.90
Butyr/Isobutryaldehyde	-	0.03	0.09	0.12	0.12
Formaldehyde	-	0.98	2.39	4.97	1.06

- Indicates compound was not included in the UATMP for that year.

Table 8-3
Comparison of Geometric Means of Program-Wide Prevalent Carbonyls with Total Air Releases Reported by Facilities Within a 10-Mile Radius of UATMP Monitoring Stations

Acetaldehyde			Butyr/Isobutyraldehyde			Formaldehyde		
Station Code	ppbv	lbs	Station Code	ppbv	lbs	Station Code	ppbv	lbs
CANJ	1.77	0	CANJ	0.51	0	EPTX	5.26	0
EPTX	1.76	0	GALA	0.15	3,217	CANJ	3.36	0
GALA	1.03	0	B2LA	0.15	8	BUVT	2.72	0
RUVT	0.91	0	EPTX	0.15	0	GALA	2.14	0
BUVT	0.88	0	RUVT	0.14	0	RUVT	1.90	0
PARR	0.76	0	BUVT	0.12	0	PARR	1.62	0
B2LA	0.72	2,241	BRVT	0.12	0	B2LA	1.59	11,618
BRVT	0.72	0	PARR	0.09	0	BRVT	1.57	0
GREY	0.64	73,951	UNVT	0.08	0	GREY	1.34	20,947
BUND	0.59	0	BUND	0.08	0	HALA	1.27	36,697
HALA	0.53	10,815	HALA	0.07	3,217	BUND	1.19	0

Table 8-4
Ranking of Monitoring Stations by Levels of Total Program-Wide Prevalent Carbonyls

Monitoring Location	Geometric Means of the Total Program-Wide Prevalent Carbonyls Concentrations[a]		Industrial Emissions of ***Program-Wide Prevalent Carbonyls*** within a 10-Mile Radius of the Monitoring Location[b]		***Total*** Industrial Emissions within a 10-Mile Radius of the Monitoring Location[c]		Total Number of Cars Owned within a 10-Mile Radius of the Monitoring Location[d]	
	ppbv 1998	Conc. Rank	Pounds in 1997	Emissions Rank	Pounds in 1997	Emissions Rank	Total Cars	Rank of Total Cars
B2LA	3.25	8	13,867	3	3,471,078	1	256,716	3
BRVT	3.53	7	0	4	37,511	8	22,611	11
BUND	3.10	9	0	4	0	11	5,616	12
BUVT	4.86	3	0	4	25,073	9	86,381	5
CANJ	7.73	2	0	4	443,296	5	1,503,540	1
EPTX	8.84	1	0	4	147,020	7	360,257	2
GALA	3.95	5	0	3	511,797	4	45,196	8
GREY	3.05	10	94,898	1	2,296,884	3	70,410	6
HALA	2.33	12	50,729	2	3,463,330	2	60,821	7
PARR	3.69	6	0	4	345,472	6	124,765	4
RUVT	4.06	4	0	4	940	10	22,848	10
UNVT	2.36	11	0	4	0	11	23,650	9

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

[b] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997). The emissions reported are the total air releases of the halogenated hydrocarbons identified as program-wide prevalent for the 1998 UATMP. Acetone was not reportable to TRI in 1997.

[c] Industrial emissions were calculated from emissions data for TRI reporting year 1997 (TRI, 1997).

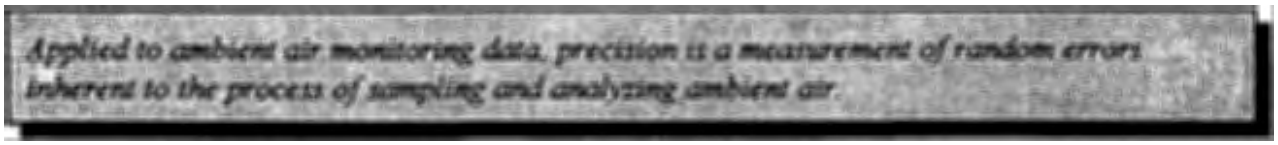
[d] The total number of cars owned within a 10-mile radius was estimated based on a ratio of 0.74 cars per person (U.S. population of 260,000,000 and total cars in U.S. of 193,400,000). Information from "Statistical Abstract of the United States", 1999, and the internet link at http://link-usa.com/zipcode/pop.htm

9.0 Data Quality

This section evaluates how precisely and accurately ambient air concentrations were measured during the 1998 UATMP. As indicators of the reliability of experimental measurements, both precision and accuracy should be considered when interpreting ambient air monitoring results. In general, this section shows that the 1998 UATMP monitoring data are of a known and high quality, particularly for the most program-wide prevalent compounds in urban air.

9.1 Precision

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



9.1.1 Analytical Precision

Analytical precision is a measurement of random errors associated with laboratory analysis of environmental samples. These errors may result from various factors, but typically originate from random "noise" inherent to analytical instruments. Laboratories can easily evaluate analytical precision by comparing concentrations measured during replicate analysis of the same ambient air samples. This report uses two parameters to quantify random errors indicated by replicate analyses of 1998 UATMP samples:

> ***Average concentration difference*** simply quantifies how replicate analytical results differ, on average, for each compound. When interpreting central tendency estimates for specific compounds sampled during the 1998 UATMP, participating agencies are encouraged to compare central tendencies to the average concentration differences. If a compound's

average concentration difference exceeds or nearly equals its central tendency, the analytical method may not be capable of precisely characterizing annual concentrations. Therefore, data interpretations for these compounds should be made with caution.

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

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

Where:

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

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

The following approach was employed to estimate how precisely the central laboratory analyzed 1998 UATMP samples:

RPDs and concentration differences were calculated for every replicate analysis performed during the program. In cases where compounds were not detected during replicate analyses, these parameters were not calculated.

Second, to make an overall estimate of method precision, program-average RPDs and concentration absolute differences were calculated for each compound by averaging the values from the individual replicate analyses.

Tables 9-1 and 9-2 use both absolute average concentration differences and RPDs to characterize the analytical precision representing all sites for the VOC and carbonyl measurements made during the 1998 UATMP, respectively.

Replicate analytical data show that laboratory VOC analysis precision was excellent. With the exception of acetylene (average concentration difference of 0.18 ppbv), average concentration difference in replicate analyses was less than or equal to 0.07 ppbv. The method was most precise when measuring air concentrations for the most program-wide prevalent compounds (i.e., compounds consistently found at levels exceeding their detection limits). For VOCs, samples exhibit RPDs ranging from 1 percent to 17 percent.

In terms of average concentration difference, the precision of the VOC analytical method was fairly uniform across compounds, with few exceptions. The average concentration difference during replicate analyses for most compounds was 0.03 ppbv or less, though acetylene had a slightly greater concentration difference. The relatively high variability for acetylene largely resulted from poor agreement in the replicate analysis of two sets of samples collected on April 12, 1999, at El Paso, TX, and March 25, 1999, at Brattleboro, VT. Disregarding these samples, the average concentration difference for acetylene becomes 0.11 ppbv, rather than 0.18 ppbv.

As Table 9-2 shows, laboratory analysis of carbonyl samples during the 1998 UATMP was consistently more precise than analysis of VOC samples. The RPD was less than 20 percent for every carbonyl compound. With one exception, the average concentration differences observed upon replicate analyses of carbonyls were less than or equal to 0.01 ppbv—formaldehyde had average concentration differences of 0.02 ppbv.

Accordingly, random errors during laboratory analysis had minimal impacts on the carbonyl concentration data measured during the 1998 UATMP. Overall, replicate analyses of both carbonyl and VOC samples suggest that the corresponding analytical methods consistently measured each compound in air samples within a precision of 25 percent—a precision level well within the UATMP data quality objectives (USEPA, 1988) and guidelines in the Compendium Methods (USEPA, 1999).

9.1.2 Sampling and Analytical Precision

As the name implies, *sampling and analytical precision* quantifies random errors associated not only with analyzing ambient air samples in the laboratory but also with collecting the samples in the field. This form of precision is most easily evaluated by comparing concentrations measured in duplicate samples collected off the same manifold. During the 1998 UATMP, duplicate samples were collected on approximately 10 percent of the scheduled sampling days, and most of these samples were analyzed in replicate. To calculate sampling and analytical precision, data analysts first averaged the results from each replicate analysis (if performed), then compared these average concentrations between the two samples in each duplicate. Tables 9-3 and 9-4 present average concentration differences and RPDs as estimates of sampling and analytical precision for VOC and carbonyl measurements, respectively. It should be noted that Tables 9-1 and 9-2 are twice as high, representing the replicates of the duplicate samples presented in Tables 9-3 and 9-4.

According to the sampling and analytical data in Table 9-3, concentrations of VOCs measured in duplicate samples during the 1998 UATMP were in excellent agreement. On average, these concentrations differed by 0.10 ppbv or less for almost every compound detected during the program. With the exception of acetonitrile (RPD of 69 percent), RPDs ranged from 1 percent to 35 percent. The sampling and analytical precision data in Table 9-3 do not differ significantly from the analytical precision data in Table 9-1. This similarity suggests that limitations associated with laboratory analysis of the VOC samples during the 1998 UATMP probably outweighed random errors associated with sampling procedures.

Like the duplicate sampling results for VOCs, the duplicate sampling results for carbonyls were highly precise. As the data in Table 9-4 show, every carbonyl compound had an RPD for sampling and analytical precision less than or equal to 20 percent. For most compounds, the sampling and analytical RPDs (see Table 9-4) were notably higher than the analytical precision RPDs (see Table 9-2)—a trend that differs from the trend observed for VOCs. This observation suggests that random errors associated with collecting air samples and random errors associated

with analyzing these samples both contributed significantly to overall imprecision in the carbonyl sampling and analytical method. Random sampling errors most likely resulted from trace amounts of carbonyls contaminating the silica gel sampling cartridges before the scheduled sampling days. As the estimates of sampling and analytical precision show, however, such sources of contamination did not have significant impacts—not greater than 0.20 ppbv, on average—on the carbonyl monitoring results.

To summarize, duplicate sampling results indicate that the 1998 UATMP air quality measurements generally have precision better than 25 percent—well within the UATMP data quality objectives of 100 percent (USEPA, 1988). This excellent measurement precision suggests that the 1998 UATMP monitoring data offer a precise account of air quality at the selected monitoring locations, especially for the most program-wide prevalent compounds. Although random errors had very small impacts on measurement of the less program-wide prevalent compounds, participating agencies should note that the central tendencies for these compounds have nearly the same magnitude as the average concentration difference. Therefore, central tendency concentrations for these less program-wide prevalent compounds should be interpreted with caution.

9.2 Accuracy

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

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

EPA/State participants provided three external audit samples for the 1998 UATMP. The results are displayed on Table 9-5. All acceptance criteria were met representing accurate carbonyl analytical methods.

The accuracy of the 1998 UATMP monitoring data can also be assessed qualitatively by reviewing the accuracy of the monitoring methods and how they were implemented:

- The sampling and analytical methods used in the 1998 UATMP (i.e., Compendium Methods TO-11A and TO-15) have been approved by EPA for accurately measuring ambient levels of VOCs and carbonyls, respectively—an approval that is based on many years of research into the development of ambient air monitoring methodologies.
- When collecting and analyzing ambient air samples, all field sampling staff and laboratory analysts strictly followed quality control and quality assurance guidelines detailed in the respective monitoring methods. This strict adherence to the well-documented sampling and analytical methods suggests, though certainly does not prove, that the 1998 UATMP monitoring data accurately represent ambient air quality.

Table 9-1
VOC Analytical Precision
(Based on Replicate Analysis of 99 Valid Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
Hydrocarbons			
Acetylene	**99**	**10**	**0.18**
Benzene	**99**	**5**	**0.03**
1,3-Butadiene	54	18	0.03[1]
Ethylbenzene	**99**	**8**	**0.01[1]**
n-Octane	95	13	0.01[1]
Propylene	**99**	**6**	**0.05**
Styrene	98	17	0.01[1]
Toluene	**99**	**7**	**0.05**
1,2,4-Trimethylbenzene	99	11	0.02[1]
1,3,5-Trimethylbenzene	99	15	0.01[1]
***m*-,*p*-Xylene**	**99**	**8**	**0.03**
***o*-Xylene**	**99**	**10**	**0.01**
Halogenated Hydrocarbons			
Bromochloromethane	0	NA	NA
Bromodichloromethane	0	NA	NA
Bromoform	0	NA	NA
Bromomethane	6	10	<0.01[1]
Carbon Tetrachloride	**99**	**13**	**0.01[1]**
Chlorobenzene	0	NA	NA
Chloroethane	0	NA	NA
Chloroform	2	3	<0.01[1]
Chloromethane	**99**	**5**	**0.03**
Chloromethylbenzene	0	NA	NA
Chloroprene	8	0.4	0.02
Dibromochloromethane	1	NA	NA

Table 9-1 (Continued)
VOC Analytical Precision
(Based on Replicate Analysis of 99 Valid Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
1,2-Dibromoethane	1	NA	NA
m-Dichlorobenzene	0	NA	NA
o-Dichlorobenzene	1	NA	NA
***p*-Dichlorobenzene**	**13**	**6**	**<0.01[1]**
1,1-Dichloroethane	0	NA	NA
1,2-Dichloroethane	0	NA	NA
1,1-Dichloroethene	0	NA	NA
cis-1,2-Dichloroethylene	1	NA	NA
trans-1,2-Dichloroethylene	0	NA	NA
1,2-Dichloropropane	0	NA	NA
cis-1,3-Dichloropropene	0	NA	NA
trans-1,3-Dichloropropene	0	NA	NA
Dichlorodifluoromethane	**99**	**5**	**0.03**
Dichlorotetrafluoroethane	9	3	<0.01[1]
Hexachloro-1,3-Butadiene	1	NA	NA
Methylene Chloride	**96**	**16**	**0.03[1]**
1,1,2,2-Tetrachloroethane	0	NA	NA
Tetrachloroethylene	**39**	**14**	**0.01[1]**
1,2,4-Trichlorobenzene	2	NA	NA
1,1,1-Trichloroethane	**99**	**13**	**0.01[1]**
1,1,2-Trichloroethane	0	NA	NA
Trichloroethylene	10	8	0.01[1]
Trichlorofluoromethane	**99**	**15**	**0.07**
Trichlorotrifluoroethane	**98**	**9**	**0.01[1]**
Vinyl Chloride	0	NA	NA

Table 9-1 (Continued)
VOC Analytical Precision
(Based on Replicate Analysis of 99 Valid Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
Polar Compounds			
Acetonitrile	**47**	**10**	**1.08**
Acrylonitrile	4	8	0.04[1]
Ethyl Acrylate	0	NA	NA
Ethyl *tert*-Butyl Ether	0	NA	NA
Methyl Ethyl Ketone	**99**	**9**	**0.05**
Methyl Isobutyl Ketone	16	1	<0.01[1]
Methyl Methacrylate	0	NA	NA
Methyl *tert*-Butyl Ether	**48**	**5**	**0.05**
tert-Amyl Methyl Ether	8	1	0.01[1]

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

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

Table 9-2
Carbonyl Analytical Precision
(Based on Replicate Analysis of 64 Valid Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses (%)	Average Concentration Difference in Replicate Analyses (ppbv)
Acetaldehyde	**64**	**1**	**0.01**
Acetone	**64**	**1**	**0.01**
Acrolein	29	19	<0.01
Benzaldehyde	61	13	<0.01
Butyr/Isobutyraldehyde	**60**	**5**	**0.01**
Crotonaldehyde	37	11	<0.01
2,5-Dimethylbenzaldehyde	2	3	<0.01[1]
Formaldehyde	**64**	**2**	**0.02**
Hexaldehyde	64	13	<0.01
Isovaleraldehyde	23	23	0.01
Propionaldehyde	46	4	0.01
Tolualdehydes	52	19	<0.01
Valeraldehyde	62	9	<0.01

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

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

Table 9-3
VOC Sampling and Analytical Precision
(Based on 50 Valid Duplicate Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
Hydrocarbons			
Acetylene	**50**	**5**	**0.07**
Benzene	**50**	**6**	**0.02**
1,3-Butadiene	25	19	0.03[1]
Ethylbenzene	**50**	**8**	**0.01**
n-Octane	48	15	0.01[1]
Propylene	**50**	**8**	**0.05**
Styrene	50	24	0.03
Toluene	**50**	**10**	**0.05**
1,2,4-Trimethylbenzene	50	12	0.03[1]
1,3,5-Trimethylbenzene	50	13	0.01[1]
***m-,p*-Xylene**	**50**	**8**	**0.03**
***o*-Xylene**	**50**	**10**	**0.02**
Halogenated Hydrocarbons			
Bromochloromethane	0	NA	NA
Bromodichloromethane	0	NA	NA
Bromoform	0	NA	0.00
Bromomethane	3	1	<0.01[1]
Carbon Tetrachloride	**50**	**25**	**0.02[1]**
Chlorobenzene	0	NA	NA
Chloroethane	0	NA	NA
Chloroform	1	NA	NA
Chloromethane	**50**	**12**	**0.08**
Chloromethylbenzene	0	NA	NA
Chloroprene	4	4	0.04

Table 9-3 (Continued)
VOC Sampling and Analytical Precision
(Based on 50 Valid Duplicate Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
Dibromochloromethane	0	NA	NA
1,2-Dibromoethane	1	NA	NA
m-Dichlorobenzene	0	NA	NA
o-Dichlorobenzene	0	NA	NA
p-Dichlorobenzene	**7**	**7**	**0.01**[1]
1,1-Dichloroethane	0	NA	NA
1,2-Dichloroethane	0	NA	NA
1,1-Dichloroethene	0	NA	NA
cis-1,2-Dichloroethylene	0	NA	NA
trans-1,2-Dichloroethylene	0	NA	NA
1,2-Dichloropropane	0	NA	NA
cis-1,3-Dichloropropene	0	NA	NA
trans-1,3-Dichloropropene	0	NA	NA
Dichlorodifluoromethane	**50**	**6**	**0.04**
Dichlorotetrafluoroethane	4	16	<0.01[1]
Hexachloro-1,3-Butadiene	0	NA	NA
Methylene Chloride	**46**	**35**	**0.08**[1]
1,1,2,2-Tetrachloroethane	0	NA	0.00
Tetrachloroethylene	**20**	**23**	**0.02**[1]
1,2,4-Trichlorobenzene	1	NA	NA
1,1,1-Trichloroethane	**50**	**12**	**0.01**[1]
1,1,2-Trichloroethane	0	NA	NA
Trichloroethylene	4	4	0.01[1]
Trichlorofluoromethane	**50**	**30**	**0.15**
Trichlorotrifluoroethane	**50**	**10**	**0.01**[1]

Table 9-3 (Continued)
VOC Sampling and Analytical Precision
(Based on 50 Valid Duplicate Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
Vinyl Chloride	0	NA	NA
Polar Compounds			
Acetonitrile	**21**	**69**	**2.76**
Acrylonitrile	2	NA	<0.01[1]
Ethyl Acrylate	0	NA	NA
Ethyl *tert*-Butyl Ether	0	NA	NA
Methyl Ethyl Ketone	**44**	**23**	**0.12**
Methyl Isobutyl Ketone	5	1	0.01[1]
Methyl Methacrylate	0	NA	NA
Methyl *tert*-Butyl Ether	**25**	**12**	**0.06**
tert-Amyl Methyl Ether	4	15	0.02[1]

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

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

Table 9-4
Carbonyl Sampling and Analytical Precision
(Based on 32 Valid Duplicate Samples)

Compound	Number of Observations	Average RPD in Replicate Analyses of Duplicates (%)	Average Concentration Difference in Replicate Analyses of Duplicates (ppbv)
Acetaldehyde	**32**	**14**	**0.07**
Acetone	**32**	**20**	**0.22**
Acrolein	14	16	<0.01
Benzaldehyde	30	20	0.01
Butyr/Isobutyraldehyde	**30**	**18**	**0.01**
Crotonaldehyde	17	25	0.01
2,5-Dimethylbenzaldehyde	1	1	<0.01[1]
Formaldehyde	**32**	**14**	**0.17**
Hexaldehyde	31	22	0.01
Isovaleraldehyde	9	21	0.01
Propionaldehyde	32	14	0.01
Tolualdehydes	25	24	0.01
Valeraldehyde	31	19	0.01

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

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

Table 9-5
1999 Carbonyl Audit Results

Audit Date	Compound	Sample ID	Concentration (µg/cartridge)		% Difference	Passed/Failed
			Reported	Actual		
05/14/99	Formaldehyde	1199	0.05	0.00	blank	Passed
		2199	1.05	1.25	-20.0	
		3199	3.44	4.00	-15.3	
	Acetaldehyde	1199	0.03	0.00	blank	Passed
		2199	0.87	1.00	-16.0	
		3199	2.62	3.00	-13.7	
	Acetone	1199	0.07	0.00	blank	Passed
		2199	1.22	1.40	-17.9	
		3199	3.95	4.50	-13.8	
08/06/99	Formaldehyde	1299	0.05	0.00	blank	Passed
		2299	0.93	0.90	-2.2	
		3299	4.32	4.25	0.5	
	Acetaldehyde	1299	0.04	0.00	blank	Passed
		2299	1.57	1.50	2.0	
		3299	4.20	4.00	4.0	
	Acetone	1299	0.12	0.00	blank	Passed
		2299	1.13	1.00	1.0	
		3299	3.05	3.00	-2.3	
10/07/99	Formaldehyde	1399	0.02	0.00	blank	Passed
		2399	1.60	1.50	5.3	
		3399	3.15	3.00	4.3	
	Acetaldehyde	1399	0.05	0.00	blank	Passed
		2399	0.96	0.85	7.1	
		3399	4.82	4.50	6.0	
	Acetone	1399	0.24	0.00	blank	Passed
		2399	1.51	1.20	5.8	
		3399	4.49	4.00	6.3	

10.0 Conclusions and Recommendations

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

10.1 Conclusions

Analyses of the 1998 UATMP monitoring data identified the following notable trends and patterns in urban air pollution:

- *Ambient air concentrations of hydrocarbons.* Levels of airborne hydrocarbons were highest at the El Paso, TX, monitoring location and were lowest at the Underhill, VT, and Beulah, ND, monitoring locations. At most stations, emissions from motor vehicles and industrial sources appear to be important sources of hydrocarbons in ambient air.

- *Ambient air concentrations of halogenated hydrocarbons.* Unlike the concentration range seen for the hydrocarbons, little variation is demonstrated for the concentrations and no strong trends are exhibited in 1998 UATMP halogenated hydrocarbons data. No single factor was identified to explain air quality trends for this group of compounds.

  Ambient air concentrations of polar compounds. Levels of airborne polar compounds were significantly higher at the Baton Rouge, LA, monitoring location while the remaining sites demonstrated little variation in polar compound concentrations. The TRI emissions ranks for the 12 sites were very consistent with the respective rank of the total ambient air concentration of the program-wide prevalent polar compounds. However, before drawing conclusions on the impact of industrial emissions and ambient air concentrations, it should be noted that 6 of the 12 monitoring sites did not report any industrial emissions of program-wide prevalent polar compounds.

  Ambient air concentrations of carbonyls. The UATMP monitoring data seem to suggest that emissions from motor vehicles and photochemical reactions most strongly influence ambient air concentrations of carbonyls. The fact that ambient air concentrations of most carbonyls were positively correlated with temperature at most monitoring locations supported the hypothesis that photochemical reactions *form* carbonyls in ambient air. Although emissions data from facilities subject to the Toxic Release Inventory reporting requirements were quite inconsistent with the observed spatial variations in

concentrations of carbonyls, emissions from other industrial emissions sources may have contributed to the levels of carbonyls detected during the UATMP.

10.2 Recommendations

In light of the lessons learned from the 1998 UATMP, a number of recommendations for future ambient air monitoring are warranted:

- *Continue to identify and implement improvements to the sampling and analytical methods.* The improvements made to the analytical methods prior to the 1998 UATMP allowed for measurement of ambient air concentrations of 11 compounds that were not measured during previous programs. This improvement provides sponsoring agencies and a variety of interested parties with important information about air quality within their urban areas. Further research is encouraged to identify other method improvements that would allow the UATMP to characterize an even wider range of components in urban air pollution.

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

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

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

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

    2. *Micro-Climate Assessment.* An assessment is needed of the immediate micro-climate for a representative "urban" and "rural" site, to determine a reasonable geographic radius of influence. It is absolutely critical to determine a

rough estimate of the maximum radius of concern (R_{max}) in order to know what sources need to be included in the characterization. A value for R_{max} may be determined with relatively little effort using simple dispersion models, such as CALINZ4 for urban settings. In these models R_{max} would be defined for non-reactive species such as CO or PM. Since most/all of the toxic compounds of concern have some level of reactivity, R_{max} would actually be somewhat less. Therefore this method would provide a conservative estimate for R_{max}.

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

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

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

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

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

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APPENDIX A

AIRS SITE DESCRIPTIONS FOR THE 1998 UATMP MONITORING STATIONS

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 05 ARKANSAS AQCR: 022 SHREVEPORT-TEXARKANA-TYLE
County: 091 MILLER MSA : 8360 TEXARKANA, TX-TEXARKANA,
Site : 0096 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : METERS Date Established : 97/08/01
Land Use : 1 RESIDENTIAL Date Last Updated: 99/01/20
Location Setting : 3 RURAL Date Terminated : / /
City : 00000 NOT IN A CITY

Latitude : +33:11:15:0000 Longitude : - 94:01:26:0000
Method of Determ.: NAV-GPS Est. of Accuracy : 0.10000MIN
Datum : 00 DATUM UNKNOW Scale : NA

UTM = Zone : 15 Easting : 404563 Northing : 3672330

Address : ROUTE 1, TEXARKANA
Support Agency : 001 ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
Location Descrip.:
GREY SITE

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 05-091-0096 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	6	NE	5	1998	MILLER CO. 28

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 05-091-0096
Met-Site-Id.: - - Direction: Type: 1 Distance: 0 METERS

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

COMMENTS:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 05 ARKANSAS AQCR: 016 CENTRAL ARKANSAS
County: 119 PULASKI MSA : 4400 LITTLE ROCK-NORTH LITTLE
Site : 0007 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 80 METERS Date Established : 86/04/01
Land Use : 2 COMMERCIAL Date Last Updated: 99/02/08
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 50450 NORTH LITTLE ROCK

Latitude : +34:45:22:0000 Longitude : - 92:16:33:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 15 Easting : 566279 Northing : 3846039

Address : PIKE AVE AT RIVER ROAD
Support Agency : 002 ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
Location Descrip.:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 05-119-0007 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	6	500			

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 05-119-0007
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

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

COMMENTS: SITE NAME PARR RECLOATION OF SLAMS MID-TOWN SITE

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 22 LOUISIANA AQCR: 106 SOUTHERN LOUISIANA-SOUTHE
County: 033 EAST BATON ROUGE MSA : 0760 BATON ROUGE, LA
Site : 0009 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 62 METERS Date Established : 92/08/01
Land Use : 2 COMMERCIAL Date Last Updated: 99/01/13
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 05000 BATON ROUGE

Latitude : +30:27:40:0000 Longitude : - 91:10:37:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 15 Easting : 675028 Northing : 3371143

Address : 1071 LEESVILLE AVE
Support Agency : 001 STATE OF LOUISIANA
Location Descrip.:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 22-033-0009 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	6	5000			

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 22-033-0009
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

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

COMMENTS: CAPITOL SITE - RELOCATE FOR 220330006

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 22 LOUISIANA AQCR: 106 SOUTHERN LOUISIANA-SOUTHE
County: 089 ST CHARLES MSA : 5560 NEW ORLEANS, LA
Site : 0003 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 3 METERS Date Established : 91/03/01
Land Use : 3 INDUSTRIAL Date Last Updated: 99/01/13
Location Setting : 3 RURAL Date Terminated : / /
City : 32510 HAHNVILLE

Latitude : +29:59:03:0000 Longitude : - 90:24:38:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 15 Easting : 749833 Northing : 3319674

Address : 1 RIVER PARK DRIVE
Support Agency : 001 STATE OF LOUISIANA
Location Descrip.:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 22-089-0003 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 22-089-0003
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

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

COMMENTS: RIVER PARK APARTMENT

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 22 LOUISIANA AQCR: 106 SOUTHERN LOUISIANA-SOUTHE
County: 095 ST JOHN THE BAPTIST MSA : 5560 NEW ORLEANS, LA
Site : 0002 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 9 METERS Date Established : 71/01/01
Land Use : 3 INDUSTRIAL Date Last Updated: 99/03/05
Location Setting : 3 RURAL Date Terminated : / /
City : 00000 NOT IN A CITY

Latitude : +30:03:30:0000 Longitude : - 90:36:30:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 15 Easting : 730573 Northing : 3327480

Address : AZALEA AND SOUTH APRICOT STREET
Support Agency : 000 DESCRIPTION UNKNOWN
Location Descrip.:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 22-095-0002 State or Local Site Id:

Site Loc. MSA CMSA
Type Description Rep. Rep.

Tangent Street Type Direction Traffic Flow Street Name
Number Road To Street Flow Year

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 22-095-0002
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

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

COMMENTS: SITE ACTIVATED FOR SULFUR DIOXIDE IN 1973 A LARGE REFINERY IS LOCATING IN THE AREA IN 1975 SULFUR DIOXIDE VAL REPRESENT BACKGR D

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

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

Elevation (MSL) : 6 METERS Date Established : 68/01/01
Land Use : 1 RESIDENTIAL Date Last Updated: 99/01/13
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 10000 CAMDEN

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

UTM = Zone : 18 Easting : 491692 Northing : 4419012

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

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

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

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

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

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

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

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

COMMENTS: NJ #04081, START SO2,O3,1/1/68,NJ #058(TSP)START 9/3/83, SO4 10/83
START IP #2 10/83,SSI,SLAMS-TSP,CO 10/1/84;TSP DISC.12/31/86

PF8 INVALID - END OF SELECTED RECORDS
02/14/00 AIRS Air Quality Subsystem AMP510SB
Browse Site Data Page 1/3

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

Elevation (MSL) : 630 METERS Date Established : 98/12/13
Land Use : 4 AGRICULTURAL Date Last Updated: 99/06/15
Location Setting : 3 RURAL Date Terminated : / /
City : 00000 NOT IN A CITY

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

UTM = Zone : 14 Easting : 290816 Northing : 5241843

Address : BEULAH NORTH
Support Agency : 001 NORTH DAKOTA STATE DEPARTMENT OF HEALTH
Location Descrip.:
LICATED IN A WILDLIFE MANAGEMENT AREA
PF3=end PF4=main menu PF5=terminate PF7=prev PF8=next PF9=gen

12/07/98 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

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

Elevation (MSL) : 1140 METERS Date Established : 73/01/01
Land Use : 2 COMMERCIAL Date Last Updated: 98/09/25
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 24000 EL PASO

Latitude : +31:45:45:0000 Longitude : -106:29:13:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 13 Easting : 359179 Northing : 3514886

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

12/07/98 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

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

Site Loc. Type	Description	MSA Rep.	CMSA Rep.
1	UPWIND BACKGROUND	2320	

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Street Name Year
1	5	S	20000	1979 CAMPBELL STREET
2	4	SE	25000	1979 FRANKLIN STREET
3	4	NW	25000	1979 MISSOURI STREET
4	3	NE	160040	1992 IH-10

12/07/98 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

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

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

COMMENTS: SIP MONITOR
ACTIVE 11/73

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 50 VERMONT AQCR: 159 CHAMPLAIN VALLEY
County: 007 CHITTENDEN MSA : 0000 NOT IN AN MSA
Site : 0007 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 342 METERS Date Established : 88/05/01
Land Use : 5 FOREST Date Last Updated: 99/01/29
Location Setting : 3 RURAL Date Terminated : / /
City : 00000 NOT IN A CITY

Latitude : +44:31:39:0000 Longitude : - 72:52:28:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 18 Easting : 668903 Northing : 4932445

Address : PROCTOR MAPLE RESEARCH FARM
Support Agency : 001 VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION
Location Descrip.:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-007-0007 State or Local Site Id:

Site Loc. MSA CMSA
Type Description Rep. Rep.

Tangent Street Type Direction Traffic Flow Street Name
Number Road To Street Flow Year

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-007-0007
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

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

COMMENTS: 47-0180-001-F01

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 50 VERMONT AQCR: 159 CHAMPLAIN VALLEY
County: 007 CHITTENDEN MSA : 1305 BURLINGTON, VT
Site : 0003 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 64 METERS Date Established : 70/01/01
Land Use : 2 COMMERCIAL Date Last Updated: 99/01/29
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 10675 BURLINGTON

Latitude : +44:28:44:0000 Longitude : - 73:12:43:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 18 Easting : 642202 Northing : 4926402

Address : ADJ. TO 82 S. WINOOSKI AVENUE
Support Agency : 001 VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION
Location Descrip.:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-007-0003 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	5	6000			
2	5	15000			
3	6	6000			

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-007-0003
Met-Site-Id.: - - Direction: Type: 1 Distance: 0 METERS

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

COMMENTS: VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION
DISCONTINUED

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 50 VERMONT AQCR: 159 CHAMPLAIN VALLEY
County: 021 RUTLAND MSA : 0000 NOT IN AN MSA
Site : 0002 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : 165 METERS Date Established : 71/01/01
Land Use : 2 COMMERCIAL Date Last Updated: 99/01/29
Location Setting : 1 URBAN AND CE Date Terminated : / /
City : 61225 RUTLAND

Latitude : +43:36:29:0000 Longitude : - 72:58:58:0000
Method of Determ.: Est. of Accuracy :
Datum : Scale :

UTM = Zone : 18 Easting : 662800 Northing : 4830100

Address : PARKING LOT ADJ. TO 9 MERCHANT'S ROW
Support Agency : 001 VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION
Location Descrip.:

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-021-0002 State or Local Site Id:

Site Loc. MSA CMSA
Type Description Rep. Rep.

Tangent Street Type Direction Traffic Flow Street Name
Number Road To Street Flow Year

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-021-0002
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

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

COMMENTS: LOCATED IN PARKING LOT ADJ TO BUSINESS AND COMMERCIAL DISTRICT SLAMS SO2

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

State : 50 VERMONT AQCR: 221 VERMONT
County: 025 WINDHAM MSA : 0000 NOT IN AN MSA
Site : 0004 CMSA: 0000 DESCRIPTION UNKNOWN

Elevation (MSL) : METERS Date Established : 96/03/01
Land Use : 2 COMMERCIAL Date Last Updated: 99/01/29
Location Setting : 2 SUBURBAN Date Terminated : / /
City : 07900 BRATTLEBORO

Latitude : +42:53:20:0000 Longitude : - 72:33:15:0000
Method of Determ.: MAP Est. of Accuracy : 0.66000SEC
Datum : 27 NAD 27 Scale : 24000C

UTM = Zone : 18 Easting : 699725 Northing : 4751175

Address : 1277 PUTNEY ROAD, RTE 5 BRATTLEBORO
Support Agency : 001 VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION
Location Descrip.:
1277 PUTNEY ROAD, RTE 5 IN AGWAY PARKING LOT

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-025-0004 State or Local Site Id:

Site Loc. Type	Description	MSA Rep.	CMSA Rep.
5	OTHER		

Tangent Street Number	Type Road	Direction To Street	Traffic Flow	Flow Year	Street Name
1	5	W	16578	1996	PUTNEY ROAD

05/12/99 AIRS Air Quality Subsystem AMP510SB
Browse Site Data

Site-Id : 50-025-0004
Met-Site-Id.: - - Direction: Type: Distance: 0 METERS

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

COMMENTS:

APPENDIX B

1998/1999 SUMMARY OF INVALIDATED VOC SAMPLES

Table B-1
Invalid VOC Samples for the 1998/1999 UATMP Season

ERG ID	Comments	Site ID	Date Sampled	Invalid Reason
14780		B2LA	9/8/98	Zero pressure
15367	Duplicate 1		1/30/99	Carbonyl tube was lost
15435			2/11/99	Zero pressure
15437			2/17/99	Zero pressure
15467			2/25/99	Zero pressure
15509			3/13/99	Zero pressure
15672			4/19/99	Zero pressure
15695	Duplicate 1		4/20/99	Top of the canister broke
15697	Duplicate 2		4/20/99	Duplicate was voided
15707			4/26/99	Main breaker was out
15759			4/30/99	Zero pressure
15756			5/2/99	Zero pressure
15778			5/25/99	Zero pressure
16133			7/23/99	Zero pressure
16316			8/10/99	Zero pressure
16695			9/5/99	Zero pressure
16869			9/30/99	Zero pressure
15826	2"Hg	BRVT	5/12/99	Duplicate was voided
15828	0"Hg		5/12/99	Zero pressure
16611	NA		8/28/99	Pressure too low
15502		BUND	3/13/99	Zero pressure
15540	Duplicate 1		3/19/99	Zero pressure
15542	Duplicate 2		3/19/99	Zero pressure
15705			4/24/99	Zero pressure
15727	Duplicate 1		5/6/99	Vacuum too low for analysis
15729	Duplicate 2		5/6/99	Vacuum too low for analysis
16359			8/16/99	Vacuum too low for analysis
15326	0"Hg	BUVT	1/12/99	Zero pressure
15405	NA		2/5/99	Improper time setup
15602	4"Hg		3/25/99	Analysis of duplicates didn't match
15604	4"Hg		3/25/99	Analysis of duplicates didn't match
15217		CANJ	12/1/98	Zero pressure
15686			4/18/99	Sample was not received

Table B-1 (Continued)
Invalid VOC Samples for the 1998/1999 UATMP Season

ERG ID	Comments	Site ID	Date Sampled	Invalid Reason
15343		EPTX	1/6/99	Carbonyl sample not sent
15495			3/7/99	Zero pressure
15688			4/18/99	Sample was not received
15231		GALA	11/19/98	Zero pressure
15411			2/17/99	Carbonyl tube was void
15459			2/23/99	Carbonyl tube was void
15690			4/18/99	Carbonyl tube was void
15692			4/24/99	Canister was not sampled
15754	Duplicate 1		5/6/99	Carbonyl tube was void
14556		GREY	9/1/98	Zero pressure
14695			9/2/98	Zero pressure
14886			9/17/98	Zero pressure
15141			10/25/98	No sample taken
15219			11/13/98	No sample taken
15286			12/25/98	Carbonyl tube was void
15312			1/6/99	Zero pressure
15364			1/18/99	Zero pressure
15370			1/30/99	Zero pressure
15131		HALA	10/14/98	Zero pressure
15221			12/1/98	Zero pressure
15415			2/13/99	Zero pressure
15618			3/31/99	Zero pressure
15680			4/6/99	Sampler had blown diaphragm
15762	Duplicate 1		5/6/99	Zero pressure
15764	Duplicate 2		5/6/99	Duplicate sample voided
16201			7/29/99	Zero pressure
14682		PARR	9/3/98	Zero pressure
15209			11/19/98	Zero pressure
15320	0"Hg	RUVT	1/12/99	Zero pressure
15822	0"Hg		5/12/99	Zero pressure
15824	4"Hg		5/12/99	Duplicate sample voided
15925	NA		6/17/99	Carbonyl tube was void
16899	0"Hg		9/21/99	Canister leaked
16620	0"Hg	UNVT	8/28/99	Zero pressure

APPENDIX C

1998/1999 SUMMARY OF INVALIDATED CARBONYL SAMPLES

Table C-1
Invalid Carbonyl Samples for the 1998/1999 UATMP Season

ERG ID	Comments	Site ID	Date Sampled	Invalid Reason
14781	Duplicate 1	B2LA	9/8/98	Canister was void
15168			11/1/98	Canister was void
15366			1/30/99	Carbonyl tube lost
15436			2/11/99	Canister was void
15438			2/17/99	Canister was void
15468			2/25/99	Canister was void
15510	Duplicate 2		3/13/99	Canister was void
15673			4/19/99	Canister was void
15698			4/20/99	Canister was void
15708			4/26/99	Main breaker was out
15760/15761	Sample & blank		4/30/99	Canister was void
15757/15758	Sample & blank		5/2/99	Canister was void
15779/15780	Sample & blank		5/25/99	Canister was void
16134			7/23/99	Canister was void
16317			8/10/99	Canister was void
16696			9/5/99	Canister was void
16870			9/27/99	Canister was void
15827	Duplicate 1	BRVT	5/12/99	Canister was void
15829	Duplicate 2		5/12/99	Canister was void
16612			8/28/99	Canister was void
15728	Duplicate 1	BUND	5/6/99	Canister was void
15730	Duplicate 2		5/6/99	Canister was void
16360			8/16/99	Canister was void
15327		BUVT	1/12/99	Canister was void
15406			2/5/99	Improper time setup
15218		CANJ	12/1/98	Canister was void
15687			4/18/99	Sample was not received
15067	Duplicate 1	EPTX	10/2/98	No COC or sampling information
15129	Duplicate 2		10/2/98	Carbonyl sample not sent
15130			10/14/98	Carbonyl sample not sent
15344			1/6/99	Carbonyl sample not sent
15496			3/7/99	Canister was void
15689			4/18/99	Sample was not received

Table C-1 (Continued)
Invalid Carbonyl Samples for the 1998/1999 UATMP Season

ERG ID	Comments	Site ID	Date Sampled	Invalid Reason
15232		GALA	11/19/98	Canister was void
15412			2/17/99	Flow problems
15460			2/23/99	Flow problems
15691			4/18/99	Carbonyl tube was disconnected
15753	Duplicate 1		5/6/99	Duplicate was voided
15755	Duplicate 2		5/6/99	Carbonyl sample was not sent
14557/14558	Sample & blank	GREY	9/1/98	Canister was void
14696			9/5/98	Canister was void
14887/14888	Sample & blank		9/17/98	Canister was void
15142			10/25/98	Canister was void
15220			11/13/98	Canister was void
15287			12/25/98	Canister was void
15313			1/6/99	Canister was void
15365			1/18/99	Canister was void
15371			1/30/99	Canister was void
15132		HALA	10/14/98	Canister was void
15222			12/1/98	Canister was void
15416			2/13/99	Canister was void
15619			3/31/99	Canister was void
15681			4/6/99	Canister was void
15763	Duplicate 1		5/6/99	Canister was void
15765	Duplicate 2		5/6/99	Canister was void
16202			7/29/99	Canister was void
14683		PARR	9/3/98	Canister was void
15146			10/26/98	Carbonyl sample was not sent
15210			11/19/98	Canister was void
15321		RUVT	1/12/99	Canister was void
15823	Duplicate 1		5/12/99	Canister was void
15825	Duplicate 2		5/12/99	Canister was void
15926			6/17/99	Tube was not connected properly
16610			8/28/99	Tube missing from packet
16900			9/21/99	Carbonyl tube was void
16621		UNVT	8/28/99	Canister was void

APPENDIX *D*

1998/1999 SUMMARY TABLES FOR VOC MONITORING

Table D-1
Summary Statistics for VOC Concentrations Measured at Baton Rouge, Louisiana (B2LA)
(Based on 18 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.76***	***5.34***	***1.59***	***1.97***	***1.70***	***1.23***	***0.63***
Propylene	***0***	***100%***	***0.55***	***5.00***	***1.42***	***1.77***	***1.45***	***1.19***	***0.67***
Dichlorodifluoromethane	***0***	***100%***	***0.46***	***0.76***	***0.64***	***0.63***	***0.62***	***0.09***	***0.14***
Chloromethane	***0***	***100%***	***0.11***	***3.11***	***0.90***	***1.08***	***0.85***	***0.79***	***0.73***
Dichlorotetrafluoroethane	14	22%	ND	0.07	0.02	0.02	0.02	0.01	0.69
Vinyl Chloride	16	11%	ND	0.26	0.04	0.05	0.04	0.05	1.10
1,3-Butadiene	*3*	*83%*	*ND*	*0.44*	*0.09*	*0.12*	*0.08*	*0.11*	*0.94*
Bromomethane	16	11%	ND	0.07	0.02	0.02	0.02	0.01	0.51
Chloroethane	15	17%	ND	0.24	0.03	0.05	0.04	0.06	1.09
Acetonitrile	**5**	**72%**	**ND**	**109.00**	**42.87**	**39.60**	**6.78**	**37.56**	**0.95**
Trichlorofluoromethane	***0***	***100%***	***0.20***	***1.87***	***0.30***	***0.40***	***0.34***	***0.38***	***0.93***
Acrylonitrile	16	11%	ND	1.23	0.03	0.11	0.04	0.28	2.61
1,1-Dichloroethene	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-1 (Continued)
Summary Statistics for VOC Concentrations Measured at Baton Rouge, Louisiana (B2LA)
(Based on 18 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***1***	***94%***	***ND***	***0.64***	***0.15***	***0.20***	***0.15***	***0.16***	***0.82***
Trichlorotrifluoroethane	***0***	***100%***	***0.08***	***0.59***	***0.13***	***0.19***	***0.16***	***0.14***	***0.75***
trans-1,2-Dichloroethylene	18	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl *tert*-Butyl Ether	**12**	**33%**	**ND**	**0.30**	**0.02**	**0.07**	**0.03**	**0.10**	**1.37**
Methyl Ethyl Ketone	***0***	***100%***	***0.57***	***1.72***	***1.11***	***1.07***	***1.01***	***0.37***	***0.35***
Chloroprene	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	18	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	10	44%	ND	0.37	0.02	0.08	0.05	0.10	1.23
Ethyl *tert*-Butyl Ether	18	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	16	11%	ND	0.49	0.04	0.08	0.05	0.12	1.51
1,1,1-Trichloroethane	***0***	***100%***	***0.05***	***0.22***	***0.09***	***0.10***	***0.09***	***0.05***	***0.51***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-1 (Continued)
Summary Statistics for VOC Concentrations Measured at Baton Rouge, Louisiana (B2LA)
(Based on 18 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.44***	***1.49***	***0.73***	***0.77***	***0.72***	***0.31***	***0.41***
Carbon Tetrachloride	***0***	***100%***	***0.05***	***0.17***	***0.10***	***0.10***	***0.09***	***0.03***	***0.28***
tert-Amyl Methyl Ether	18	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloropropane	18	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Bromodichloromethane	18	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	15	17%	ND	0.48	0.03	0.06	0.04	0.11	1.92
Methyl Methacrylate	14	22%	ND	0.28	0.03	0.07	0.05	0.08	1.14
cis-1,3-Dichloropropene	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	7	61%	ND	0.33	0.09	0.12	0.09	0.09	0.78
trans-1,3-Dichloropropene	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.56***	***10.27***	***1.19***	***2.02***	***1.43***	***2.37***	***1.17***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-1 (Continued)
Summary Statistics for VOC Concentrations Measured at Baton Rouge, Louisiana (B2LA)
(Based on 18 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	18	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	18	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
n-Octane	*0*	*100%*	*0.08*	*0.83*	*0.14*	*0.20*	*0.16*	*0.19*	*0.93*
Tetrachloroethylene	**7**	**61%**	**ND**	**0.18**	**0.05**	**0.06**	**0.05**	**0.04**	**0.62**
Chlorobenzene	17	6%	ND	0.07	0.02	0.02	0.02	0.01	0.52
Ethylbenzene	***0***	***100%***	***0.12***	***1.83***	***0.26***	***0.39***	***0.30***	***0.40***	***1.02***
m-,p-Xylene	***0***	***100%***	***0.29***	***3.57***	***0.65***	***1.03***	***0.78***	***0.89***	***0.87***
Bromoform	18	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*0*	*100%*	*0.05*	*1.27*	*0.20*	*0.31*	*0.21*	*0.31*	*0.99*
1,1,2,2-Tetrachloroethane	17	6%	ND	0.03	0.03	0.03	0.03	0.00	0.09
o-Xylene	***0***	***100%***	***0.15***	***1.86***	***0.35***	***0.58***	***0.43***	***0.52***	***0.91***
1,3,5-Trimethylbenzene	*0*	*100%*	*0.07*	*2.34*	*0.12*	*0.32*	*0.17*	*0.54*	*1.69*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.13*	*6.85*	*0.29*	*0.85*	*0.42*	*1.57*	*1.86*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-1 (Continued)
Summary Statistics for VOC Concentrations Measured at Baton Rouge, Louisiana (B2LA)
(Based on 18 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	18	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Chloromethylbenzene	18	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
***p*-Dichlorobenzene**	**13**	**28%**	**ND**	**0.05**	**0.04**	**0.04**	**0.04**	**0.01**	**0.16**
o-Dichlorobenzene	18	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
1,2,4-Trichlorobenzene	17	6%	ND	0.05	0.05	0.04	0.04	0.01	0.13
Hexachloro-1,3-Butadiene	18	0%	ND	ND	0.06	0.06	0.06	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-2
Summary Statistics for VOC Concentrations Measured at Beulah, North Dakota (BUND)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.29***	***1.20***	***0.62***	***0.62***	***0.58***	***0.22***	***0.35***
Propylene	***0***	***100%***	***0.17***	***1.14***	***0.33***	***0.35***	***0.32***	***0.17***	***0.49***
Dichlorodifluoromethane	***0***	***100%***	***0.16***	***1.06***	***0.66***	***0.67***	***0.65***	***0.15***	***0.23***
Chloromethane	***0***	***100%***	***0.52***	***0.83***	***0.63***	***0.62***	***0.62***	***0.07***	***0.10***
Dichlorotetrafluoroethane	27	16%	ND	0.11	0.02	0.02	0.02	0.02	0.93
Vinyl Chloride	31	3%	ND	0.11	0.04	0.04	0.04	0.01	0.36
1,3-Butadiene	30	6%	ND	0.03	0.03	0.03	0.02	0.00	0.05
Bromomethane	31	3%	ND	0.15	0.02	0.02	0.02	0.02	0.96
Chloroethane	29	9%	ND	0.29	0.03	0.04	0.04	0.05	1.15
Acetonitrile	**11**	**66%**	**ND**	**5.60**	**0.91**	**1.18**	**0.58**	**1.28**	**1.09**
Trichlorofluoromethane	***0***	***100%***	***0.27***	***0.80***	***0.35***	***0.40***	***0.38***	***0.13***	***0.33***
Acrylonitrile	30	6%	ND	0.15	0.03	0.04	0.03	0.02	0.68
1,1-Dichloroethene	31	3%	ND	0.14	0.02	0.02	0.02	0.02	0.89

NR = not reported. Sampling site had contamination problems with Methyl Ethyl Ketone, therefore the whole year of data is not reported for this compound.
ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-2 (Continued)
Summary Statistics for VOC Concentrations Measured at Beulah, North Dakota (BUND)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***0***	***100%***	***0.11***	***2.85***	***0.41***	***0.54***	***0.44***	***0.49***	***0.91***
Trichlorotrifluoroethane	***0***	***100%***	***0.07***	***0.46***	***0.10***	***0.11***	***0.10***	***0.07***	***0.63***
trans-1,2-Dichloroethylene	32	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	31	3%	ND	0.09	0.02	0.02	0.02	0.01	0.76
Methyl *tert*-Butyl Ether	**32**	**0%**	**ND**	**ND**	**0.02**	**0.02**	**0.02**	**0.00**	**0.00**
Methyl Ethyl Ketone	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**	**NR**
Chloroprene	32	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	32	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	32	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	31	3%	ND	0.11	0.02	0.02	0.02	0.02	0.70
Ethyl *tert*-Butyl Ether	32	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	31	3%	ND	0.12	0.04	0.04	0.04	0.01	0.33
1,1,1-Trichloroethane	***0***	***100%***	***0.04***	***0.18***	***0.06***	***0.07***	***0.07***	***0.03***	***0.44***

NR = not reported. Sampling site had contamination problems with Methyl Ethyl Ketone, therefore the whole year of data is not reported for this compound.
ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-2 (Continued)
Summary Statistics for VOC Concentrations Measured at Beulah, North Dakota (BUND)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.12***	***0.56***	***0.23***	***0.26***	***0.24***	***0.10***	***0.40***
Carbon Tetrachloride	***1***	***97%***	***ND***	***0.11***	***0.08***	***0.08***	***0.08***	***0.02***	***0.21***
tert-Amyl Methyl Ether	32	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloropropane	32	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	32	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Bromodichloromethane	32	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	28	13%	ND	0.44	0.03	0.05	0.03	0.07	1.57
Methyl Methacrylate	32	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
cis-1,3-Dichloropropene	32	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	26	19%	ND	0.61	0.04	0.08	0.05	0.12	1.55
trans-1,3-Dichloropropene	32	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	31	3%	ND	0.11	0.02	0.02	0.02	0.02	0.93
Toluene	***0***	***100%***	***0.14***	***1.32***	***0.31***	***0.45***	***0.36***	***0.34***	***0.75***

NR = not reported. Sampling site had contamination problems with Methyl Ethyl Ketone, therefore the whole year of data is not reported for this compound.
ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-2 (Continued)
Summary Statistics for VOC Concentrations Measured at Beulah, North Dakota (BUND)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	32	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	31	3%	ND	0.08	0.03	0.03	0.03	0.01	0.36
n-Octane	*5*	*84%*	*ND*	*0.36*	*0.08*	*0.09*	*0.07*	*0.06*	*0.71*
Tetrachloroethylene	**25**	**22%**	**ND**	**0.40**	**0.05**	**0.06**	**0.05**	**0.06**	**1.01**
Chlorobenzene	31	3%	ND	0.10	0.02	0.02	0.02	0.01	0.63
Ethylbenzene	***1***	***97%***	***ND***	***0.24***	***0.06***	***0.09***	***0.08***	***0.05***	***0.57***
m-,p-Xylene	***0***	***100%***	***0.06***	***0.60***	***0.12***	***0.17***	***0.14***	***0.12***	***0.71***
Bromoform	32	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*1*	*97%*	*ND*	*0.18*	*0.06*	*0.07*	*0.06*	*0.04*	*0.59*
1,1,2,2-Tetrachloroethane	31	3%	ND	0.05	0.03	0.03	0.03	0.00	0.17
o-Xylene	***0***	***100%***	***0.02***	***0.20***	***0.07***	***0.09***	***0.08***	***0.05***	***0.53***
1,3,5-Trimethylbenzene	*6*	*81%*	*ND*	*0.11*	*0.04*	*0.05*	*0.04*	*0.02*	*0.38*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.04*	*0.19*	*0.08*	*0.09*	*0.09*	*0.04*	*0.42*

NR = not reported. Sampling site had contamination problems with Methyl Ethyl Ketone, therefore the whole year of data is not reported for this compound.
ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-2 (Continued)
Summary Statistics for VOC Concentrations Measured at Beulah, North Dakota (BUND)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	31	3%	ND	0.05	0.05	0.05	0.05	0.00	0.02
Chloromethylbenzene	32	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
p-Dichlorobenzene	**30**	**6%**	**ND**	**0.05**	**0.04**	**0.04**	**0.04**	**0.00**	**0.10**
o-Dichlorobenzene	32	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
1,2,4-Trichlorobenzene	30	6%	ND	0.05	0.05	0.04	0.04	0.01	0.20
Hexachloro-1,3-Butadiene	31	3%	ND	0.06	0.06	0.05	0.05	0.00	0.08

NR = not reported. Sampling site had contamination problems with Methyl Ethyl Ketone, therefore the whole year of data is not reported for this compound.
ND = nondetect
Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-3
Summary Statistics for VOC Concentrations Measured at Brattleboro, Vermont (BRVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.38***	***4.20***	***1.21***	***1.66***	***1.39***	***1.09***	***0.66***
Propylene	***0***	***100%***	***0.36***	***1.71***	***0.71***	***0.84***	***0.78***	***0.38***	***0.44***
Dichlorodifluoromethane	***0***	***100%***	***0.48***	***1.60***	***0.64***	***0.67***	***0.65***	***0.18***	***0.27***
Chloromethane	***0***	***100%***	***0.47***	***0.92***	***0.63***	***0.64***	***0.64***	***0.10***	***0.15***
Dichlorotetrafluoroethane	27	13%	ND	0.02	0.02	0.01	0.01	0.00	0.10
Vinyl Chloride	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,3-Butadiene	7	77%	ND	0.28	0.07	0.08	0.07	0.07	0.79
Bromomethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Acetonitrile	**25**	**19%**	**ND**	**15.25**	**0.11**	**1.04**	**0.20**	**3.06**	**2.94**
Trichlorofluoromethane	***0***	***100%***	***0.24***	***0.76***	***0.32***	***0.35***	***0.34***	***0.12***	***0.34***
Acrylonitrile	27	13%	ND	0.89	0.03	0.08	0.04	0.17	2.09
1,1-Dichloroethene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-3 (Continued)
Summary Statistics for VOC Concentrations Measured at Brattleboro, Vermont (BRVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	**11**	**65%**	**ND**	**0.45**	**0.07**	**0.11**	**0.08**	**0.11**	**0.97**
Trichlorotrifluoroethane	***0***	***100%***	***0.05***	***0.90***	***0.11***	***0.14***	***0.12***	***0.15***	***1.06***
trans-1,2-Dichloroethylene	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl tert-Butyl Ether	***2***	***94%***	***ND***	***0.78***	***0.33***	***0.36***	***0.29***	***0.19***	***0.52***
Methyl Ethyl Ketone	***1***	***97%***	***ND***	***4.03***	***0.59***	***0.94***	***0.66***	***0.89***	***0.95***
Chloroprene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	29	6%	ND	0.06	0.02	0.02	0.02	0.01	0.31
Ethyl *tert*-Butyl Ether	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,1,1-Trichloroethane	***0***	***100%***	***0.04***	***0.10***	***0.06***	***0.06***	***0.06***	***0.01***	***0.19***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-3 (Continued)
Summary Statistics for VOC Concentrations Measured at Brattleboro, Vermont (BRVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.29***	***1.18***	***0.53***	***0.58***	***0.54***	***0.24***	***0.41***
Carbon Tetrachloride	***1***	***97%***	***ND***	***0.12***	***0.09***	***0.09***	***0.08***	***0.02***	***0.23***
tert-Amyl Methyl Ether	30	3%	ND	0.06	0.03	0.03	0.03	0.01	0.18
1,2-Dichloropropane	31	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	30	3%	ND	0.09	0.02	0.02	0.02	0.01	0.56
Bromodichloromethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	28	10%	ND	0.09	0.03	0.03	0.03	0.01	0.35
Methyl Methacrylate	30	3%	ND	0.05	0.03	0.03	0.03	0.00	0.12
cis-1,3-Dichloropropene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	22	29%	ND	0.27	0.04	0.06	0.05	0.05	0.88
trans-1,3-Dichloropropene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.32***	***8.69***	***0.93***	***1.30***	***1.02***	***1.46***	***1.12***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-3 (Continued)
Summary Statistics for VOC Concentrations Measured at Brattleboro, Vermont (BRVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
n-Octane	*5*	*84%*	*ND*	*0.14*	*0.07*	*0.08*	*0.07*	*0.03*	*0.34*
Tetrachloroethylene	**22**	**29%**	**ND**	**0.09**	**0.05**	**0.05**	**0.05**	**0.02**	**0.31**
Chlorobenzene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethylbenzene	***0***	***100%***	***0.09***	***0.37***	***0.16***	***0.19***	***0.18***	***0.07***	***0.35***
m-,p-Xylene	***0***	***100%***	***0.17***	***1.07***	***0.38***	***0.46***	***0.42***	***0.20***	***0.45***
Bromoform	31	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*1*	*97%*	*ND*	*0.14*	*0.07*	*0.07*	*0.07*	*0.02*	*0.31*
1,1,2,2-Tetrachloroethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
o-Xylene	***0***	***100%***	***0.11***	***0.49***	***0.20***	***0.24***	***0.22***	***0.10***	***0.41***
1,3,5-Trimethylbenzene	*1*	*97%*	*ND*	*0.13*	*0.07*	*0.08*	*0.08*	*0.03*	*0.32*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.10*	*0.40*	*0.18*	*0.21*	*0.19*	*0.08*	*0.37*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-3 (Continued)
Summary Statistics for VOC Concentrations Measured at Brattleboro, Vermont (BRVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	30	3%	ND	0.05	0.05	0.05	0.05	0.00	0.02
Chloromethylbenzene	31	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
***p*-Dichlorobenzene**	**30**	**3%**	**ND**	**0.06**	**0.04**	**0.04**	**0.04**	**0.00**	**0.09**
o-Dichlorobenzene	30	3%	ND	0.06	0.05	0.05	0.05	0.00	0.04
1,2,4-Trichlorobenzene	30	3%	ND	0.24	0.05	0.05	0.05	0.04	0.68
Hexachloro-1,3-Butadiene	30	3%	ND	0.06	0.06	0.05	0.05	0.00	0.02

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-4
Summary Statistics for VOC Concentrations Measured at Burlington, Vermont (BUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.58***	***5.16***	***2.15***	***2.38***	***2.17***	***1.02***	***0.43***
Propylene	***0***	***100%***	***0.80***	***1.98***	***1.20***	***1.22***	***1.19***	***0.30***	***0.24***
Dichlorodifluoromethane	***0***	***100%***	***0.53***	***0.90***	***0.65***	***0.67***	***0.66***	***0.09***	***0.14***
Chloromethane	***0***	***100%***	***0.44***	***0.85***	***0.64***	***0.64***	***0.63***	***0.09***	***0.14***
Dichlorotetrafluoroethane	27	13%	ND	0.02	0.02	0.01	0.01	0.00	0.12
Vinyl Chloride	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,3-Butadiene	*1*	*97%*	*ND*	*0.29*	*0.14*	*0.15*	*0.14*	*0.06*	*0.36*
Bromomethane	28	10%	ND	0.17	0.02	0.03	0.02	0.03	1.06
Chloroethane	29	6%	ND	0.06	0.03	0.03	0.03	0.01	0.17
Acetonitrile	**26**	**16%**	**ND**	**17.34**	**0.11**	**0.89**	**0.17**	**3.19**	**3.57**
Trichlorofluoromethane	***0***	***100%***	***0.24***	***0.90***	***0.34***	***0.37***	***0.36***	***0.13***	***0.35***
Acrylonitrile	28	10%	ND	0.27	0.03	0.05	0.04	0.06	1.24
1,1-Dichloroethene	30	3%	ND	0.10	0.02	0.02	0.02	0.01	0.64

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-4 (Continued)
Summary Statistics for VOC Concentrations Measured at Burlington, Vermont (BUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***3***	***90%***	***ND***	***1.68***	***0.11***	***0.21***	***0.13***	***0.31***	***1.49***
Trichlorotrifluoroethane	***1***	***97%***	***ND***	***0.14***	***0.09***	***0.09***	***0.08***	***0.02***	***0.24***
trans-1,2-Dichloroethylene	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl tert-Butyl Ether	***1***	***97%***	***ND***	***0.80***	***0.37***	***0.36***	***0.30***	***0.17***	***0.48***
Methyl Ethyl Ketone	***0***	***100%***	***0.09***	***3.71***	***0.46***	***0.66***	***0.49***	***0.74***	***1.13***
Chloroprene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	30	3%	ND	0.05	0.04	0.04	0.04	0.00	0.08
Bromochloromethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	26	16%	ND	0.04	0.02	0.02	0.02	0.01	0.27
Ethyl *tert*-Butyl Ether	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,1,1-Trichloroethane	***0***	***100%***	***0.05***	***0.08***	***0.06***	***0.06***	***0.06***	***0.01***	***0.15***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-4 (Continued)
Summary Statistics for VOC Concentrations Measured at Burlington, Vermont (BUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.51***	***1.33***	***0.81***	***0.86***	***0.84***	***0.23***	***0.26***
Carbon Tetrachloride	***1***	***97%***	***ND***	***0.12***	***0.09***	***0.09***	***0.09***	***0.02***	***0.19***
tert-Amyl Methyl Ether	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloropropane	31	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Bromodichloromethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	30	3%	ND	0.03	0.03	0.03	0.03	0.00	0.04
Methyl Methacrylate	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
cis-1,3-Dichloropropene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	27	13%	ND	0.26	0.04	0.05	0.04	0.04	0.91
trans-1,3-Dichloropropene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.96***	***4.23***	***1.68***	***1.85***	***1.75***	***0.67***	***0.37***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-4 (Continued)
Summary Statistics for VOC Concentrations Measured at Burlington, Vermont (BUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
n-Octane	*0*	*100%*	*0.03*	*0.36*	*0.09*	*0.10*	*0.09*	*0.06*	*0.59*
Tetrachloroethylene	**21**	**32%**	**ND**	**0.07**	**0.05**	**0.04**	**0.04**	**0.01**	**0.31**
Chlorobenzene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethylbenzene	***0***	***100%***	***0.21***	***0.52***	***0.28***	***0.31***	***0.30***	***0.08***	***0.26***
m-,p-Xylene	***0***	***100%***	***0.50***	***1.34***	***0.77***	***0.84***	***0.81***	***0.22***	***0.26***
Bromoform	31	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*1*	*97%*	*ND*	*0.23*	*0.09*	*0.09*	*0.09*	*0.04*	*0.39*
1,1,2,2-Tetrachloroethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
o-Xylene	***0***	***100%***	***0.28***	***0.67***	***0.39***	***0.42***	***0.40***	***0.11***	***0.26***
1,3,5-Trimethylbenzene	*1*	*97%*	*ND*	*0.19*	*0.12*	*0.12*	*0.12*	*0.03*	*0.27*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.18*	*0.59*	*0.32*	*0.34*	*0.33*	*0.10*	*0.29*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-4 (Continued)
Summary Statistics for VOC Concentrations Measured at Burlington, Vermont (BUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	31	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Chloromethylbenzene	31	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
p-Dichlorobenzene	**30**	**3%**	**ND**	**0.04**	**0.04**	**0.04**	**0.04**	**0.00**	**0.09**
o-Dichlorobenzene	31	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
1,2,4-Trichlorobenzene	30	3%	ND	0.05	0.05	0.04	0.04	0.00	0.03
Hexachloro-1,3-Butadiene	30	3%	ND	0.06	0.06	0.05	0.05	0.00	0.03

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-5
Summary Statistics for VOC Concentrations Measured at Camden, New Jersey (CANJ)
(Based on 29 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.63***	***3.76***	***1.50***	***1.75***	***1.56***	***0.89***	***0.51***
Propylene	***0***	***100%***	***0.25***	***6.23***	***0.94***	***1.22***	***0.95***	***1.11***	***0.91***
Dichlorodifluoromethane	***0***	***100%***	***0.23***	***0.91***	***0.66***	***0.66***	***0.64***	***0.13***	***0.20***
Chloromethane	***0***	***100%***	***0.24***	***1.21***	***0.74***	***0.77***	***0.73***	***0.23***	***0.30***
Dichlorotetrafluoroethane	25	17%	ND	0.02	0.02	0.01	0.01	0.00	0.16
Vinyl Chloride	28	7%	ND	0.04	0.04	0.03	0.03	0.00	0.13
1,3-Butadiene	7	77%	ND	0.32	0.04	0.07	0.05	0.06	0.92
Bromomethane	20	33%	ND	0.18	0.02	0.04	0.03	0.04	1.13
Chloroethane	26	13%	ND	0.11	0.03	0.03	0.03	0.02	0.48
Acetonitrile	**23**	**23%**	**ND**	**2.65**	**0.11**	**0.35**	**0.16**	**0.65**	**1.85**
Trichlorofluoromethane	***0***	***100%***	***0.13***	***0.59***	***0.32***	***0.33***	***0.32***	***0.09***	***0.28***
Acrylonitrile	17	43%	ND	1.15	0.03	0.37	0.11	0.45	1.21
1,1-Dichloroethene	28	7%	ND	0.02	0.02	0.02	0.02	0.00	0.13

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-5 (Continued)
Summary Statistics for VOC Concentrations Measured at Camden, New Jersey (CANJ)
(Based on 29 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***1***	***97%***	***ND***	***0.43***	***0.13***	***0.16***	***0.14***	***0.10***	***0.59***
Trichlorotrifluoroethane	***0***	***100%***	***0.03***	***0.14***	***0.09***	***0.09***	***0.09***	***0.02***	***0.24***
trans-1,2-Dichloroethylene	28	7%	ND	0.03	0.03	0.02	0.02	0.00	0.13
1,1-Dichloroethane	28	7%	ND	0.02	0.02	0.01	0.01	0.00	0.13
Methyl tert-Butyl Ether	***0***	***100%***	***0.24***	***2.22***	***0.83***	***0.92***	***0.78***	***0.50***	***0.54***
Methyl Ethyl Ketone	***0***	***100%***	***0.06***	***1.87***	***0.62***	***0.73***	***0.61***	***0.40***	***0.55***
Chloroprene	28	7%	ND	0.02	0.02	0.01	0.01	0.00	0.13
cis-1,2-Dichloroethylene	28	7%	ND	0.04	0.04	0.03	0.03	0.00	0.13
Bromochloromethane	28	7%	ND	0.02	0.02	0.02	0.02	0.00	0.13
Chloroform	27	10%	ND	0.02	0.02	0.02	0.02	0.00	0.16
Ethyl *tert*-Butyl Ether	28	7%	ND	0.03	0.03	0.02	0.02	0.00	0.13
1,2-Dichloroethane	28	7%	ND	0.04	0.04	0.04	0.04	0.01	0.13
1,1,1-Trichloroethane	***0***	***100%***	***0.02***	***0.17***	***0.07***	***0.07***	***0.07***	***0.03***	***0.37***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-5 (Continued)
Summary Statistics for VOC Concentrations Measured at Camden, New Jersey (CANJ)
(Based on 29 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.20***	***1.00***	***0.59***	***0.58***	***0.54***	***0.21***	***0.36***
Carbon Tetrachloride	***0***	***100%***	***0.03***	***0.11***	***0.09***	***0.09***	***0.08***	***0.02***	***0.25***
tert-Amyl Methyl Ether	27	10%	ND	0.03	0.03	0.03	0.03	0.00	0.14
1,2-Dichloropropane	28	7%	ND	0.05	0.05	0.04	0.04	0.01	0.13
Ethyl Acrylate	28	7%	ND	0.02	0.02	0.02	0.02	0.00	0.13
Bromodichloromethane	28	7%	ND	0.03	0.03	0.02	0.02	0.00	0.13
Trichloroethylene	24	20%	ND	0.07	0.03	0.03	0.03	0.01	0.36
Methyl Methacrylate	28	7%	ND	0.03	0.03	0.03	0.03	0.00	0.13
cis-1,3-Dichloropropene	28	7%	ND	0.02	0.02	0.01	0.01	0.00	0.13
Methyl Isobutyl Ketone	22	27%	ND	0.18	0.04	0.05	0.04	0.03	0.70
trans-1,3-Dichloropropene	28	7%	ND	0.02	0.02	0.01	0.01	0.00	0.13
1,1,2-Trichloroethane	28	7%	ND	0.02	0.02	0.01	0.01	0.00	0.13
Toluene	***0***	***100%***	***0.35***	***1.94***	***1.11***	***1.08***	***0.98***	***0.44***	***0.41***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-5 (Continued)
Summary Statistics for VOC Concentrations Measured at Camden, New Jersey (CANJ)
(Based on 29 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	28	7%	ND	0.02	0.02	0.02	0.02	0.00	0.13
1,2-Dibromoethane	28	7%	ND	0.03	0.03	0.02	0.02	0.00	0.13
n-Octane	*1*	*97%*	*ND*	*0.36*	*0.09*	*0.10*	*0.09*	*0.06*	*0.58*
Tetrachloroethylene	**7**	**77%**	**ND**	**0.15**	**0.05**	**0.07**	**0.06**	**0.03**	**0.50**
Chlorobenzene	28	7%	ND	0.02	0.02	0.02	0.02	0.00	0.13
Ethylbenzene	***0***	***100%***	***0.05***	***0.26***	***0.18***	***0.17***	***0.16***	***0.06***	***0.34***
m-,p-Xylene	***0***	***100%***	***0.13***	***0.76***	***0.47***	***0.44***	***0.40***	***0.17***	***0.38***
Bromoform	28	7%	ND	0.06	0.06	0.06	0.06	0.01	0.13
Styrene	*1*	*97%*	*ND*	*0.19*	*0.07*	*0.08*	*0.07*	*0.04*	*0.47*
1,1,2,2-Tetrachloroethane	28	7%	ND	0.03	0.03	0.02	0.02	0.00	0.13
o-Xylene	***0***	***100%***	***0.06***	***0.37***	***0.23***	***0.22***	***0.21***	***0.08***	***0.36***
1,3,5-Trimethylbenzene	*2*	*93%*	*ND*	*0.13*	*0.08*	*0.08*	*0.07*	*0.02*	*0.31*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.05*	*0.38*	*0.20*	*0.20*	*0.18*	*0.08*	*0.38*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-5 (Continued)
Summary Statistics for VOC Concentrations Measured at Camden, New Jersey (CANJ)
(Based on 29 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	28	7%	ND	0.05	0.05	0.04	0.04	0.01	0.13
Chloromethylbenzene	28	7%	ND	0.09	0.09	0.09	0.09	0.01	0.13
p-Dichlorobenzene	**12**	**60%**	**ND**	**0.11**	**0.04**	**0.05**	**0.05**	**0.02**	**0.46**
o-Dichlorobenzene	28	7%	ND	0.05	0.05	0.05	0.05	0.01	0.13
1,2,4-Trichlorobenzene	27	10%	ND	0.05	0.05	0.04	0.04	0.01	0.20
Hexachloro-1,3-Butadiene	28	7%	ND	0.06	0.06	0.05	0.05	0.01	0.13

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-6
Summary Statistics for VOC Concentrations Measured at El Paso, Texas (EPTX)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***1.45***	***18.89***	***3.89***	***5.14***	***4.31***	***3.54***	***0.69***
Propylene	***0***	***100%***	***0.35***	***5.41***	***1.35***	***1.77***	***1.48***	***1.18***	***0.67***
Dichlorodifluoromethane	***0***	***100%***	***0.15***	***1.67***	***0.68***	***0.69***	***0.64***	***0.25***	***0.37***
Chloromethane	***0***	***100%***	***0.20***	***1.14***	***0.85***	***0.81***	***0.76***	***0.23***	***0.28***
Dichlorotetrafluoroethane	23	28%	ND	0.02	0.02	0.01	0.01	0.00	0.25
Vinyl Chloride	27	16%	ND	0.09	0.04	0.03	0.03	0.01	0.35
1,3-Butadiene	*1*	*97%*	*ND*	*0.79*	*0.17*	*0.24*	*0.19*	*0.18*	*0.72*
Bromomethane	25	22%	ND	0.10	0.02	0.02	0.02	0.02	0.74
Chloroethane	28	13%	ND	0.03	0.03	0.03	0.03	0.01	0.21
Acetonitrile	**22**	**31%**	**ND**	**43.48**	**0.11**	**2.36**	**0.20**	**7.99**	**3.38**
Trichlorofluoromethane	***0***	***100%***	***0.07***	***1.20***	***0.31***	***0.34***	***0.30***	***0.19***	***0.55***
Acrylonitrile	17	47%	ND	1.64	0.03	0.36	0.11	0.45	1.27
1,1-Dichloroethene	28	13%	ND	0.02	0.02	0.02	0.02	0.00	0.21

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-6 (Continued)
Summary Statistics for VOC Concentrations Measured at El Paso, Texas (EPTX)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***0***	***100%***	***0.23***	***3.45***	***0.71***	***0.83***	***0.70***	***0.58***	***0.70***
Trichlorotrifluoroethane	***0***	***100%***	***0.02***	***0.13***	***0.10***	***0.09***	***0.09***	***0.02***	***0.27***
trans-1,2-Dichloroethylene	28	13%	ND	0.03	0.03	0.02	0.02	0.00	0.21
1,1-Dichloroethane	28	13%	ND	0.02	0.02	0.01	0.01	0.00	0.21
Methyl *tert*-Butyl Ether	**8**	**75%**	**ND**	**1.69**	**0.24**	**0.39**	**0.15**	**0.43**	**1.10**
Methyl Ethyl Ketone	***0***	***100%***	***0.18***	***3.39***	***0.79***	***0.98***	***0.84***	***0.62***	***0.63***
Chloroprene	28	13%	ND	0.02	0.02	0.01	0.01	0.00	0.21
cis-1,2-Dichloroethylene	28	13%	ND	0.04	0.04	0.03	0.03	0.01	0.21
Bromochloromethane	28	13%	ND	0.02	0.02	0.02	0.02	0.00	0.21
Chloroform	28	13%	ND	0.02	0.02	0.02	0.02	0.00	0.21
Ethyl *tert*-Butyl Ether	28	13%	ND	0.03	0.03	0.02	0.02	0.00	0.21
1,2-Dichloroethane	28	13%	ND	0.04	0.04	0.04	0.04	0.01	0.21
1,1,1-Trichloroethane	***1***	***97%***	***ND***	***0.16***	***0.06***	***0.06***	***0.06***	***0.03***	***0.42***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-6 (Continued)
Summary Statistics for VOC Concentrations Measured at El Paso, Texas (EPTX)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.47***	***3.36***	***1.24***	***1.35***	***1.20***	***0.69***	***0.51***
Carbon Tetrachloride	***0***	***100%***	***0.01***	***0.11***	***0.08***	***0.08***	***0.07***	***0.02***	***0.32***
tert-Amyl Methyl Ether	11	66%	ND	1.05	0.10	0.28	0.12	0.32	1.13
1,2-Dichloropropane	28	13%	ND	0.05	0.05	0.04	0.04	0.01	0.21
Ethyl Acrylate	28	13%	ND	0.19	0.02	0.02	0.02	0.03	1.25
Bromodichloromethane	28	13%	ND	0.03	0.03	0.02	0.02	0.00	0.21
Trichloroethylene	24	25%	ND	0.11	0.03	0.03	0.03	0.02	0.71
Methyl Methacrylate	28	13%	ND	0.03	0.03	0.03	0.03	0.01	0.21
cis-1,3-Dichloropropene	28	13%	ND	0.02	0.02	0.01	0.01	0.00	0.21
Methyl Isobutyl Ketone	23	28%	ND	0.27	0.04	0.05	0.04	0.05	0.92
trans-1,3-Dichloropropene	28	13%	ND	0.02	0.02	0.01	0.01	0.00	0.21
1,1,2-Trichloroethane	28	13%	ND	0.02	0.02	0.01	0.01	0.00	0.21
Toluene	***0***	***100%***	***0.46***	***7.33***	***2.47***	***2.93***	***2.43***	***1.74***	***0.60***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-6 (Continued)
Summary Statistics for VOC Concentrations Measured at El Paso, Texas (EPTX)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	28	13%	ND	0.02	0.02	0.02	0.02	0.00	0.21
1,2-Dibromoethane	28	13%	ND	0.03	0.03	0.02	0.02	0.00	0.21
n-Octane	*0*	*100%*	*0.03*	*0.31*	*0.12*	*0.14*	*0.12*	*0.08*	*0.53*
Tetrachloroethylene	**16**	**50%**	**ND**	**0.14**	**0.05**	**0.05**	**0.04**	**0.02**	**0.52**
Chlorobenzene	28	13%	ND	0.02	0.02	0.02	0.02	0.00	0.21
Ethylbenzene	***0***	***100%***	***0.12***	***28.28***	***0.43***	***1.33***	***0.46***	***4.92***	***3.71***
m-,p-Xylene	***0***	***100%***	***0.36***	***98.76***	***1.16***	***4.28***	***1.23***	***17.25***	***4.03***
Bromoform	28	13%	ND	0.06	0.06	0.06	0.05	0.01	0.21
Styrene	*0*	*100%*	*0.02*	*1.81*	*0.11*	*0.19*	*0.12*	*0.31*	*1.64*
1,1,2,2-Tetrachloroethane	28	13%	ND	0.03	0.03	0.02	0.02	0.00	0.21
o-Xylene	***0***	***100%***	***0.16***	***44.77***	***0.55***	***1.97***	***0.59***	***7.82***	***3.97***
1,3,5-Trimethylbenzene	*0*	*100%*	*0.04*	*0.43*	*0.17*	*0.18*	*0.15*	*0.10*	*0.54*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.08*	*1.27*	*0.47*	*0.51*	*0.42*	*0.30*	*0.59*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-6 (Continued)
Summary Statistics for VOC Concentrations Measured at El Paso, Texas (EPTX)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	27	16%	ND	0.13	0.05	0.04	0.04	0.02	0.41
Chloromethylbenzene	28	13%	ND	0.09	0.09	0.08	0.08	0.02	0.21
_p_-Dichlorobenzene	**8**	**75%**	**ND**	**0.15**	**0.04**	**0.05**	**0.04**	**0.03**	**0.69**
o-Dichlorobenzene	28	13%	ND	0.05	0.05	0.05	0.04	0.01	0.21
1,2,4-Trichlorobenzene	26	19%	ND	0.06	0.05	0.04	0.04	0.01	0.21
Hexachloro-1,3-Butadiene	27	16%	ND	0.06	0.06	0.05	0.05	0.01	0.20

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-7
Summary Statistics for VOC Concentrations Measured at Garyville, Louisiana (GALA)
(Based on 28 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***1***	***96%***	***ND***	***3.89***	***1.08***	***1.29***	***1.01***	***0.85***	***0.66***
Propylene	***0***	***100%***	***0.01***	***22.73***	***0.71***	***1.79***	***0.78***	***4.22***	***2.36***
Dichlorodifluoromethane	***0***	***100%***	***0.01***	***1.64***	***0.67***	***0.71***	***0.60***	***0.27***	***0.38***
Chloromethane	***1***	***96%***	***ND***	***2.59***	***1.06***	***1.10***	***0.83***	***0.55***	***0.50***
Dichlorotetrafluoroethane	24	14%	ND	0.02	0.02	0.01	0.01	0.00	0.17
Vinyl Chloride	25	11%	ND	0.14	0.04	0.04	0.03	0.02	0.57
1,3-Butadiene	12	57%	ND	0.52	0.03	0.10	0.05	0.13	1.31
Bromomethane	24	14%	ND	0.18	0.02	0.03	0.02	0.03	1.21
Chloroethane	26	7%	ND	0.03	0.03	0.03	0.03	0.00	0.16
Acetonitrile	**19**	**32%**	**ND**	**24.67**	**0.11**	**1.72**	**0.23**	**4.87**	**2.84**
Trichlorofluoromethane	***0***	***100%***	***0.01***	***1.10***	***0.31***	***0.37***	***0.30***	***0.22***	***0.60***
Acrylonitrile	25	11%	ND	0.11	0.03	0.03	0.03	0.02	0.53
1,1-Dichloroethene	25	11%	ND	0.05	0.02	0.02	0.02	0.01	0.33

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-7 (Continued)
Summary Statistics for VOC Concentrations Measured at Garyville, Louisiana (GALA)
(Based on 28 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***3***	***89%***	***ND***	***3.09***	***0.09***	***0.33***	***0.12***	***0.70***	***2.09***
Trichlorotrifluoroethane	***0***	***100%***	***0.01***	***0.21***	***0.11***	***0.11***	***0.10***	***0.04***	***0.39***
trans-1,2-Dichloroethylene	26	7%	ND	0.03	0.03	0.02	0.02	0.00	0.16
1,1-Dichloroethane	26	7%	ND	0.02	0.02	0.01	0.01	0.00	0.16
Methyl *tert*-Butyl Ether	**21**	**25%**	**ND**	**0.41**	**0.02**	**0.04**	**0.02**	**0.08**	**2.02**
Methyl Ethyl Ketone	***0***	***100%***	***0.01***	***1.66***	***0.70***	***0.69***	***0.56***	***0.34***	***0.49***
Chloroprene	19	32%	ND	2.59	0.02	0.27	0.04	0.60	2.25
cis-1,2-Dichloroethylene	26	7%	ND	0.04	0.04	0.03	0.03	0.01	0.16
Bromochloromethane	26	7%	ND	0.02	0.02	0.02	0.02	0.00	0.16
Chloroform	22	21%	ND	0.06	0.02	0.02	0.02	0.01	0.47
Ethyl *tert*-Butyl Ether	26	7%	ND	0.03	0.03	0.02	0.02	0.00	0.16
1,2-Dichloroethane	25	11%	ND	0.30	0.04	0.05	0.04	0.05	1.05
1,1,1-Trichloroethane	***0***	***100%***	***0.02***	***26.92***	***0.14***	***1.21***	***0.18***	***5.05***	***4.16***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-7 (Continued)
Summary Statistics for VOC Concentrations Measured at Garyville, Louisiana (GALA)
(Based on 28 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.02***	***1.13***	***0.42***	***0.48***	***0.40***	***0.25***	***0.52***
Carbon Tetrachloride	***0***	***100%***	***0.02***	***0.12***	***0.09***	***0.09***	***0.08***	***0.02***	***0.27***
tert-Amyl Methyl Ether	25	11%	ND	0.37	0.03	0.04	0.03	0.07	1.59
1,2-Dichloropropane	26	7%	ND	0.05	0.05	0.04	0.04	0.01	0.16
Ethyl Acrylate	26	7%	ND	0.02	0.02	0.02	0.02	0.00	0.16
Bromodichloromethane	26	7%	ND	0.03	0.03	0.02	0.02	0.00	0.16
Trichloroethylene	21	25%	ND	0.08	0.03	0.03	0.03	0.01	0.39
Methyl Methacrylate	26	7%	ND	0.03	0.03	0.03	0.03	0.00	0.16
cis-1,3-Dichloropropene	26	7%	ND	0.02	0.02	0.01	0.01	0.00	0.16
Methyl Isobutyl Ketone	21	25%	ND	0.09	0.04	0.04	0.04	0.02	0.45
trans-1,3-Dichloropropene	26	7%	ND	0.02	0.02	0.01	0.01	0.00	0.16
1,1,2-Trichloroethane	26	7%	ND	0.02	0.02	0.01	0.01	0.00	0.16
Toluene	***0***	***100%***	***0.03***	***12.75***	***0.85***	***1.39***	***0.81***	***2.33***	***1.68***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-7 (Continued)
Summary Statistics for VOC Concentrations Measured at Garyville, Louisiana (GALA)
(Based on 28 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	26	7%	ND	0.02	0.02	0.02	0.02	0.00	0.16
1,2-Dibromoethane	26	7%	ND	0.03	0.03	0.02	0.02	0.00	0.16
n-Octane	*1*	*96%*	*ND*	*0.56*	*0.08*	*0.12*	*0.09*	*0.12*	*1.03*
Tetrachloroethylene	**14**	**50%**	**ND**	**2.38**	**0.05**	**0.29**	**0.11**	**0.52**	**1.78**
Chlorobenzene	26	7%	ND	0.02	0.02	0.02	0.02	0.00	0.16
Ethylbenzene	***0***	***100%***	***0.03***	***0.59***	***0.15***	***0.18***	***0.15***	***0.11***	***0.63***
m-,p-Xylene	***0***	***100%***	***0.02***	***1.58***	***0.34***	***0.42***	***0.33***	***0.31***	***0.73***
Bromoform	26	7%	ND	0.06	0.06	0.06	0.06	0.01	0.16
Styrene	*2*	*93%*	*ND*	*0.33*	*0.07*	*0.08*	*0.07*	*0.06*	*0.72*
1,1,2,2-Tetrachloroethane	26	7%	ND	0.03	0.03	0.02	0.02	0.00	0.16
o-Xylene	***0***	***100%***	***0.01***	***0.79***	***0.19***	***0.22***	***0.17***	***0.15***	***0.69***
1,3,5-Trimethylbenzene	*3*	*89%*	*ND*	*0.23*	*0.06*	*0.07*	*0.06*	*0.04*	*0.58*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.02*	*0.65*	*0.15*	*0.18*	*0.15*	*0.12*	*0.66*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-7 (Continued)
Summary Statistics for VOC Concentrations Measured at Garyville, Louisiana (GALA)
(Based on 28 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	26	7%	ND	0.05	0.05	0.04	0.04	0.01	0.16
Chloromethylbenzene	26	7%	ND	0.09	0.09	0.09	0.08	0.01	0.16
***p*-Dichlorobenzene**	**23**	**18%**	**ND**	**0.04**	**0.04**	**0.04**	**0.04**	**0.01**	**0.20**
o-Dichlorobenzene	25	11%	ND	0.05	0.05	0.05	0.05	0.01	0.16
1,2,4-Trichlorobenzene	24	14%	ND	0.05	0.05	0.04	0.04	0.01	0.22
Hexachloro-1,3-Butadiene	26	7%	ND	0.06	0.06	0.05	0.05	0.01	0.16

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-8
Summary Statistics for VOC Concentrations Measured at Hahnville, Louisiana (HALA)
(Based on 25 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.44***	***3.25***	***1.31***	***1.49***	***1.33***	***0.69***	***0.46***
Propylene	***0***	***100%***	***0.62***	***4.54***	***1.36***	***1.70***	***1.45***	***1.10***	***0.64***
Dichlorodifluoromethane	***0***	***100%***	***0.55***	***0.92***	***0.63***	***0.66***	***0.65***	***0.08***	***0.12***
Chloromethane	***0***	***100%***	***0.16***	***5.25***	***1.37***	***1.83***	***1.45***	***1.32***	***0.72***
Dichlorotetrafluoroethane	23	8%	ND	0.02	0.02	0.01	0.01	0.00	0.06
Vinyl Chloride	25	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,3-Butadiene	7	72%	ND	1.80	0.08	0.19	0.08	0.37	1.90
Bromomethane	24	4%	ND	0.03	0.02	0.02	0.02	0.00	0.10
Chloroethane	24	4%	ND	0.08	0.03	0.03	0.03	0.01	0.34
Acetonitrile	**16**	**36%**	**ND**	**117.00**	**0.11**	**5.86**	**0.33**	**23.43**	**4.00**
Trichlorofluoromethane	***0***	***100%***	***0.03***	***1.62***	***0.28***	***0.35***	***0.29***	***0.27***	***0.79***
Acrylonitrile	18	28%	ND	1.36	0.03	0.21	0.07	0.36	1.74
1,1-Dichloroethene	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-8 (Continued)
Summary Statistics for VOC Concentrations Measured at Hahnville, Louisiana (HALA)
(Based on 25 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***2***	***92%***	***ND***	***1.37***	***0.08***	***0.17***	***0.11***	***0.26***	***1.58***
Trichlorotrifluoroethane	***0***	***100%***	***0.09***	***0.30***	***0.13***	***0.13***	***0.13***	***0.04***	***0.31***
trans-1,2-Dichloroethylene	25	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl *tert*-Butyl Ether	**14**	**44%**	**ND**	**5.14**	**0.02**	**0.32**	**0.05**	**1.05**	**3.23**
Methyl Ethyl Ketone	***1***	***96%***	***ND***	***1.93***	***0.68***	***0.79***	***0.65***	***0.39***	***0.50***
Chloroprene	23	8%	ND	1.44	0.02	0.11	0.02	0.34	3.05
cis-1,2-Dichloroethylene	25	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	24	4%	ND	0.05	0.02	0.02	0.02	0.01	0.32
Ethyl *tert*-Butyl Ether	25	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	24	4%	ND	0.21	0.04	0.05	0.04	0.03	0.73
1,1,1-Trichloroethane	***0***	***100%***	***0.05***	***0.27***	***0.07***	***0.09***	***0.08***	***0.06***	***0.69***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-8 (Continued)
Summary Statistics for VOC Concentrations Measured at Hahnville, Louisiana (HALA)
(Based on 25 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.30***	***2.40***	***0.70***	***0.77***	***0.69***	***0.42***	***0.55***
Carbon Tetrachloride	***0***	***100%***	***0.06***	***0.13***	***0.09***	***0.09***	***0.09***	***0.02***	***0.18***
tert-Amyl Methyl Ether	25	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloropropane	25	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	24	4%	ND	0.09	0.02	0.02	0.02	0.01	0.61
Bromodichloromethane	25	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	23	8%	ND	0.09	0.03	0.03	0.03	0.01	0.40
Methyl Methacrylate	25	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
cis-1,3-Dichloropropene	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	20	20%	ND	0.59	0.04	0.07	0.05	0.12	1.62
trans-1,3-Dichloropropene	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.40***	***5.98***	***1.08***	***1.50***	***1.10***	***1.42***	***0.95***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-8 (Continued)
Summary Statistics for VOC Concentrations Measured at Hahnville, Louisiana (HALA)
(Based on 25 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	25	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
n-Octane	*0*	*100%*	*0.06*	*0.90*	*0.13*	*0.21*	*0.16*	*0.19*	*0.90*
Tetrachloroethylene	**16**	**36%**	**ND**	**1.95**	**0.05**	**0.17**	**0.08**	**0.39**	**2.27**
Chlorobenzene	25	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethylbenzene	***0***	***100%***	***0.08***	***0.59***	***0.15***	***0.19***	***0.17***	***0.11***	***0.60***
m-,p-Xylene	***0***	***100%***	***0.19***	***1.54***	***0.37***	***0.46***	***0.40***	***0.30***	***0.64***
Bromoform	25	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*0*	*100%*	*0.03*	*0.44*	*0.06*	*0.09*	*0.07*	*0.09*	*1.01*
1,1,2,2-Tetrachloroethane	25	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
o-Xylene	***0***	***100%***	***0.10***	***0.74***	***0.20***	***0.23***	***0.20***	***0.14***	***0.60***
1,3,5-Trimethylbenzene	*1*	*96%*	*ND*	*0.24*	*0.07*	*0.09*	*0.08*	*0.05*	*0.54*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.09*	*0.67*	*0.18*	*0.21*	*0.18*	*0.13*	*0.64*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-8 (Continued)
Summary Statistics for VOC Concentrations Measured at Hahnville, Louisiana (HALA)
(Based on 25 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	24	4%	ND	0.05	0.05	0.04	0.04	0.00	0.07
Chloromethylbenzene	25	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
p-Dichlorobenzene	**21**	**16%**	**ND**	**0.18**	**0.04**	**0.04**	**0.04**	**0.03**	**0.65**
o-Dichlorobenzene	24	4%	ND	0.06	0.05	0.05	0.05	0.00	0.04
1,2,4-Trichlorobenzene	24	4%	ND	0.32	0.05	0.06	0.05	0.06	0.98
Hexachloro-1,3-Butadiene	24	4%	ND	0.13	0.06	0.06	0.06	0.02	0.26

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-9
Summary Statistics for VOC Concentrations Measured at North Little Rock, Arkansas (PARR)
(Based on 20 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.65***	***5.07***	***1.71***	***2.13***	***1.87***	***1.17***	***0.55***
Propylene	***0***	***100%***	***0.29***	***2.64***	***0.84***	***0.98***	***0.84***	***0.58***	***0.60***
Dichlorodifluoromethane	***0***	***100%***	***0.46***	***0.90***	***0.63***	***0.65***	***0.64***	***0.11***	***0.18***
Chloromethane	***0***	***100%***	***0.53***	***1.48***	***0.70***	***0.80***	***0.77***	***0.27***	***0.33***
Dichlorotetrafluoroethane	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Vinyl Chloride	20	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,3-Butadiene	12	40%	ND	0.30	0.03	0.08	0.05	0.08	1.10
Bromomethane	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroethane	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Acetonitrile	**16**	**20%**	**ND**	**1.55**	**0.11**	**0.26**	**0.15**	**0.39**	**1.51**
Trichlorofluoromethane	***1***	***95%***	***ND***	***0.53***	***0.28***	***0.29***	***0.25***	***0.09***	***0.32***
Acrylonitrile	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethene	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-9 (Continued)
Summary Statistics for VOC Concentrations Measured at North Little Rock, Arkansas (PARR)
(Based on 20 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***1***	***95%***	***ND***	***6.85***	***0.20***	***1.01***	***0.31***	***1.83***	***1.80***
Trichlorotrifluoroethane	***0***	***100%***	***0.08***	***0.26***	***0.10***	***0.11***	***0.10***	***0.04***	***0.38***
trans-1,2-Dichloroethylene	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl *tert*-Butyl Ether	**20**	**0%**	**ND**	**ND**	**0.02**	**0.02**	**0.02**	**0.00**	**0.00**
Methyl Ethyl Ketone	***0***	***100%***	***0.08***	***1.49***	***0.66***	***0.73***	***0.63***	***0.34***	***0.47***
Chloroprene	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	20	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	16	20%	ND	0.07	0.02	0.03	0.02	0.01	0.55
Ethyl *tert*-Butyl Ether	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	20	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,1,1-Trichloroethane	***1***	***95%***	***ND***	***0.09***	***0.06***	***0.06***	***0.06***	***0.01***	***0.22***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-9 (Continued)
Summary Statistics for VOC Concentrations Measured at North Little Rock, Arkansas (PARR)
(Based on 20 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.26***	***1.34***	***0.58***	***0.63***	***0.57***	***0.29***	***0.47***
Carbon Tetrachloride	***0***	***100%***	***0.02***	***0.11***	***0.08***	***0.08***	***0.08***	***0.02***	***0.27***
tert-Amyl Methyl Ether	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloropropane	20	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Bromodichloromethane	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Methyl Methacrylate	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
cis-1,3-Dichloropropene	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	15	25%	ND	0.14	0.04	0.05	0.04	0.03	0.58
trans-1,3-Dichloropropene	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.26***	***3.22***	***0.78***	***0.97***	***0.79***	***0.74***	***0.76***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-9 (Continued)
Summary Statistics for VOC Concentrations Measured at North Little Rock, Arkansas (PARR)
(Based on 20 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
n-Octane	*0*	*100%*	*0.03*	*0.29*	*0.09*	*0.10*	*0.09*	*0.06*	*0.60*
Tetrachloroethylene	**12**	**40%**	**ND**	**0.11**	**0.05**	**0.06**	**0.05**	**0.02**	**0.38**
Chlorobenzene	20	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethylbenzene	***0***	***100%***	***0.08***	***0.63***	***0.18***	***0.23***	***0.20***	***0.16***	***0.69***
m-,p-Xylene	***0***	***100%***	***0.14***	***1.76***	***0.42***	***0.56***	***0.45***	***0.44***	***0.78***
Bromoform	20	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*0*	*100%*	*0.04*	*1.65*	*0.07*	*0.18*	*0.10*	*0.36*	*1.99*
1,1,2,2-Tetrachloroethane	20	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
o-Xylene	***0***	***100%***	***0.08***	***0.85***	***0.24***	***0.30***	***0.24***	***0.21***	***0.72***
1,3,5-Trimethylbenzene	*1*	*95%*	*ND*	*0.53*	*0.08*	*0.12*	*0.10*	*0.11*	*0.92*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.10*	*1.77*	*0.23*	*0.34*	*0.25*	*0.38*	*1.12*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-9 (Continued)
Summary Statistics for VOC Concentrations Measured at North Little Rock, Arkansas (PARR)
(Based on 20 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	20	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Chloromethylbenzene	20	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
p-Dichlorobenzene	**17**	**15%**	**ND**	**0.06**	**0.04**	**0.04**	**0.04**	**0.01**	**0.19**
o-Dichlorobenzene	20	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
1,2,4-Trichlorobenzene	20	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Hexachloro-1,3-Butadiene	20	0%	ND	ND	0.06	0.06	0.06	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-10
Summary Statistics for VOC Concentrations Measured at Rutland, Vermont (RUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.74***	***5.86***	***1.70***	***2.15***	***1.90***	***1.24***	***0.58***
Propylene	***0***	***100%***	***0.46***	***2.50***	***0.87***	***0.96***	***0.90***	***0.43***	***0.44***
Dichlorodifluoromethane	***0***	***100%***	***0.48***	***1.40***	***0.67***	***0.70***	***0.69***	***0.16***	***0.22***
Chloromethane	***0***	***100%***	***0.44***	***0.87***	***0.62***	***0.64***	***0.63***	***0.10***	***0.16***
Dichlorotetrafluoroethane	29	6%	ND	0.02	0.02	0.01	0.01	0.00	0.06
Vinyl Chloride	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,3-Butadiene	*2*	*94%*	*ND*	*0.34*	*0.08*	*0.10*	*0.07*	*0.07*	*0.78*
Bromomethane	29	6%	ND	0.04	0.02	0.02	0.02	0.00	0.19
Chloroethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Acetonitrile	**16**	**48%**	**ND**	**20.43**	**0.11**	**1.24**	**0.33**	**3.62**	**2.92**
Trichlorofluoromethane	***0***	***100%***	***0.24***	***0.67***	***0.32***	***0.34***	***0.34***	***0.08***	***0.25***
Acrylonitrile	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-10 (Continued)
Summary Statistics for VOC Concentrations Measured at Rutland, Vermont (RUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***3***	***90%***	***ND***	***0.86***	***0.10***	***0.15***	***0.11***	***0.16***	***1.05***
Trichlorotrifluoroethane	***0***	***100%***	***0.04***	***0.12***	***0.09***	***0.09***	***0.09***	***0.02***	***0.17***
trans-1,2-Dichloroethylene	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl tert-Butyl Ether	***2***	***94%***	***ND***	***0.55***	***0.28***	***0.28***	***0.22***	***0.15***	***0.53***
Methyl Ethyl Ketone	***0***	***100%***	***0.26***	***1.36***	***0.58***	***0.62***	***0.56***	***0.29***	***0.47***
Chloroprene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	27	13%	ND	0.03	0.02	0.02	0.02	0.00	0.17
Ethyl *tert*-Butyl Ether	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	31	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,1,1-Trichloroethane	***0***	***100%***	***0.05***	***0.09***	***0.06***	***0.06***	***0.06***	***0.01***	***0.17***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-10 (Continued)
Summary Statistics for VOC Concentrations Measured at Rutland, Vermont (RUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.36***	***1.52***	***0.64***	***0.68***	***0.64***	***0.27***	***0.39***
Carbon Tetrachloride	***0***	***100%***	***0.06***	***0.12***	***0.09***	***0.09***	***0.09***	***0.02***	***0.18***
tert-Amyl Methyl Ether	29	6%	ND	0.06	0.03	0.03	0.03	0.01	0.19
1,2-Dichloropropane	31	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Bromodichloromethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	29	6%	ND	0.03	0.03	0.03	0.03	0.00	0.06
Methyl Methacrylate	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
cis-1,3-Dichloropropene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	29	6%	ND	0.14	0.04	0.04	0.04	0.02	0.52
trans-1,3-Dichloropropene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.47***	***4.71***	***1.46***	***1.69***	***1.45***	***0.96***	***0.57***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-10 (Continued)
Summary Statistics for VOC Concentrations Measured at Rutland, Vermont (RUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
n-Octane	*4*	*87%*	*ND*	*0.20*	*0.11*	*0.11*	*0.10*	*0.04*	*0.42*
Tetrachloroethylene	**21**	**32%**	**ND**	**0.07**	**0.05**	**0.05**	**0.04**	**0.01**	**0.26**
Chlorobenzene	31	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethylbenzene	***0***	***100%***	***0.10***	***0.48***	***0.26***	***0.27***	***0.25***	***0.11***	***0.40***
m-,p-Xylene	***0***	***100%***	***0.24***	***1.47***	***0.66***	***0.72***	***0.65***	***0.32***	***0.45***
Bromoform	31	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*1*	*97%*	*ND*	*0.37*	*0.07*	*0.08*	*0.07*	*0.07*	*0.82*
1,1,2,2-Tetrachloroethane	31	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
o-Xylene	***0***	***100%***	***0.13***	***0.74***	***0.34***	***0.36***	***0.33***	***0.16***	***0.44***
1,3,5-Trimethylbenzene	*1*	*97%*	*ND*	*0.39*	*0.11*	*0.12*	*0.11*	*0.07*	*0.57*
1,2,4-Trimethylbenzene	*0*	*100%*	*0.08*	*0.97*	*0.29*	*0.34*	*0.29*	*0.20*	*0.58*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-10 (Continued)
Summary Statistics for VOC Concentrations Measured at Rutland, Vermont (RUVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	30	3%	ND	0.05	0.05	0.04	0.04	0.00	0.02
Chloromethylbenzene	31	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
p-Dichlorobenzene	**25**	**19%**	**ND**	**0.04**	**0.04**	**0.04**	**0.04**	**0.01**	**0.19**
o-Dichlorobenzene	31	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
1,2,4-Trichlorobenzene	30	3%	ND	0.06	0.05	0.05	0.05	0.00	0.06
Hexachloro-1,3-Butadiene	30	3%	ND	0.06	0.06	0.05	0.05	0.00	0.05

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-11
Summary Statistics for VOC Concentrations Measured at Texarkana, Arkansas (GREY)
(Based on 12 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.37***	***2.00***	***0.95***	***1.04***	***0.93***	***0.52***	***0.50***
Propylene	***0***	***100%***	***0.29***	***0.98***	***0.39***	***0.48***	***0.44***	***0.22***	***0.47***
Dichlorodifluoromethane	***0***	***100%***	***0.50***	***0.66***	***0.60***	***0.59***	***0.59***	***0.05***	***0.08***
Chloromethane	***0***	***100%***	***0.56***	***0.84***	***0.65***	***0.66***	***0.66***	***0.08***	***0.12***
Dichlorotetrafluoroethane	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Vinyl Chloride	12	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,3-Butadiene	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Bromomethane	10	17%	ND	0.17	0.02	0.03	0.02	0.04	1.29
Chloroethane	11	8%	ND	0.55	0.03	0.07	0.04	0.15	2.05
Acetonitrile	**7**	**42%**	**ND**	**8.95**	**0.11**	**2.51**	**0.45**	**3.67**	**1.46**
Trichlorofluoromethane	***0***	***100%***	***0.26***	***0.44***	***0.29***	***0.31***	***0.31***	***0.06***	***0.18***
Acrylonitrile	9	25%	ND	1.01	0.03	0.23	0.07	0.38	1.61
1,1-Dichloroethene	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-11 (Continued)
Summary Statistics for VOC Concentrations Measured at Texarkana, Arkansas (GREY)
(Based on 12 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	***0***	***100%***	***0.11***	***0.54***	***0.24***	***0.26***	***0.23***	***0.13***	***0.50***
Trichlorotrifluoroethane	***0***	***100%***	***0.07***	***0.10***	***0.08***	***0.08***	***0.08***	***0.01***	***0.12***
trans-1,2-Dichloroethylene	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl *tert*-Butyl Ether	**12**	**0%**	**ND**	**ND**	**0.02**	**0.02**	**0.02**	**0.00**	**0.00**
Methyl Ethyl Ketone	***0***	***100%***	***0.52***	***3.28***	***0.90***	***1.18***	***0.97***	***0.84***	***0.72***
Chloroprene	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	12	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethyl *tert*-Butyl Ether	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	12	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,1,1-Trichloroethane	***0***	***100%***	***0.04***	***0.10***	***0.05***	***0.06***	***0.05***	***0.02***	***0.30***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-11 (Continued)
Summary Statistics for VOC Concentrations Measured at Texarkana, Arkansas (GREY)
(Based on 12 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.26***	***0.58***	***0.42***	***0.42***	***0.41***	***0.10***	***0.23***
Carbon Tetrachloride	***0***	***100%***	***0.05***	***0.11***	***0.08***	***0.08***	***0.08***	***0.02***	***0.26***
tert-Amyl Methyl Ether	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloropropane	12	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Bromodichloromethane	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	11	8%	ND	0.10	0.03	0.04	0.03	0.02	0.56
Methyl Methacrylate	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
cis-1,3-Dichloropropene	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	10	17%	ND	0.21	0.04	0.05	0.04	0.05	0.95
trans-1,3-Dichloropropene	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.16***	***5.53***	***0.31***	***1.16***	***0.48***	***1.99***	***1.71***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-11 (Continued)
Summary Statistics for VOC Concentrations Measured at Texarkana, Arkansas (GREY)
(Based on 12 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,2-Dibromoethane	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
n-Octane	*2*	*83%*	*ND*	*0.14*	*0.07*	*0.07*	*0.06*	*0.03*	*0.48*
Tetrachloroethylene	**11**	**8%**	**ND**	**0.14**	**0.05**	**0.06**	**0.05**	**0.03**	**0.45**
Chlorobenzene	12	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethylbenzene	***0***	***100%***	***0.02***	***0.49***	***0.08***	***0.15***	***0.10***	***0.14***	***0.97***
m-,p-Xylene	***1***	***92%***	***ND***	***0.61***	***0.14***	***0.23***	***0.17***	***0.20***	***0.88***
Bromoform	12	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	*1*	*92%*	*ND*	*1.85*	*0.13*	*0.33*	*0.17*	*0.52*	*1.55*
1,1,2,2-Tetrachloroethane	12	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
o-Xylene	***1***	***92%***	***ND***	***0.34***	***0.08***	***0.13***	***0.09***	***0.11***	***0.84***
1,3,5-Trimethylbenzene	3	75%	ND	0.11	0.04	0.05	0.05	0.02	0.47
1,2,4-Trimethylbenzene	*1*	*92%*	*ND*	*0.35*	*0.09*	*0.12*	*0.10*	*0.09*	*0.74*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-11 (Continued)
Summary Statistics for VOC Concentrations Measured at Texarkana, Arkansas (GREY)
(Based on 12 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	12	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Chloromethylbenzene	12	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
p-Dichlorobenzene	**12**	**0%**	**ND**	**ND**	**0.04**	**0.04**	**0.04**	**0.00**	**0.00**
o-Dichlorobenzene	12	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
1,2,4-Trichlorobenzene	12	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Hexachloro-1,3-Butadiene	12	0%	ND	ND	0.06	0.06	0.06	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-12
Summary Statistics for VOC Concentrations Measured at Underhill, Vermont (UNVT)
(Based on 33 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Acetylene	***0***	***100%***	***0.22***	***1.57***	***0.53***	***0.62***	***0.56***	***0.30***	***0.48***
Propylene	***0***	***100%***	***0.14***	***0.51***	***0.24***	***0.26***	***0.25***	***0.09***	***0.33***
Dichlorodifluoromethane	***0***	***100%***	***0.39***	***0.75***	***0.62***	***0.61***	***0.60***	***0.07***	***0.11***
Chloromethane	***0***	***100%***	***0.42***	***0.98***	***0.69***	***0.68***	***0.67***	***0.11***	***0.17***
Dichlorotetrafluoroethane	28	15%	ND	0.02	0.02	0.01	0.01	0.00	0.10
Vinyl Chloride	33	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,3-Butadiene	32	3%	ND	0.09	0.03	0.03	0.03	0.01	0.42
Bromomethane	31	6%	ND	0.02	0.02	0.02	0.02	0.00	0.02
Chloroethane	33	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Acetonitrile	**28**	**15%**	**ND**	**5.85**	**0.11**	**0.44**	**0.16**	**1.11**	**2.50**
Trichlorofluoromethane	***0***	***100%***	***0.05***	***0.58***	***0.31***	***0.33***	***0.30***	***0.11***	***0.33***
Acrylonitrile	30	9%	ND	0.30	0.03	0.05	0.04	0.07	1.37
1,1-Dichloroethene	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-12 (Continued)
Summary Statistics for VOC Concentrations Measured at Underhill, Vermont (UNVT)
(Based on 33 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Methylene Chloride	**12**	**64%**	**ND**	**1.29**	**0.05**	**0.13**	**0.08**	**0.23**	**1.71**
Trichlorotrifluoroethane	***0***	***100%***	***0.05***	***0.39***	***0.09***	***0.10***	***0.09***	***0.05***	***0.54***
trans-1,2-Dichloroethylene	33	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,1-Dichloroethane	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl *tert*-Butyl Ether	**33**	**0%**	**ND**	**ND**	**0.02**	**0.02**	**0.02**	**0.00**	**0.00**
Methyl Ethyl Ketone	***1***	***97%***	***ND***	***1.06***	***0.39***	***0.43***	***0.36***	***0.21***	***0.50***
Chloroprene	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
cis-1,2-Dichloroethylene	33	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
Bromochloromethane	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Chloroform	32	3%	ND	0.02	0.02	0.02	0.02	0.00	0.06
Ethyl *tert*-Butyl Ether	33	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloroethane	33	0%	ND	ND	0.04	0.04	0.04	0.00	0.00
1,1,1-Trichloroethane	***2***	***94%***	***ND***	***0.16***	***0.06***	***0.06***	***0.06***	***0.02***	***0.35***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-12 (Continued)
Summary Statistics for VOC Concentrations Measured at Underhill, Vermont (UNVT)
(Based on 33 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Benzene	***0***	***100%***	***0.06***	***0.40***	***0.21***	***0.22***	***0.20***	***0.08***	***0.37***
Carbon Tetrachloride	***0***	***100%***	***0.04***	***0.12***	***0.09***	***0.08***	***0.08***	***0.02***	***0.22***
tert-Amyl Methyl Ether	33	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
1,2-Dichloropropane	33	0%	ND	ND	0.05	0.05	0.05	0.00	0.00
Ethyl Acrylate	32	3%	ND	0.16	0.02	0.02	0.02	0.02	1.01
Bromodichloromethane	33	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Trichloroethylene	33	0%	ND	ND	0.03	0.03	0.03	0.00	0.00
Methyl Methacrylate	32	3%	ND	0.07	0.03	0.03	0.03	0.01	0.22
cis-1,3-Dichloropropene	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Methyl Isobutyl Ketone	31	6%	ND	0.43	0.04	0.05	0.04	0.07	1.42
trans-1,3-Dichloropropene	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
1,1,2-Trichloroethane	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Toluene	***0***	***100%***	***0.10***	***2.40***	***0.20***	***0.36***	***0.25***	***0.45***	***1.26***

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-12 (Continued)
Summary Statistics for VOC Concentrations Measured at Underhill, Vermont (UNVT)
(Based on 33 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Dibromochloromethane	32	3%	ND	0.02	0.02	0.02	0.02	0.00	0.04
1,2-Dibromoethane	32	3%	ND	0.03	0.03	0.02	0.02	0.00	0.04
n-Octane	15	55%	ND	0.16	0.05	0.05	0.05	0.02	0.44
Tetrachloroethylene	**31**	**6%**	**ND**	**0.05**	**0.05**	**0.05**	**0.05**	**0.01**	**0.20**
Chlorobenzene	33	0%	ND	ND	0.02	0.02	0.02	0.00	0.00
Ethylbenzene	***5***	***85%***	***ND***	***0.24***	***0.06***	***0.07***	***0.07***	***0.04***	***0.55***
m-,p-Xylene	***0***	***100%***	***0.02***	***0.83***	***0.09***	***0.12***	***0.10***	***0.13***	***1.13***
Bromoform	33	0%	ND	ND	0.06	0.06	0.06	0.00	0.00
Styrene	8	76%	ND	0.11	0.04	0.05	0.04	0.02	0.48
1,1,2,2-Tetrachloroethane	32	3%	ND	0.04	0.03	0.03	0.03	0.00	0.10
o-Xylene	***1***	***97%***	***ND***	***0.43***	***0.06***	***0.07***	***0.06***	***0.07***	***0.94***
1,3,5-Trimethylbenzene	7	79%	ND	0.44	0.04	0.05	0.04	0.07	1.41
1,2,4-Trimethylbenzene	*1*	*97%*	*ND*	*0.71*	*0.06*	*0.09*	*0.07*	*0.12*	*1.33*

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table D-12 (Continued)
Summary Statistics for VOC Concentrations Measured at Underhill, Vermont (UNVT)
(Based on 33 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
m-Dichlorobenzene	32	3%	ND	0.08	0.05	0.05	0.05	0.01	0.13
Chloromethylbenzene	33	0%	ND	ND	0.09	0.09	0.09	0.00	0.00
***p*-Dichlorobenzene**	**31**	**6%**	**ND**	**0.09**	**0.04**	**0.04**	**0.04**	**0.01**	**0.23**
o-Dichlorobenzene	32	3%	ND	0.11	0.05	0.05	0.05	0.01	0.20
1,2,4-Trichlorobenzene	32	3%	ND	0.41	0.05	0.06	0.05	0.06	1.13
Hexachloro-1,3-Butadiene	32	3%	ND	0.27	0.06	0.06	0.06	0.04	0.61

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

APPENDIX E

1998/1999 SUMMARY TABLES FOR CARBONYL MONITORING

Table E-1
Summary Statistics for Carbonyl Concentrations Measured at Baton Rouge, Louisiana (B2LA)
(Based on 18 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.72***	***4.16***	***1.57***	***1.80***	***1.59***	***0.97***	***0.54***
Acetaldehyde	***0***	***100%***	***0.36***	***1.68***	***0.69***	***0.78***	***0.72***	***0.34***	***0.44***
Acrolein	5	72%	ND	0.06	0.01	0.02	0.01	0.02	0.99
Acetone	***0***	***100%***	***0.07***	***2.91***	***0.72***	***0.79***	***0.48***	***0.74***	***0.93***
Propionaldehyde	*0*	*100%*	*0.07*	*0.23*	*0.10*	*0.12*	*0.11*	*0.05*	*0.45*
Crotonaldehyde	13	28%	ND	0.06	0.00	0.01	0.00	0.02	1.72
Butyr/Isobutyraldehyde	***0***	***100%***	***0.02***	***0.81***	***0.19***	***0.21***	***0.15***	***0.19***	***0.90***
Benzaldehyde	*0*	*100%*	*0.01*	*0.11*	*0.04*	*0.04*	*0.04*	*0.03*	*0.58*
Isovaleraldehyde	5	72%	ND	0.03	0.01	0.01	0.01	0.01	0.71
Valeraldehyde	*0*	*100%*	*0.01*	*0.09*	*0.03*	*0.03*	*0.03*	*0.02*	*0.53*
Tolualdehydes	4	78%	ND	0.06	0.03	0.03	0.02	0.02	0.73
Hexaldehyde	*0*	*100%*	*0.01*	*0.17*	*0.03*	*0.04*	*0.03*	*0.04*	*0.91*
2,5-Dimethylbenzaldehyde	16	11%	ND	0.02	0.00	0.00	0.00	0.00	1.71

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-2
Summary Statistics for Carbonyl Concentrations Measured at Beulah, North Dakota (BUND)
(Based on 34 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.51***	***3.50***	***1.18***	***1.36***	***1.19***	***0.76***	***0.56***
Acetaldehyde	***0***	***100%***	***0.35***	***1.77***	***0.54***	***0.64***	***0.59***	***0.33***	***0.51***
Acrolein	12	65%	ND	0.06	0.02	0.02	0.01	0.02	0.83
Acetone	***0***	***100%***	***0.63***	***3.46***	***1.11***	***1.30***	***1.18***	***0.65***	***0.50***
Propionaldehyde	*0*	*100%*	*0.05*	*0.22*	*0.07*	*0.08*	*0.08*	*0.04*	*0.46*
Crotonaldehyde	18	47%	ND	0.02	0.00	0.01	0.00	0.01	1.04
Butyr/Isobutyraldehyde	***0***	***100%***	***0.02***	***0.46***	***0.07***	***0.11***	***0.08***	***0.12***	***1.04***
Benzaldehyde	*4*	*88%*	*ND*	*0.07*	*0.02*	*0.02*	*0.01*	*0.02*	*0.86*
Isovaleraldehyde	18	47%	ND	0.04	0.00	0.01	0.00	0.01	1.27
Valeraldehyde	*1*	*97%*	*ND*	*0.09*	*0.04*	*0.04*	*0.03*	*0.02*	*0.47*
Tolualdehydes	10	71%	ND	0.06	0.02	0.02	0.01	0.01	0.78
Hexaldehyde	*0*	*100%*	*0.02*	*0.14*	*0.07*	*0.07*	*0.07*	*0.03*	*0.36*
2,5-Dimethylbenzaldehyde	34	0%	ND	ND	0.00	0.00	0.00	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-3
Summary Statistics for Carbonyl Concentrations Measured at Brattleboro, Vermont (BRVT)
(Based on 31 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.72***	***3.55***	***1.47***	***1.74***	***1.57***	***0.82***	***0.47***
Acetaldehyde	***0***	***100%***	***0.36***	***1.51***	***0.73***	***0.76***	***0.72***	***0.26***	***0.34***
Acrolein	13	58%	ND	0.09	0.01	0.02	0.01	0.02	1.25
Acetone	***0***	***100%***	***0.18***	***2.62***	***1.12***	***1.10***	***0.98***	***0.49***	***0.45***
Propionaldehyde	*0*	*100%*	*0.05*	*0.24*	*0.10*	*0.10*	*0.10*	*0.04*	*0.36*
Crotonaldehyde	17	45%	ND	0.12	0.00	0.02	0.00	0.03	1.75
Butyr/Isobutyraldehyde	***0***	***100%***	***0.03***	***0.28***	***0.13***	***0.14***	***0.12***	***0.07***	***0.54***
Benzaldehyde	*1*	*97%*	*ND*	*0.16*	*0.04*	*0.06*	*0.04*	*0.04*	*0.63*
Isovaleraldehyde	12	61%	ND	0.05	0.01	0.01	0.01	0.01	1.02
Valeraldehyde	*0*	*100%*	*0.02*	*0.11*	*0.03*	*0.04*	*0.04*	*0.02*	*0.57*
Tolualdehydes	*2*	*94%*	*ND*	*0.07*	*0.04*	*0.04*	*0.03*	*0.02*	*0.50*
Hexaldehyde	*0*	*100%*	*0.02*	*0.17*	*0.05*	*0.06*	*0.05*	*0.04*	*0.63*
2,5-Dimethylbenzaldehyde	28	10%	ND	0.01	0.00	0.00	0.00	0.00	1.22

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-4
Summary Statistics for Carbonyl Concentrations Measured at Burlington, Vermont (BUVT)
(Based on 32 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***1.19***	***6.52***	***2.68***	***2.95***	***2.72***	***1.26***	***0.43***
Acetaldehyde	***0***	***100%***	***0.07***	***1.67***	***0.99***	***0.96***	***0.88***	***0.33***	***0.34***
Acrolein	11	66%	ND	0.20	0.02	0.03	0.01	0.04	1.55
Acetone	***0***	***100%***	***0.08***	***2.26***	***1.01***	***1.08***	***0.91***	***0.53***	***0.49***
Propionaldehyde	*0*	*100%*	*0.02*	*0.25*	*0.12*	*0.13*	*0.12*	*0.05*	*0.39*
Crotonaldehyde	18	44%	ND	0.11	0.00	0.02	0.00	0.03	1.66
Butyr/Isobutyraldehyde	***1***	***97%***	***ND***	***0.59***	***0.12***	***0.17***	***0.12***	***0.15***	***0.83***
Benzaldehyde	*0*	*100%*	*0.03*	*0.16*	*0.06*	*0.07*	*0.06*	*0.03*	*0.44*
Isovaleraldehyde	15	53%	ND	0.04	0.01	0.01	0.00	0.01	1.06
Valeraldehyde	*1*	*97%*	*ND*	*0.07*	*0.03*	*0.03*	*0.03*	*0.02*	*0.49*
Tolualdehydes	*0*	*100%*	*0.01*	*0.08*	*0.04*	*0.04*	*0.04*	*0.02*	*0.35*
Hexaldehyde	*0*	*100%*	*0.01*	*0.11*	*0.03*	*0.04*	*0.03*	*0.02*	*0.59*
2,5-Dimethylbenzaldehyde	21	34%	ND	0.02	0.00	0.00	0.00	0.01	1.43

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-5
Summary Statistics for Carbonyl Concentrations Measured at Camden, New Jersey (CANJ)
(Based on 29 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***1.51***	***8.75***	***3.15***	***3.66***	***3.36***	***1.70***	***0.46***
Acetaldehyde	***0***	***100%***	***0.82***	***3.25***	***1.80***	***1.88***	***1.77***	***0.64***	***0.34***
Acrolein	*5*	*83%*	*ND*	*0.20*	*0.02*	*0.03*	*0.01*	*0.04*	*1.23*
Acetone	***0***	***100%***	***0.94***	***3.73***	***1.84***	***1.95***	***1.83***	***0.71***	***0.36***
Propionaldehyde	*0*	*100%*	*0.12*	*0.74*	*0.37*	*0.38*	*0.35*	*0.15*	*0.39*
Crotonaldehyde	13	57%	ND	0.12	0.01	0.02	0.01	0.03	1.46
Butyr/Isobutyraldehyde	***0***	***100%***	***0.21***	***1.23***	***0.53***	***0.57***	***0.51***	***0.25***	***0.45***
Benzaldehyde	*0*	*100%*	*0.02*	*0.23*	*0.07*	*0.08*	*0.07*	*0.05*	*0.58*
Isovaleraldehyde	*3*	*90%*	*ND*	*0.11*	*0.03*	*0.04*	*0.02*	*0.02*	*0.67*
Valeraldehyde	*0*	*100%*	*0.03*	*0.78*	*0.34*	*0.39*	*0.33*	*0.18*	*0.48*
Tolualdehydes	*5*	*83%*	*ND*	*0.09*	*0.04*	*0.04*	*0.02*	*0.02*	*0.66*
Hexaldehyde	*0*	*100%*	*0.03*	*0.29*	*0.12*	*0.12*	*0.10*	*0.06*	*0.51*
2,5-Dimethylbenzaldehyde	26	13%	ND	0.02	0.00	0.00	0.00	0.00	1.83

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-6
Summary Statistics for Carbonyl Concentrations Measured at El Paso, Texas (EPTX)
(Based on 30 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***1.38***	***30.14***	***3.91***	***7.54***	***5.26***	***7.76***	***1.03***
Acetaldehyde	***0***	***100%***	***0.52***	***6.79***	***1.51***	***2.28***	***1.76***	***1.83***	***0.80***
Acrolein	8	73%	ND	0.75	0.02	0.11	0.02	0.20	1.82
Acetone	***0***	***100%***	***0.22***	***2.57***	***1.33***	***1.37***	***1.20***	***0.62***	***0.46***
Propionaldehyde	*0*	*100%*	*0.08*	*0.31*	*0.17*	*0.19*	*0.17*	*0.08*	*0.41*
Crotonaldehyde	*5*	*83%*	*ND*	*0.14*	*0.03*	*0.04*	*0.02*	*0.03*	*0.90*
Butyr/Isobutyraldehyde	***0***	***100%***	***0.03***	***0.42***	***0.17***	***0.18***	***0.15***	***0.10***	***0.59***
Benzaldehyde	*0*	*100%*	*0.03*	*0.65*	*0.09*	*0.17*	*0.11*	*0.18*	*1.08*
Isovaleraldehyde	15	50%	ND	0.33	0.01	0.04	0.01	0.09	2.33
Valeraldehyde	*1*	*97%*	*ND*	*0.33*	*0.05*	*0.08*	*0.05*	*0.08*	*1.00*
Tolualdehydes	*0*	*100%*	*0.01*	*0.31*	*0.07*	*0.09*	*0.07*	*0.08*	*0.82*
Hexaldehyde	*0*	*100%*	*0.01*	*0.27*	*0.05*	*0.09*	*0.06*	*0.08*	*0.97*
2,5-Dimethylbenzaldehyde	21	30%	ND	0.03	0.00	0.01	0.00	0.01	1.52

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-7
Summary Statistics for Carbonyl Concentrations Measured at Garyville, Louisiana (GALA)
(Based on 29 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.58***	***4.63***	***2.16***	***2.32***	***2.14***	***0.94***	***0.40***
Acetaldehyde	***0***	***100%***	***0.50***	***1.93***	***1.09***	***1.08***	***1.03***	***0.34***	***0.32***
Acrolein	12	57%	ND	0.04	0.01	0.01	0.01	0.01	1.00
Acetone	***0***	***100%***	***0.25***	***0.96***	***0.49***	***0.51***	***0.48***	***0.20***	***0.39***
Propionaldehyde	*0*	*100%*	*0.11*	*0.44*	*0.24*	*0.24*	*0.23*	*0.08*	*0.32*
Crotonaldehyde	19	32%	ND	0.12	0.00	0.01	0.00	0.03	2.05
Butyr/Isobutyraldehyde	***2***	***93%***	***ND***	***0.48***	***0.20***	***0.23***	***0.15***	***0.14***	***0.60***
Benzaldehyde	*0*	*100%*	*0.02*	*0.18*	*0.06*	*0.07*	*0.06*	*0.04*	*0.53*
Isovaleraldehyde	7	75%	ND	0.06	0.02	0.02	0.01	0.02	0.85
Valeraldehyde	*0*	*100%*	*0.05*	*0.37*	*0.21*	*0.20*	*0.18*	*0.08*	*0.41*
Tolualdehydes	*1*	*96%*	*ND*	*0.07*	*0.04*	*0.04*	*0.02*	*0.02*	*0.60*
Hexaldehyde	*2*	*93%*	*ND*	*0.18*	*0.09*	*0.09*	*0.06*	*0.04*	*0.48*
2,5-Dimethylbenzaldehyde	25	11%	ND	0.01	0.00	0.00	0.00	0.00	1.67

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-8
Summary Statistics for Carbonyl Concentrations Measured at Hahnville, Louisiana (HALA)
(Based on 21 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.03***	***5.04***	***1.32***	***1.72***	***1.27***	***1.20***	***0.70***
Acetaldehyde	***0***	***100%***	***0.04***	***1.44***	***0.55***	***0.67***	***0.53***	***0.41***	***0.61***
Acrolein	7	68%	ND	0.19	0.01	0.02	0.01	0.04	1.97
Acetone	***0***	***100%***	***0.03***	***1.43***	***0.60***	***0.62***	***0.33***	***0.51***	***0.81***
Propionaldehyde	*0*	*100%*	*0.01*	*0.31*	*0.10*	*0.11*	*0.09*	*0.08*	*0.70*
Crotonaldehyde	16	27%	ND	0.12	0.00	0.01	0.00	0.03	2.41
Butyr/Isobutyraldehyde	***3***	***86%***	***ND***	***0.58***	***0.13***	***0.15***	***0.07***	***0.14***	***0.92***
Benzaldehyde	*2*	*91%*	*ND*	*0.07*	*0.02*	*0.03*	*0.02*	*0.02*	*0.64*
Isovaleraldehyde	6	73%	ND	0.12	0.01	0.02	0.01	0.03	1.34
Valeraldehyde	*1*	*95%*	*ND*	*0.24*	*0.04*	*0.06*	*0.04*	*0.06*	*1.01*
Tolualdehydes	*4*	*82%*	*ND*	*0.06*	*0.02*	*0.02*	*0.01*	*0.02*	*0.83*
Hexaldehyde	*1*	*95%*	*ND*	*0.08*	*0.05*	*0.05*	*0.04*	*0.02*	*0.44*
2,5-Dimethylbenzaldehyde	19	14%	ND	0.02	0.00	0.00	0.00	0.00	1.77

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-9
Summary Statistics for Carbonyl Concentrations Measured at North Little Rock, Arkansas (PARR)
(Based on 18 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.75***	***5.04***	***1.50***	***1.80***	***1.62***	***1.00***	***0.55***
Acetaldehyde	***0***	***100%***	***0.43***	***1.34***	***0.70***	***0.81***	***0.76***	***0.30***	***0.37***
Acrolein	9	50%	ND	0.10	0.01	0.02	0.01	0.02	1.37
Acetone	***0***	***100%***	***0.46***	***2.18***	***1.25***	***1.23***	***1.13***	***0.49***	***0.39***
Propionaldehyde	*0*	*100%*	*0.06*	*0.24*	*0.11*	*0.11*	*0.11*	*0.04*	*0.37*
Crotonaldehyde	9	50%	ND	0.14	0.00	0.03	0.01	0.04	1.56
Butyr/Isobutyraldehyde	***0***	***100%***	***0.03***	***0.64***	***0.09***	***0.14***	***0.09***	***0.16***	***1.12***
Benzaldehyde	*0*	*100%*	*0.01*	*0.21*	*0.04*	*0.05*	*0.04*	*0.04*	*0.87*
Isovaleraldehyde	9	50%	ND	0.04	0.00	0.01	0.00	0.01	1.24
Valeraldehyde	*3*	*83%*	*ND*	*0.06*	*0.02*	*0.03*	*0.02*	*0.02*	*0.69*
Tolualdehydes	*0*	*100%*	*0.00*	*0.12*	*0.03*	*0.03*	*0.03*	*0.03*	*0.76*
Hexaldehyde	*0*	*100%*	*0.01*	*0.07*	*0.03*	*0.03*	*0.03*	*0.01*	*0.40*
2,5-Dimethylbenzaldehyde	17	6%	ND	0.03	0.00	0.00	0.00	0.01	2.72

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-10
Summary Statistics for Carbonyl Concentrations Measured at Rutland, Vermont (RUVT)
(Based on 28 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.64***	***5.11***	***1.83***	***2.11***	***1.90***	***1.03***	***0.49***
Acetaldehyde	***0***	***100%***	***0.30***	***1.65***	***0.94***	***0.97***	***0.91***	***0.34***	***0.35***
Acrolein	11	61%	ND	0.15	0.01	0.03	0.01	0.04	1.45
Acetone	***1***	***96%***	***ND***	***2.31***	***1.02***	***1.07***	***0.78***	***0.51***	***0.48***
Propionaldehyde	*0*	*100%*	*0.05*	*1.36*	*0.14*	*0.18*	*0.14*	*0.24*	*1.32*
Crotonaldehyde	18	36%	ND	0.10	0.00	0.01	0.00	0.02	1.80
Butyr/Isobutyraldehyde	***0***	***100%***	***0.02***	***0.48***	***0.16***	***0.19***	***0.14***	***0.13***	***0.69***
Benzaldehyde	*1*	*96%*	*ND*	*0.15*	*0.05*	*0.05*	*0.04*	*0.03*	*0.64*
Isovaleraldehyde	11	61%	ND	0.03	0.01	0.01	0.01	0.01	0.88
Valeraldehyde	*0*	*100%*	*0.01*	*0.10*	*0.03*	*0.04*	*0.03*	*0.02*	*0.60*
Tolualdehydes	*4*	*86%*	*ND*	*0.08*	*0.04*	*0.03*	*0.02*	*0.02*	*0.64*
Hexaldehyde	*0*	*100%*	*0.00*	*0.11*	*0.04*	*0.04*	*0.03*	*0.03*	*0.71*
2,5-Dimethylbenzaldehyde	19	32%	ND	0.02	0.00	0.00	0.00	0.01	1.45

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-11
Summary Statistics for Carbonyl Concentrations Measured at Texarkana, Arkansas (GREY)
(Based on 11 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.38***	***4.18***	***1.49***	***1.64***	***1.34***	***1.06***	***0.65***
Acetaldehyde	***0***	***100%***	***0.31***	***1.21***	***0.65***	***0.70***	***0.64***	***0.30***	***0.42***
Acrolein	6	45%	ND	0.03	0.00	0.01	0.00	0.01	1.18
Acetone	***0***	***100%***	***0.41***	***1.38***	***0.89***	***0.95***	***0.89***	***0.34***	***0.36***
Propionaldehyde	*1*	*91%*	*ND*	*0.22*	*0.08*	*0.08*	*0.05*	*0.06*	*0.75*
Crotonaldehyde	4	64%	ND	0.07	0.02	0.03	0.01	0.03	0.96
Butyr/Isobutyraldehyde	***0***	***100%***	***0.02***	***0.41***	***0.05***	***0.10***	***0.07***	***0.12***	***1.14***
Benzaldehyde	*0*	*100%*	*0.01*	*0.06*	*0.03*	*0.03*	*0.03*	*0.02*	*0.52*
Isovaleraldehyde	8	27%	ND	0.03	0.00	0.01	0.00	0.01	1.68
Valeraldehyde	*1*	*91%*	*ND*	*0.07*	*0.02*	*0.03*	*0.02*	*0.02*	*0.80*
Tolualdehydes	*2*	*82%*	*ND*	*0.05*	*0.03*	*0.03*	*0.02*	*0.02*	*0.59*
Hexaldehyde	*0*	*100%*	*0.01*	*0.15*	*0.03*	*0.04*	*0.03*	*0.04*	*0.93*
2,5-Dimethylbenzaldehyde	11	0%	ND	ND	0.00	0.00	0.00	0.00	0.00

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

Table E-12
Summary Statistics for Carbonyl Concentrations Measured at Underhill, Vermont (UNVT)
(Based on 33 Valid Sampling Days)

Compound	Prevalence of Compound in Ambient Air		Range of Measured Concentrations		Central Tendency of Measured Concentrations			Variability in Measured Concentrations	
	Number of Nondetects	Frequency of Detections	Lowest (ppbv)	Highest (ppbv)	Median (ppbv)	Arithmetic Mean (ppbv)	Geometric Mean (ppbv)	Standard Deviation (ppbv)	Coefficient of Variation
Formaldehyde	***0***	***100%***	***0.45***	***3.18***	***0.85***	***1.06***	***0.91***	***0.67***	***0.63***
Acetaldehyde	***0***	***100%***	***0.24***	***0.81***	***0.44***	***0.46***	***0.44***	***0.16***	***0.34***
Acrolein	16	52%	ND	0.11	0.00	0.01	0.00	0.02	1.81
Acetone	***0***	***100%***	***0.26***	***1.90***	***0.84***	***0.90***	***0.84***	***0.36***	***0.40***
Propionaldehyde	*0*	*100%*	*0.03*	*0.12*	*0.06*	*0.06*	*0.06*	*0.02*	*0.37*
Crotonaldehyde	23	30%	ND	0.04	0.00	0.01	0.00	0.01	1.71
Butyr/Isobutyraldehyde	***0***	***100%***	***0.01***	***0.48***	***0.08***	***0.12***	***0.08***	***0.11***	***0.96***
Benzaldehyde	*1*	*97%*	*ND*	*0.12*	*0.02*	*0.03*	*0.02*	*0.02*	*0.81*
Isovaleraldehyde	20	39%	ND	0.02	0.00	0.00	0.00	0.01	1.09
Valeraldehyde	*2*	*94%*	*ND*	*0.04*	*0.02*	*0.02*	*0.01*	*0.01*	*0.56*
Tolualdehydes	9	73%	ND	0.04	0.01	0.02	0.01	0.01	0.80
Hexaldehyde	*2*	*94%*	*ND*	*0.06*	*0.02*	*0.02*	*0.02*	*0.01*	*0.61*
2,5-Dimethylbenzaldehyde	28	15%	ND	0.02	0.00	0.00	0.00	0.00	1.65

ND = nondetect

Notes: Summary statistics were calculated from a processed UATMP database, in which duplicate and replicate analyses were averaged to generate just one observation for each successful sampling day. Program-wide prevalent compounds are presented in bold text. As Section 3.1.3 discusses, central tendency concentrations for these compounds should adequately represent long-term average concentrations, but the central tendency concentrations of the other compounds (in plain text) may be influenced by the number of nondetects and the magnitude of the detection limit. Compounds listed in italics represent overall site-specific prevalent compounds over 80% for frequency only.

APPENDIX F

1998/1999 VOC RAW MONITORING DATA

1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	B2LA 14780	B2LA 14895	B2LA 15064	B2LA 15126
SAMPLE DATE	9/8/98	9/20/98	10/2/98	10/14/98
ANALYSIS DATE		10/10/98	10/22/98	10/30/98
FILE NAME		L8JO006/L8JV004	L8JV018	L8J%008/L8KK024
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	0.76	0.93	3.41
PROPYLENE	V	0.61	0.68	1.42
DICHLORODIFLUOROMETHANE	V	0.63	0.53	0.76
CHLOROMETHANE	V	0.87	0.54	0.96
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	0.04 U	ND	0.09
BROMOMETHANE	V	ND	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	96.36	42.56	54.94
TRICHLOROFLUOROMETHANE	V	0.36	0.22	0.45
ACRYLONITRILE	V	ND	ND	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.10 U	ND	0.31
TRICHLOROTRIFLUOROETHANE	V	0.10	0.08	0.14
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	ND	ND	ND
METHYL ETHYL KETONE	V	1.10	0.59	1.60
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.19	0.05 U	0.20
BENZENE	V	0.44	0.56	1.17
CARBON TETRACHLORIDE	V	0.11	0.05 U	0.07 U
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	ND	ND
METHYL METHACRYLATE	V	0.28	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	0.24	ND	0.13
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	1.08	1.03	10.27
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.15	0.83	0.43
TETRACHLOROETHYLENE	V	ND	ND	0.05 U
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.28	0.70	0.59
m,p - XYLENE	V	0.68	2.71	1.84
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.49	1.27	0.29
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	0.03 U
o - XYLENE	V	0.39	1.84	1.07
1,3,5-TRIMETHYLBENZENE	V	0.09	2.34	0.82
1,2,4-TRIMETHYLBENZENE	V	0.24	6.85	2.07
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	ND
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

U = Under Detection Limit
ND =Not Detected
V = Void

1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	B2LA 15167	B2LA 15175	B2LA 15187	B2LA 15203
SAMPLE DATE	11/1/98	11/7/98	11/13/98	11/19/98
ANALYSIS DATE	11/11/98	11/19/98	11/18/98	11/30/98
FILE NAME	L8KK021	L8KR016	L8KR010/L8KR1015	L8K$016/L8LA015
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.52	1.67	1.41	5.34
PROPYLENE	0.97	0.71	0.55	2.62
DICHLORODIFLUOROMETHANE	0.57	0.46	0.46	0.62
CHLOROMETHANE	0.58	0.45	0.47	0.96
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.11	ND	0.03 U	0.18
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	43.18	31.78	48.78	109.00
TRICHLOROFLUOROMETHANE	0.26	0.24	0.20	0.28
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.08 U	0.64	0.09 U	0.15
TRICHLOROTRIFLUOROETHANE	0.10	0.47	0.10	0.12
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	1.06	1.14	0.86	1.16
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	0.09	ND	0.11
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.11	0.05 U	0.11
BENZENE	0.79	0.94	0.52	1.49
CARBON TETRACHLORIDE	0.09	0.06 U	0.08 U	0.13
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	0.48	ND	ND
METHYL METHACRYLATE	ND	0.20	ND	0.19
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.10	0.19	0.06 U	0.19
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.45	5.60	1.06	2.27
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.18	0.42	0.09	0.18
TETRACHLOROETHYLENE	ND	0.07 U	0.06 U	0.18
CHLOROBENZENE	ND	ND	ND	0.07
ETHYLBENZENE	0.34	1.83	0.24	0.51
m,p - XYLENE	0.98	3.57	0.62	1.35
BROMOFORM	ND	ND	ND	ND
STYRENE	0.27	0.75	0.17	0.54
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.57	1.86	0.34	0.73
1,3,5-TRIMETHYLBENZENE	0.40	0.39	0.12	0.33
1,2,4-TRIMETHYLBENZENE	0.90	0.94	0.31	0.82
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.03 U	ND	ND	0.04 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

U = Under Detection Limit
ND =Not Detected
V = Void

1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	B2LA 15213	B2LA 15243	B2LA 15367 D1	B2LA 15368 D2
SAMPLE DATE	11/25/98	12/1/98	1/30/99	1/30/99
ANALYSIS DATE	12/8/98	12/9/98		2/11/99
FILE NAME	L8LH014/L8LV012	L8LH018		L9BJ011/L9BQ006
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	4.12	2.85	V	1.24
PROPYLENE	1.88	1.33	V	0.81
DICHLORODIFLUOROMETHANE	0.64	0.64	V	0.66
CHLOROMETHANE	0.99	0.11	V	0.72
DICHLOROTETRAFLUOROETHANE	ND	ND	V	0.03
VINYL CHLORIDE	ND	ND	V	ND
1,3-BUTADIENE	0.21	0.09	V	0.09
BROMOMETHANE	0.07	ND	V	ND
CHLOROETHANE	ND	ND	V	ND
ACETONITRILE	91.22	81.34	V	52.32
TRICHLOROFLUOROMETHANE	0.29	0.30	V	0.32
ACRYLONITRILE	ND	ND	V	ND
1,1-DICHLOROETHENE	ND	ND	V	ND
METHYLENE CHLORIDE	0.14	0.09 U	V	0.29
TRICHLOROTRIFLUOROETHANE	0.12	0.13	V	0.14
trans - 1,2 - DICHLOROETHYLENE	ND	ND	V	ND
1,1 - DICHLOROETHANE	ND	ND	V	ND
METHYL tert-BUTYL ETHER	ND	ND	V	ND
METHYL ETHYL KETONE	1.67	1.15	V	0.62
CHLOROPRENE	ND	ND	V	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	V	ND
BROMOCHLOROMETHANE	ND	ND	V	ND
CHLOROFORM	0.09	0.08	V	ND
ETHYL tert-BUTYL ETHER	ND	ND	V	ND
1,2 - DICHLOROETHANE	ND	ND	V	ND
1,1,1 - TRICHLOROETHANE	0.11	0.11	V	0.08
BENZENE	1.46	0.82	V	0.50
CARBON TETRACHLORIDE	0.11	0.10	V	0.08
tert-AMYL METHYL ETHER	ND	ND	V	ND
1,2 - DICHLOROPROPANE	ND	ND	V	ND
ETHYL ACRYLATE	ND	ND	V	ND
BROMODICHLOROMETHANE	ND	ND	V	ND
TRICHLOROETHYLENE	ND	ND	V	ND
METHYL METHACRYLATE	0.18	ND	V	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	V	ND
METHYL ISOBUTYL KETONE	0.21	ND	V	0.07 U
trans - 1,3 - DICHLOROPROPENE	ND	ND	V	ND
1,1,2 - TRICHLOROETHANE	ND	ND	V	ND
TOLUENE	2.35	1.26	V	1.00
DIBROMOCHLOROMETHANE	ND	ND	V	ND
1,2-DIBROMOETHANE	ND	ND	V	ND
N-OCTANE	0.17	0.10	V	0.08 U
TETRACHLOROETHYLENE	0.07 U	0.11	V	ND
CHLOROBENZENE	ND	ND	V	ND
ETHYLBENZENE	0.55	0.30	V	0.23
m,p - XYLENE	1.60	0.80	V	0.59
BROMOFORM	ND	ND	V	ND
STYRENE	0.49	0.36	V	0.24
1,1,2,2 - TETRACHLOROETHANE	ND	ND	V	ND
o - XYLENE	0.86	0.44	V	0.30
1,3,5-TRIMETHYLBENZENE	0.26	0.19	V	0.12
1,2,4-TRIMETHYLBENZENE	0.71	0.46	V	0.28
m - DICHLOROBENZENE	ND	ND	V	ND
CHLOROMETHYLBENZENE	ND	ND	V	ND
p - DICHLOROBENZENE	0.05 U	0.03 U	V	ND
o - DICHLOROBENZENE	ND	ND	V	ND
1,2,4-TRICHLOROBENZENE	ND	ND	V	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	V	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
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SAMPLE SITE #	B2LA 15368 R2	B2LA 15435	B2LA 15437	B2LA 15467
SAMPLE DATE	1/30/99	2/11/99	2/17/99	2/25/99
ANALYSIS DATE	2/12/99			
FILE NAME	L9BL009			
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.29	V	V	V
PROPYLENE	0.75	V	V	V
DICHLORODIFLUOROMETHANE	0.64	V	V	V
CHLOROMETHANE	0.73	V	V	V
DICHLOROTETRAFLUOROETHANE	0.04	V	V	V
VINYL CHLORIDE	ND	V	V	V
1,3-BUTADIENE	0.08	V	V	V
BROMOMETHANE	ND	V	V	V
CHLOROETHANE	ND	V	V	V
ACETONITRILE	58.95	V	V	V
TRICHLOROFLUOROMETHANE	0.31	V	V	V
ACRYLONITRILE	ND	V	V	V
1,1-DICHLOROETHENE	ND	V	V	V
METHYLENE CHLORIDE	0.25	V	V	V
TRICHLOROTRIFLUOROETHANE	0.14	V	V	V
trans - 1,2 - DICHLOROETHYLENE	ND	V	V	V
1,1 - DICHLOROETHANE	ND	V	V	V
METHYL tert-BUTYL ETHER	ND	V	V	V
METHYL ETHYL KETONE	0.67	V	V	V
CHLOROPRENE	ND	V	V	V
cis-1,2-DICHLOROETHYLENE	ND	V	V	V
BROMOCHLOROMETHANE	ND	V	V	V
CHLOROFORM	ND	V	V	V
ETHYL tert-BUTYL ETHER	ND	V	V	V
1,2 - DICHLOROETHANE	ND	V	V	V
1,1,1 - TRICHLOROETHANE	0.09	V	V	V
BENZENE	0.49	V	V	V
CARBON TETRACHLORIDE	0.10	V	V	V
tert-AMYL METHYL ETHER	ND	V	V	V
1,2 - DICHLOROPROPANE	ND	V	V	V
ETHYL ACRYLATE	ND	V	V	V
BROMODICHLOROMETHANE	ND	V	V	V
TRICHLOROETHYLENE	ND	V	V	V
METHYL METHACRYLATE	ND	V	V	V
cis -1,3 - DICHLOROPROPENE	ND	V	V	V
METHYL ISOBUTYL KETONE	0.07 U	V	V	V
trans - 1,3 - DICHLOROPROPENE	ND	V	V	V
1,1,2 - TRICHLOROETHANE	ND	V	V	V
TOLUENE	0.98	V	V	V
DIBROMOCHLOROMETHANE	ND	V	V	V
1,2-DIBROMOETHANE	ND	V	V	V
N-OCTANE	0.09 U	V	V	V
TETRACHLOROETHYLENE	ND	V	V	V
CHLOROBENZENE	ND	V	V	V
ETHYLBENZENE	0.22	V	V	V
m,p - XYLENE	0.55	V	V	V
BROMOFORM	ND	V	V	V
STYRENE	0.24	V	V	V
1,1,2,2 - TETRACHLOROETHANE	ND	V	V	V
o - XYLENE	0.29	V	V	V
1,3,5-TRIMETHYLBENZENE	0.10	V	V	V
1,2,4-TRIMETHYLBENZENE	0.22	V	V	V
m - DICHLOROBENZENE	ND	V	V	V
CHLOROMETHYLBENZENE	ND	V	V	V
p - DICHLOROBENZENE	ND	V	V	V
o - DICHLOROBENZENE	ND	V	V	V
1,2,4-TRICHLOROBENZENE	ND	V	V	V
HEXACHLORO-1,3-BUTADIENE	ND	V	V	V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	B2LA 15489	B2LA 15509	B2LA 15532	B2LA 15672
SAMPLE DATE	3/7/99	3/13/99	3/19/99	4/19/99
ANALYSIS DATE	3/11/99		3/24/99	
FILE NAME	L9CJ022/L9CL010		L9CX008	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.23	V	1.72	V
PROPYLENE	1.42	V	1.13	V
DICHLORODIFLUOROMETHANE	0.66	V	0.60	V
CHLOROMETHANE	0.70	V	0.71	V
DICHLOROTETRAFLUOROETHANE	ND	V	ND	V
VINYL CHLORIDE	0.26	V	ND	V
1,3-BUTADIENE	ND	V	0.34	V
BROMOMETHANE	ND	V	ND	V
CHLOROETHANE	ND	V	ND	V
ACETONITRILE	54.04	V	2.79	V
TRICHLOROFLUOROMETHANE	0.29	V	0.29	V
ACRYLONITRILE	ND	V	ND	V
1,1-DICHLOROETHENE	ND	V	ND	V
METHYLENE CHLORIDE	0.06 U	V	0.15	V
TRICHLOROTRIFLUOROETHANE	0.28	V	0.12	V
trans - 1,2 - DICHLOROETHYLENE	ND	V	ND	V
1,1 - DICHLOROETHANE	ND	V	ND	V
METHYL tert-BUTYL ETHER	ND	V	0.29	V
METHYL ETHYL KETONE	0.77	V	1.19	V
CHLOROPRENE	ND	V	ND	V
cis-1,2-DICHLOROETHYLENE	ND	V	ND	V
BROMOCHLOROMETHANE	ND	V	ND	V
CHLOROFORM	0.37	V	ND	V
ETHYL tert-BUTYL ETHER	ND	V	ND	V
1,2 - DICHLOROETHANE	0.32	V	ND	V
1,1,1 - TRICHLOROETHANE	0.07	V	0.06	V
BENZENE	0.75	V	0.66	V
CARBON TETRACHLORIDE	0.08 U	V	0.08 U	V
tert-AMYL METHYL ETHER	ND	V	ND	V
1,2 - DICHLOROPROPANE	ND	V	ND	V
ETHYL ACRYLATE	ND	V	ND	V
BROMODICHLOROMETHANE	ND	V	ND	V
TRICHLOROETHYLENE	ND	V	ND	V
METHYL METHACRYLATE	ND	V	ND	V
cis -1,3 - DICHLOROPROPENE	ND	V	ND	V
METHYL ISOBUTYL KETONE	ND	V	ND	V
trans - 1,3 - DICHLOROPROPENE	ND	V	ND	V
1,1,2 - TRICHLOROETHANE	ND	V	ND	V
TOLUENE	0.67	V	1.23	V
DIBROMOCHLOROMETHANE	ND	V	ND	V
1,2-DIBROMOETHANE	ND	V	ND	V
N-OCTANE	0.12	V	0.08 U	V
TETRACHLOROETHYLENE	ND	V	0.03 U	V
CHLOROBENZENE	ND	V	ND	V
ETHYLBENZENE	0.17	V	0.23	V
m,p - XYLENE	0.40	V	0.60	V
BROMOFORM	ND	V	ND	V
STYRENE	0.13	V	0.09 U	V
1,1,2,2 - TETRACHLOROETHANE	ND	V	ND	V
o - XYLENE	0.28	V	0.33	V
1,3,5-TRIMETHYLBENZENE	0.07 U	V	0.09	V
1,2,4-TRIMETHYLBENZENE	0.20	V	0.26	V
m - DICHLOROBENZENE	ND	V	ND	V
CHLOROMETHYLBENZENE	ND	V	ND	V
p - DICHLOROBENZENE	ND	V	ND	V
o - DICHLOROBENZENE	ND	V	ND	V
1,2,4-TRICHLOROBENZENE	ND	V	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	V	ND	V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
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SAMPLE SITE #	B2LA 15697	B2LA 15695	B2LA 15707	B2LA 15769
SAMPLE DATE	4/20/99	4/20/99	4/26/99	4/30/99
ANALYSIS DATE				
FILE NAME				
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	V	V	V
PROPYLENE	V	V	V	V
DICHLORODIFLUOROMETHANE	V	V	V	V
CHLOROMETHANE	V	V	V	V
DICHLOROTETRAFLUOROETHANE	V	V	V	V
VINYL CHLORIDE	V	V	V	V
1,3-BUTADIENE	V	V	V	V
BROMOMETHANE	V	V	V	V
CHLOROETHANE	V	V	V	V
ACETONITRILE	V	V	V	V
TRICHLOROFLUOROMETHANE	V	V	V	V
ACRYLONITRILE	V	V	V	V
1,1-DICHLOROETHENE	V	V	V	V
METHYLENE CHLORIDE	V	V	V	V
TRICHLOROTRIFLUOROETHANE	V	V	V	V
trans - 1,2 - DICHLOROETHYLENE	V	V	V	V
1,1 - DICHLOROETHANE	V	V	V	V
METHYL tert-BUTYL ETHER	V	V	V	V
METHYL ETHYL KETONE	V	V	V	V
CHLOROPRENE	V	V	V	V
cis-1,2-DICHLOROETHYLENE	V	V	V	V
BROMOCHLOROMETHANE	V	V	V	V
CHLOROFORM	V	V	V	V
ETHYL tert-BUTYL ETHER	V	V	V	V
1,2 - DICHLOROETHANE	V	V	V	V
1,1,1 - TRICHLOROETHANE	V	V	V	V
BENZENE	V	V	V	V
CARBON TETRACHLORIDE	V	V	V	V
tert-AMYL METHYL ETHER	V	V	V	V
1,2 - DICHLOROPROPANE	V	V	V	V
ETHYL ACRYLATE	V	V	V	V
BROMODICHLOROMETHANE	V	V	V	V
TRICHLOROETHYLENE	V	V	V	V
METHYL METHACRYLATE	V	V	V	V
cis -1,3 - DICHLOROPROPENE	V	V	V	V
METHYL ISOBUTYL KETONE	V	V	V	V
trans - 1,3 - DICHLOROPROPENE	V	V	V	V
1,1,2 - TRICHLOROETHANE	V	V	V	V
TOLUENE	V	V	V	V
DIBROMOCHLOROMETHANE	V	V	V	V
1,2-DIBROMOETHANE	V	V	V	V
N-OCTANE	V	V	V	V
TETRACHLOROETHYLENE	V	V	V	V
CHLOROBENZENE	V	V	V	V
ETHYLBENZENE	V	V	V	V
m,p - XYLENE	V	V	V	V
BROMOFORM	V	V	V	V
STYRENE	V	V	V	V
1,1,2,2 - TETRACHLOROETHANE	V	V	V	V
o - XYLENE	V	V	V	V
1,3,5-TRIMETHYLBENZENE	V	V	V	V
1,2,4-TRIMETHYLBENZENE	V	V	V	V
m - DICHLOROBENZENE	V	V	V	V
CHLOROMETHYLBENZENE	V	V	V	V
p - DICHLOROBENZENE	V	V	V	V
o - DICHLOROBENZENE	V	V	V	V
1,2,4-TRICHLOROBENZENE	V	V	V	V
HEXACHLORO-1,3-BUTADIENE	V	V	V	V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	B2LA 15756	B2LA 15778	B2LA 15815	B2LA 15832
SAMPLE DATE	5/2/99	5/25/99	6/4/99	6/11/99
ANALYSIS DATE			6/9/99	6/18/99
FILE NAME			L9FI009	L9FQ014
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	V	1.09	1.62
PROPYLENE	V	V	1.57	2.14
DICHLORODIFLUOROMETHANE	V	V	0.68	0.55
CHLOROMETHANE	V	V	1.20	0.92
DICHLOROTETRAFLUOROETHANE	V	V	0.01 U	0.02 U
VINYL CHLORIDE	V	V	ND	ND
1,3-BUTADIENE	V	V	0.05	0.44
BROMOMETHANE	V	V	ND	ND
CHLOROETHANE	V	V	ND	ND
ACETONITRILE	V	V	0.70	ND
TRICHLOROFLUOROMETHANE	V	V	1.87	0.24
ACRYLONITRILE	V	V	ND	ND
1,1-DICHLOROETHENE	V	V	ND	ND
METHYLENE CHLORIDE	V	V	0.19	0.10
TRICHLOROTRIFLUOROETHANE	V	V	0.10	0.14
trans - 1,2 - DICHLOROETHYLENE	V	V	ND	ND
1,1 - DICHLOROETHANE	V	V	ND	ND
METHYL tert-BUTYL ETHER	V	V	0.07	0.21
METHYL ETHYL KETONE	V	V	0.66	0.57
CHLOROPRENE	V	V	ND	ND
cis-1,2-DICHLOROETHYLENE	V	V	ND	ND
BROMOCHLOROMETHANE	V	V	ND	ND
CHLOROFORM	V	V	0.12	ND
ETHYL tert-BUTYL ETHER	V	V	ND	ND
1,2 - DICHLOROETHANE	V	V	ND	ND
1,1,1 - TRICHLOROETHANE	V	V	0.08	0.06
BENZENE	V	V	0.58	0.76
CARBON TETRACHLORIDE	V	V	0.10	0.17
tert-AMYL METHYL ETHER	V	V	ND	ND
1,2 - DICHLOROPROPANE	V	V	ND	ND
ETHYL ACRYLATE	V	V	ND	ND
BROMODICHLOROMETHANE	V	V	ND	ND
TRICHLOROETHYLENE	V	V	ND	0.04 U
METHYL METHACRYLATE	V	V	ND	ND
cis -1,3 - DICHLOROPROPENE	V	V	ND	ND
METHYL ISOBUTYL KETONE	V	V	0.15	ND
trans - 1,3 - DICHLOROPROPENE	V	V	ND	ND
1,1,2 - TRICHLOROETHANE	V	V	ND	ND
TOLUENE	V	V	0.72	1.43
DIBROMOCHLOROMETHANE	V	V	ND	ND
1,2-DIBROMOETHANE	V	V	ND	ND
N-OCTANE	V	V	0.13	0.13
TETRACHLOROETHYLENE	V	V	0.03 U	0.03 U
CHLOROBENZENE	V	V	ND	ND
ETHYLBENZENE	V	V	0.14	0.27
m,p - XYLENE	V	V	0.31	0.75
BROMOFORM	V	V	ND	ND
STYRENE	V	V	0.10 U	0.10
1,1,2,2 - TETRACHLOROETHANE	V	V	ND	ND
o - XYLENE	V	V	0.17	0.36
1,3,5-TRIMETHYLBENZENE	V	V	0.08 U	0.12
1,2,4-TRIMETHYLBENZENE	V	V	0.16	0.31
m - DICHLOROBENZENE	V	V	ND	ND
CHLOROMETHYLBENZENE	V	V	ND	ND
p - DICHLOROBENZENE	V	V	ND	0.04 U
o - DICHLOROBENZENE	V	V	ND	ND
1,2,4-TRICHLOROBENZENE	V	V	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	V	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
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SAMPLE SITE #	B2LA 16039		B2LA 16133	B2LA 16246		B2LA 16316
SAMPLE DATE	7/5/99		7/23/99	7/29/99		8/10/99
ANALYSIS DATE	7/28/99			8/11/99		
FILE NAME	L9GI010			L9HJ018		
UNITS	ppbv		ppbv	ppbv		ppbv
ACETYLENE	1.56		V	1.15		V
PROPYLENE	3.41		V	5.00		V
DICHLORODIFLUOROMETHANE	0.71		V	0.74		V
CHLOROMETHANE	2.28		V	2.54		V
DICHLOROTETRAFLUOROETHANE	0.07		V	ND		V
VINYL CHLORIDE	ND		V	ND		V
1,3-BUTADIENE	0.14		V	0.04	U	V
BROMOMETHANE	ND		V	ND		V
CHLOROETHANE	0.24		V	0.15		V
ACETONITRILE	ND		V	ND		V
TRICHLOROFLUOROMETHANE	0.53		V	0.38		V
ACRYLONITRILE	1.23		V	ND		V
1,1-DICHLOROETHENE	ND		V	ND		V
METHYLENE CHLORIDE	0.26		V	0.25		V
TRICHLOROTRIFLUOROETHANE	0.59		V	0.14		V
trans - 1,2 - DICHLOROETHYLENE	ND		V	ND		V
1,1 - DICHLOROETHANE	ND		V	ND		V
METHYL tert-BUTYL ETHER	ND		V	0.09		V
METHYL ETHYL KETONE	1.49		V	1.72		V
CHLOROPRENE	ND		V	ND		V
cis-1,2-DICHLOROETHYLENE	ND		V	ND		V
BROMOCHLOROMETHANE	ND		V	ND		V
CHLOROFORM	ND		V	0.09		V
ETHYL tert-BUTYL ETHER	ND		V	ND		V
1,2 - DICHLOROETHANE	ND		V	ND		V
1,1,1 - TRICHLOROETHANE	0.10		V	0.09		V
BENZENE	0.74		V	0.55		V
CARBON TETRACHLORIDE	0.10		V	0.12		V
tert-AMYL METHYL ETHER	ND		V	ND		V
1,2 - DICHLOROPROPANE	ND		V	ND		V
ETHYL ACRYLATE	ND		V	ND		V
BROMODICHLOROMETHANE	ND		V	ND		V
TRICHLOROETHYLENE	0.02	U	V	ND		V
METHYL METHACRYLATE	ND		V	ND		V
cis -1,3 - DICHLOROPROPENE	ND		V	ND		V
METHYL ISOBUTYL KETONE	0.22		V	0.33		V
trans - 1,3 - DICHLOROPROPENE	ND		V	ND		V
1,1,2 - TRICHLOROETHANE	ND		V	ND		V
TOLUENE	2.57		V	0.71		V
DIBROMOCHLOROMETHANE	ND		V	ND		V
1,2-DIBROMOETHANE	ND		V	ND		V
N-OCTANE	0.15		V	0.10		V
TETRACHLOROETHYLENE	0.04	U	V	ND		V
CHLOROBENZENE	ND		V	ND		V
ETHYLBENZENE	0.19		V	0.12		V
m,p - XYLENE	0.49		V	0.32		V
BROMOFORM	ND		V	ND		V
STYRENE	0.12		V	0.05	U	V
1,1,2,2 - TETRACHLOROETHANE	ND		V	ND		V
o - XYLENE	0.26		V	0.15		V
1,3,5-TRIMETHYLBENZENE	0.08		V	0.07	U	V
1,2,4-TRIMETHYLBENZENE	0.21		V	0.13		V
m - DICHLOROBENZENE	ND		V	ND		V
CHLOROMETHYLBENZENE	ND		V	ND		V
p - DICHLOROBENZENE	0.03	U	V	ND		V
o - DICHLOROBENZENE	ND		V	ND		V
1,2,4-TRICHLOROBENZENE	0.02	U	V	ND		V
HEXACHLORO-1,3-BUTADIENE	ND		V	ND		V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Baton Rouge, LA (B2LA)
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SAMPLE SITE #	B2LA 16475		B2LA 16695	B2LA 16721		B2LA 16869
SAMPLE DATE	8/22/99		9/5/99	9/15/99		9/30/99
ANALYSIS DATE	9/2/99			9/23/99		
FILE NAME	L9IB010			L9IV015		
UNITS	ppbv		ppbv	ppbv		ppbv
ACETYLENE	1.76		V	1.02		V
PROPYLENE	3.08		V	2.60		V
DICHLORODIFLUOROMETHANE	0.74		V	0.70		V
CHLOROMETHANE	1.26		V	3.11		V
DICHLOROTETRAFLUOROETHANE	ND		V	ND		V
VINYL CHLORIDE	0.05	U	V	ND		V
1,3-BUTADIENE	0.13		V	0.13		V
BROMOMETHANE	0.03	U	V	ND		V
CHLOROETHANE	0.13		V	ND		V
ACETONITRILE	ND		V	ND		V
TRICHLOROFLUOROMETHANE	0.32		V	0.44		V
ACRYLONITRILE	0.25		V	ND		V
1,1-DICHLOROETHENE	ND		V	ND		V
METHYLENE CHLORIDE	0.10		V	0.54		V
TRICHLOROTRIFLUOROETHANE	0.20		V	0.34		V
trans - 1,2 - DICHLOROETHYLENE	ND		V	ND		V
1,1 - DICHLOROETHANE	ND		V	ND		V
METHYL tert-BUTYL ETHER	0.16		V	0.30		V
METHYL ETHYL KETONE	0.77		V	1.13		V
CHLOROPRENE	ND		V	ND		V
cis-1,2-DICHLOROETHYLENE	ND		V	ND		V
BROMOCHLOROMETHANE	ND		V	ND		V
CHLOROFORM	0.28		V	ND		V
ETHYL tert-BUTYL ETHER	ND		V	ND		V
1,2 - DICHLOROETHANE	ND		V	0.49		V
1,1,1 - TRICHLOROETHANE	0.22		V	0.06	U	V
BENZENE	0.72		V	0.44		V
CARBON TETRACHLORIDE	0.12		V	0.09	U	V
tert-AMYL METHYL ETHER	ND		V	ND		V
1,2 - DICHLOROPROPANE	ND		V	ND		V
ETHYL ACRYLATE	ND		V	ND		V
BROMODICHLOROMETHANE	ND		V	ND		V
TRICHLOROETHYLENE	ND		V	ND		V
METHYL METHACRYLATE	ND		V	ND		V
cis -1,3 - DICHLOROPROPENE	ND		V	ND		V
METHYL ISOBUTYL KETONE	ND		V	ND		V
trans - 1,3 - DICHLOROPROPENE	ND		V	ND		V
1,1,2 - TRICHLOROETHANE	ND		V	ND		V
TOLUENE	1.14		V	0.56		V
DIBROMOCHLOROMETHANE	ND		V	ND		V
1,2-DIBROMOETHANE	ND		V	ND		V
N-OCTANE	0.15		V	0.11		V
TETRACHLOROETHYLENE	0.03	U	V	ND		V
CHLOROBENZENE	ND		V	ND		V
ETHYLBENZENE	0.22		V	0.12		V
m,p - XYLENE	0.62		V	0.29		V
BROMOFORM	ND		V	ND		V
STYRENE	0.11	U	V	0.07	U	V
1,1,2,2 - TETRACHLOROETHANE	ND		V	ND		V
o - XYLENE	0.32		V	0.16		V
1,3,5-TRIMETHYLBENZENE	0.10		V	0.07	U	V
1,2,4-TRIMETHYLBENZENE	0.26		V	0.14		V
m - DICHLOROBENZENE	ND		V	ND		V
CHLOROMETHYLBENZENE	ND		V	ND		V
p - DICHLOROBENZENE	0.02	U	V	ND		V
o - DICHLOROBENZENE	ND		V	ND		V
1,2,4-TRICHLOROBENZENE	ND		V	ND		V
HEXACHLORO-1,3-BUTADIENE	ND		V	ND		V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 16374	BUND 16407	BUND 16429	BUND 16441
SAMPLE DATE	2/3/99	2/13/99	2/17/99	2/23/99
ANALYSIS DATE	2/11/99	2/23/99	2/23/99	3/4/99
FILE NAME	L9BJ012	L9BW012	L9BW013/CL015	L9CD014/CJ009
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.57	0.97	0.66	0.71
PROPYLENE	0.20	0.33	0.20	0.17
DICHLORODIFLUOROMETHANE	0.60	0.68	0.62	0.55
CHLOROMETHANE	0.61	0.60	0.58	0.56
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	1.26	NR	ND	1.01
TRICHLOROFLUOROMETHANE	0.31	0.53	0.27	0.48
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.37	0.69	0.28	0.37
TRICHLOROTRIFLUOROETHANE	0.09	0.08	0.08	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	NR	NR	NR	NR
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.06	0.06	0.05 U
BENZENE	0.34	0.32	0.27	0.23
CARBON TETRACHLORIDE	0.09	0.05 U	0.09	0.05 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.28	0.64	0.20	0.25
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.05 U	0.06 U	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.07 U	0.09 U	0.06 U	0.02 U
m,p - XYLENE	0.11	0.18	0.07 U	0.06 U
BROMOFORM	ND	ND	ND	ND
STYRENE	0.05 U	0.09	0.04 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.07	0.09	0.05	0.02 U
1,3,5-TRIMETHYLBENZENE	0.05 U	0.05 U	0.02 U	ND
1,2,4-TRIMETHYLBENZENE	0.09	0.14	0.06 U	0.04 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 15451	BUND 15497	BUND 16502	BUND 16537
SAMPLE DATE	3/1/99	3/7/99	3/13/99	3/13/99
ANALYSIS DATE	3/10/99	3/13/99		3/25/99
FILE NAME	L9CJ013	L9CL017		L9CX016
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.57	0.66	V	0.73
PROPYLENE	0.21	0.18	V	0.19
DICHLORODIFLUOROMETHANE	0.63	0.57	V	0.59
CHLOROMETHANE	0.61	0.56	V	0.56
DICHLOROTETRAFLUOROETHANE	ND	ND	V	ND
VINYL CHLORIDE	ND	ND	V	ND
1,3-BUTADIENE	ND	ND	V	ND
BROMOMETHANE	ND	ND	V	ND
CHLOROETHANE	ND	ND	V	ND
ACETONITRILE	1.52	1.45	V	2.73
TRICHLOROFLUOROMETHANE	0.29	0.27	V	0.29
ACRYLONITRILE	ND	ND	V	ND
1,1-DICHLOROETHENE	ND	ND	V	ND
METHYLENE CHLORIDE	0.53	0.41	V	0.48
TRICHLOROTRIFLUOROETHANE	0.08	0.07	V	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	V	ND
1,1 - DICHLOROETHANE	ND	ND	V	ND
METHYL tert-BUTYL ETHER	ND	ND	V	ND
METHYL ETHYL KETONE	NR	NR	V	NR
CHLOROPRENE	ND	ND	V	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	V	ND
BROMOCHLOROMETHANE	ND	ND	V	ND
CHLOROFORM	ND	ND	V	ND
ETHYL tert-BUTYL ETHER	ND	ND	V	ND
1,2 - DICHLOROETHANE	ND	ND	V	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.06	V	0.04 U
BENZENE	0.21	0.23	V	0.23
CARBON TETRACHLORIDE	ND	0.07 U	V	0.06 U
tert-AMYL METHYL ETHER	ND	ND	V	ND
1,2 - DICHLOROPROPANE	ND	ND	V	ND
ETHYL ACRYLATE	ND	ND	V	ND
BROMODICHLOROMETHANE	ND	ND	V	ND
TRICHLOROETHYLENE	ND	ND	V	ND
METHYL METHACRYLATE	ND	ND	V	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	V	ND
METHYL ISOBUTYL KETONE	ND	ND	V	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	V	ND
1,1,2 - TRICHLOROETHANE	ND	ND	V	ND
TOLUENE	0.22	0.17	V	0.14
DIBROMOCHLOROMETHANE	ND	ND	V	ND
1,2-DIBROMOETHANE	ND	ND	V	ND
N-OCTANE	0.36	ND	V	ND
TETRACHLOROETHYLENE	ND	ND	V	ND
CHLOROBENZENE	ND	ND	V	ND
ETHYLBENZENE	0.05 U	0.05 U	V	0.06 U
m,p - XYLENE	0.10	0.07 U	V	0.07 U
BROMOFORM	ND	ND	V	ND
STYRENE	0.04 U	0.03 U	V	0.02 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	V	ND
o - XYLENE	0.06	0.06	V	0.04
1,3,5-TRIMETHYLBENZENE	0.04 U	0.03 U	V	0.03 U
1,2,4-TRIMETHYLBENZENE	0.11	0.08 U	V	0.04 U
m - DICHLOROBENZENE	ND	ND	V	ND
CHLOROMETHYLBENZENE	ND	ND	V	ND
p - DICHLOROBENZENE	ND	ND	V	ND
o - DICHLOROBENZENE	ND	ND	V	ND
1,2,4-TRICHLOROBENZENE	ND	ND	V	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	V	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 16540 D1	BUND 16542 D2	BUND 16570	BUND 16640
SAMPLE DATE	3/19/99	3/19/99	3/25/99	3/31/99
ANALYSIS DATE			4/22/99	4/22/99
FILE NAME			L9DU013	L9DV012
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	V	0.65	0.80
PROPYLENE	V	V	0.21	0.34
DICHLORODIFLUOROMETHANE	V	V	0.61	0.66
CHLOROMETHANE	V	V	0.64	0.66
DICHLOROTETRAFLUOROETHANE	V	V	ND	ND
VINYL CHLORIDE	V	V	ND	ND
1,3-BUTADIENE	V	V	ND	ND
BROMOMETHANE	V	V	ND	ND
CHLOROETHANE	V	V	ND	ND
ACETONITRILE	V	V	5.60	1.54
TRICHLOROFLUOROMETHANE	V	V	0.31	0.40
ACRYLONITRILE	V	V	ND	ND
1,1-DICHLOROETHENE	V	V	ND	ND
METHYLENE CHLORIDE	V	V	0.36	1.27
TRICHLOROTRIFLUOROETHANE	V	V	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	V	V	ND	ND
1,1 - DICHLOROETHANE	V	V	ND	ND
METHYL tert-BUTYL ETHER	V	V	ND	ND
METHYL ETHYL KETONE	V	V	NR	NR
CHLOROPRENE	V	V	ND	ND
cis-1,2-DICHLOROETHYLENE	V	V	ND	ND
BROMOCHLOROMETHANE	V	V	ND	ND
CHLOROFORM	V	V	ND	ND
ETHYL tert-BUTYL ETHER	V	V	ND	ND
1,2 - DICHLOROETHANE	V	V	ND	ND
1,1,1 - TRICHLOROETHANE	V	V	0.06	0.07
BENZENE	V	V	0.25	0.29
CARBON TETRACHLORIDE	V	V	0.06 U	0.09 U
tert-AMYL METHYL ETHER	V	V	ND	ND
1,2 - DICHLOROPROPANE	V	V	ND	ND
ETHYL ACRYLATE	V	V	ND	ND
BROMODICHLOROMETHANE	V	V	ND	ND
TRICHLOROETHYLENE	V	V	ND	ND
METHYL METHACRYLATE	V	V	ND	ND
cis -1,3 - DICHLOROPROPENE	V	V	ND	ND
METHYL ISOBUTYL KETONE	V	V	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	V	ND	ND
1,1,2 - TRICHLOROETHANE	V	V	ND	ND
TOLUENE	V	V	0.21	0.50
DIBROMOCHLOROMETHANE	V	V	ND	ND
1,2-DIBROMOETHANE	V	V	ND	ND
N-OCTANE	V	V	0.05 U	0.09
TETRACHLOROETHYLENE	V	V	ND	ND
CHLOROBENZENE	V	V	ND	ND
ETHYLBENZENE	V	V	0.06 U	0.10
m,p - XYLENE	V	V	0.10	0.18
BROMOFORM	V	V	ND	ND
STYRENE	V	V	0.05 U	0.08 U
1,1,2,2 - TETRACHLOROETHANE	V	V	ND	ND
o - XYLENE	V	V	0.06	0.09
1,3,5-TRIMETHYLBENZENE	V	V	0.05 U	0.05 U
1,2,4-TRIMETHYLBENZENE	V	V	0.08 U	0.14
m - DICHLOROBENZENE	V	V	ND	ND
CHLOROMETHYLBENZENE	V	V	ND	ND
p - DICHLOROBENZENE	V	V	ND	ND
o - DICHLOROBENZENE	V	V	ND	ND
1,2,4-TRICHLOROBENZENE	V	V	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	V	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 15646	BUND 15637	BUND 15682 D1	BUND 15682 R1
SAMPLE DATE	4/6/99	4/12/99	4/18/99	4/18/99
ANALYSIS DATE	4/22/99	4/22/99	5/11/99	5/12/99
FILE NAME	L9DV013	L9DV011	L9EJ018	L9EL011
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.11	0.81	0.60	0.71
PROPYLENE	0.41	0.34	0.29	0.31
DICHLORODIFLUOROMETHANE	1.04	0.69	0.67	0.73
CHLOROMETHANE	0.62	0.64	0.58	0.62
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.03 U	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	1.80	3.77	ND	0.85
TRICHLOROFLUOROMETHANE	0.40	0.51	1.07	1.49
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.41	1.27	0.20	0.21
TRICHLOROTRIFLUOROETHANE	0.08	0.10	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	NR	NR	NR	NR
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.13	0.06	0.07	0.06
BENZENE	0.37	0.29	0.31	0.32
CARBON TETRACHLORIDE	0.06 U	0.06 U	0.10	0.09
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	0.38	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.80	1.05	0.37	0.48
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.09 U	0.09 U	0.05 U	0.05 U
TETRACHLOROETHYLENE	0.07 U	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.13	0.24	0.07 U	0.08 U
m,p - XYLENE	0.33	0.60	0.13	0.16
BROMOFORM	ND	ND	ND	ND
STYRENE	0.17	0.10 U	0.04 U	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.17	0.20	0.08	0.08
1,3,5-TRIMETHYLBENZENE	0.08	0.04 U	0.04 U	0.05 U
1,2,4-TRIMETHYLBENZENE	0.19	0.11	0.08 U	0.08 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 16684 D2	BUND 16684 R2	BUND 16705	BUND 16712
SAMPLE DATE	4/18/99	4/18/99	4/24/99	4/30/99
ANALYSIS DATE	5/11/99	5/12/99		5/19/99
FILE NAME	L9EJ019	L9EL012		L9ER016
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.56	0.58	NA	0.57
PROPYLENE	0.34	0.32	NA	0.31
DICHLORODIFLUOROMETHANE	0.63	0.61	NA	0.69
CHLOROMETHANE	0.71	0.64	NA	0.66
DICHLOROTETRAFLUOROETHANE	ND	ND	NA	ND
VINYL CHLORIDE	ND	ND	NA	ND
1,3-BUTADIENE	ND	ND	NA	ND
BROMOMETHANE	ND	ND	NA	ND
CHLOROETHANE	ND	ND	NA	ND
ACETONITRILE	0.87	0.97	NA	ND
TRICHLOROFLUOROMETHANE	0.31	0.32	NA	0.78
ACRYLONITRILE	ND	ND	NA	ND
1,1-DICHLOROETHENE	ND	ND	NA	ND
METHYLENE CHLORIDE	0.40	0.36	NA	0.53
TRICHLOROTRIFLUOROETHANE	0.10	0.10	NA	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	NA	ND
1,1 - DICHLOROETHANE	ND	ND	NA	ND
METHYL tert-BUTYL ETHER	ND	ND	NA	ND
METHYL ETHYL KETONE	NR	NR	NA	NR
CHLOROPRENE	ND	ND	NA	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	NA	ND
BROMOCHLOROMETHANE	ND	ND	NA	ND
CHLOROFORM	ND	ND	NA	ND
ETHYL tert-BUTYL ETHER	ND	ND	NA	ND
1,2 - DICHLOROETHANE	ND	ND	NA	ND
1,1,1 - TRICHLOROETHANE	0.08	0.06	NA	0.07
BENZENE	0.28	0.27	NA	0.21
CARBON TETRACHLORIDE	0.08 U	0.09	NA	0.09
tert-AMYL METHYL ETHER	ND	ND	NA	ND
1,2 - DICHLOROPROPANE	ND	ND	NA	ND
ETHYL ACRYLATE	ND	ND	NA	ND
BROMODICHLOROMETHANE	ND	ND	NA	ND
TRICHLOROETHYLENE	ND	ND	NA	ND
METHYL METHACRYLATE	ND	ND	NA	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	NA	ND
METHYL ISOBUTYL KETONE	ND	ND	NA	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	NA	ND
1,1,2 - TRICHLOROETHANE	ND	ND	NA	ND
TOLUENE	0.22	0.22	NA	0.33
DIBROMOCHLOROMETHANE	ND	ND	NA	ND
1,2-DIBROMOETHANE	ND	ND	NA	ND
N-OCTANE	0.06 U	0.07 U	NA	0.06 U
TETRACHLOROETHYLENE	ND	ND	NA	ND
CHLOROBENZENE	ND	ND	NA	ND
ETHYLBENZENE	0.06 U	0.06 U	NA	0.07 U
m,p - XYLENE	0.11	0.10	NA	0.11
BROMOFORM	ND	ND	NA	ND
STYRENE	0.04 U	0.04 U	NA	0.03 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	NA	ND
o - XYLENE	0.07	0.06	NA	0.07
1,3,5-TRIMETHYLBENZENE	0.04 U	0.04 U	NA	0.04 U
1,2,4-TRIMETHYLBENZENE	0.07 U	0.07 U	NA	0.07 U
m - DICHLOROBENZENE	ND	ND	NA	ND
CHLOROMETHYLBENZENE	ND	ND	NA	ND
p - DICHLOROBENZENE	ND	ND	NA	ND
o - DICHLOROBENZENE	ND	ND	NA	ND
1,2,4-TRICHLOROBENZENE	ND	ND	NA	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	NA	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 15727	BUND 15729	BUND 15773	BUND 15771
SAMPLE DATE	5/6/99	5/6/99	5/18/99	5/24/99
ANALYSIS DATE			5/26/99	5/26/99
FILE NAME			L9EZ016	L9EZ017
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	V	0.66	0.48
PROPYLENE	V	V	0.40	0.33
DICHLORODIFLUOROMETHANE	V	V	0.97	0.16
CHLOROMETHANE	V	V	0.69	0.64
DICHLOROTETRAFLUOROETHANE	V	V	ND	ND
VINYL CHLORIDE	V	V	ND	ND
1,3-BUTADIENE	V	V	ND	ND
BROMOMETHANE	V	V	ND	ND
CHLOROETHANE	V	V	ND	ND
ACETONITRILE	V	V	ND	ND
TRICHLOROFLUOROMETHANE	V	V	0.33	0.40
ACRYLONITRILE	V	V	ND	ND
1,1-DICHLOROETHENE	V	V	ND	ND
METHYLENE CHLORIDE	V	V	0.64	0.42
TRICHLOROTRIFLUOROETHANE	V	V	0.10	0.10
trans - 1,2 - DICHLOROETHYLENE	V	V	ND	ND
1,1 - DICHLOROETHANE	V	V	ND	ND
METHYL tert-BUTYL ETHER	V	V	ND	ND
METHYL ETHYL KETONE	V	V	NR	NR
CHLOROPRENE	V	V	ND	ND
cis-1,2-DICHLOROETHYLENE	V	V	ND	ND
BROMOCHLOROMETHANE	V	V	ND	ND
CHLOROFORM	V	V	ND	ND
ETHYL tert-BUTYL ETHER	V	V	ND	ND
1,2 - DICHLOROETHANE	V	V	ND	ND
1,1,1 - TRICHLOROETHANE	V	V	0.08	0.05 U
BENZENE	V	V	0.21	0.49
CARBON TETRACHLORIDE	V	V	0.10	0.09
tert-AMYL METHYL ETHER	V	V	ND	ND
1,2 - DICHLOROPROPANE	V	V	ND	ND
ETHYL ACRYLATE	V	V	ND	ND
BROMODICHLOROMETHANE	V	V	ND	ND
TRICHLOROETHYLENE	V	V	ND	ND
METHYL METHACRYLATE	V	V	ND	ND
cis -1,3 - DICHLOROPROPENE	V	V	ND	ND
METHYL ISOBUTYL KETONE	V	V	0.61	ND
trans - 1,3 - DICHLOROPROPENE	V	V	ND	ND
1,1,2 - TRICHLOROETHANE	V	V	ND	ND
TOLUENE	V	V	0.42	0.56
DIBROMOCHLOROMETHANE	V	V	ND	ND
1,2-DIBROMOETHANE	V	V	ND	ND
N-OCTANE	V	V	0.07 U	0.10
TETRACHLOROETHYLENE	V	V	ND	ND
CHLOROBENZENE	V	V	ND	ND
ETHYLBENZENE	V	V	0.14	0.11
m,p - XYLENE	V	V	0.28	0.22
BROMOFORM	V	V	ND	ND
STYRENE	V	V	0.09 U	0.03 U
1,1,2,2 - TETRACHLOROETHANE	V	V	ND	ND
o - XYLENE	V	V	0.17	0.12
1,3,5-TRIMETHYLBENZENE	V	V	0.08	0.04 U
1,2,4-TRIMETHYLBENZENE	V	V	0.19	0.09 U
m - DICHLOROBENZENE	V	V	ND	ND
CHLOROMETHYLBENZENE	V	V	ND	ND
p - DICHLOROBENZENE	V	V	ND	ND
o - DICHLOROBENZENE	V	V	ND	ND
1,2,4-TRICHLOROBENZENE	V	V	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	V	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 15834		BUND 15899		BUND 15929		BUND 15969	
SAMPLE DATE	6/11/99		6/17/99		6/23/99		6/29/99	
ANALYSIS DATE	6/17/99		6/24/99		6/24/99		7/2/99	
FILE NAME	L9FQ013		L9FW014		L9F#014		L9GB014	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.20		0.37		0.74		0.63	
PROPYLENE	0.46		0.34		0.36		0.27	
DICHLORODIFLUOROMETHANE	1.06		0.57		0.69		0.57	
CHLOROMETHANE	0.63		0.65		0.83		0.62	
DICHLOROTETRAFLUOROETHANE	0.01	U	0.02	U	0.11		0.02	U
VINYL CHLORIDE	ND		ND		0.11		ND	
1,3-BUTADIENE	0.02	U	ND		ND		ND	
BROMOMETHANE	ND		ND		0.15		0.02	U
CHLOROETHANE	ND		ND		0.14		ND	
ACETONITRILE	2.31		1.45		1.09		ND	
TRICHLOROFLUOROMETHANE	0.33		0.32		0.56		0.32	
ACRYLONITRILE	ND		0.15		ND		ND	
1,1-DICHLOROETHENE	ND		ND		0.14		ND	
METHYLENE CHLORIDE	0.41		0.59		2.85		0.33	
TRICHLOROTRIFLUOROETHANE	0.10		0.14		0.46		0.27	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		0.09		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	NR		NR		NR		NR	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		0.11		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		0.12		ND	
1,1,1 - TRICHLOROETHANE	0.16		0.06		0.18		0.07	
BENZENE	0.25		0.13		0.32		0.21	
CARBON TETRACHLORIDE	0.08	U	0.08	U	0.09		0.10	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		0.09		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		0.10		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		0.11		ND	
TOLUENE	1.14		0.22		1.32		0.48	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		0.08		ND	
N-OCTANE	0.10		0.10		0.20		0.08	U
TETRACHLOROETHYLENE	0.04	U	ND		0.09	U	ND	
CHLOROBENZENE	ND		ND		0.10		ND	
ETHYLBENZENE	0.14		0.06	U	0.18		0.07	U
m,p - XYLENE	0.21		0.11		0.34		0.14	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.11		0.06	U	0.11		0.05	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		0.05	U	ND	
o - XYLENE	0.13		0.07		0.19		0.07	
1,3,5-TRIMETHYLBENZENE	0.05	U	0.04	U	0.11		0.04	U
1,2,4-TRIMETHYLBENZENE	0.10		0.08	U	0.15		0.07	U
m - DICHLOROBENZENE	ND		ND		0.05	U	ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	0.02	U	ND		0.05	U	ND	
o - DICHLOROBENZENE	ND		ND		0.05	U	ND	
1,2,4-TRICHLOROBENZENE	0.01	U	ND		0.01	U	ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		0.03	U	ND	

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SAMPLE SITE #	BUND 16003	BUND 16135	BUND 16146	BUND 16203
SAMPLE DATE	7/6/99	7/17/99	7/23/99	7/29/99
ANALYSIS DATE	7/20/99	7/28/99	8/11/99	8/11/99
FILE NAME	L9GT014	L9GI017	L9HJ019	L9HJ020
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.34	0.29	0.45	0.80
PROPYLENE	0.33	0.35	0.49	1.14
DICHLORODIFLUOROMETHANE	0.74	0.65	0.72	0.69
CHLOROMETHANE	0.59	0.67	0.77	0.70
DICHLOROTETRAFLUOROETHANE	0.01 U	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	0.29
ACETONITRILE	0.91	0.91	ND	ND
TRICHLOROFLUOROMETHANE	0.47	0.37	0.45	0.43
ACRYLONITRILE	ND	0.10	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.50	0.57	0.54	0.57
TRICHLOROTRIFLUOROETHANE	0.11	0.10	0.11	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	NR	NR	NR	NR
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.06	0.06
BENZENE	0.19	0.23	0.19	0.56
CARBON TETRACHLORIDE	0.09 U	0.08 U	0.11	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	0.11	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.10	ND	ND	0.22
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.30	0.34	0.31	0.95
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.09	0.09 U	0.08 U	0.14
TETRACHLOROETHYLENE	ND	0.14	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.06 U	0.06 U	0.07 U	0.15
m,p - XYLENE	0.11	0.12	0.13	0.31
BROMOFORM	ND	ND	ND	ND
STYRENE	0.08 U	0.08 U	0.07 U	0.16
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.07	0.08	0.09	0.14
1,3,5-TRIMETHYLBENZENE	0.04 U	0.04 U	0.04 U	0.05 U
1,2,4-TRIMETHYLBENZENE	0.07 U	0.08 U	0.09	0.11
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	BUND 16281	BUND 16314	BUND 16359	BUND 16440
SAMPLE DATE	8/4/99	8/10/99	8/16/99	8/22/99
ANALYSIS DATE	8/17/99	8/17/99		9/7/99
FILE NAME	L9HP010	L9HP021		L9IG005
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.41	0.78	NA	0.41
PROPYLENE	0.51	0.54	NA	0.39
DICHLORODIFLUOROMETHANE	0.68	0.82	NA	0.59
CHLOROMETHANE	0.63	0.66	NA	0.56
DICHLOROTETRAFLUOROETHANE	ND	ND	NA	ND
VINYL CHLORIDE	ND	ND	NA	ND
1,3-BUTADIENE	ND	ND	NA	ND
BROMOMETHANE	ND	ND	NA	ND
CHLOROETHANE	ND	0.13	NA	ND
ACETONITRILE	0.77	0.89	NA	1.13
TRICHLOROFLUOROMETHANE	0.37	0.41	NA	0.29
ACRYLONITRILE	ND	ND	NA	ND
1,1-DICHLOROETHENE	ND	ND	NA	ND
METHYLENE CHLORIDE	0.36	0.58	NA	0.40
TRICHLOROTRIFLUOROETHANE	0.15	0.09	NA	0.13
trans - 1,2 - DICHLOROETHYLENE	ND	ND	NA	ND
1,1 - DICHLOROETHANE	ND	ND	NA	ND
METHYL tert-BUTYL ETHER	ND	ND	NA	ND
METHYL ETHYL KETONE	NR	NR	NA	ND
CHLOROPRENE	ND	ND	NA	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	NA	ND
BROMOCHLOROMETHANE	ND	ND	NA	ND
CHLOROFORM	ND	ND	NA	ND
ETHYL tert-BUTYL ETHER	ND	ND	NA	ND
1,2 - DICHLOROETHANE	ND	ND	NA	ND
1,1,1 - TRICHLOROETHANE	0.06	0.09	NA	0.05 U
BENZENE	0.19	0.47	NA	0.21
CARBON TETRACHLORIDE	0.07 U	0.08 U	NA	0.08 U
tert-AMYL METHYL ETHER	ND	ND	NA	ND
1,2 - DICHLOROPROPANE	ND	ND	NA	ND
ETHYL ACRYLATE	ND	ND	NA	ND
BROMODICHLOROMETHANE	ND	ND	NA	ND
TRICHLOROETHYLENE	ND	ND	NA	ND
METHYL METHACRYLATE	ND	ND	NA	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	NA	ND
METHYL ISOBUTYL KETONE	ND	0.17	NA	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	NA	ND
1,1,2 - TRICHLOROETHANE	ND	ND	NA	ND
TOLUENE	0.25	1.19	NA	0.31
DIBROMOCHLOROMETHANE	ND	ND	NA	ND
1,2-DIBROMOETHANE	ND	ND	NA	ND
N-OCTANE	0.10	0.13	NA	0.10
TETRACHLOROETHYLENE	ND	0.02 U	NA	ND
CHLOROBENZENE	ND	ND	NA	ND
ETHYLBENZENE	0.06 U	0.19	NA	0.07 U
m,p - XYLENE	0.12	0.40	NA	0.14
BROMOFORM	ND	ND	NA	ND
STYRENE	0.07 U	0.18	NA	0.08 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	NA	ND
o - XYLENE	0.07	0.20	NA	0.09
1,3,5-TRIMETHYLBENZENE	0.05 U	0.06 U	NA	0.05 U
1,2,4-TRIMETHYLBENZENE	0.08 U	0.14	NA	0.09
m - DICHLOROBENZENE	ND	ND	NA	ND
CHLOROMETHYLBENZENE	ND	ND	NA	ND
p - DICHLOROBENZENE	ND	ND	NA	ND
o - DICHLOROBENZENE	ND	ND	NA	ND
1,2,4-TRICHLOROBENZENE	ND	ND	NA	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	NA	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
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SAMPLE SITE #	BUND 16599		BUND 16674		BUND 16702		BUND 16786 D1	
SAMPLE DATE	8/28/99		9/3/99		9/9/99		9/15/99	
ANALYSIS DATE	9/15/99		9/23/99		9/16/99		10/12/99	
FILE NAME	L9IN022		L9IV016		L9IN023		L9JK021	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.36		0.47		0.37		0.34	
PROPYLENE	0.30		0.35		0.35		0.30	
DICHLORODIFLUOROMETHANE	0.70		0.62		0.62		0.64	
CHLOROMETHANE	0.64		0.60		0.57		0.52	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		2.19	
TRICHLOROFLUOROMETHANE	0.31		0.30		0.32		0.29	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.35		0.28		0.27		0.19	
TRICHLOROTRIFLUOROETHANE	0.10		0.10		0.10		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	NR		NR		NR		NR	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.07		0.05	U	0.06		0.06	
BENZENE	0.16		0.14		0.36		0.12	
CARBON TETRACHLORIDE	0.10		0.06	U	0.08	U	0.08	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		0.44		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.31		0.21		0.19		0.19	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.05	U	ND		0.06	U	0.03	U
TETRACHLOROETHYLENE	ND		ND		0.40		ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.06	U	0.05	U	0.05	U	0.05	U
m,p - XYLENE	0.12		0.09		0.10		0.07	U
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.06	U	0.05	U	0.04	U	0.03	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.08		0.06		0.05		0.05	
1,3,5-TRIMETHYLBENZENE	0.03	U	0.05	U	0.04	U	0.04	U
1,2,4-TRIMETHYLBENZENE	0.07	U	0.09		0.06	U	0.05	U
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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SAMPLE SITE #	BUND 16786 R1	BUND 16788 D2	BUND 16788 R2	BUND 16799
SAMPLE DATE	9/15/99	9/15/99	9/15/99	9/21/99
ANALYSIS DATE	10/13/99	10/12/99	10/13/99	10/13/99
FILE NAME	L9JL016	L9JK022	L9JL017	L9JL018
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.37	0.35	0.39	0.70
PROPYLENE	0.30	0.21	0.22	0.32
DICHLORODIFLUOROMETHANE	0.66	0.69	0.70	0.66
CHLOROMETHANE	0.58	0.54	0.50	0.57
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	2.46	4.03	5.37	ND
TRICHLOROFLUOROMETHANE	0.32	0.33	0.36	0.31
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.21	0.14	0.13	0.11
TRICHLOROTRIFLUOROETHANE	0.10	0.10	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	NR	NR	NR	NR
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.06	0.05 U	0.05 U
BENZENE	0.12	0.13	0.12	0.16
CARBON TETRACHLORIDE	0.09	0.09	0.08 U	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	0.02 U
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.17	0.22	0.21	0.19
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.03 U	0.05 U	0.04 U	0.05 U
TETRACHLOROETHYLENE	ND	ND	ND	0.02 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.05 U	0.05 U	0.05 U	0.05 U
m,p - XYLENE	0.08 U	0.08	0.09	0.10
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	0.03 U	0.04 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.05	0.05	0.06	0.06
1,3,5-TRIMETHYLBENZENE	0.03 U	0.03 U	0.03 U	0.03 U
1,2,4-TRIMETHYLBENZENE	0.05 U	0.04 U	0.05 U	0.05 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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NR = Not Reported

1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Beulah, ND (BUND)
Yearly Report (Feburary 1999 - September 1999)

SAMPLE SITE #	BUND 16838 D1	BUND 16838 R1	BUND 16840 D2	BUND 16840 R2
SAMPLE DATE	9/27/99	9/27/99	9/27/99	9/27/99
ANALYSIS DATE	10/12/99	10/15/99	10/13/99	10/15/99
FILE NAME	L9JL012	L9JN021	L9JL013	L9JN022
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.54	0.56	0.59	0.67
PROPYLENE	0.23	0.29	0.25	0.28
DICHLORODIFLUOROMETHANE	0.62	0.68	0.69	0.70
CHLOROMETHANE	0.54	0.49	0.52	0.51
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	1.28	1.51	1.44
TRICHLOROFLUOROMETHANE	0.63	0.75	0.33	0.35
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.14	0.15	0.11	0.13
TRICHLOROTRIFLUOROETHANE	0.10	0.09	0.10	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	NR	NR	NR	NR
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.05 U	0.06	0.06
BENZENE	0.16	0.19	0.15	0.20
CARBON TETRACHLORIDE	0.08 U	0.08 U	0.08 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.20	0.31	0.24	0.39
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	0.04 U	ND	0.06 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.05 U	0.06 U	0.05 U	0.07 U
m,p - XYLENE	0.09	0.13	0.09	0.14
BROMOFORM	ND	ND	ND	ND
STYRENE	0.03 U	0.04 U	0.04 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.06	0.08	0.06	0.09
1,3,5-TRIMETHYLBENZENE	0.03 U	0.03 U	0.04 U	0.03 U
1,2,4-TRIMETHYLBENZENE	0.05 U	0.06 U	0.05 U	0.06 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BRVT 14684	BRVT 14811	BRVT 15054	BRVT 15113
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98
ANALYSIS DATE	9/25/98	10/19/98	10/22/98	10/22/98
FILE NAME	LBIY016	LBJS020	LBJV010	LBJV016
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.58	1.08	1.21	1.17
PROPYLENE	0.77	0.72	0.66	0.75
DICHLORODIFLUOROMETHANE	0.77	0.67	0.59	0.57
CHLOROMETHANE	0.59	0.53	0.58	0.47
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	15.25	ND	ND
TRICHLOROFLUOROMETHANE	0.36	0.76	0.26	0.27
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.45	0.14	0.05 U
TRICHLOROTRIFLUOROETHANE	0.05	0.11	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.52	0.63	0.78	0.49
METHYL ETHYL KETONE	0.49	0.93	0.42	0.33
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.06	0.06	0.06
BENZENE	0.53	0.56	0.62	0.66
CARBON TETRACHLORIDE	0.12	0.11	0.07 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.09	2.47	1.19	1.23
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	0.08 U	ND	ND
TETRACHLOROETHYLENE	ND	0.07 U	0.05 U	0.05 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.20	0.24	0.20	0.22
m,p - XYLENE	0.50	0.56	0.48	0.52
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	0.12	0.05 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.28	0.27	0.24	0.26
1,3,5-TRIMETHYLBENZENE	ND	0.06 U	0.07 U	0.06 U
1,2,4-TRIMETHYLBENZENE	0.18	0.20	0.25	0.24
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BRVT 15137	BRVT 15155	BRVT 15195	BRVT 15237
SAMPLE DATE	10/20/98	11/1/98	11/13/98	11/25/98
ANALYSIS DATE	12/6/98	11/12/98	12/1/98	12/8/98
FILE NAME	L8LF008	L8KK018	L8LA014	L8LH013
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.15	0.62	2.39	2.71
PROPYLENE	0.56	0.36	1.10	1.18
DICHLORODIFLUOROMETHANE	0.58	0.48	0.62	0.59
CHLOROMETHANE	0.57	0.48	0.61	0.54
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	0.12	0.15
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.28	0.24	0.29	0.27
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	0.03 U
TRICHLOROTRIFLUOROETHANE	0.11	0.08	0.12	0.27
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.22	ND	0.32	0.27
METHYL ETHYL KETONE	0.49	0.34	0.40	0.48
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.05 U	0.05 U	0.06
BENZENE	0.46	0.32	0.81	0.83
CARBON TETRACHLORIDE	0.08 U	0.08 U	0.09	0.11
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.68	0.32	1.29	1.45
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.06 U	ND	0.07 U	0.07 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.14	0.09 U	0.26	0.26
m,p - XYLENE	0.34	0.17	0.68	0.67
BROMOFORM	ND	ND	ND	ND
STYRENE	0.06 U	0.05 U	0.09 U	0.07 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.20	0.11	0.33	0.36
1,3,5-TRIMETHYLBENZENE	0.08	0.05 U	0.12	0.11
1,2,4-TRIMETHYLBENZENE	0.22	0.10	0.30	0.30
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BRVT 16251	BRVT 16282	BRVT 16304	BRVT 16318
SAMPLE DATE	12/7/98	12/19/98	12/31/98	1/12/99
ANALYSIS DATE	12/31/98	1/12/99	1/12/99	1/22/99
FILE NAME	L8LV007	L9AK012	L9AK019	L9AU012
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.02	4.09	3.74	4.20
PROPYLENE	0.98	1.51	1.67	1.61
DICHLORODIFLUOROMETHANE	0.71	0.67	0.77	0.66
CHLOROMETHANE	0.65	0.58	0.63	0.68
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.09	0.18	0.18	0.26
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	0.91	2.11	ND
TRICHLOROFLUOROMETHANE	0.33	0.29	0.34	0.31
ACRYLONITRILE	ND	0.14	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.27	0.10	0.16	0.44
TRICHLOROTRIFLUOROETHANE	0.11	0.12	0.12	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.63	0.52	0.21	0.40
METHYL ETHYL KETONE	0.76	0.59	0.95	0.41
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.06	0.05 U	0.05 U
BENZENE	0.58	0.96	0.97	1.08
CARBON TETRACHLORIDE	0.09	0.09	0.09	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.14	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.52	1.41	1.63	1.72
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.12	0.09	0.10	0.12
TETRACHLOROETHYLENE	0.08 U	0.06 U	0.04 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.20	0.27	0.28	0.32
m,p - XYLENE	0.48	0.67	0.72	0.87
BROMOFORM	ND	ND	ND	ND
STYRENE	0.09 U	0.09 U	0.09 U	0.08 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.27	0.36	0.37	0.43
1,3,5-TRIMETHYLBENZENE	0.08	0.12	0.12	0.13
1,2,4-TRIMETHYLBENZENE	0.22	0.30	0.25	0.36
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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V = Voided

1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BRVT 15349 D1	BRVT 15349 R1	BRVT 15351 D2	BRVT 15351 R2
SAMPLE DATE	1/24/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE	2/2/99	2/9/99	2/2/99	2/9/99
FILE NAME	L9BB011	L9BI007	L9BB012	L9BB008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.62	2.43	2.73	2.58
PROPYLENE	1.24	1.15	1.30	1.26
DICHLORODIFLUOROMETHANE	0.61	0.66	0.62	0.64
CHLOROMETHANE	0.57	0.60	0.61	0.61
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.18	0.13	0.05	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	5.04	4.41	11.19	13.01
TRICHLOROFLUOROMETHANE	0.33	0.38	0.33	0.34
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.06 U	0.04 U	0.07 U	0.05 U
TRICHLOROTRIFLUOROETHANE	0.11	0.11	0.09	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.34	0.35	0.33	0.32
METHYL ETHYL KETONE	0.52	0.58	0.35	0.41
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.06	0.05 U	0.07
BENZENE	0.81	0.80	0.79	0.80
CARBON TETRACHLORIDE	0.08	0.05 U	0.09	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLORDETHANE	ND	ND	ND	ND
TOLUENE	1.31	1.29	1.25	1.20
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.11	0.08 U	0.10	0.11
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.25	0.24	0.24	0.23
m,p - XYLENE	0.68	0.66	0.63	0.61
BROMOFORM	ND	ND	ND	ND
STYRENE	0.12	0.12	0.07 U	0.06
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.35	0.34	0.33	0.32
1,3,5-TRIMETHYLBENZENE	0.13	0.13	0.12	0.12
1,2,4-TRIMETHYLBENZENE	0.37	0.34	0.31	0.30
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
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SAMPLE SITE #	BRVT 16413		BRVT 16443		BRVT 16483		BRVT 16647	
SAMPLE DATE	2/5/99		2/17/99		3/1/99		3/13/99	
ANALYSIS DATE	2/23/99		3/4/99		3/11/99		3/24/99	
FILE NAME	L9BW006		L9CD009		L9CJ019		L9CX013	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.24		4.07		2.50		1.18	
PROPYLENE	0.61		1.71		1.07		1.02	
DICHLORODIFLUOROMETHANE	0.63		0.59		0.60		0.60	
CHLOROMETHANE	0.65		0.67		0.61		0.92	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	0.10		0.28		0.15		0.07	
BROMOMETHANE	ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.29		0.26		0.34		0.37	
ACRYLONITRILE	ND		ND		ND		0.89	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.07	U	0.11		ND		0.07	U
TRICHLOROTRIFLUOROETHANE	0.10		0.90		0.10		0.19	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	0.45		0.56		0.37		0.12	
METHYL ETHYL KETONE	ND		1.69		4.03		1.71	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.04	U	0.05	U	0.05	U	0.04	U
BENZENE	0.46		1.18		0.77		0.57	
CARBON TETRACHLORIDE	0.07	U	0.03	U	0.07	U	ND	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	0.09		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	0.05	U	ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	0.27		0.05	U	0.07		0.17	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.53		2.23		1.11		0.43	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.05	U	0.11		0.06	U	ND	
TETRACHLOROETHYLENE	ND		0.09	U	ND		ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.14		0.37		0.23		0.12	
m,p - XYLENE	0.29		1.07		0.58		0.26	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.11		0.05	U	0.07	U	0.05	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.15		0.49		0.30		0.16	
1,3,5-TRIMETHYLBENZENE	0.08		0.12		0.09		0.05	U
1,2,4-TRIMETHYLBENZENE	0.16		0.40		0.25		0.12	
m - DICHLOROBENZENE	0.05	U	ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	0.06	U	ND		ND		ND	
o - DICHLOROBENZENE	0.08	U	ND		ND		ND	
1,2,4-TRICHLOROBENZENE	0.24		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	0.05	U	ND		ND		ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
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SAMPLE SITE #	BRVT 16587 D1	BRVT 16587 R1	BRVT 16589 D2	BRVT 16589 R2
SAMPLE DATE	3/25/99	3/25/99	3/25/99	3/25/99
ANALYSIS DATE	4/13/99	4/13/99	4/13/99	4/13/99
FILE NAME	L9DL015	L9DM010	L9DL016	L9DM011
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.08	1.68	0.92	1.89
PROPYLENE	0.84	0.69	0.83	0.81
DICHLORODIFLUOROMETHANE	0.70	0.73	0.64	0.67
CHLOROMETHANE	0.73	0.72	0.69	0.67
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.07	0.07	0.08	0.08
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	1.02	1.15	0.31	0.31
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.22	0.20	0.13	0.16
TRICHLOROTRIFLUOROETHANE	0.11	0.11	0.11	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.19	0.19	0.21	0.22
METHYL ETHYL KETONE	1.10	1.12	1.18	1.17
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.06	0.06	0.04 U
BENZENE	0.53	0.51	0.56	0.58
CARBON TETRACHLORIDE	0.06 U	0.08 U	0.04 U	0.04 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.67	0.69	0.72	0.72
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.05 U	0.04 U	0.06 U	0.07 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.15	0.15	0.17	0.16
m,p - XYLENE	0.38	0.33	0.41	0.40
BROMOFORM	ND	ND	ND	ND
STYRENE	0.05 U	0.04 U	0.05 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.19	0.18	0.23	0.21
1,3,5-TRIMETHYLBENZENE	0.07 U	0.05 U	0.07 U	0.07 U
1,2,4-TRIMETHYLBENZENE	0.16	0.16	0.17	0.14
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
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SAMPLE SITE #	BRVT 15656	BRVT 15826 D1	BRVT 15828	BRVT 15789
SAMPLE DATE	4/6/99	5/12/99	5/12/99	6/18/99
ANALYSIS DATE	5/6/99			6/7/99
FILE NAME	L9ED020			L9FG010
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.34	V	V	0.98
PROPYLENE	0.69	V	V	0.56
DICHLORODIFLUOROMETHANE	0.66	V	V	0.55
CHLOROMETHANE	0.62	V	V	0.67
DICHLOROTETRAFLUOROETHANE	ND	V	V	0.02 U
VINYL CHLORIDE	ND	V	V	ND
1,3-BUTADIENE	0.05	V	V	0.05
BROMOMETHANE	ND	V	V	ND
CHLOROETHANE	ND	V	V	ND
ACETONITRILE	0.92	V	V	ND
TRICHLOROFLUOROMETHANE	0.35	V	V	0.29
ACRYLONITRILE	ND	V	V	ND
1,1-DICHLOROETHENE	ND	V	V	ND
METHYLENE CHLORIDE	0.20	V	V	0.05 U
TRICHLOROTRIFLUOROETHANE	0.11	V	V	0.12
trans - 1,2 - DICHLOROETHYLENE	ND	V	V	ND
1,1 - DICHLOROETHANE	ND	V	V	ND
METHYL tert-BUTYL ETHER	0.26	V	V	0.40
METHYL ETHYL KETONE	1.40	V	V	0.93
CHLOROPRENE	ND	V	V	ND
cis-1,2-DICHLOROETHYLENE	ND	V	V	ND
BROMOCHLOROMETHANE	ND	V	V	ND
CHLOROFORM	ND	V	V	ND
ETHYL tert-BUTYL ETHER	ND	V	V	ND
1,2 - DICHLOROETHANE	ND	V	V	ND
1,1,1 - TRICHLOROETHANE	0.06	V	V	0.07
BENZENE	0.39	V	V	0.34
CARBON TETRACHLORIDE	0.09	V	V	0.08 U
tert-AMYL METHYL ETHER	ND	V	V	ND
1,2 - DICHLOROPROPANE	ND	V	V	ND
ETHYL ACRYLATE	ND	V	V	ND
BROMODICHLOROMETHANE	ND	V	V	ND
TRICHLOROETHYLENE	ND	V	V	ND
METHYL METHACRYLATE	ND	V	V	ND
cis -1,3 - DICHLOROPROPENE	ND	V	V	ND
METHYL ISOBUTYL KETONE	0.09	V	V	0.09
trans - 1,3 - DICHLOROPROPENE	ND	V	V	ND
1,1,2 - TRICHLOROETHANE	ND	V	V	ND
TOLUENE	0.79	V	V	0.74
DIBROMOCHLOROMETHANE	ND	V	V	ND
1,2-DIBROMOETHANE	ND	V	V	ND
N-OCTANE	0.10	V	V	0.09
TETRACHLOROETHYLENE	ND	V	V	ND
CHLOROBENZENE	ND	V	V	ND
ETHYLBENZENE	0.14	V	V	0.14
m,p - XYLENE	0.30	V	V	0.29
BROMOFORM	ND	V	V	ND
STYRENE	0.05 U	V	V	0.08 U
1,1,2,2 - TETRACHLOROETHANE	ND	V	V	ND
o - XYLENE	0.15	V	V	0.16
1,3,5-TRIMETHYLBENZENE	0.06 U	V	V	0.06 U
1,2,4-TRIMETHYLBENZENE	0.12	V	V	0.14
m - DICHLOROBENZENE	ND	V	V	ND
CHLOROMETHYLBENZENE	ND	V	V	ND
p - DICHLOROBENZENE	ND	V	V	ND
o - DICHLOROBENZENE	ND	V	V	ND
1,2,4-TRICHLOROBENZENE	ND	V	V	ND
HEXACHLORO-1,3-BUTADIENE	ND	V	V	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
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SAMPLE SITE #	BRVT 15836		BRVT 15838		BRVT 15919		BRVT 16022	
SAMPLE DATE	5/30/99		6/5/99		6/17/99		6/29/99	
ANALYSIS DATE	6/17/99		6/17/99		6/29/99		7/20/99	
FILE NAME	L9FQ009		L9FQ011		L9F#006		L9GT007	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.04		0.86		1.05		1.01	
PROPYLENE	0.59		0.48		0.58		0.67	
DICHLORODIFLUOROMETHANE	0.60		0.55		0.64		0.67	
CHLOROMETHANE	0.69		0.62		0.64		0.78	
DICHLOROTETRAFLUOROETHANE	0.01	U	0.01	U	ND		0.01	U
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	0.06		0.03	U	0.05		0.05	
BROMOMETHANE	ND		ND		ND		0.02	U
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		1.97		ND	
TRICHLOROFLUOROMETHANE	0.31		0.29		0.58		0.33	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.05	U	0.05	U	0.11		0.07	U
TRICHLOROTRIFLUOROETHANE	0.12		0.11		0.11		0.10	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	0.27		0.28		ND		0.62	
METHYL ETHYL KETONE	0.73		3.73		0.43		0.76	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		0.03	U	ND		0.02	U
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.07		0.06		0.08		0.07	
BENZENE	0.37		0.29		0.43		0.43	
CARBON TETRACHLORIDE	0.08	U	0.09		0.09		0.09	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	0.12		0.13		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.72		0.59		8.69		0.93	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.14		0.06	U	0.09		0.09	
TETRACHLOROETHYLENE	ND		0.01	U	ND		0.02	U
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.15		0.11		0.17		0.15	
m,p - XYLENE	0.34		0.24		0.38		0.36	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.06	U	0.06	U	0.07	U	0.07	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.18		0.13		0.18		0.19	
1,3,5-TRIMETHYLBENZENE	0.07	U	0.06	U	0.07	U	0.07	U
1,2,4-TRIMETHYLBENZENE	0.15		0.14		0.17		0.17	
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
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SAMPLE SITE #	BRVT 16269	BRVT 16252	BRVT 16283	BRVT 16496
SAMPLE DATE	7/17/99	7/23/99	8/4/99	8/16/99
ANALYSIS DATE	8/10/99	8/10/99	8/16/99	9/3/99
FILE NAME	L9HJ009	L9HJ008	LPHP011	L9IB015
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.35	1.21	0.76	0.74
PROPYLENE	0.71	0.65	0.47	0.42
DICHLORODIFLUOROMETHANE	0.74	0.70	0.71	0.60
CHLOROMETHANE	0.80	0.80	0.64	0.60
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.07	0.07	ND	0.04 U
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.36	0.32	0.40	0.30
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.08 U	0.08 U	0.05 U	0.03 U
TRICHLOROTRIFLUOROETHANE	0.10	0.10	0.10	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.30	0.39	0.35	0.20
METHYL ETHYL KETONE	0.93	1.39	0.59	1.41
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.10	0.07	0.06	0.05 U
BENZENE	0.47	0.43	0.33	0.33
CARBON TETRACHLORIDE	0.10	0.12	0.09	0.09
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	0.09	0.02 U	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.77	0.83	0.67	0.51
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.07 U	0.07 U	0.06 U	0.05 U
TETRACHLOROETHYLENE	ND	ND	0.01 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.15	0.15	0.11	0.14
m,p - XYLENE	0.37	0.36	0.24	0.23
BROMOFORM	ND	ND	ND	ND
STYRENE	0.06 U	0.07 U	0.05 U	0.14
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.18	0.18	0.13	0.12
1,3,5-TRIMETHYLBENZENE	0.07 U	0.07 U	0.06 U	0.05 U
1,2,4-TRIMETHYLBENZENE	0.17	0.18	0.13	0.12
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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V = Voided

1998/99 UATMP (Urban Air Toxics Monitoring Program) - Brattleboro, VT (BRVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BRVT 16611	BRVT 16613	BRVT 16803	BRVT 16903
SAMPLE DATE	8/28/99	9/3/99	9/9/99	9/21/99
ANALYSIS DATE		9/14/99	10/6/99	10/11/99
FILE NAME		L9IN014	L9JF008	L9JK008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	1.30	0.58	0.38
PROPYLENE	V	0.57	0.67	0.74
DICHLORODIFLUOROMETHANE	V	0.68	0.66	1.60
CHLOROMETHANE	V	0.70	0.75	0.70
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	0.09	0.06	0.07
BROMOMETHANE	V	ND	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	ND	ND	ND
TRICHLOROFLUOROMETHANE	V	0.33	0.38	0.30
ACRYLONITRILE	V	ND	0.35	0.31
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	ND	0.14	ND
TRICHLOROTRIFLUOROETHANE	V	0.10	0.12	0.11
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	0.21	0.71	0.27
METHYL ETHYL KETONE	V	0.38	0.53	0.36
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	0.06	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.06	0.06	0.06
BENZENE	V	0.47	0.54	0.45
CARBON TETRACHLORIDE	V	0.10	0.11	0.10
tert-AMYL METHYL ETHER	V	ND	0.06	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	0.02 U	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	0.83	1.14	0.81
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.07 U	0.07 U	0.07 U
TETRACHLOROETHYLENE	V	ND	0.05 U	ND
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.16	0.18	0.14
m,p - XYLENE	V	0.37	0.42	0.36
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.06 U	0.07 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.19	0.22	0.19
1,3,5-TRIMETHYLBENZENE	V	0.08	0.08	0.07 U
1,2,4-TRIMETHYLBENZENE	V	0.19	0.20	0.18
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	ND
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BUVT 14677	BUVT 14818	BUVT 15083	BUVT 15107
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98
ANALYSIS DATE	9/25/98	10/14/98	10/22/98	10/22/98
FILE NAME	L8IY017	L8JM011	L8JV009	L8JV019
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.30	2.73	1.66	2.15
PROPYLENE	1.27	1.43	0.96	1.44
DICHLORODIFLUOROMETHANE	0.84	0.64	0.53	0.55
CHLOROMETHANE	0.77	0.54	0.45	0.44
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.11	0.22	0.13	0.18
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.39	0.30	0.24	0.25
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.16	0.04 U	0.19
TRICHLOROTRIFLUOROETHANE	0.07	0.09	0.08	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.47	0.48	0.52	0.54
METHYL ETHYL KETONE	0.53	0.36	0.53	0.25
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	0.04	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.08	0.05 U	0.06
BENZENE	0.92	1.07	0.91	1.33
CARBON TETRACHLORIDE	0.12	0.10	0.09	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	2.24	2.60	1.74	2.25
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.36	0.10	0.04 U	0.05 U
TETRACHLOROETHYLENE	ND	0.02 U	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.33	0.35	0.30	0.40
m,p - XYLENE	0.91	1.00	0.81	1.19
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	0.12	0.07 U	0.10 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.60	0.50	0.40	0.58
1,3,5-TRIMETHYLBENZENE	ND	0.15	0.10	0.14
1,2,4-TRIMETHYLBENZENE	0.25	0.45	0.34	0.51
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BUVT 15147	BUVT 15153	BUVT 15197	BUVT 15235
SAMPLE DATE	10/16/98	11/1/98	11/13/98	11/25/98
ANALYSIS DATE	10/30/98	11/12/98	12/1/98	12/8/98
FILE NAME	L8J%009	L8KK017	L8LA013	L8LH012
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.10	2.36	3.77	2.33
PROPYLENE	1.22	1.22	1.80	1.08
DICHLORODIFLUOROMETHANE	0.57	0.73	0.63	0.63
CHLOROMETHANE	0.52	0.56	0.57	0.58
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.08	0.13	0.28	0.17
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.25	0.51	0.29	0.31
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	0.10
METHYLENE CHLORIDE	ND	0.17	0.08 U	0.09 U
TRICHLOROTRIFLUOROETHANE	0.08	0.08	0.08	ND
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.26	0.15	0.30	0.18
METHYL ETHYL KETONE	0.38	0.46	0.23	0.31
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.06	0.07	0.07
BENZENE	0.74	0.86	1.29	0.83
CARBON TETRACHLORIDE	0.08 U	0.10	0.10	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.45	1.73	2.41	1.68
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.04 U	0.07 U	0.09	0.03 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.24	0.30	0.38	0.27
m,p - XYLENE	0.74	0.80	1.10	0.71
BROMOFORM	ND	ND	ND	ND
STYRENE	0.05 U	0.11	0.12	0.10 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.36	0.39	0.55	0.35
1,3,5-TRIMETHYLBENZENE	0.12	0.14	0.18	0.12
1,2,4-TRIMETHYLBENZENE	0.40	0.37	0.52	0.34
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BUVT 15249	BUVT 15284	BUVT 15310	BUVT 15326
SAMPLE DATE	12/7/98	12/19/98	12/31/98	1/12/99
ANALYSIS DATE	12/31/98	1/11/99	1/12/99	
FILE NAME	L8LV006	L9AK011	L9AK020	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.32	3.63	5.16	V
PROPYLENE	1.20	1.23	1.66	V
DICHLORODIFLUOROMETHANE	0.63	0.72	0.69	V
CHLOROMETHANE	0.63	0.60	0.63	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	0.13	0.16	0.22	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	5.25	1.16	ND	V
TRICHLOROFLUOROMETHANE	0.34	0.50	0.29	V
ACRYLONITRILE	0.27	ND	ND	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.30	0.11	0.54	V
TRICHLOROTRIFLUOROETHANE	0.11	0.08	0.08	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	0.39	0.16	0.11	V
METHYL ETHYL KETONE	0.30	0.35	0.09	V
CHLOROPRENE	ND	ND	ND	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	ND	ND	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.07	0.05 U	0.05 U	V
BENZENE	0.88	0.81	1.16	V
CARBON TETRACHLORIDE	0.10	0.07 U	0.09	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	ND	ND	ND	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	ND	ND	ND	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	1.98	1.49	2.05	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	0.11	0.07 U	0.12	V
TETRACHLOROETHYLENE	ND	ND	ND	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.34	0.25	0.40	V
m,p - XYLENE	0.99	0.60	1.07	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.09 U	0.10	0.07 U	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.46	0.33	0.69	V
1,3,5-TRIMETHYLBENZENE	0.16	0.10	0.12	V
1,2,4-TRIMETHYLBENZENE	0.45	0.28	0.32	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	ND	ND	ND	V
o - DICHLOROBENZENE	ND	ND	ND	V
1,2,4-TRICHLOROBENZENE	ND	ND	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BUVT 15354 D1	BUVT 15354 R1	BUVT 15356 D2	BUVT 15356 R2
SAMPLE DATE	1/24/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE	2/2/99	2/9/99	2/3/99	2/9/99
FILE NAME	L9BB013	L9BB009	L9BB014	L9BB010
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.57	2.27	2.51	2.36
PROPYLENE	1.18	1.13	1.13	1.05
DICHLORODIFLUOROMETHANE	0.64	0.64	0.64	0.63
CHLOROMETHANE	0.68	0.61	0.62	0.66
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.13	0.16	0.19	0.18
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	0.78
TRICHLOROFLUOROMETHANE	0.30	0.28	0.30	0.33
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.05 U	0.08 U	0.08 U	0.07 U
TRICHLOROTRIFLUOROETHANE	0.09	0.05	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.29	0.30	0.31	0.29
METHYL ETHYL KETONE	0.16	0.16	0.30	0.43
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	0.10
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.04 U	0.06	0.06
BENZENE	0.73	0.74	0.76	0.74
CARBON TETRACHLORIDE	0.08 U	0.08 U	0.08 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.37	1.33	1.38	1.37
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.07 U	0.07 U	0.07 U	0.09
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.27	0.26	0.29	0.26
m,p - XYLENE	0.74	0.72	0.77	0.73
BROMOFORM	ND	ND	ND	ND
STYRENE	0.08 U	0.10 U	0.09 U	0.10 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.38	0.37	0.38	0.37
1,3,5-TRIMETHYLBENZENE	0.13	0.13	0.13	0.14
1,2,4-TRIMETHYLBENZENE	0.34	0.35	0.36	0.36
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BUVT 15405	BUVT 15449	BUVT 15477	BUVT 15481
SAMPLE DATE	2/5/99	2/17/99	2/23/99	3/1/99
ANALYSIS DATE		3/4/99	3/10/99	3/11/99
FILE NAME		L9CD013	L9CJ017	L9CJ018
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	1.78	3.24	5.04
PROPYLENE	V	1.22	1.23	1.98
DICHLORODIFLUOROMETHANE	V	0.62	0.62	0.65
CHLOROMETHANE	V	0.60	0.69	0.67
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	ND	0.17	0.29
BROMOMETHANE	V	0.17	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	ND	ND	ND
TRICHLOROFLUOROMETHANE	V	0.53	0.30	0.37
ACRYLONITRILE	V	ND	ND	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.19	0.11	0.13
TRICHLOROTRIFLUOROETHANE	V	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	0.22	ND	0.41
METHYL ETHYL KETONE	V	0.59	0.25	3.71
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.06	0.05 U	0.05 U
BENZENE	V	1.01	1.00	1.31
CARBON TETRACHLORIDE	V	ND	0.07 U	0.08 U
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	ND	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	ND	0.12
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	1.61	1.37	2.30
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.05 U	0.06 U	0.09
TETRACHLOROETHYLENE	V	ND	ND	ND
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.28	0.25	0.43
m,p - XYLENE	V	0.83	0.75	1.34
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.05 U	0.05 U	0.11
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.40	0.35	0.65
1,3,5-TRIMETHYLBENZENE	V	0.10	0.08	0.19
1,2,4-TRIMETHYLBENZENE	V	0.33	0.18	0.59
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	ND
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
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SAMPLE SITE #	BUVT 15563	BUVT 15602 D1	BUVT 15604 D2	BUVT 15644
SAMPLE DATE	3/13/99	3/25/99	3/25/99	4/6/99
ANALYSIS DATE	3/24/99			4/22/99
FILE NAME	L9CX014			L9DV007
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.06	V	V	2.60
PROPYLENE	0.88	V	V	1.17
DICHLORODIFLUOROMETHANE	0.90	V	V	0.65
CHLOROMETHANE	0.62	V	V	0.68
DICHLOROTETRAFLUOROETHANE	ND	V	V	ND
VINYL CHLORIDE	ND	V	V	ND
1,3-BUTADIENE	0.12	V	V	0.14
BROMOMETHANE	ND	V	V	ND
CHLOROETHANE	ND	V	V	ND
ACETONITRILE	ND	V	V	ND
TRICHLOROFLUOROMETHANE	0.36	V	V	0.31
ACRYLONITRILE	ND	V	V	ND
1,1-DICHLOROETHENE	ND	V	V	ND
METHYLENE CHLORIDE	ND	V	V	0.18
TRICHLOROTRIFLUOROETHANE	0.08	V	V	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	V	V	ND
1,1 - DICHLOROETHANE	ND	V	V	ND
METHYL tert-BUTYL ETHER	0.28	V	V	0.29
METHYL ETHYL KETONE	0.46	V	V	1.25
CHLOROPRENE	ND	V	V	ND
cis-1,2-DICHLOROETHYLENE	ND	V	V	ND
BROMOCHLOROMETHANE	ND	V	V	ND
CHLOROFORM	ND	V	V	ND
ETHYL tert-BUTYL ETHER	ND	V	V	ND
1,2 - DICHLOROETHANE	ND	V	V	ND
1,1,1 - TRICHLOROETHANE	0.06	V	V	0.06
BENZENE	0.67	V	V	0.77
CARBON TETRACHLORIDE	0.05 U	V	V	0.09 U
tert-AMYL METHYL ETHER	ND	V	V	ND
1,2 - DICHLOROPROPANE	ND	V	V	ND
ETHYL ACRYLATE	ND	V	V	ND
BROMODICHLOROMETHANE	ND	V	V	ND
TRICHLOROETHYLENE	ND	V	V	ND
METHYL METHACRYLATE	ND	V	V	ND
cis -1,3 - DICHLOROPROPENE	ND	V	V	ND
METHYL ISOBUTYL KETONE	ND	V	V	0.07
trans - 1,3 - DICHLOROPROPENE	ND	V	V	ND
1,1,2 - TRICHLOROETHANE	ND	V	V	ND
TOLUENE	0.96	V	V	2.81
DIBROMOCHLOROMETHANE	ND	V	V	ND
1,2-DIBROMOETHANE	ND	V	V	ND
N-OCTANE	0.05 U	V	V	0.08 U
TETRACHLOROETHYLENE	ND	V	V	0.03 U
CHLOROBENZENE	ND	V	V	ND
ETHYLBENZENE	0.21	V	V	0.29
m,p - XYLENE	0.58	V	V	0.80
BROMOFORM	ND	V	V	ND
STYRENE	0.03 U	V	V	0.09 U
1,1,2,2 - TETRACHLOROETHANE	ND	V	V	ND
o - XYLENE	0.30	V	V	0.39
1,3,5-TRIMETHYLBENZENE	0.08	V	V	0.11
1,2,4-TRIMETHYLBENZENE	0.21	V	V	0.31
m - DICHLOROBENZENE	ND	V	V	ND
CHLOROMETHYLBENZENE	ND	V	V	ND
p - DICHLOROBENZENE	ND	V	V	ND
o - DICHLOROBENZENE	ND	V	V	ND
1,2,4-TRICHLOROBENZENE	ND	V	V	ND
HEXACHLORO-1,3-BUTADIENE	ND	V	V	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
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SAMPLE SITE #	BUVT 15676	BUVT 15733	BUVT 15795 D1	BUVT 15795 R1
SAMPLE DATE	4/18/99	4/30/99	5/12/99	5/12/99
ANALYSIS DATE	5/11/99	5/18/99	6/7/99	6/9/99
FILE NAME	L9EJ013	L9RR012	L9FG005	L9FI005
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.30	3.55	1.94	2.04
PROPYLENE	1.22	1.93	1.02	0.96
DICHLORODIFLUOROMETHANE	0.69	0.78	0.59	0.62
CHLOROMETHANE	0.68	0.75	0.66	0.67
DICHLOROTETRAFLUOROETHANE	ND	ND	0.02 U	0.02 U
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.16	0.26	0.15	0.14
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.32	0.33	0.32	0.68
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.06 U	0.69	0.17	0.18
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.44	0.49	0.21	0.22
METHYL ETHYL KETONE	0.66	0.81	0.66	0.70
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	0.01 U	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.07	0.08	0.06
BENZENE	0.77	1.30	0.63	0.62
CARBON TETRACHLORIDE	0.07 U	0.08	0.06 U	0.06 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.40	2.43	1.20	1.18
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.09	0.11	0.09	0.09
TETRACHLOROETHYLENE	ND	0.07 U	0.02 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.28	0.47	0.23	0.25
m,p - XYLENE	0.77	1.30	0.60	0.64
BROMOFORM	ND	ND	ND	ND
STYRENE	0.07 U	0.10 U	0.06 U	0.10 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.39	0.67	0.31	0.34
1,3,5-TRIMETHYLBENZENE	0.13	0.19	0.09	0.12
1,2,4-TRIMETHYLBENZENE	0.33	0.49	0.25	0.29
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
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SAMPLE SITE #	BUVT 15797 D2		BUVT 15797 R2		BUVT 15793		BUVT 15840	
SAMPLE DATE	5/12/99		5/12/99		6/24/99		6/5/99	
ANALYSIS DATE	6/7/99		6/9/99		6/7/99		6/17/99	
FILE NAME	L9FG006		L9FI006		L9FG013		L9FQ012	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.99		1.89		1.96		1.46	
PROPYLENE	0.99		0.86		0.83		0.80	
DICHLORODIFLUOROMETHANE	0.61		0.59		0.59		0.56	
CHLOROMETHANE	0.62		0.60		0.68		0.70	
DICHLOROTETRAFLUOROETHANE	0.03	U	0.03	U	0.02	U	0.01	U
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	0.13		0.12		0.10		0.11	
BROMOMETHANE	ND		ND		0.03	U	0.02	U
CHLOROETHANE	ND		0.03	U	0.06	U	ND	
ACETONITRILE	ND		ND		0.97		ND	
TRICHLOROFLUOROMETHANE	0.37		0.81		0.29		0.27	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.16		0.17		0.08	U	0.07	U
TRICHLOROTRIFLUOROETHANE	0.11		0.09		0.10		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	0.23		0.21		0.38		0.26	
METHYL ETHYL KETONE	0.50		0.38		0.46		0.64	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		0.03	U	0.02	U
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.08		0.07		0.07		0.06	
BENZENE	0.65		0.61		0.53		0.51	
CARBON TETRACHLORIDE	0.10		0.09		0.10		0.09	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		0.10		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	1.23		1.14		1.09		1.18	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.11		0.10		0.13		0.11	
TETRACHLOROETHYLENE	0.02	U	0.02	U	0.02	U	0.02	U
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.26		0.25		0.22		0.23	
m,p - XYLENE	0.65		0.63		0.50		0.57	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.09	U	0.10	U	0.09	U	0.08	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.34		0.32		0.28		0.29	
1,3,5-TRIMETHYLBENZENE	0.12		0.13		0.10		0.10	
1,2,4-TRIMETHYLBENZENE	0.27		0.27		0.25		0.26	
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		0.02	U	ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		0.01	U	ND		ND	

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SAMPLE SITE #	BUVT 15921	BUVT 16024	BUVT 16260	BUVT 16262
SAMPLE DATE	6/17/99	6/29/99	7/17/99	7/29/99
ANALYSIS DATE	6/29/99	7/20/99	8/10/99	8/10/99
FILE NAME	L9F#008	LPGT006	L9HJ007	L9HJ014
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.63	1.72	2.13	2.60
PROPYLENE	0.94	1.05	1.19	1.43
DICHLORODIFLUOROMETHANE	0.56	0.68	0.84	0.79
CHLOROMETHANE	0.63	0.72	0.85	0.80
DICHLOROTETRAFLUOROETHANE	0.01 U	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.13	0.14	0.14	0.20
BROMOMETHANE	ND	ND	0.03 U	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	17.34	ND	ND
TRICHLOROFLUOROMETHANE	0.51	0.34	0.38	0.37
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.25	0.08 U	1.68	0.16
TRICHLOROTRIFLUOROETHANE	0.09	0.10	0.11	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.39	0.47	0.80	0.37
METHYL ETHYL KETONE	0.54	0.53	2.86	0.48
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	0.02 U	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.08	0.06
BENZENE	0.65	0.71	0.93	0.87
CARBON TETRACHLORIDE	0.08 U	0.08 U	0.10	0.11
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.03 U	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	0.26	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.62	1.95	4.23	1.72
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.09	0.12	0.15	0.11
TETRACHLOROETHYLENE	ND	0.02 U	0.02 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.27	0.27	0.52	0.33
m,p - XYLENE	0.72	0.68	1.15	0.86
BROMOFORM	ND	ND	ND	ND
STYRENE	0.09 U	0.11	0.23	0.09 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.33	0.36	0.55	0.40
1,3,5-TRIMETHYLBENZENE	0.11	0.11	0.15	0.13
1,2,4-TRIMETHYLBENZENE	0.26	0.31	0.43	0.35
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	0.02 U	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	BUVT 16277	BUVT 16494	BUVT 16615	BUVT 16805
SAMPLE DATE	8/4/99	8/16/99	8/28/99	9/9/99
ANALYSIS DATE	8/16/99	9/3/99	9/14/99	10/6/99
FILE NAME	L9HP010	L9IB016	L9IN013	L9JF009
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.15	1.84	1.55	0.62
PROPYLENE	1.22	1.03	1.10	0.93
DICHLORODIFLUOROMETHANE	0.73	0.68	0.56	0.67
CHLOROMETHANE	0.74	0.66	0.65	0.62
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.16	0.13	0.12	0.12
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.43	0.90	0.30	0.34
ACRYLONITRILE	ND	ND	ND	0.21
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.07 U	0.22	0.18	0.09 U
TRICHLOROTRIFLUOROETHANE	0.10	0.09	0.08	0.14
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.24	0.67	0.59	0.42
METHYL ETHYL KETONE	0.51	0.26	0.43	0.46
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	0.02 U	0.04 U	0.04 U	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.06	0.05 U	0.07
BENZENE	0.74	0.72	0.74	0.69
CARBON TETRACHLORIDE	0.12	0.09	0.08 U	0.09
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.02 U	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.42	1.38	2.84	1.37
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.11	0.08 U	0.10	0.11
TETRACHLOROETHYLENE	0.03 U	ND	0.03 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.27	0.25	0.47	0.27
m,p - XYLENE	0.76	0.63	1.05	0.70
BROMOFORM	ND	ND	ND	ND
STYRENE	0.09 U	0.08 U	0.16	0.08 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.37	0.30	0.47	0.33
1,3,5-TRIMETHYLBENZENE	0.11	0.10	0.10	0.10
1,2,4-TRIMETHYLBENZENE	0.30	0.26	0.27	0.28
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Burlington, VT (BUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	BUVT 16901	
SAMPLE DATE	9/21/99	
ANALYSIS DATE	10/14/99	
FILE NAME	L9JN006	
UNITS	ppbv	
ACETYLENE	0.58	
PROPYLENE	1.14	
DICHLORODIFLUOROMETHANE	0.67	
CHLOROMETHANE	0.55	
DICHLOROTETRAFLUOROETHANE	ND	
VINYL CHLORIDE	ND	
1,3-BUTADIENE	0.17	
BROMOMETHANE	ND	
CHLOROETHANE	ND	
ACETONITRILE	ND	
TRICHLOROFLUOROMETHANE	0.36	
ACRYLONITRILE	0.22	
1,1-DICHLOROETHENE	ND	
METHYLENE CHLORIDE	0.09	U
TRICHLOROTRIFLUOROETHANE	0.12	
trans - 1,2 - DICHLOROETHYLENE	ND	
1,1 - DICHLOROETHANE	ND	
METHYL tert-BUTYL ETHER	0.20	
METHYL ETHYL KETONE	0.89	
CHLOROPRENE	ND	
cis-1,2-DICHLOROETHYLENE	ND	
BROMOCHLOROMETHANE	ND	
CHLOROFORM	ND	
ETHYL tert-BUTYL ETHER	ND	
1,2 - DICHLOROETHANE	ND	
1,1,1 - TRICHLOROETHANE	0.07	
BENZENE	0.65	
CARBON TETRACHLORIDE	0.10	
tert-AMYL METHYL ETHER	ND	
1,2 - DICHLOROPROPANE	ND	
ETHYL ACRYLATE	ND	
BROMODICHLOROMETHANE	ND	
TRICHLOROETHYLENE	ND	
METHYL METHACRYLATE	ND	
cis -1,3 - DICHLOROPROPENE	ND	
METHYL ISOBUTYL KETONE	ND	
trans - 1,3 - DICHLOROPROPENE	ND	
1,1,2 - TRICHLOROETHANE	ND	
TOLUENE	1.38	
DIBROMOCHLOROMETHANE	ND	
1,2-DIBROMOETHANE	ND	
N-OCTANE	0.08	U
TETRACHLOROETHYLENE	ND	
CHLOROBENZENE	ND	
ETHYLBENZENE	0.27	
m,p - XYLENE	0.73	
BROMOFORM	ND	
STYRENE	0.10	U
1,1,2,2 - TETRACHLOROETHANE	ND	
o - XYLENE	0.35	
1,3,5-TRIMETHYLBENZENE	0.12	
1,2,4-TRIMETHYLBENZENE	0.30	
m - DICHLOROBENZENE	ND	
CHLOROMETHYLBENZENE	ND	
p - DICHLOROBENZENE	ND	
o - DICHLOROBENZENE	ND	
1,2,4-TRICHLOROBENZENE	ND	
HEXACHLORO-1,3-BUTADIENE	ND	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Camden, NJ (CANJ)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	CANJ 14769	CANJ 14889	CANJ 14969	CANJ 15085
SAMPLE DATE	9/8/98	9/14/98	9/20/98	10/2/98
ANALYSIS DATE	9/25/98	10/14/98	10/14/98	10/22/98
FILE NAME	L8IY020	L8JM013	L8JM027	L8JV018
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.63	1.18	1.40	1.44
PROPYLENE	0.25	0.68	1.88	1.19
DICHLORODIFLUOROMETHANE	0.83	0.60	0.76	0.66
CHLOROMETHANE	0.52	0.86	0.85	0.82
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	0.04 U	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.35	0.29	0.28	0.29
ACRYLONITRILE	ND	0.96	1.00	0.64
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.13	0.17	0.13
TRICHLOROTRIFLUOROETHANE	0.07	0.08	0.09	0.07
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.68	0.70	1.86	1.26
METHYL ETHYL KETONE	1.14	0.67	0.78	0.77
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.07	0.10	0.07
BENZENE	0.38	0.45	0.75	0.93
CARBON TETRACHLORIDE	0.11	0.10	0.10	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.61	0.69	1.67	1.25
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.36	0.08 U	0.06 U	0.10
TETRACHLOROETHYLENE	ND	ND	0.05 U	0.07 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.10	0.13	0.23	0.20
m,p - XYLENE	0.28	0.31	0.64	0.58
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	0.06 U	0.07 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.16	0.16	0.30	0.28
1,3,5-TRIMETHYLBENZENE	ND	0.09	0.08	0.08
1,2,4-TRIMETHYLBENZENE	0.09	0.20	0.27	0.26
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	0.05 U	0.09	0.10
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Camden, NJ (CANJ)
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SAMPLE SITE #	CANJ 15120	CANJ 15143	CANJ 15177	CANJ 15211
SAMPLE DATE	10/14/98	10/26/98	11/7/98	11/19/98
ANALYSIS DATE	10/30/98	11/3/98	11/18/98	12/8/98
FILE NAME	L8J%007	L8KC013	L8KR011	L8LH008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.62	3.64	1.88	3.01
PROPYLENE	0.96	1.56	0.77	0.91
DICHLORODIFLUOROMETHANE	0.70	0.91	0.51	0.64
CHLOROMETHANE	0.71	0.89	0.53	0.62
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	0.13	0.07	0.09
BROMOMETHANE	ND	ND	0.12	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	0.72	ND
TRICHLOROFLUOROMETHANE	0.39	0.37	0.26	0.28
ACRYLONITRILE	ND	1.05	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.18	0.40	0.06 U	0.17
TRICHLOROTRIFLUOROETHANE	0.08	0.09	0.07	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.71	2.22	0.59	1.02
METHYL ETHYL KETONE	0.90	0.82	0.45	0.52
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.17	0.06	0.06
BENZENE	0.61	0.82	0.60	0.73
CARBON TETRACHLORIDE	0.09	0.10	0.08 U	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	0.06 U	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.04	1.94	1.01	1.44
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.24	0.13	0.09	0.08 U
TETRACHLOROETHYLENE	0.11	0.09 U	0.11	0.15
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.16	0.26	0.16	0.19
m,p - XYLENE	0.40	0.76	0.41	0.51
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	0.16	0.07 U	0.08 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.18	0.37	0.21	0.27
1,3,5-TRIMETHYLBENZENE	0.07 U	0.13	0.06 U	0.09
1,2,4-TRIMETHYLBENZENE	0.17	0.38	0.20	0.27
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.06 U	0.11	0.05 U	0.04 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Camden, NJ (CANJ)
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SAMPLE SITE #	CANJ 15217 D1	CANJ 16227 D2	CANJ 15262	CANJ 16276
SAMPLE DATE	12/1/98	12/1/98	12/13/98	12/26/98
ANALYSIS DATE		12/8/98	12/31/98	1/12/99
FILE NAME		L8LH009	L9LV016	L9AK013
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	1.86	3.72	3.76
PROPYLENE	V	1.19	2.93	1.72
DICHLORODIFLUOROMETHANE	V	0.59	0.69	0.66
CHLOROMETHANE	V	0.58	0.76	0.66
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	0.04 U	0.14	0.12
BROMOMETHANE	V	ND	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	2.45	ND	ND
TRICHLOROFLUOROMETHANE	V	0.28	0.32	0.31
ACRYLONITRILE	V	ND	0.66	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.13	0.21	0.09 U
TRICHLOROTRIFLUOROETHANE	V	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	0.82	1.34	0.73
METHYL ETHYL KETONE	V	0.37	0.59	0.52
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.07	0.12	0.05 U
BENZENE	V	0.60	1.00	0.86
CARBON TETRACHLORIDE	V	0.10	0.08 U	0.06 U
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	ND	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	1.07	1.61	1.23
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.09	0.13	0.08 U
TETRACHLOROETHYLENE	V	0.11	0.06 U	ND
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.17	0.25	0.19
m,p - XYLENE	V	0.46	0.70	0.47
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.09 U	0.09 U	0.07 U
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.22	0.36	0.26
1,3,5-TRIMETHYLBENZENE	V	0.09	0.10	0.08
1,2,4-TRIMETHYLBENZENE	V	0.22	0.29	0.20
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	ND
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Camden, NJ (CANJ)
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SAMPLE SITE #	CANJ 15316		CANJ 15377 D1		CANJ 15377R1		CANJ 13379 D2	
SAMPLE DATE	1/6/99		1/30/99		1/30/99		1/30/99	
ANALYSIS DATE	1/21/99		2/11/99		2/12/99		2/11/99	
FILE NAME	L9AU009		L9BJ007		L9BL006		L9BJ008	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.82		2.44		2.74		2.39	
PROPYLENE	1.53		0.89		0.92		0.84	
DICHLORODIFLUOROMETHANE	0.70		0.65		0.66		0.71	
CHLOROMETHANE	0.63		0.62		0.63		0.63	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	0.09		0.12		0.11		0.12	
BROMOMETHANE	ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.35		0.43		0.46		0.63	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.43		0.20		0.18		0.25	
TRICHLOROTRIFLUOROETHANE	0.10		0.08		0.08		0.08	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	0.52		0.57		0.59		0.51	
METHYL ETHYL KETONE	0.06		0.47		0.49		0.48	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.06		0.06		0.06		0.07	
BENZENE	0.89		0.64		0.69		0.66	
CARBON TETRACHLORIDE	0.09		0.07	U	0.08	U	0.08	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	1.04		1.22		1.21		1.17	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.08	U	0.09		0.08	U	0.08	U
TETRACHLOROETHYLENE	0.03	U	0.05	U	0.04	U	0.05	U
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.18		0.21		0.20		0.20	
m,p - XYLENE	0.47		0.52		0.51		0.49	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.07	U	0.13		0.10	U	0.12	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.25		0.29		0.27		0.26	
1,3,5-TRIMETHYLBENZENE	0.07	U	0.11		0.08		0.11	
1,2,4-TRIMETHYLBENZENE	0.18		0.28		0.25		0.28	
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Camden, NJ (CANJ)
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SAMPLE SITE #	CANJ 15379 R2	CANJ 15453	CANJ 15463	CANJ 15511
SAMPLE DATE	1/30/99	2/17/99	2/23/99	3/7/99
ANALYSIS DATE	2/12/99	3/4/99	3/4/99	3/17/99
FILE NAME	L9BL006	L9CD016	L9CD019	L9CQ009
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.50	3.29	1.27	1.43
PROPYLENE	0.87	1.10	0.35	0.41
DICHLORODIFLUOROMETHANE	0.72	0.55	0.40	0.54
CHLOROMETHANE	0.63	0.47	0.48	0.64
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.09	0.14	0.02 U	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	0.73
TRICHLOROFLUOROMETHANE	0.79	0.40	0.20	0.27
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.29	0.32	0.07 U	0.08 U
TRICHLOROTRIFLUOROETHANE	0.10	0.08	0.06	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.50	1.21	0.25	0.83
METHYL ETHYL KETONE	0.52	0.59	0.21	0.34
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.04 U	0.04 U	0.06
BENZENE	0.65	0.74	0.34	0.43
CARBON TETRACHLORIDE	0.07 U	0.05 U	0.05 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.04 U	0.07	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.22	1.72	0.44	0.48
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.08 U	0.12	ND	0.04 U
TETRACHLOROETHYLENE	0.03 U	0.14	0.03 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.19	0.24	0.06 U	0.10
m,p - XYLENE	0.47	0.70	0.18	0.21
BROMOFORM	ND	ND	ND	ND
STYRENE	0.10 U	0.05 U	0.02 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.25	0.33	0.09	0.12
1,3,5-TRIMETHYLBENZENE	0.09	0.09	ND	0.05 U
1,2,4-TRIMETHYLBENZENE	0.22	0.29	0.05 U	0.09
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	CANJ 15535	CANJ 15624 D1	CANJ 15624 R1	CANJ 15626 D2
SAMPLE DATE	3/13/99	3/25/99	3/25/99	3/25/99
ANALYSIS DATE	3/24/99	4/16/99	4/21/99	4/22/99
FILE NAME	L9CX007	L9DP012	L9DU009	L9DV005
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.79	1.37	1.46	1.59
PROPYLENE	1.13	0.43	0.47	0.47
DICHLORODIFLUOROMETHANE	0.63	0.50	0.65	0.68
CHLOROMETHANE	0.70	0.56	0.64	0.67
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.32	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	2.65	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.29	0.24	0.74	0.69
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.13	0.12	0.35	0.38
TRICHLOROTRIFLUOROETHANE	0.12	0.07	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.32	0.31	0.27	0.29
METHYL ETHYL KETONE	1.21	0.52	0.54	0.55
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.04 U	0.05 U	0.05 U
BENZENE	0.70	0.36	0.39	0.42
CARBON TETRACHLORIDE	0.08 U	0.05 U	0.09 U	0.09
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.07	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.28	0.57	0.65	0.66
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.09	0.05 U	0.06 U	0.07 U
TETRACHLOROETHYLENE	ND	0.05 U	0.04 U	0.06 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.24	0.11	0.13	0.13
m,p - XYLENE	0.66	0.27	0.32	0.31
BROMOFORM	ND	ND	ND	ND
STYRENE	0.10	0.05 U	0.06 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.34	0.15	0.16	0.16
1,3,5-TRIMETHYLBENZENE	0.12	0.06 U	0.08	0.06 U
1,2,4-TRIMETHYLBENZENE	0.29	0.14	0.18	0.16
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	CANJ 15626 R2		CANJ 15686	CANJ 15709		CANJ 15786	
SAMPLE DATE	3/25/99		4/18/99	4/30/99		5/24/99	
ANALYSIS DATE	4/21/99			5/26/99		6/7/99	
FILE NAME	L9DU010			L9EZ011		L9FG011	
UNITS	ppbv		ppbv	ppbv		ppbv	
ACETYLENE	1.50		V	1.61		1.81	
PROPYLENE	0.45		V	0.65		1.52	
DICHLORODIFLUOROMETHANE	0.64		V	0.76		0.64	
CHLOROMETHANE	0.69		V	0.93		0.86	
DICHLOROTETRAFLUOROETHANE	ND		V	ND		0.02	U
VINYL CHLORIDE	ND		V	ND		ND	
1,3-BUTADIENE	ND		V	ND		0.11	
BROMOMETHANE	ND		V	ND		0.03	U
CHLOROETHANE	ND		V	ND		0.03	U
ACETONITRILE	ND		V	ND		ND	
TRICHLOROFLUOROMETHANE	0.68		V	0.29		0.39	
ACRYLONITRILE	ND		V	0.91		1.15	
1,1-DICHLOROETHENE	ND		V	ND		ND	
METHYLENE CHLORIDE	0.30		V	0.09	U	0.16	
TRICHLOROTRIFLUOROETHANE	0.09		V	0.11		0.10	
trans - 1,2 - DICHLOROETHYLENE	ND		V	ND		ND	
1,1 - DICHLOROETHANE	ND		V	ND		ND	
METHYL tert-BUTYL ETHER	0.29		V	0.64		1.15	
METHYL ETHYL KETONE	0.52		V	0.66		0.97	
CHLOROPRENE	ND		V	ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		V	ND		ND	
BROMOCHLOROMETHANE	ND		V	ND		ND	
CHLOROFORM	ND		V	ND		ND	
ETHYL tert-BUTYL ETHER	ND		V	ND		ND	
1,2 - DICHLOROETHANE	ND		V	ND		ND	
1,1,1 - TRICHLOROETHANE	0.04	U	V	0.07		0.09	
BENZENE	0.39		V	0.43		0.64	
CARBON TETRACHLORIDE	0.10		V	0.10		0.10	
tert-AMYL METHYL ETHER	ND		V	ND		ND	
1,2 - DICHLOROPROPANE	ND		V	ND		ND	
ETHYL ACRYLATE	ND		V	ND		ND	
BROMODICHLOROMETHANE	ND		V	ND		ND	
TRICHLOROETHYLENE	ND		V	ND		ND	
METHYL METHACRYLATE	ND		V	ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		V	ND		ND	
METHYL ISOBUTYL KETONE	ND		V	0.09		0.11	
trans - 1,3 - DICHLOROPROPENE	ND		V	ND		ND	
1,1,2 - TRICHLOROETHANE	ND		V	ND		ND	
TOLUENE	0.66		V	0.78		1.36	
DIBROMOCHLOROMETHANE	ND		V	ND		ND	
1,2-DIBROMOETHANE	ND		V	ND		ND	
N-OCTANE	0.06	U	V	0.06	U	0.20	
TETRACHLOROETHYLENE	0.04	U	V	ND		0.08	U
CHLOROBENZENE	ND		V	ND		ND	
ETHYLBENZENE	0.13		V	0.15		0.21	
m,p - XYLENE	0.31		V	0.34		0.61	
BROMOFORM	ND		V	ND		ND	
STYRENE	0.07	U	V	0.07	U	0.09	U
1,1,2,2 - TETRACHLOROETHANE	ND		V	ND		ND	
o - XYLENE	0.16		V	0.19		0.28	
1,3,5-TRIMETHYLBENZENE	0.07	U	V	0.08		0.10	
1,2,4-TRIMETHYLBENZENE	0.19		V	0.17		0.27	
m - DICHLOROBENZENE	ND		V	ND		ND	
CHLOROMETHYLBENZENE	ND		V	ND		ND	
p - DICHLOROBENZENE	ND		V	ND		0.07	U
o - DICHLOROBENZENE	ND		V	ND		ND	
1,2,4-TRICHLOROBENZENE	ND		V	ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		V	ND		ND	

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SAMPLE SITE #	CANJ 15902		CANJ 15995		CANJ 16000		CANJ 16036	
SAMPLE DATE	6/5/99		6/17/99		7/5/99		7/11/99	
ANALYSIS DATE	6/24/99		7/14/99		7/20/99		7/28/99	
FILE NAME	L9FW009		L9GN009		L9GT011		L9GI009	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.12		0.97		1.03		0.63	
PROPYLENE	1.08		0.85		2.04		0.41	
DICHLORODIFLUOROMETHANE	0.61		0.80		0.74		0.66	
CHLOROMETHANE	0.97		1.00		1.01		0.71	
DICHLOROTETRAFLUOROETHANE	ND		0.02	U	0.01	U	ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	0.04	U	0.04	U	0.05		0.02	U
BROMOMETHANE	0.05		0.04		0.03	U	ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		0.27		ND	
TRICHLOROFLUOROMETHANE	0.28		0.38		0.35		0.32	
ACRYLONITRILE	ND		0.94		ND		0.70	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.11		0.10		0.10		0.09	U
TRICHLOROTRIFLUOROETHANE	0.10		0.12		0.11		0.12	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	1.18		0.42		0.84		0.34	
METHYL ETHYL KETONE	1.06		1.55		1.26		0.52	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		0.01	U	ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.07		0.08		0.07		0.06	
BENZENE	0.47		0.33		0.42		0.29	
CARBON TETRACHLORIDE	0.05	U	0.10		0.09	U	0.10	
tert-AMYL METHYL ETHER	0.02	U	ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		0.06		0.07	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		0.18		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.77		0.64		1.33		0.42	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.12		0.07	U	0.11		0.06	U
TETRACHLOROETHYLENE	0.03	U	0.07	U	0.03	U	0.08	U
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.14		0.11		0.17		0.09	U
m,p - XYLENE	0.38		0.24		37.00		0.19	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.06	U	0.07	U	0.10	U	0.05	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.18		0.13		0.19		0.11	
1,3,5-TRIMETHYLBENZENE	0.07	U	0.07	U	0.07	U	0.05	U
1,2,4-TRIMETHYLBENZENE	0.16		0.17		0.17		0.10	
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	0.08		0.02	U	0.09		0.03	U
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	0.01	U	ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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SAMPLE SITE #	CANJ 16187		CANJ 16241		CANJ 16363		CANJ 16601	
SAMPLE DATE	7/23/99		8/4/99		8/16/99		8/28/99	
ANALYSIS DATE	8/10/99		8/11/99		9/2/99		9/16/99	
FILE NAME	L9HJ015		L9HJ017		L9IB007		L9IN016	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.28		1.16		1.19		1.53	
PROPYLENE	1.31		0.70		0.72		6.23	
DICHLORODIFLUOROMETHANE	0.77		0.82		0.68		0.80	
CHLOROMETHANE	1.21		1.14		0.98		1.01	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	0.04	U	0.04	U	ND		0.06	
BROMOMETHANE	0.14		ND		0.05		0.18	
CHLOROETHANE	0.11		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.46		0.35		0.39		0.36	
ACRYLONITRILE	ND		ND		ND		1.03	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.20		0.16		0.13		0.14	
TRICHLOROTRIFLUOROETHANE	0.14		0.11		0.10		0.10	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	1.33		0.80		1.62		1.65	
METHYL ETHYL KETONE	1.87		0.64		1.05		0.77	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.08		0.07		0.07		0.08	
BENZENE	0.66		0.39		0.57		0.69	
CARBON TETRACHLORIDE	0.11		0.11		0.10		0.10	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		0.02	U	ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	1.17		0.71		1.66		1.15	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.19		0.07	U	0.11		0.15	
TETRACHLOROETHYLENE	0.06	U	0.05	U	0.08	U	0.07	U
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.19		0.13		0.26		0.18	
m,p - XYLENE	0.41		0.33		0.54		0.49	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.07	U	0.05	U	0.19		0.11	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.20		0.16		0.29		0.25	
1,3,5-TRIMETHYLBENZENE	0.07	U	0.06	U	0.09		0.09	
1,2,4-TRIMETHYLBENZENE	0.17		0.15		0.22		0.23	
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	0.03	U	0.06	U	0.03	U	0.08	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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SAMPLE SITE #	CANJ 16713	CANJ 16790 D1	CANJ 16790 R1	CANJ 16791 D2
SAMPLE DATE	9/9/99	9/15/99	9/15/99	9/15/99
ANALYSIS DATE	9/22/99	10/12/99	10/18/99	10/12/99
FILE NAME	L9IV012	L9JK019	L9JL014	L9JK020
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.58	0.75	0.71	0.72
PROPYLENE	0.86	1.28	1.07	1.22
DICHLORODIFLUOROMETHANE	0.69	0.81	0.66	0.75
CHLOROMETHANE	1.15	1.02	0.85	0.67
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.08	0.11	0.08	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	2.83
TRICHLOROFLUOROMETHANE	0.33	0.37	0.32	0.33
ACRYLONITRILE	1.14	0.62	0.47	0.62
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.19	0.29	0.25	0.30
TRICHLOROTRIFLUOROETHANE	0.12	0.11	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	1.13	1.40	1.17	1.34
METHYL ETHYL KETONE	0.59	0.54	0.48	0.60
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	0.03 U
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.08	0.07	0.06	0.08
BENZENE	0.51	0.56	0.48	0.57
CARBON TETRACHLORIDE	0.11	0.09 U	0.07 U	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	0.08	0.06 U	0.06
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.08	2.01	1.61	1.99
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.11	0.15	0.13	0.14
TETRACHLOROETHYLENE	0.05 U	0.20	0.17	0.19
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.17	0.25	0.19	0.24
m,p - XYLENE	0.48	0.68	0.57	0.69
BROMOFORM	ND	ND	ND	ND
STYRENE	0.09 U	0.07 U	0.07 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.24	0.33	0.26	0.32
1,3,5-TRIMETHYLBENZENE	0.12	0.11	0.08	0.11
1,2,4-TRIMETHYLBENZENE	0.27	0.30	0.24	0.28
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.07 U	0.05 U	0.04 U	0.04 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Camden, NJ (CANJ)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	CANJ 16791 R2	
SAMPLE DATE	9/16/99	
ANALYSIS DATE	10/13/99	
FILE NAME	L9JL015	
UNITS	ppbv	
ACETYLENE	0.83	
PROPYLENE	1.27	
DICHLORODIFLUOROMETHANE	0.80	
CHLOROMETHANE	0.73	
DICHLOROTETRAFLUOROETHANE	ND	
VINYL CHLORIDE	ND	
1,3-BUTADIENE	ND	
BROMOMETHANE	ND	
CHLOROETHANE	ND	
ACETONITRILE	3.33	
TRICHLOROFLUOROMETHANE	0.36	
ACRYLONITRILE	0.52	
1,1-DICHLOROETHENE	ND	
METHYLENE CHLORIDE	0.28	
TRICHLOROTRIFLUOROETHANE	0.10	
trans - 1,2 - DICHLOROETHYLENE	ND	
1,1 - DICHLOROETHANE	ND	
METHYL tert-BUTYL ETHER	1.43	
METHYL ETHYL KETONE	0.74	
CHLOROPRENE	ND	
cis-1,2-DICHLOROETHYLENE	ND	
BROMOCHLOROMETHANE	ND	
CHLOROFORM	0.03	U
ETHYL tert-BUTYL ETHER	ND	
1,2 - DICHLOROETHANE	ND	
1,1,1 - TRICHLOROETHANE	0.07	
BENZENE	0.60	
CARBON TETRACHLORIDE	0.10	
tert-AMYL METHYL ETHER	ND	
1,2 - DICHLOROPROPANE	ND	
ETHYL ACRYLATE	ND	
BROMODICHLOROMETHANE	ND	
TRICHLOROETHYLENE	0.07	
METHYL METHACRYLATE	ND	
cis -1,3 - DICHLOROPROPENE	ND	
METHYL ISOBUTYL KETONE	ND	
trans - 1,3 - DICHLOROPROPENE	ND	
1,1,2 - TRICHLOROETHANE	ND	
TOLUENE	2.07	
DIBROMOCHLOROMETHANE	ND	
1,2-DIBROMOETHANE	ND	
N-OCTANE	0.16	
TETRACHLOROETHYLENE	0.21	
CHLOROBENZENE	ND	
ETHYLBENZENE	0.25	
m,p - XYLENE	0.71	
BROMOFORM	ND	
STYRENE	0.05	U
1,1,2,2 - TETRACHLOROETHANE	ND	
o - XYLENE	0.33	
1,3,5-TRIMETHYLBENZENE	0.10	
1,2,4-TRIMETHYLBENZENE	0.28	
m - DICHLOROBENZENE	ND	
CHLOROMETHYLBENZENE	ND	
p - DICHLOROBENZENE	0.05	U
o - DICHLOROBENZENE	ND	
1,2,4-TRICHLOROBENZENE	ND	
HEXACHLORO-1,3-BUTADIENE	ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - El Paso, TX (EPTX)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	EPTX 14893	EPTX 15000	EPTX 15066	EPTX 15128
SAMPLE DATE	9/14/98	9/20/98	10/2/98	10/14/98
ANALYSIS DATE	10/14/98	10/15/98	10/22/98	11/3/98
FILE NAME	L8JM012	L8JO007	L8JV012	L8KC008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.02	2.71	3.63	4.06
PROPYLENE	1.16	1.00	1.55	1.76
DICHLORODIFLUOROMETHANE	0.78	0.63	0.58	0.71
CHLOROMETHANE	1.10	0.84	0.67	0.90
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.12	0.13	0.17	0.28
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	1.20	0.53	0.26	0.30
ACRYLONITRILE	0.91	0.67	ND	1.15
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	3.45	1.32	0.69	0.60
TRICHLOROTRIFLUOROETHANE	0.10	0.08	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	0.12	0.76	0.66
METHYL ETHYL KETONE	1.32	1.54	0.51	1.39
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	0.09	0.05 U	0.05 U
BENZENE	1.13	0.97	1.54	1.21
CARBON TETRACHLORIDE	0.08 U	0.11	0.07 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	0.59	0.52
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	0.12	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	2.25	3.22	2.41	2.58
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.11	0.12	0.10	0.10
TETRACHLOROETHYLENE	ND	0.14	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.40	0.39	0.42	0.41
m,p - XYLENE	1.03	0.89	1.25	1.15
BROMOFORM	ND	ND	ND	ND
STYRENE	0.09 U	0.26	0.11 U	0.12
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.48	0.42	0.61	0.56
1,3,5-TRIMETHYLBENZENE	0.15	0.11	0.15	0.17
1,2,4-TRIMETHYLBENZENE	0.43	0.35	0.59	0.51
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.08	ND	ND	0.07 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - El Paso, TX (EPTX)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	EPTX 15149	EPTX 15183	EPTX 15207	EPTX 15233
SAMPLE DATE	10/26/98	11/7/98	11/19/98	12/1/98
ANALYSIS DATE	11/3/98	11/18/98	11/30/98	12/6/98
FILE NAME	L8KC014	L8HR013	L8K$017	L8LH015
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	6.52	6.13	7.64	8.11
PROPYLENE	2.43	1.71	2.26	2.70
DICHLORODIFLUOROMETHANE	0.76	0.59	0.66	0.71
CHLOROMETHANE	1.14	0.87	0.80	0.77
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.41	0.29	0.38	0.45
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	8.05
TRICHLOROFLUOROMETHANE	0.36	0.29	0.29	0.30
ACRYLONITRILE	1.64	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	1.12	1.40	0.81	0.97
TRICHLOROTRIFLUOROETHANE	0.10	0.10	0.12	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.78	0.59	0.92	1.06
METHYL ETHYL KETONE	0.74	0.65	0.80	1.13
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.06	0.06	0.06
BENZENE	1.40	1.41	1.82	2.25
CARBON TETRACHLORIDE	0.10	0.07 U	0.07 U	0.09
tert-AMYL METHYL ETHER	0.54	ND	0.77	0.80
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	0.08
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	2.62	2.24	3.13	4.86
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.11	0.11	0.19	0.28
TETRACHLOROETHYLENE	ND	ND	ND	0.04 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.47	0.43	0.55	0.77
m,p - XYLENE	1.32	1.15	1.52	2.00
BROMOFORM	ND	ND	ND	ND
STYRENE	0.14	0.11	0.19	0.19
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.67	0.58	0.76	0.95
1,3,5-TRIMETHYLBENZENE	0.19	0.16	0.43	0.27
1,2,4-TRIMETHYLBENZENE	0.59	0.49	1.27	0.85
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.06 U	ND	ND	0.10
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - El Paso, TX (EPTX)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	EPTX 15266	EPTX 15290	EPTX 15343	EPTX 15389
SAMPLE DATE	12/13/98	12/25/98	1/6/99	1/30/99
ANALYSIS DATE	12/31/98	12/25/99		2/12/99
FILE NAME	L8LV015	L9AK016		L9BL010
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	18.89	10.50	V	6.03
PROPYLENE	4.72	3.40	V	1.89
DICHLORODIFLUOROMETHANE	0.85	0.70	V	0.67
CHLOROMETHANE	0.85	1.05	V	0.78
DICHLOROTETRAFLUOROETHANE	ND	ND	V	ND
VINYL CHLORIDE	ND	ND	V	ND
1,3-BUTADIENE	0.79	0.52	V	0.35
BROMOMETHANE	ND	ND	V	ND
CHLOROETHANE	ND	ND	V	ND
ACETONITRILE	ND	ND	V	11.63
TRICHLOROFLUOROMETHANE	0.33	0.31	V	0.31
ACRYLONITRILE	ND	1.15	V	ND
1,1-DICHLOROETHENE	ND	ND	V	ND
METHYLENE CHLORIDE	1.03	1.66	V	0.90
TRICHLOROTRIFLUOROETHANE	0.11	0.11	V	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	V	ND
1,1 - DICHLOROETHANE	ND	ND	V	ND
METHYL tert-BUTYL ETHER	1.69	1.22	V	0.73
METHYL ETHYL KETONE	0.82	1.19	V	0.82
CHLOROPRENE	ND	ND	V	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	V	ND
BROMOCHLOROMETHANE	ND	ND	V	ND
CHLOROFORM	ND	ND	V	ND
ETHYL tert-BUTYL ETHER	ND	ND	V	ND
1,2 - DICHLOROETHANE	ND	ND	V	ND
1,1,1 - TRICHLOROETHANE	0.07	0.05 U	V	0.05 U
BENZENE	3.36	2.08	V	1.43
CARBON TETRACHLORIDE	0.11	0.05 U	V	0.08 U
tert-AMYL METHYL ETHER	0.94	1.05	V	0.65
1,2 - DICHLOROPROPANE	ND	ND	V	ND
ETHYL ACRYLATE	ND	ND	V	ND
BROMODICHLOROMETHANE	ND	ND	V	ND
TRICHLOROETHYLENE	ND	ND	V	ND
METHYL METHACRYLATE	ND	ND	V	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	V	ND
METHYL ISOBUTYL KETONE	ND	ND	V	0.05
trans - 1,3 - DICHLOROPROPENE	ND	ND	V	ND
1,1,2 - TRICHLOROETHANE	ND	ND	V	ND
TOLUENE	6.19	3.88	V	2.46
DIBROMOCHLOROMETHANE	ND	ND	V	ND
1,2-DIBROMOETHANE	ND	ND	V	ND
N-OCTANE	0.31	0.29	V	0.18
TETRACHLOROETHYLENE	0.05 U	0.07 U	V	0.02 U
CHLOROBENZENE	ND	ND	V	ND
ETHYLBENZENE	1.04	0.61	V	0.42
m,p - XYLENE	2.79	1.81	V	1.15
BROMOFORM	ND	ND	V	ND
STYRENE	0.19	0.15	V	0.12
1,1,2,2 - TETRACHLOROETHANE	ND	ND	V	ND
o - XYLENE	1.27	0.87	V	0.54
1,3,5-TRIMETHYLBENZENE	0.34	0.25	V	0.18
1,2,4-TRIMETHYLBENZENE	1.08	0.72	V	0.50
m - DICHLOROBENZENE	ND	ND	V	ND
CHLOROMETHYLBENZENE	ND	ND	V	ND
p - DICHLOROBENZENE	0.12	0.03 U	V	0.02 U
o - DICHLOROBENZENE	ND	ND	V	ND
1,2,4-TRICHLOROBENZENE	ND	ND	V	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	V	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - El Paso, TX (EPTX)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	EPTX 15401 D1	EPTX 15401 R1	EPTX 15403 D2	EPTX 15403 R2
SAMPLE DATE	2/11/99	2/11/99	2/11/99	2/11/99
ANALYSIS DATE	2/17/99	2/23/99	2/17/99	2/23/99
FILE NAME	L9BQ012	L9BW010	L9BQ013	L9BW011
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.48	2.41	2.43	2.69
PROPYLENE	0.99	0.98	1.09	1.17
DICHLORODIFLUOROMETHANE	0.61	0.60	0.62	0.66
CHLOROMETHANE	0.58	0.61	0.73	0.77
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.18	0.15	0.09	0.11
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.27	0.28	0.28	0.29
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.58	0.59	0.54	0.57
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.07	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.25	0.29	0.19	0.20
METHYL ETHYL KETONE	0.31	0.41	0.52	0.71
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.06	0.06	0.04 U
BENZENE	0.73	0.76	0.78	0.75
CARBON TETRACHLORIDE	0.07 U	0.06 U	0.10	0.09
tert-AMYL METHYL ETHER	0.23	0.24	0.09	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.06	1.07	0.93	0.90
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.09	0.07 U	0.07 U	0.07 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.18	0.18	0.18	0.17
m,p - XYLENE	0.45	0.45	0.45	0.44
BROMOFORM	ND	ND	ND	ND
STYRENE	0.06 U	0.06 U	0.02 U	0.02 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.23	0.24	0.22	0.21
1,3,5-TRIMETHYLBENZENE	0.07 U	0.07 U	0.07 U	0.07 U
1,2,4-TRIMETHYLBENZENE	0.20	0.20	0.18	0.15
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - El Paso, TX (EPTX)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	EPTX 15433		EPTX 15465		EPTX 15455		EPTX 15495
SAMPLE DATE	2/17/99		2/23/99		3/1/99		3/7/99
ANALYSIS DATE	3/4/99		3/5/99		3/10/99		
FILE NAME	L9CD010		L9CD017		L9CJ012		
UNITS	ppbv		ppbv		ppbv		ppbv
ACETYLENE	7.29		5.57		5.52		V
PROPYLENE	2.69		2.06		2.04		V
DICHLORODIFLUOROMETHANE	0.64		0.44		0.65		V
CHLOROMETHANE	0.72		0.60		0.87		V
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		V
VINYL CHLORIDE	ND		ND		ND		V
1,3-BUTADIENE	0.47		0.32		0.33		V
BROMOMETHANE	ND		ND		ND		V
CHLOROETHANE	ND		ND		ND		V
ACETONITRILE	ND		ND		ND		V
TRICHLOROFLUOROMETHANE	0.28		0.21		0.32		V
ACRYLONITRILE	0.83		ND		0.92		V
1,1-DICHLOROETHENE	ND		ND		ND		V
METHYLENE CHLORIDE	0.81		0.68		0.79		V
TRICHLOROTRIFLUOROETHANE	0.09		0.07		0.08		V
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		V
1,1 - DICHLOROETHANE	ND		ND		ND		V
METHYL tert-BUTYL ETHER	1.09		0.77		0.87		V
METHYL ETHYL KETONE	2.00		0.54		0.84		V
CHLOROPRENE	ND		ND		ND		V
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		V
BROMOCHLOROMETHANE	ND		ND		ND		V
CHLOROFORM	ND		ND		ND		V
ETHYL tert-BUTYL ETHER	ND		ND		ND		V
1,2 - DICHLOROETHANE	ND		ND		ND		V
1,1,1 - TRICHLOROETHANE	0.05	U	0.03	U	0.05	U	V
BENZENE	1.79		1.48		1.34		V
CARBON TETRACHLORIDE	0.04	U	0.05	U	0.07	U	V
tert-AMYL METHYL ETHER	ND		0.59		0.64	U	V
1,2 - DICHLOROPROPANE	ND		ND		ND		V
ETHYL ACRYLATE	0.06		ND		ND		V
BROMODICHLOROMETHANE	ND		ND		ND		V
TRICHLOROETHYLENE	0.03	U	ND		ND		V
METHYL METHACRYLATE	ND		ND		ND		V
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		V
METHYL ISOBUTYL KETONE	0.31		ND		ND		V
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		V
1,1,2 - TRICHLOROETHANE	ND		ND		ND		V
TOLUENE	2.98		2.29		2.72		V
DIBROMOCHLOROMETHANE	ND		ND		ND		V
1,2-DIBROMOETHANE	ND		ND		ND		V
N-OCTANE	0.12		0.09		0.17		V
TETRACHLOROETHYLENE	0.05	U	0.03	U	ND		V
CHLOROBENZENE	ND		ND		ND		V
ETHYLBENZENE	0.48		0.36		0.45		V
m,p - XYLENE	1.39		1.09		1.39		V
BROMOFORM	ND		ND		ND		V
STYRENE	0.09	U	0.06	U	0.07	U	V
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		V
o - XYLENE	0.65		0.49		0.67		V
1,3,5-TRIMETHYLBENZENE	0.19		0.13		0.33		V
1,2,4-TRIMETHYLBENZENE	0.58		0.38		0.99		V
m - DICHLOROBENZENE	ND		ND		ND		V
CHLOROMETHYLBENZENE	ND		ND		ND		V
p - DICHLOROBENZENE	0.09		0.04	U	ND		V
o - DICHLOROBENZENE	ND		ND		ND		V
1,2,4-TRICHLOROBENZENE	0.18		ND		ND		V
HEXACHLORO-1,3-BUTADIENE	0.19		ND		ND		V

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SAMPLE SITE #	EPTX 15527	EPTX 15525	EPTX 15616	EPTX 15634
SAMPLE DATE	3/13/99	3/19/99	3/31/99	4/6/99
ANALYSIS DATE	3/24/99	3/24/99	4/16/99	4/22/99
FILE NAME	L9CX009	L9CX010	L9DP015	L9DV008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	4.09	3.38	1.45	11.29
PROPYLENE	1.38	1.24	0.35	3.77
DICHLORODIFLUOROMETHANE	0.64	0.63	0.59	0.74
CHLOROMETHANE	0.73	0.66	0.64	0.81
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.20	0.14	ND	0.65
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	8.13	ND
TRICHLOROFLUOROMETHANE	0.29	0.28	0.29	0.30
ACRYLONITRILE	0.66	0.58	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.56	0.68	0.38	0.85
TRICHLOROTRIFLUOROETHANE	0.08	0.09	0.09	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.42	0.52	ND	0.71
METHYL ETHYL KETONE	0.98	0.63	3.39	2.02
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.05 U	0.07	0.06 U
BENZENE	1.16	1.03	0.47	3.09
CARBON TETRACHLORIDE	0.07 U	0.07 U	0.08 U	0.07 U
tert-AMYL METHYL ETHER	0.37	0.42	ND	0.58
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.10	0.11
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.83	2.22	0.46	7.33
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.10	0.12	0.11	0.31
TETRACHLOROETHYLENE	ND	ND	ND	0.05 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.31	0.31	0.47	1.03
m,p - XYLENE	0.90	0.87	0.60	3.19
BROMOFORM	ND	ND	ND	ND
STYRENE	0.07 U	0.08 U	1.81	0.19
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.44	0.41	0.32	1.49
1,3,5-TRIMETHYLBENZENE	0.12	0.11	0.08 U	0.36
1,2,4-TRIMETHYLBENZENE	0.35	0.34	0.08 U	1.11
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.02 U	0.03 U	ND	0.15
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	EPTX 15668 D1	EPTX 15668 R1	EPTX 15670 D2	EPTX 15670 R2
SAMPLE DATE	4/12/99	4/12/99	4/12/99	4/12/99
ANALYSIS DATE	5/10/99	5/12/99	5/10/99	5/12/99
FILE NAME	L9EJ010	L9EL009	L9EJ011	L9EL010
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	7.47	8.87	7.55	8.57
PROPYLENE	2.70	2.94	2.69	2.80
DICHLORODIFLUOROMETHANE	0.77	0.83	0.73	0.75
CHLOROMETHANE	0.80	0.89	0.76	0.80
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.42	0.41	0.40	0.40
BROMOMETHANE	0.10	0.11	0.11	0.10
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.37	0.41	0.38	0.39
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.63	0.67	0.38	0.38
TRICHLOROTRIFLUOROETHANE	0.10	0.11	0.10	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.36	0.36	0.35	0.34
METHYL ETHYL KETONE	1.76	1.75	1.75	1.83
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.07	0.07
BENZENE	2.21	2.34	2.18	2.36
CARBON TETRACHLORIDE	0.09 U	0.10	0.09 U	0.09 U
tert-AMYL METHYL ETHER	0.28	0.31	0.28	0.30
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.12	0.13	0.12	0.13
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	4.88	5.12	4.75	4.82
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.21	0.24	0.23	0.23
TETRACHLOROETHYLENE	0.06 U	0.04 U	0.04 U	0.04 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.80	0.84	0.80	0.81
m,p - XYLENE	2.24	2.35	2.21	2.30
BROMOFORM	ND	ND	ND	ND
STYRENE	0.15	0.15	0.15	0.15
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	1.09	1.11	1.06	1.09
1,3,5-TRIMETHYLBENZENE	0.27	0.28	0.27	0.27
1,2,4-TRIMETHYLBENZENE	0.79	0.84	0.80	0.80
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.06 U	0.06 U	0.07 U	0.06 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	EPTX 15688	EPTX 15702	EPTX 15723 D1	EPTX 15723 R1
SAMPLE DATE	4/18/99	4/24/99	5/6/99	5/6/99
ANALYSIS DATE		5/18/99	5/19/99	5/19/99
FILE NAME		L9ER008	L9ER014	L9ES008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	2.96	6.22	6.33
PROPYLENE	V	1.04	2.13	2.14
DICHLORODIFLUOROMETHANE	V	0.76	0.75	0.75
CHLOROMETHANE	V	0.88	0.76	0.77
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	0.11	0.27	0.29
BROMOMETHANE	V	ND	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	ND	38.53	43.09
TRICHLOROFLUOROMETHANE	V	0.36	0.34	0.35
ACRYLONITRILE	V	ND	ND	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.70	0.44	0.44
TRICHLOROTRIFLUOROETHANE	V	0.10	0.10	0.10
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	ND	ND	ND
METHYL ETHYL KETONE	V	1.13	0.77	0.78
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.08	0.08	0.08
BENZENE	V	0.98	1.86	1.82
CARBON TETRACHLORIDE	V	0.10	0.08 U	0.09
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	ND	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	1.83	4.21	4.29
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.12	0.20	0.17
TETRACHLOROETHYLENE	V	ND	0.04 U	0.04 U
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.31	0.60	0.62
m,p - XYLENE	V	0.83	1.75	1.78
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.08 U	0.33	0.33
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.42	0.84	0.85
1,3,5-TRIMETHYLBENZENE	V	0.12	0.20	0.20
1,2,4-TRIMETHYLBENZENE	V	0.31	0.68	0.67
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	0.04 U	0.05 U
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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SAMPLE SITE #	EPTX 15725 D2	EPTX 15725 R2	EPTX 15781	EPTX 15813
SAMPLE DATE	5/6/99	5/6/99	5/18/99	6/30/99
ANALYSIS DATE	5/19/99	5/19/99	5/27/99	6/9/99
FILE NAME	L9ER015	L9ES009	L9EX014	L9FI011
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	6.21	6.20	2.29	2.48
PROPYLENE	2.09	2.08	1.08	1.07
DICHLORODIFLUOROMETHANE	0.73	0.73	0.98	0.98
CHLOROMETHANE	0.72	0.73	0.88	0.96
DICHLOROTETRAFLUOROETHANE	ND	ND	0.01 U	0.02 U
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.27	0.28	0.11	0.13
BROMOMETHANE	ND	ND	ND	0.03 U
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	44.19	48.10	ND	ND
TRICHLOROFLUOROMETHANE	0.42	0.43	0.32	0.31
ACRYLONITRILE	ND	ND	ND	1.00
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.18	0.18	0.56	0.78
TRICHLOROTRIFLUOROETHANE	0.09	0.08	0.09	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.78	0.78	1.33	0.69
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.08	0.06	0.08
BENZENE	1.81	1.80	0.98	0.99
CARBON TETRACHLORIDE	0.07 U	0.07 U	0.10	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	0.14	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	4.32	4.46	1.98	1.73
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.20	0.18	0.12	0.10
TETRACHLOROETHYLENE	0.05 U	0.05 U	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.64	0.62	0.31	0.31
m,p - XYLENE	1.82	1.83	0.80	0.86
BROMOFORM	ND	ND	ND	ND
STYRENE	0.75	0.74	0.09 U	0.09 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.87	0.88	0.40	0.41
1,3,5-TRIMETHYLBENZENE	0.22	0.23	0.12	0.14
1,2,4-TRIMETHYLBENZENE	0.64	0.62	0.29	0.34
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.05 U	ND	ND	0.02 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	EPTX 15844	EPTX 15933	EPTX 15978	EPTX 16128
SAMPLE DATE	6/11/99	6/23/99	7/5/99	7/17/99
ANALYSIS DATE	6/18/99	7/2/99	7/20/99	7/28/99
FILE NAME	L9FQ015	L9GB010	L9GT010	L9GI013
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	4.68	3.27	1.64	2.63
PROPYLENE	1.62	1.33	0.91	1.20
DICHLORODIFLUOROMETHANE	0.60	0.66	0.69	1.08
CHLOROMETHANE	0.89	0.91	0.96	1.06
DICHLOROTETRAFLUOROETHANE	0.02 U	0.02 U	0.01 U	0.01 U
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.23	0.20	0.10	0.13
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	0.52	1.33
TRICHLOROFLUOROMETHANE	0.28	0.33	0.31	0.43
ACRYLONITRILE	ND	ND	0.87	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.75	0.73	0.88	0.97
TRICHLOROTRIFLUOROETHANE	0.13	0.12	0.10	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	0.09
METHYL ETHYL KETONE	0.62	0.90	0.58	1.92
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.07	0.06 U	0.16
BENZENE	1.59	1.38	0.66	1.42
CARBON TETRACHLORIDE	0.08 U	0.07 U	0.08 U	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	0.07
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	0.19
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	0.11
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	0.27
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	3.22	6.13	1.31	5.46
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.15	0.13	0.08 U	0.24
TETRACHLOROETHYLENE	0.01 U	0.02 U	ND	0.07 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.55	28.28	0.24	0.77
m,p - XYLENE	1.62	98.76	0.68	1.42
BROMOFORM	ND	ND	ND	ND
STYRENE	0.12	0.13	0.08 U	0.45
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.75	44.77	0.33	0.64
1,3,5-TRIMETHYLBENZENE	0.23	0.18	0.09	0.19
1,2,4-TRIMETHYLBENZENE	0.60	0.48	0.22	0.57
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.03 U	0.04 U	0.05 U	0.07 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	0.03 U	0.03 U
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	0.02 U

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - El Paso, TX (EPTX)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	EPTX 16196	EPTX 16328	EPTX 16444	EPTX 16606
SAMPLE DATE	7/29/99	8/10/99	8/22/99	9/3/99
ANALYSIS DATE	8/16/99	8/16/99	9/2/99	9/14/99
FILE NAME	L9HP007	L9HP012	L9IB008	L9IN015
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.72	2.69	2.87	2.70
PROPYLENE	5.41	1.46	1.06	1.05
DICHLORODIFLUOROMETHANE	0.74	0.77	1.67	0.72
CHLOROMETHANE	1.07	1.04	0.94	1.00
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	0.09	ND
1,3-BUTADIENE	0.19	0.15	0.16	0.15
BROMOMETHANE	ND	ND	ND	0.05
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.35	0.34	0.56	0.33
ACRYLONITRILE	0.85	ND	ND	0.78
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.68	0.61	0.67	0.58
TRICHLOROTRIFLUOROETHANE	0.11	0.11	0.10	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.08	0.08	0.14	0.09
METHYL ETHYL KETONE	0.59	0.61	1.24	0.40
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.07	0.10	0.07
BENZENE	1.20	1.11	1.29	1.05
CARBON TETRACHLORIDE	0.10	0.11	0.09	0.11
tert-AMYL METHYL ETHER	ND	0.07	0.13	0.08
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.02 U	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	2.65	2.21	4.65	2.48
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.12	0.12	0.13	0.11
TETRACHLOROETHYLENE	ND	ND	0.03 U	0.02 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.45	0.37	0.52	0.33
m,p - XYLENE	1.21	1.17	1.31	0.86
BROMOFORM	ND	ND	ND	ND
STYRENE	0.11	0.09 U	0.27	0.08 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.56	0.52	0.61	0.42
1,3,5-TRIMETHYLBENZENE	0.17	0.18	0.17	0.11
1,2,4-TRIMETHYLBENZENE	0.46	0.47	0.51	0.30
m - DICHLOROBENZENE	ND	ND	0.13	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.03 U	0.01 U	0.13	0.04 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Garyville, LA (GALA)
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SAMPLE SITE #	GALA 14800	GALA 14804	GALA 15098	GALA 15116
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98
ANALYSIS DATE	9/25/98	9/25/98	10/22/98	10/22/98
FILE NAME	L8IY018	L8IY022/K8IY022	L8JV005	L8JV021
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.45	0.53	0.49	0.61
PROPYLENE	0.58	0.54	0.89	0.68
DICHLORODIFLUOROMETHANE	0.71	0.73	0.61	0.70
CHLOROMETHANE	0.71	0.76	1.41	1.35
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	0.15	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	6.23
TRICHLOROFLUOROMETHANE	1.05	0.31	0.31	0.29
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	2.31	ND	ND	0.66
TRICHLOROTRIFLUOROETHANE	0.08	0.07	0.13	0.21
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.82	0.44	0.70	1.27
CHLOROPRENE	ND	ND	0.98	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.16	0.08	0.14	0.36
BENZENE	0.18	0.36	0.39	0.39
CARBON TETRACHLORIDE	0.11	0.11	0.08 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	0.09
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.70	0.41	0.76	1.27
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	0.56	0.47	0.08 U
TETRACHLOROETHYLENE	ND	ND	0.31	0.07 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.15	0.09 U	0.11	0.22
m,p - XYLENE	0.39	0.23	0.26	0.48
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	ND	0.09 U	0.13
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.21	0.10	0.16	0.28
1,3,5-TRIMETHYLBENZENE	ND	ND	0.05 U	0.07 U
1,2,4-TRIMETHYLBENZENE	0.09	0.15	0.13	0.26
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Garyville, LA (GALA)
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SAMPLE SITE #	EPTX 15149	GALA 15171	GALA 15181	GALA 15231
SAMPLE DATE	10/14/98	10/28/98	11/7/98	11/19/98
ANALYSIS DATE	11/3/98	11/11/98	11/18/98	
FILE NAME	L8KC010	L8KK020	L8KR014	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.20	1.61	1.34	V
PROPYLENE	2.38	5.17	1.60	V
DICHLORODIFLUOROMETHANE	0.91	0.65	0.54	V
CHLOROMETHANE	1.39	1.25	0.72	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	ND	0.52	0.11	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	1.71	ND	ND	V
TRICHLOROFLUOROMETHANE	0.41	0.29	0.25	V
ACRYLONITRILE	ND	ND	ND	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.09 U	0.04 U	0.34	V
TRICHLOROTRIFLUOROETHANE	0.11	0.11	0.07	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	0.09	ND	ND	V
METHYL ETHYL KETONE	0.83	0.59	0.64	V
CHLOROPRENE	ND	2.59	0.49	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	ND	ND	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.06	0.08	0.15	V
BENZENE	0.71	0.78	0.73	V
CARBON TETRACHLORIDE	0.08 U	0.10	0.08 U	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	ND	ND	0.08	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	ND	ND	0.06 U	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	1.41	1.21	3.52	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	0.06 U	0.19	0.24	V
TETRACHLOROETHYLENE	ND	ND	0.13	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.27	0.24	0.59	V
m,p - XYLENE	0.71	0.65	1.58	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.08 U	0.07 U	0.21	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.38	0.30	0.79	V
1,3,5-TRIMETHYLBENZENE	0.10	0.09	0.23	V
1,2,4-TRIMETHYLBENZENE	0.31	0.26	0.65	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	0.03 U	ND	ND	V
o - DICHLOROBENZENE	ND	ND	ND	V
1,2,4-TRICHLOROBENZENE	ND	ND	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Garyville, LA (GALA)
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SAMPLE SITE #	GALA 15264	GALA 15256	GALA 15294	GALA 16395 D1	GALA 16395 D1
SAMPLE DATE	12/1/98	12/13/98	12/25/98	2/6/99	2/5/99
ANALYSIS DATE	12/31/98	12/31/98	1/12/99	2/12/99	2/12/99
FILE NAME	L8LV008	L8LV014	L9AK017	L9BL011	L9BL011
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.77	1.19	1.60	1.61	1.61
PROPYLENE	2.04	0.63	0.69	1.33	1.33
DICHLORODIFLUOROMETHANE	0.73	0.72	1.06	0.77	0.77
CHLOROMETHANE	1.28	1.13	0.89	0.88	0.88
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND
1,3-BUTADIENE	0.46	ND	ND	0.30	0.30
BROMOMETHANE	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	26.05	26.05
TRICHLOROFLUOROMETHANE	1.10	0.35	0.35	0.29	0.29
ACRYLONITRILE	ND	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	3.09	0.18	0.16	0.18	0.18
TRICHLOROTRIFLUOROETHANE	0.11	0.13	0.19	0.13	0.13
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND
METHYL ETHYL KETONE	0.78	0.92	0.78	0.59	0.59
CHLOROPRENE	1.69	ND	ND	0.99	0.99
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.15	0.31	1.40	0.20	0.20
BENZENE	0.99	0.45	0.54	0.78	0.78
CARBON TETRACHLORIDE	0.11	0.09	0.09	0.08 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	0.06	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND	ND
TOLUENE	1.76	0.99	1.20	1.23	1.23
DIBROMOCHLOROMETHANE	ND	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND
N-OCTANE	0.14	0.07 U	0.08 U	0.11	0.11
TETRACHLOROETHYLENE	0.16	0.56	2.38	0.79	0.79
CHLOROBENZENE	ND	ND	ND	ND	ND
ETHYLBENZENE	0.29	0.20	0.24	0.20	0.20
m,p - XYLENE	0.75	0.39	0.53	0.51	0.51
BROMOFORM	ND	ND	ND	ND	ND
STYRENE	0.09 U	0.10 U	0.11	0.05 U	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND	ND
o - XYLENE	0.37	0.22	0.28	0.26	0.26
1,3,5-TRIMETHYLBENZENE	0.11	0.07 U	0.07 U	0.08 U	0.08 U
1,2,4-TRIMETHYLBENZENE	0.31	0.17	0.21	0.19	0.19
m - DICHLOROBENZENE	ND	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Garyville, LA (GALA)
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SAMPLE SITE #	GALA 15396 R1	GALA 15397 D2	GALA 15397 R2	GALA 15411
SAMPLE DATE	2/5/99	2/5/99	2/5/99	2/17/99
ANALYSIS DATE	2/17/99	2/12/99	2/17/99	
FILE NAME	L9BQ007	L9BL012	L9BQ008	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.47	1.48	1.23	V
PROPYLENE	1.34	1.20	1.15	V
DICHLORODIFLUOROMETHANE	0.78	0.79	0.78	V
CHLOROMETHANE	0.89	0.86	0.83	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	0.30	0.30	0.26	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	26.13	23.11	23.38	V
TRICHLOROFLUOROMETHANE	0.15	0.77	0.74	V
ACRYLONITRILE	ND	ND	ND	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.17	0.39	0.37	V
TRICHLOROTRIFLUOROETHANE	0.15	0.13	0.13	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	ND	ND	ND	V
METHYL ETHYL KETONE	0.64	0.61	0.66	V
CHLOROPRENE	0.94	0.81	0.89	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	ND	ND	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.22	0.23	0.21	V
BENZENE	0.81	0.72	0.69	V
CARBON TETRACHLORIDE	0.09	0.09	0.09	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	0.04 U	ND	0.04 U	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	0.05 U	0.12	0.12	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	1.23	1.35	1.33	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	0.14	0.14	0.14	V
TETRACHLOROETHYLENE	0.78	0.68	0.67	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.21	0.21	0.19	V
m,p - XYLENE	0.52	0.50	0.48	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.08 U	0.11	0.13	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.25	0.24	0.25	V
1,3,5-TRIMETHYLBENZENE	0.10	0.07 U	0.10	V
1,2,4-TRIMETHYLBENZENE	0.22	0.21	0.22	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	ND	ND	ND	V
o - DICHLOROBENZENE	ND	ND	0.04 U	V
1,2,4-TRICHLOROBENZENE	ND	0.03 U	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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SAMPLE SITE #	GALA 15459	GALA 15504	GALA 15523	GALA 15560
SAMPLE DATE	2/23/99	3/7/99	3/13/99	3/19/99
ANALYSIS DATE		3/17/99	3/22/99	4/14/99
FILE NAME		L9CQ007	L9CV008	L9DM014
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	0.88	1.11	3.89
PROPYLENE	V	0.50	0.67	0.92
DICHLORODIFLUOROMETHANE	V	0.55	1.10	0.66
CHLOROMETHANE	V	0.83	1.02	1.06
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	0.19	0.03 U	ND
BROMOMETHANE	V	ND	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	ND	5.75	ND
TRICHLOROFLUOROMETHANE	V	0.25	0.38	0.30
ACRYLONITRILE	V	ND	ND	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.07 U	0.21	0.07 U
TRICHLOROTRIFLUOROETHANE	V	0.10	0.18	0.12
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	ND	ND	ND
METHYL ETHYL KETONE	V	0.74	1.23	1.66
CHLOROPRENE	V	0.24	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.06	0.34	0.07
BENZENE	V	0.37	0.50	0.69
CARBON TETRACHLORIDE	V	0.08 U	0.04 U	0.08 U
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	0.05 U	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	0.08	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	0.42	1.56	0.86
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.07 U	0.11	0.08 U
TETRACHLOROETHYLENE	V	0.12	1.11	ND
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.09 U	0.34	0.17
m,p - XYLENE	V	0.18	0.52	0.43
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.04 U	0.33	0.05 U
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.11	0.24	0.22
1,3,5-TRIMETHYLBENZENE	V	0.05 U	0.06 U	0.08
1,2,4-TRIMETHYLBENZENE	V	0.11	0.15	0.19
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	ND
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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SAMPLE SITE #	GALA 15591 D1	GALA 15591 R1	GALA 15593 D2	GALA 15593 R2
SAMPLE DATE	3/25/99	3/25/99	3/25/99	3/25/99
ANALYSIS DATE	4/13/99	4/13/99	4/13/99	4/13/99
FILE NAME	L9DL018	L9DM012	L9DL019	L9DM013
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.10	3.02	2.88	3.15
PROPYLENE	0.38	0.38	0.36	0.38
DICHLORODIFLUOROMETHANE	0.64	0.64	0.64	0.64
CHLOROMETHANE	0.94	0.96	0.76	0.80
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	2.19	2.25
TRICHLOROFLUOROMETHANE	0.30	0.31	0.30	0.31
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.07 U	ND	0.03 U
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.10	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.83	0.83	0.54	0.64
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.07	0.06	0.06
BENZENE	0.39	0.39	0.38	0.38
CARBON TETRACHLORIDE	0.09	0.09	0.09	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.41	0.41	0.40	0.42
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.06 U	0.06 U	0.06 U	0.03 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.09 U	0.09 U	0.09 U	0.09 U
m,p - XYLENE	0.20	0.19	0.21	0.21
BROMOFORM	ND	ND	ND	ND
STYRENE	0.03 U	0.04 U	0.03 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.12	0.11	0.10	0.11
1,3,5-TRIMETHYLBENZENE	0.05 U	0.05 U	0.06 U	0.05 U
1,2,4-TRIMETHYLBENZENE	0.11	0.11	0.11	0.11
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	GALA 15620	GALA 15662 D1	GALA 15662 R1	GALA 15664 D2
SAMPLE DATE	3/31/99	4/12/99	4/12/99	4/12/99
ANALYSIS DATE	4/16/99	5/10/99	5/12/99	5/10/99
FILE NAME	L9DP014	L9EJ006	L9EL005	L9EJ007
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.77	0.78	0.99	0.79
PROPYLENE	1.31	0.52	0.59	0.50
DICHLORODIFLUOROMETHANE	0.62	0.61	0.67	0.59
CHLOROMETHANE	0.84	0.89	1.00	0.76
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.19	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	0.00	ND
TRICHLOROFLUOROMETHANE	0.29	0.28	0.30	0.29
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.68	0.05 U	0.06 U	0.07 U
TRICHLOROTRIFLUOROETHANE	0.10	0.08	0.10	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.41	ND	ND	ND
METHYL ETHYL KETONE	0.48	0.62	0.74	0.61
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.07	0.07	0.06
BENZENE	1.13	0.34	0.38	0.34
CARBON TETRACHLORIDE	0.08 U	0.09 U	0.08 U	0.10
tert-AMYL METHYL ETHER	0.37	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.87	0.43	0.52	0.44
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.11	0.04 U	0.06 U	0.05 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.31	0.10 U	0.12	0.10 U
m,p - XYLENE	0.87	0.23	0.27	0.24
BROMOFORM	ND	ND	ND	ND
STYRENE	0.07 U	0.04 U	0.05 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.43	0.12	0.16	0.12
1,3,5-TRIMETHYLBENZENE	0.13	0.05 U	0.07 U	0.05 U
1,2,4-TRIMETHYLBENZENE	0.35	0.13	0.14	0.13
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	GALA 15664 R2	GALA 15690	GALA 15692	GALA 15740
SAMPLE DATE	4/12/99	4/18/99	4/24/99	4/30/99
ANALYSIS DATE	5/10/99			5/18/99
FILE NAME	L9EL006			L9ER009
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.91	V	NS	0.91
PROPYLENE	0.53	V	NS	0.55
DICHLORODIFLUOROMETHANE	0.64	V	NS	0.86
CHLOROMETHANE	0.84	V	NS	1.06
DICHLOROTETRAFLUOROETHANE	ND	V	NS	ND
VINYL CHLORIDE	ND	V	NS	ND
1,3-BUTADIENE	ND	V	NS	ND
BROMOMETHANE	ND	V	NS	ND
CHLOROETHANE	ND	V	NS	ND
ACETONITRILE	ND	V	NS	ND
TRICHLOROFLUOROMETHANE	0.30	V	NS	0.30
ACRYLONITRILE	ND	V	NS	ND
1,1-DICHLOROETHENE	ND	V	NS	ND
METHYLENE CHLORIDE	0.03 U	V	NS	0.24
TRICHLOROTRIFLUOROETHANE	0.09	V	NS	0.20
trans - 1,2 - DICHLOROETHYLENE	ND	V	NS	ND
1,1 - DICHLOROETHANE	ND	V	NS	ND
METHYL tert-BUTYL ETHER	ND	V	NS	ND
METHYL ETHYL KETONE	0.68	V	NS	1.01
CHLOROPRENE	ND	V	NS	ND
cis-1,2-DICHLOROETHYLENE	ND	V	NS	ND
BROMOCHLOROMETHANE	ND	V	NS	ND
CHLOROFORM	ND	V	NS	ND
ETHYL tert-BUTYL ETHER	ND	V	NS	ND
1,2 - DICHLOROETHANE	ND	V	NS	ND
1,1,1 - TRICHLOROETHANE	0.06	V	NS	0.32
BENZENE	0.37	V	NS	0.31
CARBON TETRACHLORIDE	0.09 U	V	NS	0.09
tert-AMYL METHYL ETHER	ND	V	NS	ND
1,2 - DICHLOROPROPANE	ND	V	NS	ND
ETHYL ACRYLATE	ND	V	NS	ND
BROMODICHLOROMETHANE	ND	V	NS	ND
TRICHLOROETHYLENE	ND	V	NS	ND
METHYL METHACRYLATE	ND	V	NS	ND
cis -1,3 - DICHLOROPROPENE	ND	V	NS	ND
METHYL ISOBUTYL KETONE	ND	V	NS	ND
trans - 1,3 - DICHLOROPROPENE	ND	V	NS	ND
1,1,2 - TRICHLOROETHANE	ND	V	NS	ND
TOLUENE	0.47	V	NS	0.50
DIBROMOCHLOROMETHANE	ND	V	NS	ND
1,2-DIBROMOETHANE	ND	V	NS	ND
N-OCTANE	0.05 U	V	NS	0.06
TETRACHLOROETHYLENE	ND	V	NS	0.50
CHLOROBENZENE	ND	V	NS	ND
ETHYLBENZENE	0.10 U	V	NS	0.15
m,p - XYLENE	0.24	V	NS	0.20
BROMOFORM	ND	V	NS	ND
STYRENE	0.03 U	V	NS	0.11
1,1,2,2 - TETRACHLOROETHANE	ND	V	NS	ND
o - XYLENE	0.13	V	NS	0.12
1,3,5-TRIMETHYLBENZENE	0.06 U	V	NS	0.04 U
1,2,4-TRIMETHYLBENZENE	0.12	V	NS	0.10
m - DICHLOROBENZENE	ND	V	NS	ND
CHLOROMETHYLBENZENE	ND	V	NS	ND
p - DICHLOROBENZENE	ND	V	NS	ND
o - DICHLOROBENZENE	ND	V	NS	ND
1,2,4-TRICHLOROBENZENE	ND	V	NS	ND
HEXACHLORO-1,3-BUTADIENE	ND	V	NS	ND

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SAMPLE SITE #	GALA 15752 D1		GALA 15754 D2	GALA 15776		GALA 15766
SAMPLE DATE	5/6/99		5/6/99	5/12/99		5/18/99
ANALYSIS DATE	5/26/99			5/12/99		5/26/99
FILE NAME	L9EZ008			L9EZ012		L9EZ013
UNITS	ppbv		ppbv	ppbv		ppbv
ACETYLENE	1.13		V	0.97		ND
PROPYLENE	0.42		V	0.55		ND
DICHLORODIFLUOROMETHANE	1.64		V	0.99		ND
CHLOROMETHANE	ND		V	1.02		ND
DICHLOROTETRAFLUOROETHANE	ND		V	ND		ND
VINYL CHLORIDE	ND		V	ND		ND
1,3-BUTADIENE	ND		V	ND		ND
BROMOMETHANE	ND		V	ND		ND
CHLOROETHANE	ND		V	ND		ND
ACETONITRILE	ND		V	18.69		ND
TRICHLOROFLUOROMETHANE	0.31		V	0.59		ND
ACRYLONITRILE	ND		V	ND		ND
1,1-DICHLOROETHENE	ND		V	ND		ND
METHYLENE CHLORIDE	0.06	U	V	0.12		ND
TRICHLOROTRIFLUOROETHANE	0.13		V	0.19		ND
trans - 1,2 - DICHLOROETHYLENE	ND		V	ND		ND
1,1 - DICHLOROETHANE	ND		V	ND		ND
METHYL tert-BUTYL ETHER	ND		V	0.07		ND
METHYL ETHYL KETONE	0.71		V	1.24		ND
CHLOROPRENE	ND		V	ND		ND
cis-1,2-DICHLOROETHYLENE	ND		V	ND		ND
BROMOCHLOROMETHANE	ND		V	ND		ND
CHLOROFORM	0.04	U	V	ND		ND
ETHYL tert-BUTYL ETHER	ND		V	ND		ND
1,2 - DICHLOROETHANE	ND		V	ND		ND
1,1,1 - TRICHLOROETHANE	0.28		V	4.69		ND
BENZENE	0.45		V	0.39		ND
CARBON TETRACHLORIDE	0.12		V	0.10		ND
tert-AMYL METHYL ETHER	ND		V	ND		ND
1,2 - DICHLOROPROPANE	ND		V	ND		ND
ETHYL ACRYLATE	ND		V	ND		ND
BROMODICHLOROMETHANE	ND		V	ND		ND
TRICHLOROETHYLENE	ND		V	ND		ND
METHYL METHACRYLATE	ND		V	ND		ND
cis -1,3 - DICHLOROPROPENE	ND		V	ND		ND
METHYL ISOBUTYL KETONE	ND		V	0.10		ND
trans - 1,3 - DICHLOROPROPENE	ND		V	ND		ND
1,1,2 - TRICHLOROETHANE	ND		V	ND		ND
TOLUENE	0.83		V	1.06		ND
DIBROMOCHLOROMETHANE	ND		V	ND		ND
1,2-DIBROMOETHANE	ND		V	ND		ND
N-OCTANE	0.07	U	V	0.12		ND
TETRACHLOROETHYLENE	1.27		V	0.45		ND
CHLOROBENZENE	ND		V	ND		ND
ETHYLBENZENE	0.14		V	0.19		ND
m,p - XYLENE	0.29		V	0.36		ND
BROMOFORM	ND		V	ND		ND
STYRENE	0.07	U	V	0.15		ND
1,1,2,2 - TETRACHLOROETHANE	ND		V	ND		ND
o - XYLENE	0.17		V	0.19		ND
1,3,5-TRIMETHYLBENZENE	0.06	U	V	0.06	U	ND
1,2,4-TRIMETHYLBENZENE	0.14		V	0.15		ND
m - DICHLOROBENZENE	ND		V	ND		ND
CHLOROMETHYLBENZENE	ND		V	ND		ND
p - DICHLOROBENZENE	ND		V	ND		ND
o - DICHLOROBENZENE	ND		V	ND		ND
1,2,4-TRICHLOROBENZENE	ND		V	ND		ND
HEXACHLORO-1,3-BUTADIENE	ND		V	ND		ND

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SAMPLE SITE #	GALA 15817	GALA 15856	GALA 15985	GALA 16057
SAMPLE DATE	5/30/99	6/11/99	7/5/99	7/17/99
ANALYSIS DATE	6/9/99	6/18/99	7/20/99	7/28/99
FILE NAME	L9FI012	L9FQ017	L9GT013	L9GI011
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.56	2.80	0.59	1.05
PROPYLENE	0.66	1.01	0.85	22.73
DICHLORODIFLUOROMETHANE	0.57	0.67	0.64	0.68
CHLOROMETHANE	1.32	1.73	1.46	1.55
DICHLOROTETRAFLUOROETHANE	0.01 U	0.01 U	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.21	0.06	0.09	0.21
BROMOMETHANE	ND	0.02 U	ND	0.18
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	0.21	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.29	0.32	0.31	0.35
ACRYLONITRILE	ND	ND	0.11	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.04 U	0.12	0.04 U	0.11
TRICHLOROTRIFLUOROETHANE	0.10	0.16	0.09	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	0.09	ND	0.07
METHYL ETHYL KETONE	0.53	0.34	0.31	0.43
CHLOROPRENE	ND	ND	ND	0.27
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	0.06	0.02 U	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.47	0.09	0.23	0.13
BENZENE	0.39	0.50	0.24	0.50
CARBON TETRACHLORIDE	0.10	0.10	0.09	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	0.09	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.54	0.95	0.37	12.75
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.11	0.09	0.06 U	0.12
TETRACHLOROETHYLENE	ND	ND	ND	0.03 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.12	0.19	0.09 U	0.23
m,p - XYLENE	0.28	0.52	0.19	0.58
BROMOFORM	ND	ND	ND	ND
STYRENE	0.06 U	0.09 U	0.04 U	0.10 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.15	0.27	0.11	0.28
1,3,5-TRIMETHYLBENZENE	0.07 U	0.10	0.04 U	0.08
1,2,4-TRIMETHYLBENZENE	0.15	0.24	0.10	0.23
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	0.02 U	ND	0.03 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	0.01 U	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Garyville, LA (GALA)
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SAMPLE SITE #	GALA 16205		GALA 16349		GALA 16683	
SAMPLE DATE	7/29/99		8/10/99		9/3/99	
ANALYSIS DATE	8/11/99		8/19/99		9/15/99	
FILE NAME	L9HJ016		L9HQ021		L9IN018	
UNITS	ppbv		ppbv		ppbv	
ACETYLENE	1.00		1.75		0.61	
PROPYLENE	0.73		1.15		0.98	
DICHLORODIFLUOROMETHANE	0.71		0.72		0.60	
CHLOROMETHANE	2.12		2.59		1.46	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND	
VINYL CHLORIDE	0.14		ND		ND	
1,3-BUTADIENE	0.01	U	ND		0.03	U
BROMOMETHANE	0.05		ND		ND	
CHLOROETHANE	ND		ND		ND	
ACETONITRILE	ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.32		0.33		0.62	
ACRYLONITRILE	ND		ND		ND	
1,1-DICHLOROETHENE	ND		0.05		ND	
METHYLENE CHLORIDE	0.08	U	0.07	U	0.11	
TRICHLOROTRIFLUOROETHANE	0.12		0.11		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND	
METHYL tert-BUTYL ETHER	0.06		ND		ND	
METHYL ETHYL KETONE	0.85		0.31		0.34	
CHLOROPRENE	ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND	
CHLOROFORM	0.05		0.02	U	ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND	
1,2 - DICHLOROETHANE	0.30		ND		ND	
1,1,1 - TRICHLOROETHANE	26.92		0.11		0.07	
BENZENE	0.51		0.38		0.29	
CARBON TETRACHLORIDE	0.11		0.11		0.09	U
tert-AMYL METHYL ETHER	ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND	
TRICHLOROETHYLENE	0.02	U	ND		ND	
METHYL METHACRYLATE	ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND	
TOLUENE	0.56		0.44		0.56	
DIBROMOCHLOROMETHANE	ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND	
N-OCTANE	0.07	U	0.07	U	0.07	U
TETRACHLOROETHYLENE	ND		ND		ND	
CHLOROBENZENE	ND		ND		ND	
ETHYLBENZENE	0.11		0.10		0.10	U
m,p - XYLENE	0.26		0.24		0.23	
BROMOFORM	ND		ND		ND	
STYRENE	0.06	U	0.05	U	0.04	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND	
o - XYLENE	0.13		0.12		0.13	
1,3,5-TRIMETHYLBENZENE	0.05	U	0.05	U	0.05	U
1,2,4-TRIMETHYLBENZENE	0.11		0.12		0.10	
m - DICHLOROBENZENE	ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Hahnville, LA (HALA)
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SAMPLE SITE #	HALA 15104		HALA 15101		HALA 15115		HALA 15131	
SAMPLE DATE	9/14/98		9/26/98		10/8/98		10/14/98	
ANALYSIS DATE	10/14/98		10/22/98		10/22/98			
FILE NAME	L8JM014		L8JV007		L8JV020			
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.44		0.66		2.40		V	
PROPYLENE	0.62		1.05		4.54		V	
DICHLORODIFLUOROMETHANE	0.58		0.63		0.58		V	
CHLOROMETHANE	1.60		2.54		2.11		V	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		V	
VINYL CHLORIDE	ND		ND		ND		V	
1,3-BUTADIENE	ND		ND		0.70		V	
BROMOMETHANE	ND		ND		ND		V	
CHLOROETHANE	ND		ND		ND		V	
ACETONITRILE	1.48		117.00		ND		V	
TRICHLOROFLUOROMETHANE	0.27		0.42		0.25		V	
ACRYLONITRILE	0.76		1.09		0.50		V	
1,1-DICHLOROETHENE	ND		ND		ND		V	
METHYLENE CHLORIDE	0.08	U	0.30		0.13		V	
TRICHLOROTRIFLUOROETHANE	0.15		0.30		0.13		V	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		V	
1,1 - DICHLOROETHANE	ND		ND		ND		V	
METHYL tert-BUTYL ETHER	ND		ND		0.30		V	
METHYL ETHYL KETONE	0.62		1.93		0.66		V	
CHLOROPRENE	ND		ND		ND		V	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		V	
BROMOCHLOROMETHANE	ND		ND		ND		V	
CHLOROFORM	ND		ND		ND		V	
ETHYL tert-BUTYL ETHER	ND		ND		ND		V	
1,2 - DICHLOROETHANE	ND		ND		ND		V	
1,1,1 - TRICHLOROETHANE	0.07		0.25		0.05	U	V	
BENZENE	0.30		1.16		0.70		V	
CARBON TETRACHLORIDE	0.10		0.10		0.08	U	V	
tert-AMYL METHYL ETHER	ND		ND		ND		V	
1,2 - DICHLOROPROPANE	ND		ND		ND		V	
ETHYL ACRYLATE	ND		ND		ND		V	
BROMODICHLOROMETHANE	ND		ND		ND		V	
TRICHLOROETHYLENE	ND		ND		ND		V	
METHYL METHACRYLATE	ND		ND		ND		V	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		V	
METHYL ISOBUTYL KETONE	ND		0.24		ND		V	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		V	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		V	
TOLUENE	0.40		3.06		0.50		V	
DIBROMOCHLOROMETHANE	ND		ND		ND		V	
1,2-DIBROMOETHANE	ND		ND		ND		V	
N-OCTANE	0.07	U	0.37		0.09	U	V	
TETRACHLOROETHYLENE	ND		1.95		ND		V	
CHLOROBENZENE	ND		ND		ND		V	
ETHYLBENZENE	0.08	U	0.35		0.09	U	V	
m,p - XYLENE	0.20		0.62		0.20		V	
BROMOFORM	ND		ND		ND		V	
STYRENE	0.03	U	0.44		0.06	U	V	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		V	
o - XYLENE	0.11		0.31		0.10		V	
1,3,5-TRIMETHYLBENZENE	0.05	U	0.07	U	0.04	U	V	
1,2,4-TRIMETHYLBENZENE	0.10		0.24		0.10		V	
m - DICHLOROBENZENE	ND		ND		ND		V	
CHLOROMETHYLBENZENE	ND		ND		ND		V	
p - DICHLOROBENZENE	ND		ND		ND		V	
o - DICHLOROBENZENE	ND		ND		ND		V	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		V	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		V	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Hahnville, LA (HALA)
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SAMPLE SITE #	HALA 15169	HALA 15179	HALA 15223	HALA 15221
SAMPLE DATE	10/26/98	11/7/98	11/19/98	12/1/98
ANALYSIS DATE	11/11/98	11/18/98	12/8/98	
FILE NAME	L8KK019	L8KR009	L8LH007	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.96	1.54	2.03	V
PROPYLENE	1.42	0.89	1.42	V
DICHLORODIFLUOROMETHANE	0.63	0.56	0.70	V
CHLOROMETHANE	1.37	1.37	1.62	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	1.80	ND	0.09	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	ND	0.72	ND	V
TRICHLOROFLUOROMETHANE	0.27	0.27	0.27	V
ACRYLONITRILE	ND	ND	1.36	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.15	0.13	0.33	V
TRICHLOROTRIFLUOROETHANE	0.12	0.13	0.14	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	0.15	ND	ND	V
METHYL ETHYL KETONE	0.53	0.54	0.68	V
CHLOROPRENE	ND	ND	ND	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	ND	0.05	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.08	0.05 U	0.12	V
BENZENE	1.11	0.83	1.20	V
CARBON TETRACHLORIDE	0.10	0.10	0.13	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	ND	ND	0.09	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	ND	ND	ND	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	2.15	1.10	3.27	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	0.46	0.23	0.28	V
TETRACHLOROETHYLENE	ND	ND	0.08 U	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.37	0.20	0.59	V
m,p - XYLENE	1.05	0.52	1.54	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.09 U	0.05 U	0.25	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.49	0.25	0.74	V
1,3,5-TRIMETHYLBENZENE	0.15	0.09	0.24	V
1,2,4-TRIMETHYLBENZENE	0.44	0.21	0.67	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	ND	ND	0.03 U	V
o - DICHLOROBENZENE	ND	ND	ND	V
1,2,4-TRICHLOROBENZENE	ND	ND	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Hahnville, LA (HALA)
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SAMPLE SITE #	HALA 15254	HALA 15292	HALA 15314	HALA 15391 D1
SAMPLE DATE	12/13/98	12/25/98	1/9/99	2/6/99
ANALYSIS DATE	12/31/98	1/12/99	1/21/99	2/12/99
FILE NAME	L8LV004	L9AK018	L9AU010	L9BL013
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.06	1.60	1.52	1.28
PROPYLENE	0.89	1.60	1.44	0.83
DICHLORODIFLUOROMETHANE	0.70	0.64	0.63	0.78
CHLOROMETHANE	1.18	1.03	1.03	0.89
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.04 U	0.22	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	0.51	ND	21.53
TRICHLOROFLUOROMETHANE	0.29	0.28	0.03	0.32
ACRYLONITRILE	ND	ND	0.37	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.14	0.08 U	ND	0.16
TRICHLOROTRIFLUOROETHANE	0.16	0.13	0.15	0.15
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.76	1.57	0.96	0.58
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.23	0.07	0.06	0.14
BENZENE	0.43	0.94	0.52	0.75
CARBON TETRACHLORIDE	0.09	0.07 U	0.07 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	0.05 U
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	0.06 U
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.54	0.56	0.46	1.20
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.06 U	0.08 U	0.07 U	0.31
TETRACHLOROETHYLENE	0.35	0.10	ND	0.71
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.11	0.12	0.10	0.29
m,p - XYLENE	0.21	0.25	0.19	0.77
BROMOFORM	ND	ND	ND	ND
STYRENE	0.07 U	0.06 U	0.06 U	0.13
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.13	0.15	0.10	0.41
1,3,5-TRIMETHYLBENZENE	0.05 U	0.06 U	0.06 U	0.18
1,2,4-TRIMETHYLBENZENE	0.11	0.12	0.09	0.56
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Hahnville, LA (HALA)
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SAMPLE SITE #	HALA 15391 R1	HALA 15393 D2	HALA 15393 R2	HALA 15415
SAMPLE DATE	2/5/99	2/5/99	2/5/99	2/13/99
ANALYSIS DATE	2/17/99	2/12/99	2/17/99	
FILE NAME	L9BQ009	L9BL014	L9BQ010	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.09	1.24	1.02	V
PROPYLENE	0.81	0.82	0.80	V
DICHLORODIFLUOROMETHANE	0.74	0.77	0.71	V
CHLOROMETHANE	0.86	0.85	0.78	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	0.03 U	ND	0.04 U	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	17.26	18.05	15.80	V
TRICHLOROFLUOROMETHANE	0.30	0.30	0.31	V
ACRYLONITRILE	ND	ND	ND	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.21	0.18	0.15	V
TRICHLOROTRIFLUOROETHANE	0.15	0.14	0.15	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	ND	ND	ND	V
METHYL ETHYL KETONE	0.57	0.52	0.57	V
CHLOROPRENE	ND	ND	ND	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	ND	ND	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.16	0.13	0.15	V
BENZENE	0.69	0.69	0.70	V
CARBON TETRACHLORIDE	0.09	0.08 U	0.06 U	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	0.05 U	0.05 U	0.05 U	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	0.05 U	0.10	0.12	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	1.13	1.09	1.15	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	0.30	0.29	0.32	V
TETRACHLOROETHYLENE	0.69	0.63	0.62	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.28	0.24	0.23	V
m,p - XYLENE	0.73	0.61	0.61	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.14	0.07 U	0.11	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.38	0.29	0.31	V
1,3,5-TRIMETHYLBENZENE	0.38	0.10	0.11	V
1,2,4-TRIMETHYLBENZENE	0.57	0.26	0.30	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	ND	0.04 U	0.04 U	V
o - DICHLOROBENZENE	ND	ND	ND	V
1,2,4-TRICHLOROBENZENE	ND	ND	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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SAMPLE SITE #	HALA 15457	HALA 15493	HALA 15491	HALA 15556 D1
SAMPLE DATE	2/23/99	3/1/99	3/7/99	3/19/99
ANALYSIS DATE	3/10/99	3/12/99	3/12/99	4/12/99
FILE NAME	L9CJ011	L9CL007	L9CL009	L9DL010
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.07	1.80	1.31	3.15
PROPYLENE	0.71	1.24	4.07	3.29
DICHLORODIFLUOROMETHANE	0.63	0.60	0.64	0.64
CHLOROMETHANE	0.97	0.98	0.79	0.91
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	0.21	0.27	0.17
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	0.95	3.52
TRICHLOROFLUOROMETHANE	0.32	0.28	0.28	0.30
ACRYLONITRILE	0.43	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.06 U	0.03 U	0.07 U	0.08 U
TRICHLOROTRIFLUOROETHANE	0.11	0.13	0.13	0.12
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	4.94
METHYL ETHYL KETONE	0.89	0.75	0.56	0.58
CHLOROPRENE	1.03	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.05 U	0.07	0.06
BENZENE	0.44	0.72	2.40	0.90
CARBON TETRACHLORIDE	0.07 U	0.08	0.07 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	0.09	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	0.59	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.50	0.88	4.99	1.19
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.09	0.11	0.90	0.25
TETRACHLOROETHYLENE	ND	0.07 U	0.24	0.04 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.11	0.16	0.17	0.22
m,p - XYLENE	0.27	0.43	0.37	0.56
BROMOFORM	ND	ND	ND	ND
STYRENE	0.06 U	0.06 U	0.05 U	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.13	0.22	0.15	0.27
1,3,5-TRIMETHYLBENZENE	0.09	0.07 U	0.06 U	0.10
1,2,4-TRIMETHYLBENZENE	0.19	0.18	0.15	0.26
m - DICHLOROBENZENE	0.03 U	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	0.06 U	ND	ND	ND
o - DICHLOROBENZENE	0.06 U	ND	ND	ND
1,2,4-TRICHLOROBENZENE	0.32	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	0.13	ND	ND	ND

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SAMPLE SITE #	HALA 15556 R1	HALA 15558 D2	HALA 15558 R2	HALA 15595
SAMPLE DATE	3/19/99	3/19/99	3/19/99	3/25/99
ANALYSIS DATE	4/13/99	4/12/99	4/13/99	4/13/99
FILE NAME	L9DM008	L9DL011	L9DM009	L9DL017
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	3.41	3.22	3.22	2.50
PROPYLENE	3.53	3.41	3.33	0.89
DICHLORODIFLUOROMETHANE	0.69	0.72	0.69	0.68
CHLOROMETHANE	0.94	0.77	0.78	0.81
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.15	0.19	0.13	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	3.22	4.73	4.03	ND
TRICHLOROFLUOROMETHANE	0.33	0.43	0.41	0.30
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.07 U	0.09 U	0.09 U	ND
TRICHLOROTRIFLUOROETHANE	0.13	0.12	0.13	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	5.18	5.17	5.28	1.47
METHYL ETHYL KETONE	0.68	0.73	0.77	ND
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.08	0.08	0.05 U
BENZENE	0.89	0.89	0.85	0.63
CARBON TETRACHLORIDE	0.10	0.08 U	0.08 U	0.06 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.20	1.25	1.28	1.74
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.29	0.33	0.28	0.13
TETRACHLOROETHYLENE	0.05 U	0.10	0.12	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.22	0.22	0.22	0.18
m,p - XYLENE	0.54	0.61	0.62	0.48
BROMOFORM	ND	ND	ND	ND
STYRENE	0.05 U	0.06	0.04 U	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.28	0.28	0.29	0.25
1,3,5-TRIMETHYLBENZENE	0.10	0.11	0.12	0.10
1,2,4-TRIMETHYLBENZENE	0.26	0.30	0.29	0.23
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	HALA 15618	HALA 15680	HALA 15658 D1	HALA 15658 R1
SAMPLE DATE	3/31/99	4/6/99	4/18/99	4/18/99
ANALYSIS DATE			5/10/99	5/12/99
FILE NAME			L9EJ008	L9EL007
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	V	1.12	1.22
PROPYLENE	V	V	1.73	1.73
DICHLORODIFLUOROMETHANE	V	V	0.68	0.67
CHLOROMETHANE	V	V	1.10	1.08
DICHLOROTETRAFLUOROETHANE	V	V	ND	ND
VINYL CHLORIDE	V	V	ND	ND
1,3-BUTADIENE	V	V	0.37	0.32
BROMOMETHANE	V	V	ND	ND
CHLOROETHANE	V	V	ND	ND
ACETONITRILE	V	V	ND	ND
TRICHLOROFLUOROMETHANE	V	V	0.32	0.32
ACRYLONITRILE	V	V	ND	ND
1,1-DICHLOROETHENE	V	V	ND	ND
METHYLENE CHLORIDE	V	V	0.08 U	0.08 U
TRICHLOROTRIFLUOROETHANE	V	V	0.10	0.10
trans - 1,2 - DICHLOROETHYLENE	V	V	ND	ND
1,1 - DICHLOROETHANE	V	V	ND	ND
METHYL tert-BUTYL ETHER	V	V	ND	ND
METHYL ETHYL KETONE	V	V	1.41	1.54
CHLOROPRENE	V	V	1.51	1.48
cis-1,2-DICHLOROETHYLENE	V	V	ND	ND
BROMOCHLOROMETHANE	V	V	ND	ND
CHLOROFORM	V	V	ND	ND
ETHYL tert-BUTYL ETHER	V	V	ND	ND
1,2 - DICHLOROETHANE	V	V	ND	ND
1,1,1 - TRICHLOROETHANE	V	V	0.07	0.07
BENZENE	V	V	0.60	0.64
CARBON TETRACHLORIDE	V	V	0.11	0.10
tert-AMYL METHYL ETHER	V	V	ND	ND
1,2 - DICHLOROPROPANE	V	V	ND	ND
ETHYL ACRYLATE	V	V	ND	ND
BROMODICHLOROMETHANE	V	V	ND	ND
TRICHLOROETHYLENE	V	V	ND	ND
METHYL METHACRYLATE	V	V	ND	ND
cis -1,3 - DICHLOROPROPENE	V	V	ND	ND
METHYL ISOBUTYL KETONE	V	V	ND	0.10
trans - 1,3 - DICHLOROPROPENE	V	V	ND	ND
1,1,2 - TRICHLOROETHANE	V	V	ND	ND
TOLUENE	V	V	0.81	0.85
DIBROMOCHLOROMETHANE	V	V	ND	ND
1,2-DIBROMOETHANE	V	V	ND	ND
N-OCTANE	V	V	0.09 U	0.11
TETRACHLOROETHYLENE	V	V	ND	ND
CHLOROBENZENE	V	V	ND	ND
ETHYLBENZENE	V	V	0.15	0.15
m,p - XYLENE	V	V	0.31	0.33
BROMOFORM	V	V	ND	ND
STYRENE	V	V	0.05 U	0.05 U
1,1,2,2 - TETRACHLOROETHANE	V	V	ND	ND
o - XYLENE	V	V	0.17	0.18
1,3,5-TRIMETHYLBENZENE	V	V	0.06 U	0.07 U
1,2,4-TRIMETHYLBENZENE	V	V	0.13	0.13
m - DICHLOROBENZENE	V	V	ND	ND
CHLOROMETHYLBENZENE	V	V	ND	ND
p - DICHLOROBENZENE	V	V	ND	ND
o - DICHLOROBENZENE	V	V	ND	ND
1,2,4-TRICHLOROBENZENE	V	V	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	V	ND	ND

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SAMPLE SITE #	HALA 15660 D2	HALA 15660 R2	HALA 15737	HALA 15762
SAMPLE DATE	4/18/99	4/18/99	4/30/99	5/6/99
ANALYSIS DATE	5/10/99	5/12/99	5/18/99	
FILE NAME	L9EJ009	L9EL014	L9ER013	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.10	1.21	1.10	V
PROPYLENE	1.59	1.63	3.79	V
DICHLORODIFLUOROMETHANE	0.65	0.67	0.64	V
CHLOROMETHANE	0.96	0.94	1.21	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	0.34	0.29	0.13	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	ND	ND	ND	V
TRICHLOROFLUOROMETHANE	0.31	0.33	0.28	V
ACRYLONITRILE	ND	ND	ND	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.07 U	0.07 U	0.09 U	V
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.09	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	0.04	ND	ND	V
METHYL ETHYL KETONE	1.43	1.42	0.86	V
CHLOROPRENE	1.43	1.34	ND	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	ND	ND	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.07	V
BENZENE	0.57	0.62	0.59	V
CARBON TETRACHLORIDE	0.12	0.10	0.09	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	ND	ND	ND	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	ND	0.07	ND	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	0.83	0.81	5.98	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	0.08 U	0.10	0.24	V
TETRACHLOROETHYLENE	ND	ND	ND	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.14	0.13	0.13	V
m,p - XYLENE	0.31	0.32	0.31	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.04 U	0.05 U	0.03 U	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.16	0.16	0.16	V
1,3,5-TRIMETHYLBENZENE	0.06 U	0.05 U	0.06 U	V
1,2,4-TRIMETHYLBENZENE	0.11	0.13	0.14	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	ND	ND	ND	V
o - DICHLOROBENZENE	ND	ND	ND	V
1,2,4-TRICHLOROBENZENE	ND	ND	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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SAMPLE SITE #	HALA 15764	HALA 15769	HALA 15819	HALA 15854
SAMPLE DATE	5/6/99	5/21/99	6/30/99	6/11/99
ANALYSIS DATE		5/27/99	6/9/99	6/18/99
FILE NAME		L9EZ015	L9FI010	L9FQ016
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	1.60	2.22	2.23
PROPYLENE	V	2.46	1.36	1.02
DICHLORODIFLUOROMETHANE	V	0.92	0.55	0.59
CHLOROMETHANE	V	0.16	1.95	1.75
DICHLOROTETRAFLUOROETHANE	V	ND	0.01 U	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	0.27	0.08	0.09
BROMOMETHANE	V	ND	ND	0.02 U
CHLOROETHANE	V	ND	0.08	ND
ACETONITRILE	V	1.27	0.97	ND
TRICHLOROFLUOROMETHANE	V	0.37	0.27	0.28
ACRYLONITRILE	V	ND	ND	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.07 U	0.08 U	0.08 U
TRICHLOROTRIFLUOROETHANE	V	0.10	0.17	0.11
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	0.16	0.09	0.12
METHYL ETHYL KETONE	V	1.14	0.64	0.52
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.06	0.07	0.09
BENZENE	V	0.77	0.72	0.64
CARBON TETRACHLORIDE	V	0.08 U	0.11	0.09 U
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	ND	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	0.13	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	0.86	0.73	1.13
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.11	0.18	0.15
TETRACHLOROETHYLENE	V	ND	ND	0.05 U
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.15	0.15	0.21
m,p - XYLENE	V	0.36	0.38	0.55
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.05 U	0.07 U	0.07 U
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.18	0.21	0.25
1,3,5-TRIMETHYLBENZENE	V	0.06 U	0.09	0.09
1,2,4-TRIMETHYLBENZENE	V	0.14	0.21	0.22
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	0.18
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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SAMPLE SITE #	HALA 15983	HALA 16060	HALA 16201	HALA 16347
SAMPLE DATE	7/5/99	7/17/99	7/29/99	8/10/99
ANALYSIS DATE	7/20/99	7/28/99		8/19/99
FILE NAME	L9GT012	L9GI012		L9HQ022
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.50	0.95	V	1.15
PROPYLENE	2.08	1.17	V	1.35
DICHLORODIFLUOROMETHANE	0.63	0.75	V	0.79
CHLOROMETHANE	4.74	3.53	V	3.60
DICHLOROTETRAFLUOROETHANE	0.01 U	ND	V	ND
VINYL CHLORIDE	ND	ND	V	ND
1,3-BUTADIENE	0.10	0.05 U	V	0.02 U
BROMOMETHANE	ND	ND	V	ND
CHLOROETHANE	ND	ND	V	ND
ACETONITRILE	ND	ND	V	ND
TRICHLOROFLUOROMETHANE	0.30	1.62	V	0.37
ACRYLONITRILE	ND	ND	V	ND
1,1-DICHLOROETHENE	ND	ND	V	ND
METHYLENE CHLORIDE	0.11	1.37	V	0.09 U
TRICHLOROTRIFLUOROETHANE	0.11	0.12	V	0.13
trans - 1,2 - DICHLOROETHYLENE	ND	ND	V	ND
1,1 - DICHLOROETHANE	ND	ND	V	ND
METHYL tert-BUTYL ETHER	0.25	0.10	V	0.09
METHYL ETHYL KETONE	0.66	0.50	V	1.01
CHLOROPRENE	ND	ND	V	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	V	ND
BROMOCHLOROMETHANE	ND	ND	V	ND
CHLOROFORM	ND	ND	V	ND
ETHYL tert-BUTYL ETHER	ND	ND	V	ND
1,2 - DICHLOROETHANE	ND	ND	V	0.21
1,1,1 - TRICHLOROETHANE	0.06	0.07	V	0.07
BENZENE	1.13	0.59	V	0.54
CARBON TETRACHLORIDE	0.11	0.11	V	0.10
tert-AMYL METHYL ETHER	ND	ND	V	ND
1,2 - DICHLOROPROPANE	ND	ND	V	ND
ETHYL ACRYLATE	ND	ND	V	ND
BROMODICHLOROMETHANE	ND	ND	V	ND
TRICHLOROETHYLENE	ND	ND	V	ND
METHYL METHACRYLATE	ND	ND	V	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	V	ND
METHYL ISOBUTYL KETONE	ND	ND	V	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	V	ND
1,1,2 - TRICHLOROETHANE	ND	ND	V	ND
TOLUENE	1.55	1.08	V	1.57
DIBROMOCHLOROMETHANE	ND	ND	V	ND
1,2-DIBROMOETHANE	ND	ND	V	ND
N-OCTANE	0.55	0.15	V	0.10
TETRACHLOROETHYLENE	ND	0.02 U	V	ND
CHLOROBENZENE	ND	ND	V	ND
ETHYLBENZENE	0.23	0.17	V	0.15
m,p - XYLENE	0.63	0.49	V	0.36
BROMOFORM	ND	ND	V	ND
STYRENE	0.06 U	0.06 U	V	0.20
1,1,2,2 - TETRACHLOROETHANE	ND	ND	V	ND
o - XYLENE	0.30	0.24	V	0.20
1,3,5-TRIMETHYLBENZENE	0.09	0.08 U	V	0.06 U
1,2,4-TRIMETHYLBENZENE	0.21	0.19	V	0.12
m - DICHLOROBENZENE	ND	ND	V	ND
CHLOROMETHYLBENZENE	ND	ND	V	ND
p - DICHLOROBENZENE	ND	0.01 U	V	ND
o - DICHLOROBENZENE	ND	ND	V	ND
1,2,4-TRICHLOROBENZENE	ND	ND	V	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	V	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Hahnville, LA (HALA)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	HALA 16448		HALA 16677	
SAMPLE DATE	8/22/99		9/3/99	
ANALYSIS DATE	9/2/99		9/15/99	
FILE NAME	L9IB009		L9IN017	
UNITS	ppbv		ppbv	
ACETYLENE	1.30		0.61	
PROPYLENE	1.05		1.54	
DICHLORODIFLUOROMETHANE	0.63		0.58	
CHLOROMETHANE	3.77		5.25	
DICHLOROTETRAFLUOROETHANE	ND		ND	
VINYL CHLORIDE	ND		ND	
1,3-BUTADIENE	0.06		ND	
BROMOMETHANE	0.03	U	ND	
CHLOROETHANE	ND		ND	
ACETONITRILE	ND		ND	
TRICHLOROFLUOROMETHANE	0.32		0.28	
ACRYLONITRILE	ND		0.15	
1,1-DICHLOROETHENE	ND		ND	
METHYLENE CHLORIDE	0.07	U	0.25	
TRICHLOROTRIFLUOROETHANE	0.10		0.10	
trans - 1,2 - DICHLOROETHYLENE	ND		ND	
1,1 - DICHLOROETHANE	ND		ND	
METHYL tert-BUTYL ETHER	ND		ND	
METHYL ETHYL KETONE	0.53		0.71	
CHLOROPRENE	ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND	
BROMOCHLOROMETHANE	ND		ND	
CHLOROFORM	ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND	
1,2 - DICHLOROETHANE	ND		ND	
1,1,1 - TRICHLOROETHANE	0.07		0.27	
BENZENE	0.41		0.33	
CARBON TETRACHLORIDE	0.10		0.08	U
tert-AMYL METHYL ETHER	ND		ND	
1,2 - DICHLOROPROPANE	ND		ND	
ETHYL ACRYLATE	ND		ND	
BROMODICHLOROMETHANE	ND		ND	
TRICHLOROETHYLENE	ND		ND	
METHYL METHACRYLATE	ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND	
METHYL ISOBUTYL KETONE	ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND	
TOLUENE	0.74		0.48	
DIBROMOCHLOROMETHANE	ND		ND	
1,2-DIBROMOETHANE	ND		ND	
N-OCTANE	0.12		0.10	
TETRACHLOROETHYLENE	ND		ND	
CHLOROBENZENE	ND		ND	
ETHYLBENZENE	0.13		0.10	
m,p - XYLENE	0.31		0.26	
BROMOFORM	ND		ND	
STYRENE	0.08	U	0.04	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND	
o - XYLENE	0.16		0.14	
1,3,5-TRIMETHYLBENZENE	0.06	U	0.05	U
1,2,4-TRIMETHYLBENZENE	0.14		0.12	
m - DICHLOROBENZENE	ND		ND	
CHLOROMETHYLBENZENE	ND		ND	
p - DICHLOROBENZENE	ND		ND	
o - DICHLOROBENZENE	ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - N. Little Rock, AK (PARR)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	PARR 14682	PARR 14698	PARR 14965	PARR 15106
SAMPLE DATE	9/3/98	9/8/98	9/20/98	10/2/98
ANALYSIS DATE		9/25/98	10/14/98	10/22/98
FILE NAME		L8IY021/L9AH008	L8JM026	L8JV011
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	1.58	1.74	1.18
PROPYLENE	V	1.57	0.99	1.16
DICHLORODIFLUOROMETHANE	V	0.63	0.68	0.61
CHLOROMETHANE	V	1.01	1.20	1.48
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	ND	0.05	ND
BROMOMETHANE	V	ND	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	ND	ND	ND
TRICHLOROFLUOROMETHANE	V	0.27	0.28	0.27
ACRYLONITRILE	V	ND	ND	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.08 U	0.09 U	0.95
TRICHLOROTRIFLUOROETHANE	V	0.13	0.10	0.09
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	ND	ND	ND
METHYL ETHYL KETONE	V	1.49	1.20	0.64
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	0.03 U	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.07	0.07	0.06
BENZENE	V	1.02	0.66	0.55
CARBON TETRACHLORIDE	V	0.09	0.11	0.11
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	ND	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	0.56	1.43	0.91
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.07 U	0.19	0.08 U
TETRACHLOROETHYLENE	V	0.09 U	ND	0.04 U
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.11	0.32	0.52
m,p - XYLENE	V	0.23	0.85	0.90
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.05 U	0.10 U	1.65
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.14	0.42	0.53
1,3,5-TRIMETHYLBENZENE	V	0.04 U	0.12	0.53
1,2,4-TRIMETHYLBENZENE	V	0.10	0.40	1.77
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	ND
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - N. Little Rock, AK (PARR)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	PARR 15124	PARR 15146	PARR 15185	PARR 15209
SAMPLE DATE	10/14/98	10/26/98	11/7/98	11/19/98
ANALYSIS DATE	11/3/98	11/3/98	11/18/98	
FILE NAME	L8KC009	L8KC012	L8KR012	
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	4.55	5.07	1.56	V
PROPYLENE	2.64	2.16	0.75	V
DICHLORODIFLUOROMETHANE	0.90	0.89	0.46	V
CHLOROMETHANE	1.21	1.23	0.62	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	0.30	0.25	0.06	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	0.15 U	1.55	ND	V
TRICHLOROFLUOROMETHANE	0.41	0.53	0.22	V
ACRYLONITRILE	ND	ND	ND	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.21	6.85	0.07 U	V
TRICHLOROTRIFLUOROETHANE	0.13	0.26	0.08	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	ND	ND	ND	V
METHYL ETHYL KETONE	1.02	1.23	0.47	V
CHLOROPRENE	ND	ND	ND	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	0.07	ND	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.08	0.08	0.06	V
BENZENE	1.26	1.34	0.49	V
CARBON TETRACHLORIDE	0.10	0.08 U	0.06 U	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	ND	ND	ND	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	0.11	0.14	0.07 U	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	2.53	3.22	0.78	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	0.29	0.21	0.11	V
TETRACHLOROETHYLENE	0.10	0.08 U	ND	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.57	0.63	0.18	V
m,p - XYLENE	1.56	1.76	0.46	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.21	0.40	0.06 U	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.79	0.85	0.23	V
1,3,5-TRIMETHYLBENZENE	0.24	0.21	0.08	V
1,2,4-TRIMETHYLBENZENE	0.73	0.65	0.23	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	0.06 U	0.06 U	ND	V
o - DICHLOROBENZENE	ND	ND	ND	V
1,2,4-TRICHLOROBENZENE	ND	ND	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - N. Little Rock, AK (PARR)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	PARR 15241	PARR 15260	PARR 15278	PARR 15324
SAMPLE DATE	12/1/98	12/13/98	12/25/98	1/6/99
ANALYSIS DATE	12/8/98	1/8/99	1/12/99	1/21/99
FILE NAME	L8LH017	L8AH007	L9AK015	L9AU008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.23	1.52	2.93	3.31
PROPYLENE	1.00	0.51	0.88	0.83
DICHLORODIFLUOROMETHANE	0.60	0.53	0.69	0.64
CHLOROMETHANE	0.69	0.53	0.75	0.75
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.12	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	0.72	ND
TRICHLOROFLUOROMETHANE	0.27	ND	0.27	0.32
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.55	1.93	0.37	0.10
TRICHLOROTRIFLUOROETHANE	0.10	0.08	0.11	0.11
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.61	0.52	0.08 U	0.62
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	ND	0.06	0.06
BENZENE	0.65	0.43	0.61	0.64
CARBON TETRACHLORIDE	0.10	0.02 U	0.10	0.09
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.10	0.47	0.74	0.82
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.12	0.10	0.11	0.07
TETRACHLOROETHYLENE	0.05 U	ND	ND	0.11
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.25	0.13	0.19	0.18
m,p - XYLENE	0.60	0.22	0.41	0.43
BROMOFORM	ND	ND	ND	ND
STYRENE	0.13	0.07 U	0.06 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.32	0.14	0.24	0.22
1,3,5-TRIMETHYLBENZENE	0.10	0.07 U	0.07 U	0.08
1,2,4-TRIMETHYLBENZENE	0.31	0.13	0.14	0.22
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - N. Little Rock, AK (PARR)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	PARR 16362	PARR 16372	PARR 16399	PARR 16431
SAMPLE DATE	1/18/99	1/30/99	2/11/99	2/17/99
ANALYSIS DATE	2/2/99	2/11/99	2/17/99	2/24/99
FILE NAME	L9BB008	L9BJ009	L9BQ011	L9BW014
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.22	1.88	0.65	1.68
PROPYLENE	1.16	0.82	0.29	0.51
DICHLORODIFLUOROMETHANE	0.88	0.63	0.60	0.64
CHLOROMETHANE	0.66	0.72	0.75	0.63
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.11	ND	0.20	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	1.02	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.29	0.29	0.28	0.29
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	4.78	2.99	0.05 U	0.27
TRICHLOROTRIFLUOROETHANE	0.15	0.14	0.08	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.66	0.66	0.32	0.92
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	0.06	0.04 U	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.09	0.07	0.07	0.06
BENZENE	0.68	0.58	0.26	0.44
CARBON TETRACHLORIDE	0.08 U	0.08 U	0.08 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	0.07	0.06 U	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.11	0.81	0.31	0.58
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.12	0.08 U	0.04 U	0.07 U
TETRACHLOROETHYLENE	ND	ND	ND	0.05 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.24	0.18	0.09 U	0.13
m,p - XYLENE	0.58	0.41	0.18	0.32
BROMOFORM	ND	ND	ND	ND
STYRENE	0.15	0.11 U	0.06 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.31	0.26	0.10	0.17
1,3,5-TRIMETHYLBENZENE	0.13	0.10	0.05 U	0.06 U
1,2,4-TRIMETHYLBENZENE	0.31	0.23	0.11	0.17
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - N. Little Rock, AK (PARR)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	PARR 15461	PARR 15513	PARR 16501	PARR 15597 D1
SAMPLE DATE	2/23/99	3/1/99	3/7/99	3/17/99
ANALYSIS DATE	3/10/99	3/17/99	3/17/99	4/12/99
FILE NAME	L9CJ010	L9CQ006	L9CQ008	L9DL008
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.54	3.15	0.83	1.46
PROPYLENE	0.81	1.22	0.32	0.56
DICHLORODIFLUOROMETHANE	0.62	0.62	0.56	0.61
CHLOROMETHANE	0.61	0.56	0.64	0.59
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	0.13	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.30	0.26	0.27	0.29
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.18	0.34	0.06 U	0.13
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.93	0.67	0.41	0.48
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.06	0.04 U	0.05 U
BENZENE	0.57	0.86	0.28	0.40
CARBON TETRACHLORIDE	0.08 U	0.07 U	0.04 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.77	1.56	0.26	0.54
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.08	0.12	0.03 U	0.06 U
TETRACHLOROETHYLENE	ND	0.04 U	ND	0.06 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.19	0.31	0.08 U	0.12
m,p - XYLENE	0.48	0.88	0.14	0.31
BROMOFORM	ND	ND	ND	ND
STYRENE	0.04 U	0.10 U	0.05 U	0.07 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.26	0.43	0.08	0.14
1,3,5-TRIMETHYLBENZENE	0.09	0.16	0.05 U	0.08
1,2,4-TRIMETHYLBENZENE	0.23	0.44	0.10	0.17
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	0.03 U	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - N. Little Rock, AK (PARR)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	PARR 15597 R1		PARR 15599 D2		PARR 15599 R2		PARR 15584	
SAMPLE DATE	3/17/99		3/17/99		3/17/99		3/25/99	
ANALYSIS DATE	4/13/99		4/12/99		4/13/99		4/13/99	
FILE NAME	L9DM006		L9DL009		L9DM007		L9DL014	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.18		1.54		1.35		1.27	
PROPYLENE	0.56		0.57		0.59		0.54	
DICHLORODIFLUOROMETHANE	0.64		0.67		0.68		0.62	
CHLOROMETHANE	0.64		0.71		0.72		0.71	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.29		0.29		0.35		0.32	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.12		0.11		0.10		0.18	
TRICHLOROTRIFLUOROETHANE	0.08		0.08		0.10		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	0.48		0.45		0.47		1.00	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.06		0.05	U	0.05	U	0.05	U
BENZENE	0.43		0.42		0.43		0.36	
CARBON TETRACHLORIDE	0.09		0.09	U	0.10		0.08	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.55		0.54		0.58		0.40	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.05	U	0.06	U	0.06	U	0.09	U
TETRACHLOROETHYLENE	0.06	U	0.05	U	0.07	U	ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.12		0.13		0.12		0.12	
m,p - XYLENE	0.30		0.29		0.30		0.25	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.08	U	0.07	U	0.06	U	0.05	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.17		0.16		0.15		0.14	
1,3,5-TRIMETHYLBENZENE	0.06	U	0.06	U	0.06	U	0.07	U
1,2,4-TRIMETHYLBENZENE	0.16		0.16		0.15		0.16	
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - N. Little Rock, AK (PARR)
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SAMPLE SITE #	PARR 15614	
SAMPLE DATE	3/31/99	
ANALYSIS DATE	4/22/99	
FILE NAME	L9DU012	
UNITS	ppbv	
ACETYLENE	1.33	
PROPYLENE	0.86	
DICHLORODIFLUOROMETHANE	0.59	
CHLOROMETHANE	0.68	
DICHLOROTETRAFLUOROETHANE	ND	
VINYL CHLORIDE	ND	
1,3-BUTADIENE	ND	
BROMOMETHANE	ND	
CHLOROETHANE	ND	
ACETONITRILE	ND	
TRICHLOROFLUOROMETHANE	0.29	
ACRYLONITRILE	ND	
1,1-DICHLOROETHENE	ND	
METHYLENE CHLORIDE	0.13	
TRICHLOROTRIFLUOROETHANE	0.08	
trans - 1,2 - DICHLOROETHYLENE	ND	
1,1 - DICHLOROETHANE	ND	
METHYL tert-BUTYL ETHER	ND	
METHYL ETHYL KETONE	0.66	
CHLOROPRENE	ND	
cis-1,2-DICHLOROETHYLENE	ND	
BROMOCHLOROMETHANE	ND	
CHLOROFORM	ND	
ETHYL tert-BUTYL ETHER	ND	
1,2 - DICHLOROETHANE	ND	
1,1,1 - TRICHLOROETHANE	0.05	U
BENZENE	0.45	
CARBON TETRACHLORIDE	0.10	
tert-AMYL METHYL ETHER	ND	
1,2 - DICHLOROPROPANE	ND	
ETHYL ACRYLATE	ND	
BROMODICHLOROMETHANE	ND	
TRICHLOROETHYLENE	ND	
METHYL METHACRYLATE	ND	
cis -1,3 - DICHLOROPROPENE	ND	
METHYL ISOBUTYL KETONE	ND	
trans - 1,3 - DICHLOROPROPENE	ND	
1,1,2 - TRICHLOROETHANE	ND	
TOLUENE	0.57	
DIBROMOCHLOROMETHANE	ND	
1,2-DIBROMOETHANE	ND	
N-OCTANE	0.04	U
TETRACHLOROETHYLENE	0.02	U
CHLOROBENZENE	ND	
ETHYLBENZENE	0.14	
m,p - XYLENE	0.33	
BROMOFORM	ND	
STYRENE	0.10	U
1,1,2,2 - TETRACHLOROETHANE	ND	
o - XYLENE	0.18	
1,3,5-TRIMETHYLBENZENE	0.08	
1,2,4-TRIMETHYLBENZENE	0.19	
m - DICHLOROBENZENE	ND	
CHLOROMETHYLBENZENE	ND	
p - DICHLOROBENZENE	ND	
o - DICHLOROBENZENE	ND	
1,2,4-TRICHLOROBENZENE	ND	
HEXACHLORO-1,3-BUTADIENE	ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Rutland, VT (RUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	RUVT 14690	RUVT 14821	RUVT 14976	RUVT 15060
SAMPLE DATE	9/2/98	9/14/98	9/20/98	9/26/98
ANALYSIS DATE	9/25/98	10/14/98	10/14/98	10/22/98
FILE NAME	L8IY019	L8JM010	L8JM028	L8JV006
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.22	2.45	1.66	1.94
PROPYLENE	1.02	1.32	0.91	1.06
DICHLORODIFLUOROMETHANE	0.94	0.80	0.71	0.63
CHLOROMETHANE	0.62	0.72	0.62	0.46
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.09	0.14	0.08	0.12
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	0.91
TRICHLOROFLUOROMETHANE	0.67	0.35	0.32	0.24
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.23	0.16	0.14
TRICHLOROTRIFLUOROETHANE	0.04	0.09	0.10	0.05
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.43	0.55	0.42	0.47
METHYL ETHYL KETONE	0.69	1.08	0.69	0.52
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	0.03 U	0.01 U	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.08	0.09	0.06
BENZENE	0.64	0.82	0.73	0.97
CARBON TETRACHLORIDE	0.12	0.11	0.11	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.96	2.71	2.15	4.71
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	0.07 U	0.08 U	0.20
TETRACHLOROETHYLENE	ND	0.05 U	0.02 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.33	0.36	0.31	0.37
m,p - XYLENE	0.82	1.01	0.78	1.15
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	0.10	0.10	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.44	0.49	0.40	0.55
1,3,5-TRIMETHYLBENZENE	0.07 U	0.15	0.11	0.19
1,2,4-TRIMETHYLBENZENE	0.27	0.44	0.38	0.68
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Rutland, VT (RUVT)
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SAMPLE SITE #	RUVT 15111	RUVT 15135	RUVT 15157	RUVT 15201
SAMPLE DATE	10/8/98	10/20/98	11/1/98	11/13/98
ANALYSIS DATE	10/22/98	12/6/98	11/18/98	12/1/98
FILE NAME	L8JV017	L8LF007	L8KR006	L8LA012
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.86	1.59	0.97	2.89
PROPYLENE	1.04	0.67	0.49	1.08
DICHLORODIFLUOROMETHANE	0.61	0.56	0.48	0.61
CHLOROMETHANE	0.44	0.54	0.51	0.57
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.07	0.03 U	0.03 U	0.15
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	1.25	1.51	0.03 U	0.85
TRICHLOROFLUOROMETHANE	0.30	0.29	0.25	0.28
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.33	0.07 U	0.03 U	0.05 U
TRICHLOROTRIFLUOROETHANE	0.09	0.10	0.08	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.55	0.17	ND	0.19
METHYL ETHYL KETONE	0.36	0.78	0.35	0.46
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.07	0.05 U	0.07
BENZENE	1.08	0.55	0.39	0.79
CARBON TETRACHLORIDE	0.09	0.09	0.10	0.09
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	2.60	1.12	0.57	1.68
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.12	0.11	0.05 U	0.11
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.38	0.18	0.11	0.26
m,p - XYLENE	1.13	0.49	0.27	0.75
BROMOFORM	ND	ND	ND	ND
STYRENE	0.08 U	0.06 U	0.06 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.51	0.26	0.14	0.35
1,3,5-TRIMETHYLBENZENE	0.13	0.10	0.06 U	0.13
1,2,4-TRIMETHYLBENZENE	0.65	0.29	0.14	0.33
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Rutland, VT (RUVT)
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SAMPLE SITE #	RUVT 16229	RUVT 16245	RUVT 16280	RUVT 16306
SAMPLE DATE	11/25/98	12/7/98	12/19/98	12/31/98
ANALYSIS DATE	12/8/09	12/31/98	1/12/99	1/12/99
FILE NAME	L8LH011	L8LV005	L9AK009	L9AK021
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.35	1.21	5.86	5.09
PROPYLENE	0.97	0.65	2.50	2.01
DICHLORODIFLUOROMETHANE	0.60	0.63	0.71	0.75
CHLOROMETHANE	0.55	0.62	0.61	0.61
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.03 U	ND	0.34	0.30
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	2.31	ND	ND
TRICHLOROFLUOROMETHANE	0.27	0.29	0.43	0.29
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.03 U	0.08 U	0.19	0.86
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.18	0.13	0.43	0.22
METHYL ETHYL KETONE	0.30	0.36	0.58	0.50
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.05 U	0.05 U
BENZENE	0.78	0.39	1.52	1.31
CARBON TETRACHLORIDE	0.10	0.10	0.09	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.38	0.80	2.84	2.42
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.07 U	0.08 U	0.18	0.10
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.22	0.14	0.47	0.46
m,p - XYLENE	0.60	0.38	1.40	1.26
BROMOFORM	ND	ND	ND	ND
STYRENE	0.05 U	0.05 U	0.13	0.10 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.30	0.21	0.69	0.65
1,3,5-TRIMETHYLBENZENE	0.11	0.06 U	0.19	0.17
1,2,4-TRIMETHYLBENZENE	0.28	0.18	0.55	0.48
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Rutland, VT (RUVT)
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SAMPLE SITE #	RUVT 16320	RUVT 16345 D1	RUVT 16345 R1	RUVT 16347 D2
SAMPLE DATE	1/12/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE		2/2/99	2/9/99	2/2/99
FILE NAME		L9BB009	L9BI005	L9BB010
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	2.84	2.90	2.82
PROPYLENE	V	1.43	1.47	1.34
DICHLORODIFLUOROMETHANE	V	0.66	0.68	0.70
CHLOROMETHANE	V	0.67	0.66	0.60
DICHLOROTETRAFLUOROETHANE	V	ND	ND	ND
VINYL CHLORIDE	V	ND	ND	ND
1,3-BUTADIENE	V	0.22	0.22	0.16
BROMOMETHANE	V	ND	ND	ND
CHLOROETHANE	V	ND	ND	ND
ACETONITRILE	V	0.41	0.48	2.73
TRICHLOROFLUOROMETHANE	V	0.31	0.32	0.30
ACRYLONITRILE	V	ND	ND	ND
1,1-DICHLOROETHENE	V	ND	ND	ND
METHYLENE CHLORIDE	V	0.09 U	0.13	0.07 U
TRICHLOROTRIFLUOROETHANE	V	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND	ND
METHYL tert-BUTYL ETHER	V	0.42	0.43	0.41
METHYL ETHYL KETONE	V	0.30	0.36	0.18
CHLOROPRENE	V	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND	ND
BROMOCHLOROMETHANE	V	ND	ND	ND
CHLOROFORM	V	ND	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.06	0.05 U	0.04 U
BENZENE	V	0.98	0.93	0.97
CARBON TETRACHLORIDE	V	0.09	0.09	0.08 U
tert-AMYL METHYL ETHER	V	ND	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND	ND
ETHYL ACRYLATE	V	ND	ND	ND
BROMODICHLOROMETHANE	V	ND	ND	ND
TRICHLOROETHYLENE	V	ND	ND	ND
METHYL METHACRYLATE	V	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND	ND
METHYL ISOBUTYL KETONE	V	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND	ND
TOLUENE	V	2.41	2.39	2.50
DIBROMOCHLOROMETHANE	V	ND	ND	ND
1,2-DIBROMOETHANE	V	ND	ND	ND
N-OCTANE	V	0.16	0.16	0.16
TETRACHLOROETHYLENE	V	ND	ND	ND
CHLOROBENZENE	V	ND	ND	ND
ETHYLBENZENE	V	0.48	0.47	0.49
m,p - XYLENE	V	1.51	1.44	1.49
BROMOFORM	V	ND	ND	ND
STYRENE	V	0.10 U	0.09 U	0.09 U
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND	ND
o - XYLENE	V	0.72	0.72	0.77
1,3,5-TRIMETHYLBENZENE	V	0.27	0.25	0.27
1,2,4-TRIMETHYLBENZENE	V	0.76	0.74	0.75
m - DICHLOROBENZENE	V	ND	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND	ND
p - DICHLOROBENZENE	V	ND	ND	ND
o - DICHLOROBENZENE	V	ND	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND	ND

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SAMPLE SITE #	RUVT 15347 R2	RUVT 15409	RUVT 15445	RUVT 15479
SAMPLE DATE	1/24/99	2/5/99	2/17/99	3/1/99
ANALYSIS DATE	2/9/99	2/23/99	3/4/99	3/11/99
FILE NAME	L9BI006	L9BW008	L9CD012	L9CJ021
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.81	1.62	2.04	2.88
PROPYLENE	1.28	0.70	0.76	1.10
DICHLORODIFLUOROMETHANE	0.64	0.62	0.59	0.62
CHLOROMETHANE	0.60	0.57	0.60	0.60
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.20	0.04 U	0.09	0.11
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	2.06	1.15	0.46	0.63
TRICHLOROFLUOROMETHANE	0.29	0.29	0.42	0.28
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.07 U	0.07 U	0.10	0.08 U
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.08	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.42	0.13	0.19	0.28
METHYL ETHYL KETONE	0.19	0.33	0.53	0.42
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.05 U	0.06	0.06	0.05 U
BENZENE	0.94	0.55	0.62	0.73
CARBON TETRACHLORIDE	0.05 U	0.08 U	0.06 U	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	0.06
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	2.39	1.06	0.93	1.19
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.15	0.07 U	ND	0.10
TETRACHLOROETHYLENE	ND	ND	0.02 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.47	0.22	0.14	0.23
m,p - XYLENE	1.45	0.59	0.43	0.61
BROMOFORM	ND	ND	ND	ND
STYRENE	0.11	0.04 U	0.02 U	0.05 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.74	0.31	0.20	0.31
1,3,5-TRIMETHYLBENZENE	0.27	0.10	0.05 U	0.10
1,2,4-TRIMETHYLBENZENE	0.77	0.25	0.14	0.29
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	RUVT 16550	RUVT 16566	RUVT 16628 D1	RUVT 16628 R1
SAMPLE DATE	3/13/99	3/19/99	3/25/99	3/25/99
ANALYSIS DATE	3/24/99	4/12/99	4/21/99	5/7/99
FILE NAME	L9CX015	L9DL013	L9DU007	L9ED030
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.40	0.74	1.20	1.17
PROPYLENE	0.58	0.65	0.46	0.52
DICHLORODIFLUOROMETHANE	0.63	0.64	0.60	0.62
CHLOROMETHANE	0.64	0.63	0.60	0.62
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.03 U	ND	ND	0.02 U
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	0.36	ND
TRICHLOROFLUOROMETHANE	0.28	0.42	0.31	0.41
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.06 U	0.21	0.22
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	0.12	0.13	0.10
METHYL ETHYL KETONE	0.28	0.74	1.66	2.06
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.05 U	0.04 U	0.06
BENZENE	0.49	0.42	0.36	0.36
CARBON TETRACHLORIDE	0.08 U	0.07 U	0.05 U	0.03 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.49	0.51	0.46	0.48
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	ND	0.03 U	0.05 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.10	0.12	0.10	0.11
m,p - XYLENE	0.25	0.28	0.27	0.23
BROMOFORM	ND	ND	ND	ND
STYRENE	0.02 U	0.03 U	0.05 U	0.03 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.13	0.15	0.15	0.13
1,3,5-TRIMETHYLBENZENE	0.04 U	0.05 U	0.07 U	0.04 U
1,2,4-TRIMETHYLBENZENE	0.08 U	0.12	0.11	0.10
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	RUVT 15630 D2	RUVT 15630 R2	RUVT 15632	RUVT 15678
SAMPLE DATE	3/25/99	3/25/99	4/6/99	4/18/99
ANALYSIS DATE	4/21/99	4/22/99	4/22/99	5/11/99
FILE NAME	L9DU008	L9DV004	L9DV009	L9EJ014
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.15	1.27	2.50	5.36
PROPYLENE	0.40	0.44	1.44	0.60
DICHLORODIFLUOROMETHANE	0.59	0.64	0.68	0.67
CHLOROMETHANE	0.58	0.60	0.68	0.74
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	0.14	0.05
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	2.27	2.34	ND	ND
TRICHLOROFLUOROMETHANE	0.51	0.52	0.34	0.44
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.26	0.24	0.26	0.09 U
TRICHLOROTRIFLUOROETHANE	0.09	ND	0.10	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.10	ND	0.30	0.16
METHYL ETHYL KETONE	0.65	0.72	0.66	0.59
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.05 U	0.06	0.06
BENZENE	0.36	0.36	0.73	0.44
CARBON TETRACHLORIDE	0.07 U	0.09 U	0.07 U	0.09 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.45	0.47	2.08	0.97
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.05 U	0.06 U	0.13	0.11
TETRACHLOROETHYLENE	ND	ND	0.02 U	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.11	0.10	0.28	0.33
m,p - XYLENE	0.24	0.24	0.76	0.68
BROMOFORM	ND	ND	ND	ND
STYRENE	0.05 U	0.03 U	0.06 U	0.37
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.14	0.14	0.35	0.40
1,3,5-TRIMETHYLBENZENE	0.06 U	0.05 U	0.13	0.39
1,2,4-TRIMETHYLBENZENE	0.12	0.10	0.33	0.97
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	RUVT 15731	RUVT 15822	RUVT 15824	RUVT 15784
SAMPLE DATE	4/30/99	5/12/99	5/12/99	5/24/99
ANALYSIS DATE	5/18/99			6/7/99
FILE NAME	L9ER011			L9FG012
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	2.36	V	V	1.40
PROPYLENE	1.13	V	V	0.71
DICHLORODIFLUOROMETHANE	0.73	V	V	0.74
CHLOROMETHANE	0.68	V	V	0.69
DICHLOROTETRAFLUOROETHANE	ND	V	V	0.01 U
VINYL CHLORIDE	ND	V	V	ND
1,3-BUTADIENE	0.13	V	V	0.07
BROMOMETHANE	ND	V	V	ND
CHLOROETHANE	ND	V	V	ND
ACETONITRILE	ND	V	V	20.43
TRICHLOROFLUOROMETHANE	0.33	V	V	0.40
ACRYLONITRILE	ND	V	V	ND
1,1-DICHLOROETHENE	ND	V	V	ND
METHYLENE CHLORIDE	0.46	V	V	0.16
TRICHLOROTRIFLUOROETHANE	0.10	V	V	0.10
trans - 1,2 - DICHLOROETHYLENE	ND	V	V	ND
1,1 - DICHLOROETHANE	ND	V	V	ND
METHYL tert-BUTYL ETHER	0.39	V	V	0.18
METHYL ETHYL KETONE	0.66	V	V	1.36
CHLOROPRENE	ND	V	V	ND
cis-1,2-DICHLOROETHYLENE	ND	V	V	ND
BROMOCHLOROMETHANE	ND	V	V	ND
CHLOROFORM	ND	V	V	ND
ETHYL tert-BUTYL ETHER	ND	V	V	ND
1,2 - DICHLOROETHANE	ND	V	V	ND
1,1,1 - TRICHLOROETHANE	0.08	V	V	0.08
BENZENE	0.79	V	V	0.40
CARBON TETRACHLORIDE	0.09	V	V	0.10
tert-AMYL METHYL ETHER	ND	V	V	ND
1,2 - DICHLOROPROPANE	ND	V	V	ND
ETHYL ACRYLATE	ND	V	V	ND
BROMODICHLOROMETHANE	ND	V	V	ND
TRICHLOROETHYLENE	ND	V	V	ND
METHYL METHACRYLATE	ND	V	V	ND
cis -1,3 - DICHLOROPROPENE	ND	V	V	ND
METHYL ISOBUTYL KETONE	ND	V	V	0.09
trans - 1,3 - DICHLOROPROPENE	ND	V	V	ND
1,1,2 - TRICHLOROETHANE	ND	V	V	ND
TOLUENE	1.89	V	V	1.13
DIBROMOCHLOROMETHANE	ND	V	V	ND
1,2-DIBROMOETHANE	ND	V	V	ND
N-OCTANE	0.15	V	V	0.11
TETRACHLOROETHYLENE	ND	V	V	0.05 U
CHLOROBENZENE	ND	V	V	ND
ETHYLBENZENE	0.30	V	V	0.20
m,p - XYLENE	0.85	V	V	0.46
BROMOFORM	ND	V	V	ND
STYRENE	0.07 U	V	V	0.11 U
1,1,2,2 - TETRACHLOROETHANE	ND	V	V	ND
o - XYLENE	0.44	V	V	0.23
1,3,5-TRIMETHYLBENZENE	0.14	V	V	0.08
1,2,4-TRIMETHYLBENZENE	0.40	V	V	0.19
m - DICHLOROBENZENE	ND	V	V	ND
CHLOROMETHYLBENZENE	ND	V	V	ND
p - DICHLOROBENZENE	ND	V	V	0.01 U
o - DICHLOROBENZENE	ND	V	V	ND
1,2,4-TRICHLOROBENZENE	ND	V	V	ND
HEXACHLORO-1,3-BUTADIENE	ND	V	V	ND

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SAMPLE SITE #	RUVT 15904		RUVT 15925	RUVT 16026		RUVT 16258	
SAMPLE DATE	6/5/99		6/17/99	6/29/99		7/17/99	
ANALYSIS DATE	6/24/99			7/20/99		8/10/99	
FILE NAME	L9FW010			L9GT009		L9HJ012	
UNITS	ppbv		ppbv	ppbv		ppbv	
ACETYLENE	2.43		V	1.70		1.42	
PROPYLENE	0.78		V	1.02		0.77	
DICHLORODIFLUOROMETHANE	0.62		V	1.40		0.81	
CHLOROMETHANE	0.64		V	0.87		0.78	
DICHLOROTETRAFLUOROETHANE	0.01	U	V	ND		ND	
VINYL CHLORIDE	ND		V	ND		ND	
1,3-BUTADIENE	0.09		V	0.12		0.05	U
BROMOMETHANE	0.02	U	V	0.04		0.03	U
CHLOROETHANE	ND		V	ND		ND	
ACETONITRILE	2.27		V	1.20		ND	
TRICHLOROFLUOROMETHANE	0.30		V	0.31		0.39	
ACRYLONITRILE	ND		V	ND		ND	
1,1-DICHLOROETHENE	ND		V	ND		ND	
METHYLENE CHLORIDE	0.13		V	0.13		0.11	
TRICHLOROTRIFLUOROETHANE	0.11		V	0.10		0.12	
trans - 1,2 - DICHLOROETHYLENE	ND		V	ND		ND	
1,1 - DICHLOROETHANE	ND		V	ND		ND	
METHYL tert-BUTYL ETHER	0.27		V	0.43		0.28	
METHYL ETHYL KETONE	0.62		V	1.07		0.96	
CHLOROPRENE	ND		V	ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		V	ND		ND	
BROMOCHLOROMETHANE	ND		V	ND		ND	
CHLOROFORM	0.03	U	V	ND		ND	
ETHYL tert-BUTYL ETHER	ND		V	ND		ND	
1,2 - DICHLOROETHANE	ND		V	ND		ND	
1,1,1 - TRICHLOROETHANE	0.08		V	0.06		0.08	
BENZENE	0.52		V	0.60		0.56	
CARBON TETRACHLORIDE	0.09		V	0.09		0.11	
tert-AMYL METHYL ETHER	0.02	U	V	ND		ND	
1,2 - DICHLOROPROPANE	ND		V	ND		ND	
ETHYL ACRYLATE	ND		V	ND		ND	
BROMODICHLOROMETHANE	ND		V	ND		ND	
TRICHLOROETHYLENE	ND		V	0.02	U	ND	
METHYL METHACRYLATE	ND		V	ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		V	ND		ND	
METHYL ISOBUTYL KETONE	ND		V	0.14		ND	
trans - 1,3 - DICHLOROPROPENE	ND		V	ND		ND	
1,1,2 - TRICHLOROETHANE	ND		V	ND		ND	
TOLUENE	1.53		V	3.83		1.46	
DIBROMOCHLOROMETHANE	ND		V	ND		ND	
1,2-DIBROMOETHANE	ND		V	ND		ND	
N-OCTANE	0.15		V	0.20		0.11	
TETRACHLOROETHYLENE	0.02	U	V	0.05	U	ND	
CHLOROBENZENE	ND		V	ND		ND	
ETHYLBENZENE	0.35		V	0.40		0.24	
m,p - XYLENE	0.96		V	0.85		0.66	
BROMOFORM	ND		V	ND		ND	
STYRENE	0.08	U	V	0.26		0.07	U
1,1,2,2 - TETRACHLOROETHANE	ND		V	ND		ND	
o - XYLENE	0.48		V	0.42		0.31	
1,3,5-TRIMETHYLBENZENE	0.16		V	0.14		0.10	
1,2,4-TRIMETHYLBENZENE	0.41		V	0.39		0.26	
m - DICHLOROBENZENE	ND		V	ND		ND	
CHLOROMETHYLBENZENE	ND		V	ND		ND	
p - DICHLOROBENZENE	0.02	U	V	0.03	U	0.02	U
o - DICHLOROBENZENE	ND		V	ND		ND	
1,2,4-TRICHLOROBENZENE	ND		V	ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		V	ND		ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Rutland, VT (RUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	RUVT 16250	RUVT 16275	RUVT 16487	RUVT 16609
SAMPLE DATE	7/23/99	8/4/99	8/16/99	8/28/99
ANALYSIS DATE	8/10/99	8/16/99	9/3/99	9/14/99
FILE NAME	L9HJ013	L9HP009	L9IB017	L9IN012
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.45	1.24	1.21	1.35
PROPYLENE	0.87	0.76	0.81	0.87
DICHLORODIFLUOROMETHANE	0.80	0.71	0.68	0.68
CHLOROMETHANE	0.92	0.64	0.58	0.66
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	0.08	0.07	0.07	0.06
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	1.05	ND	ND
TRICHLOROFLUOROMETHANE	0.37	0.43	0.30	0.33
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.10	0.10	0.08 U	0.13
TRICHLOROTRIFLUOROETHANE	0.11	0.10	0.11	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	0.40	0.21	0.32	0.34
METHYL ETHYL KETONE	0.91	0.74	0.33	0.43
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	0.03 U	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.06 U	0.06 U
BENZENE	0.65	0.45	0.60	0.68
CARBON TETRACHLORIDE	0.11	0.10	0.08 U	0.09
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	1.68	1.40	1.38	1.41
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.10	0.11	0.15	0.11
TETRACHLOROETHYLENE	0.03 U	0.03 U	0.06 U	0.05 U
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.26	0.21	0.27	0.24
m,p - XYLENE	0.66	0.52	0.64	0.61
BROMOFORM	ND	ND	ND	ND
STYRENE	0.07 U	0.07 U	0.07 U	0.06 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.34	0.26	0.30	0.31
1,3,5-TRIMETHYLBENZENE	0.11	0.08	0.09	0.09
1,2,4-TRIMETHYLBENZENE	0.29	0.22	0.26	0.24
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	0.03 U
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	0.06 U	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	0.04 U	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Rutland, VT (RUVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	RUVT 16807		RUVT 16899
SAMPLE DATE	9/9/99		9/21/99
ANALYSIS DATE	10/6/99		
FILE NAME	L9JF010		
UNITS	ppbv		ppbv
ACETYLENE	1.47		V
PROPYLENE	0.78		V
DICHLORODIFLUOROMETHANE	0.71		V
CHLOROMETHANE	0.83		V
DICHLOROTETRAFLUOROETHANE	ND		V
VINYL CHLORIDE	ND		V
1,3-BUTADIENE	0.09		V
BROMOMETHANE	ND		V
CHLOROETHANE	ND		V
ACETONITRILE	ND		V
TRICHLOROFLUOROMETHANE	0.33		V
ACRYLONITRILE	ND		V
1,1-DICHLOROETHENE	ND		V
METHYLENE CHLORIDE	0.10		V
TRICHLOROTRIFLUOROETHANE	0.10		V
trans - 1,2 - DICHLOROETHYLENE	ND		V
1,1 - DICHLOROETHANE	ND		V
METHYL tert-BUTYL ETHER	0.39		V
METHYL ETHYL KETONE	0.46		V
CHLOROPRENE	ND		V
cis-1,2-DICHLOROETHYLENE	ND		V
BROMOCHLOROMETHANE	ND		V
CHLOROFORM	ND		V
ETHYL tert-BUTYL ETHER	ND		V
1,2 - DICHLOROETHANE	ND		V
1,1,1 - TRICHLOROETHANE	0.06		V
BENZENE	0.68		V
CARBON TETRACHLORIDE	0.10		V
tert-AMYL METHYL ETHER	ND		V
1,2 - DICHLOROPROPANE	ND		V
ETHYL ACRYLATE	ND		V
BROMODICHLOROMETHANE	ND		V
TRICHLOROETHYLENE	0.03	U	V
METHYL METHACRYLATE	ND		V
cis -1,3 - DICHLOROPROPENE	ND		V
METHYL ISOBUTYL KETONE	ND		V
trans - 1,3 - DICHLOROPROPENE	ND		V
1,1,2 - TRICHLOROETHANE	ND		V
TOLUENE	1.65		V
DIBROMOCHLOROMETHANE	ND		V
1,2-DIBROMOETHANE	ND		V
N-OCTANE	0.14		V
TETRACHLOROETHYLENE	0.07	U	V
CHLOROBENZENE	ND		V
ETHYLBENZENE	0.29		V
m,p - XYLENE	0.74		V
BROMOFORM	ND		V
STYRENE	0.09	U	V
1,1,2,2 - TETRACHLOROETHANE	ND		V
o - XYLENE	0.36		V
1,3,5-TRIMETHYLBENZENE	0.11		V
1,2,4-TRIMETHYLBENZENE	0.29		V
m - DICHLOROBENZENE	0.04	U	V
CHLOROMETHYLBENZENE	ND		V
p - DICHLOROBENZENE	0.04	U	V
o - DICHLOROBENZENE	ND		V
1,2,4-TRICHLOROBENZENE	ND		V
HEXACHLORO-1,3-BUTADIENE	ND		V

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Texarkana, AK (GREY)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	GREY 14556	GREY 14695	GREY 14886	GREY 15096	
SAMPLE DATE	9/1/98	9/5/98	9/17/99	10/6/98	
ANALYSIS DATE				10/22/98	
FILE NAME				L8JV014	
UNITS	ppbv	ppbv	ppbv	ppbv	
ACETYLENE	V	V	V	0.37	
PROPYLENE	V	V	V	0.33	
DICHLORODIFLUOROMETHANE	V	V	V	0.55	
CHLOROMETHANE	V	V	V	0.68	
DICHLOROTETRAFLUOROETHANE	V	V	V	ND	
VINYL CHLORIDE	V	V	V	ND	
1,3-BUTADIENE	V	V	V	ND	
BROMOMETHANE	V	V	V	ND	
CHLOROETHANE	V	V	V	ND	
ACETONITRILE	V	V	V	ND	
TRICHLOROFLUOROMETHANE	V	V	V	0.26	
ACRYLONITRILE	V	V	V	0.63	
1,1-DICHLOROETHENE	V	V	V	ND	
METHYLENE CHLORIDE	V	V	V	0.20	
TRICHLOROTRIFLUOROETHANE	V	V	V	0.08	
trans - 1,2 - DICHLOROETHYLENE	V	V	V	ND	
1,1 - DICHLOROETHANE	V	V	V	ND	
METHYL tert-BUTYL ETHER	V	V	V	ND	
METHYL ETHYL KETONE	V	V	V	0.62	
CHLOROPRENE	V	V	V	ND	
cis-1,2-DICHLOROETHYLENE	V	V	V	ND	
BROMOCHLOROMETHANE	V	V	V	ND	
CHLOROFORM	V	V	V	ND	
ETHYL tert-BUTYL ETHER	V	V	V	ND	
1,2 - DICHLOROETHANE	V	V	V	ND	
1,1,1 - TRICHLOROETHANE	V	V	V	0.05	U
BENZENE	V	V	V	0.37	
CARBON TETRACHLORIDE	V	V	V	0.07	U
tert-AMYL METHYL ETHER	V	V	V	ND	
1,2 - DICHLOROPROPANE	V	V	V	ND	
ETHYL ACRYLATE	V	V	V	ND	
BROMODICHLOROMETHANE	V	V	V	ND	
TRICHLOROETHYLENE	V	V	V	ND	
METHYL METHACRYLATE	V	V	V	ND	
cis -1,3 - DICHLOROPROPENE	V	V	V	ND	
METHYL ISOBUTYL KETONE	V	V	V	ND	
trans - 1,3 - DICHLOROPROPENE	V	V	V	ND	
1,1,2 - TRICHLOROETHANE	V	V	V	ND	
TOLUENE	V	V	V	0.27	
DIBROMOCHLOROMETHANE	V	V	V	ND	
1,2-DIBROMOETHANE	V	V	V	ND	
N-OCTANE	V	V	V	ND	
TETRACHLOROETHYLENE	V	V	V	ND	
CHLOROBENZENE	V	V	V	ND	
ETHYLBENZENE	V	V	V	0.08	U
m,p - XYLENE	V	V	V	0.14	
BROMOFORM	V	V	V	ND	
STYRENE	V	V	V	0.16	
1,1,2,2 - TETRACHLOROETHANE	V	V	V	ND	
o - XYLENE	V	V	V	0.09	
1,3,5-TRIMETHYLBENZENE	V	V	V	0.07	U
1,2,4-TRIMETHYLBENZENE	V	V	V	0.24	
m - DICHLOROBENZENE	V	V	V	ND	
CHLOROMETHYLBENZENE	V	V	V	ND	
p - DICHLOROBENZENE	V	V	V	ND	
o - DICHLOROBENZENE	V	V	V	ND	
1,2,4-TRICHLOROBENZENE	V	V	V	ND	
HEXACHLORO-1,3-BUTADIENE	V	V	V	ND	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Texarkana, AK (GREY)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	GREY 15118		GREY 15141		GREY 15173		GREY 15219	
SAMPLE DATE	10/14/98		10/25/98		11/7/98		11/13/98	
ANALYSIS DATE	10/30/98				11/12/98			
FILE NAME	L8J%010				L8KK022			
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	1.00		V		1.81		V	
PROPYLENE	0.75		V		0.55		V	
DICHLORODIFLUOROMETHANE	0.64		V		0.54		V	
CHLOROMETHANE	0.76		V		0.58		V	
DICHLOROTETRAFLUOROETHANE	ND		V		ND		V	
VINYL CHLORIDE	ND		V		ND		V	
1,3-BUTADIENE	ND		V		ND		V	
BROMOMETHANE	0.17		V		0.03	U	V	
CHLOROETHANE	ND		V		ND		V	
ACETONITRILE	0.21	U	V		ND		V	
TRICHLOROFLUOROMETHANE	0.37		V		0.26		V	
ACRYLONITRILE	0.88		V		1.01		V	
1,1-DICHLOROETHENE	ND		V		ND		V	
METHYLENE CHLORIDE	0.25		V		0.27		V	
TRICHLOROTRIFLUOROETHANE	0.07		V		0.07		V	
trans - 1,2 - DICHLOROETHYLENE	ND		V		ND		V	
1,1 - DICHLOROETHANE	ND		V		ND		V	
METHYL tert-BUTYL ETHER	ND		V		ND		V	
METHYL ETHYL KETONE	0.76		V		0.58		V	
CHLOROPRENE	ND		V		ND		V	
cis-1,2-DICHLOROETHYLENE	ND		V		ND		V	
BROMOCHLOROMETHANE	ND		V		ND		V	
CHLOROFORM	ND		V		ND		V	
ETHYL tert-BUTYL ETHER	ND		V		ND		V	
1,2 - DICHLOROETHANE	ND		V		ND		V	
1,1,1 - TRICHLOROETHANE	0.06		V		0.05	U	V	
BENZENE	0.53		V		0.42		V	
CARBON TETRACHLORIDE	0.08	U	V		0.09		V	
tert-AMYL METHYL ETHER	ND		V		ND		V	
1,2 - DICHLOROPROPANE	ND		V		ND		V	
ETHYL ACRYLATE	ND		V		ND		V	
BROMODICHLOROMETHANE	ND		V		ND		V	
TRICHLOROETHYLENE	ND		V		ND		V	
METHYL METHACRYLATE	ND		V		ND		V	
cis -1,3 - DICHLOROPROPENE	ND		V		ND		V	
METHYL ISOBUTYL KETONE	ND		V		ND		V	
trans - 1,3 - DICHLOROPROPENE	ND		V		ND		V	
1,1,2 - TRICHLOROETHANE	ND		V		ND		V	
TOLUENE	0.44		V		0.24		V	
DIBROMOCHLOROMETHANE	ND		V		ND		V	
1,2-DIBROMOETHANE	ND		V		ND		V	
N-OCTANE	0.09	U	V		0.06	U	V	
TETRACHLOROETHYLENE	ND		V		ND		V	
CHLOROBENZENE	ND		V		ND		V	
ETHYLBENZENE	0.09	U	V		0.07	U	V	
m,p - XYLENE	0.18		V		0.11		V	
BROMOFORM	ND		V		ND		V	
STYRENE	0.11	U	V		0.10	U	V	
1,1,2,2 - TETRACHLOROETHANE	ND		V		ND		V	
o - XYLENE	0.09		V		0.08	U	V	
1,3,5-TRIMETHYLBENZENE	0.03	U	V		0.04	U	V	
1,2,4-TRIMETHYLBENZENE	0.10		V		0.08	U	V	
m - DICHLOROBENZENE	ND		V		ND		V	
CHLOROMETHYLBENZENE	ND		V		ND		V	
p - DICHLOROBENZENE	ND		V		ND		V	
o - DICHLOROBENZENE	ND		V		ND		V	
1,2,4-TRICHLOROBENZENE	ND		V		ND		V	
HEXACHLORO-1,3-BUTADIENE	ND		V		ND		V	

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Texarkana, AK (GREY)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	GREY 15239		GREY 15268	GREY 15286	GREY 15312
SAMPLE DATE	12/3/98		12/13/98	12/25/98	1/6/99
ANALYSIS DATE	12/8/98		12/23/98		
FILE NAME	L8LH016		L8LV011		
UNITS	ppbv		ppbv	ppbv	ppbv
ACETYLENE	2.00		1.26	V	V
PROPYLENE	0.30		0.72	V	V
DICHLORODIFLUOROMETHANE	0.57		0.66	V	V
CHLOROMETHANE	0.65		0.73	V	V
DICHLOROTETRAFLUOROETHANE	ND		ND	V	V
VINYL CHLORIDE	ND		ND	V	V
1,3-BUTADIENE	ND		ND	V	V
BROMOMETHANE	ND		ND	V	V
CHLOROETHANE	ND		0.55	V	V
ACETONITRILE	5.12		ND	V	V
TRICHLOROFLUOROMETHANE	0.44		0.36	V	V
ACRYLONITRILE	ND		ND	V	V
1,1-DICHLOROETHENE	ND		ND	V	V
METHYLENE CHLORIDE	0.22		0.64	V	V
TRICHLOROTRIFLUOROETHANE	0.08		0.10	V	V
trans - 1,2 - DICHLOROETHYLENE	ND		ND	V	V
1,1 - DICHLOROETHANE	ND		ND	V	V
METHYL tert-BUTYL ETHER	ND		ND	V	V
METHYL ETHYL KETONE	0.55		1.84	V	V
CHLOROPRENE	ND		ND	V	V
cis-1,2-DICHLOROETHYLENE	ND		ND	V	V
BROMOCHLOROMETHANE	ND		ND	V	V
CHLOROFORM	ND		ND	V	V
ETHYL tert-BUTYL ETHER	ND		ND	V	V
1,2 - DICHLOROETHANE	ND		ND	V	V
1,1,1 - TRICHLOROETHANE	0.05	U	0.10	V	V
BENZENE	0.41		0.48	V	V
CARBON TETRACHLORIDE	0.08	U	0.11	V	V
tert-AMYL METHYL ETHER	ND		ND	V	V
1,2 - DICHLOROPROPANE	ND		ND	V	V
ETHYL ACRYLATE	ND		ND	V	V
BROMODICHLOROMETHANE	ND		ND	V	V
TRICHLOROETHYLENE	ND		ND	V	V
METHYL METHACRYLATE	ND		ND	V	V
cis -1,3 - DICHLOROPROPENE	ND		ND	V	V
METHYL ISOBUTYL KETONE	ND		0.21	V	V
trans - 1,3 - DICHLOROPROPENE	ND		ND	V	V
1,1,2 - TRICHLOROETHANE	ND		ND	V	V
TOLUENE	0.35		5.29	V	V
DIBROMOCHLOROMETHANE	ND		ND	V	V
1,2-DIBROMOETHANE	ND		ND	V	V
N-OCTANE	0.03	U	0.14	V	V
TETRACHLOROETHYLENE	ND		0.14	V	V
CHLOROBENZENE	ND		ND	V	V
ETHYLBENZENE	0.07	U	0.34	V	V
m,p - XYLENE	0.11		0.61	V	V
BROMOFORM	ND		ND	V	V
STYRENE	0.08	U	0.35	V	V
1,1,2,2 - TETRACHLOROETHANE	ND		ND	V	V
o - XYLENE	0.08		0.33	V	V
1,3,5-TRIMETHYLBENZENE	0.04	U	0.11	V	V
1,2,4-TRIMETHYLBENZENE	0.08	U	0.35	V	V
m - DICHLOROBENZENE	ND		ND	V	V
CHLOROMETHYLBENZENE	ND		ND	V	V
p - DICHLOROBENZENE	ND		ND	V	V
o - DICHLOROBENZENE	ND		ND	V	V
1,2,4-TRICHLOROBENZENE	ND		ND	V	V
HEXACHLORO-1,3-BUTADIENE	ND		ND	V	V

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V = Void

1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Texarkana, AK (GREY)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	GREY 15364	GREY 15370	GREY 15419	GREY 15439
SAMPLE DATE	1/16/99	1/30/99	2/11/99	2/23/99
ANALYSIS DATE			2/23/99	3/4/99
FILE NAME			L9BW009	L9CD015
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	V	V	0.49	0.60
PROPYLENE	V	V	0.98	0.30
DICHLORODIFLUOROMETHANE	V	V	0.61	0.50
CHLOROMETHANE	V	V	0.64	0.56
DICHLOROTETRAFLUOROETHANE	V	V	ND	ND
VINYL CHLORIDE	V	V	ND	ND
1,3-BUTADIENE	V	V	ND	ND
BROMOMETHANE	V	V	ND	ND
CHLOROETHANE	V	V	ND	ND
ACETONITRILE	V	V	ND	ND
TRICHLOROFLUOROMETHANE	V	V	0.29	0.33
ACRYLONITRILE	V	V	ND	ND
1,1-DICHLOROETHENE	V	V	ND	ND
METHYLENE CHLORIDE	V	V	0.13	0.13
TRICHLOROTRIFLUOROETHANE	V	V	0.09	0.07
trans - 1,2 - DICHLOROETHYLENE	V	V	ND	ND
1,1 - DICHLOROETHANE	V	V	ND	ND
METHYL tert-BUTYL ETHER	V	V	ND	ND
METHYL ETHYL KETONE	V	V	0.52	1.03
CHLOROPRENE	V	V	ND	ND
cis-1,2-DICHLOROETHYLENE	V	V	ND	ND
BROMOCHLOROMETHANE	V	V	ND	ND
CHLOROFORM	V	V	ND	ND
ETHYL tert-BUTYL ETHER	V	V	ND	ND
1,2 - DICHLOROETHANE	V	V	ND	ND
1,1,1 - TRICHLOROETHANE	V	V	0.04 U	0.04 U
BENZENE	V	V	0.53	0.26
CARBON TETRACHLORIDE	V	V	0.10	0.05 U
tert-AMYL METHYL ETHER	V	V	ND	ND
1,2 - DICHLOROPROPANE	V	V	ND	ND
ETHYL ACRYLATE	V	V	ND	ND
BROMODICHLOROMETHANE	V	V	ND	ND
TRICHLOROETHYLENE	V	V	ND	ND
METHYL METHACRYLATE	V	V	ND	ND
cis -1,3 - DICHLOROPROPENE	V	V	ND	ND
METHYL ISOBUTYL KETONE	V	V	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	V	ND	ND
1,1,2 - TRICHLOROETHANE	V	V	ND	ND
TOLUENE	V	V	0.26	0.16
DIBROMOCHLOROMETHANE	V	V	ND	ND
1,2-DIBROMOETHANE	V	V	ND	ND
N-OCTANE	V	V	0.07 U	0.03 U
TETRACHLOROETHYLENE	V	V	ND	ND
CHLOROBENZENE	V	V	ND	ND
ETHYLBENZENE	V	V	0.08 U	0.02 U
m,p - XYLENE	V	V	0.13	0.04 U
BROMOFORM	V	V	ND	ND
STYRENE	V	V	0.18	ND
1,1,2,2 - TETRACHLOROETHANE	V	V	ND	ND
o - XYLENE	V	V	0.08	ND
1,3,5-TRIMETHYLBENZENE	V	V	0.06 U	ND
1,2,4-TRIMETHYLBENZENE	V	V	0.09	ND
m - DICHLOROBENZENE	V	V	ND	ND
CHLOROMETHYLBENZENE	V	V	ND	ND
p - DICHLOROBENZENE	V	V	ND	ND
o - DICHLOROBENZENE	V	V	ND	ND
1,2,4-TRICHLOROBENZENE	V	V	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	V	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Texarkana, AK (GREY)
Yearly Report (September 1998 - March 1999)

SAMPLE SITE #	GREY 15487	GREY 15507	GREY 15530	GREY 15584
SAMPLE DATE	3/7/99	3/13/99	3/19/99	3/25/99
ANALYSIS DATE	3/12/99	3/17/99	3/24/99	4/16/99
FILE NAME	L9CL008	L9CQ010	L9CX011	L9DP005
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.81	0.89	1.03	1.51
PROPYLENE	0.29	0.32	0.44	0.45
DICHLORODIFLUOROMETHANE	0.62	0.54	0.62	0.62
CHLOROMETHANE	0.66	0.63	0.65	0.66
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	6.19	8.95
TRICHLOROFLUOROMETHANE	0.28	0.26	0.28	0.32
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.11	0.17	0.39	0.28
TRICHLOROTRIFLUOROETHANE	0.09	0.08	0.09	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	1.21	0.56	1.05	2.11
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.04 U	0.06	0.05 U
BENZENE	0.32	0.31	0.38	0.58
CARBON TETRACHLORIDE	0.09	0.07 U	0.05 U	0.10
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	0.09
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.21	0.27	0.45	5.53
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	0.04 U	0.07 U	0.09
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.06 U	0.06 U	0.13	0.30
m,p - XYLENE	0.10	0.09	0.20	0.41
BROMOFORM	ND	ND	ND	ND
STYRENE	0.06 U	0.05 U	0.25	0.74
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.06	0.05	0.10	0.22
1,3,5-TRIMETHYLBENZENE	0.03 U	0.03 U	0.03 U	0.06 U
1,2,4-TRIMETHYLBENZENE	0.06 U	0.06 U	0.09	0.13
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/1999 UATMP (Urban Air Toxics Monitoring Program) - Texarkana, AK (GREY)
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SAMPLE SITE #	GREY 15622	
SAMPLE DATE	3/31/99	
ANALYSIS DATE	4/21/99	
FILE NAME	L9DU011	
UNITS	ppbv	
ACETYLENE	0.71	
PROPYLENE	0.35	
DICHLORODIFLUOROMETHANE	0.59	
CHLOROMETHANE	0.65	
DICHLOROTETRAFLUOROETHANE	ND	
VINYL CHLORIDE	ND	
1,3-BUTADIENE	ND	
BROMOMETHANE	ND	
CHLOROETHANE	ND	
ACETONITRILE	8.86	
TRICHLOROFLUOROMETHANE	0.30	
ACRYLONITRILE	ND	
1,1-DICHLOROETHENE	ND	
METHYLENE CHLORIDE	0.37	
TRICHLOROTRIFLUOROETHANE	0.09	
trans - 1,2 - DICHLOROETHYLENE	ND	
1,1 - DICHLOROETHANE	ND	
METHYL tert-BUTYL ETHER	ND	
METHYL ETHYL KETONE	3.28	
CHLOROPRENE	ND	
cis-1,2-DICHLOROETHYLENE	ND	
BROMOCHLOROMETHANE	ND	
CHLOROFORM	ND	
ETHYL tert-BUTYL ETHER	ND	
1,2 - DICHLOROETHANE	ND	
1,1,1 - TRICHLOROETHANE	0.07	
BENZENE	0.46	
CARBON TETRACHLORIDE	0.05	U
tert-AMYL METHYL ETHER	ND	
1,2 - DICHLOROPROPANE	ND	
ETHYL ACRYLATE	ND	
BROMODICHLOROMETHANE	ND	
TRICHLOROETHYLENE	0.10	
METHYL METHACRYLATE	ND	
cis -1,3 - DICHLOROPROPENE	ND	
METHYL ISOBUTYL KETONE	ND	
trans - 1,3 - DICHLOROPROPENE	ND	
1,1,2 - TRICHLOROETHANE	ND	
TOLUENE	0.47	
DIBROMOCHLOROMETHANE	ND	
1,2-DIBROMOETHANE	ND	
N-OCTANE	0.08	U
TETRACHLOROETHYLENE	ND	
CHLOROBENZENE	ND	
ETHYLBENZENE	0.49	
m,p - XYLENE	0.61	
BROMOFORM	ND	
STYRENE	1.85	
1,1,2,2 - TETRACHLOROETHANE	ND	
o - XYLENE	0.34	
1,3,5-TRIMETHYLBENZENE	0.06	U
1,2,4-TRIMETHYLBENZENE	0.10	
m - DICHLOROBENZENE	ND	
CHLOROMETHYLBENZENE	ND	
p - DICHLOROBENZENE	ND	
o - DICHLOROBENZENE	ND	
1,2,4-TRICHLOROBENZENE	ND	
HEXACHLORO-1,3-BUTADIENE	ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Underhill, VT (UNVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	UNVT 14680	UNVT 14815	UNVT 15052	UNVT 15109
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98
ANALYSIS DATE	9/25/98	10/19/98	10/22/98	10/22/98
FILE NAME	L8IY015	L8JS021	L8JV008	L8JV015
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	1.07	0.42	0.46	0.58
PROPYLENE	0.24	0.32	0.19	0.29
DICHLORODIFLUOROMETHANE	0.75	0.62	0.56	0.60
CHLOROMETHANE	0.49	0.68	0.49	0.56
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	0.34
TRICHLOROFLUOROMETHANE	0.39	0.58	0.27	0.52
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	1.29	0.05 U	0.20
TRICHLOROTRIFLUOROETHANE	0.39	0.08	0.08	0.06
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.53	0.38	0.35	0.43
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.03 U	0.04 U	0.06
BENZENE	0.17	0.22	0.25	0.31
CARBON TETRACHLORIDE	0.12	0.08 U	0.08 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.19	0.26	0.28	0.56
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.08 U	0.06 U	0.07 U	0.13
m,p - XYLENE	0.11	0.09	0.10	0.15
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	0.03 U	0.04 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.08	0.06	0.08	0.09
1,3,5-TRIMETHYLBENZENE	0.03 U	0.03 U	0.44	0.03 U
1,2,4-TRIMETHYLBENZENE	0.07 U	0.06 U	0.71	0.07 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Underhill, VT (UNVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	UNVT 16139	UNVT 16159	UNVT 16199	UNVT 16225
SAMPLE DATE	10/20/98	11/1/98	11/13/98	11/25/98
ANALYSIS DATE	10/30/98	11/18/98	12/1/98	12/8/98
FILE NAME	L8J%005	L8KR007	L8LA011	L8LH010
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.32	0.51	0.74	0.52
PROPYLENE	0.16	0.21	0.28	0.15
DICHLORODIFLUOROMETHANE	0.39	0.57	0.60	0.56
CHLOROMETHANE	0.42	0.59	0.62	0.61
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.05	0.28	0.30	0.25
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.03 U	ND	ND
TRICHLOROTRIFLUOROETHANE	0.05	0.09	0.08	0.08
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.26	0.26	0.34	0.11
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	ND	0.04 U	0.05 U	0.05 U
BENZENE	0.13	0.25	0.25	0.23
CARBON TETRACHLORIDE	0.06 U	0.09	0.08 U	0.11
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.10	0.18	0.35	0.16
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.02 U	0.06 U	0.07 U	0.05 U
m,p - XYLENE	0.02 U	0.09	0.10	0.07 U
BROMOFORM	ND	ND	ND	ND
STYRENE	ND	ND	0.06 U	ND
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	ND	0.05	0.06	0.05
1,3,5-TRIMETHYLBENZENE	0.02 U	ND	0.05 U	ND
1,2,4-TRIMETHYLBENZENE	0.06 U	0.05 U	0.10	0.05 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Underhill, VT (UNVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	UNVT 16247		UNVT 16288		UNVT 16308		UNVT 16322	
SAMPLE DATE	12/7/98		12/19/98		12/31/98		1/12/99	
ANALYSIS DATE	12/31/98		1/11/99		1/21/99		1/21/99	
FILE NAME	L8LV009		L9AK010		L9AU007		L9LAU011	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.59		1.57		0.92		1.03	
PROPYLENE	0.22		0.47		0.22		0.32	
DICHLORODIFLUOROMETHANE	0.64		0.65		0.62		0.62	
CHLOROMETHANE	0.71		0.65		0.63		0.71	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		5.85		ND		ND	
TRICHLOROFLUOROMETHANE	0.31		0.40		0.29		0.31	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	ND		0.19		0.40		0.35	
TRICHLOROTRIFLUOROETHANE	0.10		0.09		0.09		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	0.26		0.44		0.27		0.16	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.07		0.06		0.05	U	0.07	
BENZENE	0.28		0.35		0.06		0.40	
CARBON TETRACHLORIDE	0.11		0.07	U	0.09		0.09	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.20		1.32		0.18		0.31	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	ND		0.08	U	ND		ND	
TETRACHLOROETHYLENE	ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.06	U	0.16		0.05	U	0.06	U
m,p - XYLENE	0.09		0.26		0.06	U	0.11	
BROMOFORM	ND		ND		ND		ND	
STYRENE	ND		0.09	U	0.03	U	0.03	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.06		0.14		0.04		0.07	
1,3,5-TRIMETHYLBENZENE	0.03	U	0.05	U	0.03	U	0.03	U
1,2,4-TRIMETHYLBENZENE	0.06	U	0.09		0.05	U	0.05	U
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Underhill, VT (UNVT)
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SAMPLE SITE #	UNVT 16358 D1	UNVT 16358 R1	UNVT 16360 D2	UNVT 16360 R2
SAMPLE DATE	1/24/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE	2/3/99	2/9/99	2/3/99	2/11/99
FILE NAME	L9BB015	L9BI011	L9BB016	L9BJ006
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.66	0.63	0.69	V
PROPYLENE	0.23	0.23	0.20	V
DICHLORODIFLUOROMETHANE	0.62	0.63	0.60	V
CHLOROMETHANE	0.70	0.70	0.68	V
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	V
VINYL CHLORIDE	ND	ND	ND	V
1,3-BUTADIENE	ND	ND	ND	V
BROMOMETHANE	ND	ND	ND	V
CHLOROETHANE	ND	ND	ND	V
ACETONITRILE	2.47	2.53	0.37	V
TRICHLOROFLUOROMETHANE	0.30	0.29	0.29	V
ACRYLONITRILE	ND	ND	ND	V
1,1-DICHLOROETHENE	ND	ND	ND	V
METHYLENE CHLORIDE	0.03 U	ND	ND	V
TRICHLOROTRIFLUOROETHANE	0.11	0.10	0.08	V
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	V
1,1 - DICHLOROETHANE	ND	ND	ND	V
METHYL tert-BUTYL ETHER	ND	ND	ND	V
METHYL ETHYL KETONE	0.24	0.33	0.15	V
CHLOROPRENE	ND	ND	ND	V
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	V
BROMOCHLOROMETHANE	ND	ND	ND	V
CHLOROFORM	ND	ND	ND	V
ETHYL tert-BUTYL ETHER	ND	ND	ND	V
1,2 - DICHLOROETHANE	ND	ND	ND	V
1,1,1 - TRICHLOROETHANE	0.05 U	0.04 U	0.05 U	V
BENZENE	0.26	0.27	0.28	V
CARBON TETRACHLORIDE	0.09	0.07 U	0.09	V
tert-AMYL METHYL ETHER	ND	ND	ND	V
1,2 - DICHLOROPROPANE	ND	ND	ND	V
ETHYL ACRYLATE	ND	ND	ND	V
BROMODICHLOROMETHANE	ND	ND	ND	V
TRICHLOROETHYLENE	ND	ND	ND	V
METHYL METHACRYLATE	ND	ND	ND	V
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	V
METHYL ISOBUTYL KETONE	ND	ND	ND	V
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	V
1,1,2 - TRICHLOROETHANE	ND	ND	ND	V
TOLUENE	0.27	0.27	0.24	V
DIBROMOCHLOROMETHANE	ND	ND	ND	V
1,2-DIBROMOETHANE	ND	ND	ND	V
N-OCTANE	ND	0.05 U	ND	V
TETRACHLOROETHYLENE	ND	ND	ND	V
CHLOROBENZENE	ND	ND	ND	V
ETHYLBENZENE	0.07 U	0.08 U	0.07 U	V
m,p - XYLENE	0.11	0.12	0.11	V
BROMOFORM	ND	ND	ND	V
STYRENE	0.04 U	0.04 U	0.04 U	V
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	V
o - XYLENE	0.07	0.08	0.07	V
1,3,5-TRIMETHYLBENZENE	0.04 U	0.05 U	0.03 U	V
1,2,4-TRIMETHYLBENZENE	0.07 U	0.09	0.07 U	V
m - DICHLOROBENZENE	ND	ND	ND	V
CHLOROMETHYLBENZENE	ND	ND	ND	V
p - DICHLOROBENZENE	ND	ND	ND	V
o - DICHLOROBENZENE	ND	ND	ND	V
1,2,4-TRICHLOROBENZENE	ND	ND	ND	V
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	V

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SAMPLE SITE #	UNVT 16417		UNVT 16447		UNVT 16486		UNVT 15544	
SAMPLE DATE	2/5/99		2/17/99		3/1/99		3/13/99	
ANALYSIS DATE	3/4/99		3/4/99		3/11/99		3/24/99	
FILE NAME	L9CD006		L9CD011		L9CJ020		L9CX012	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.57		0.80		1.15		0.80	
PROPYLENE	0.17		0.15		0.34		0.24	
DICHLORODIFLUOROMETHANE	0.54		0.51		0.63		0.62	
CHLOROMETHANE	0.62		0.61		0.71		0.72	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	0.09		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	2.60		ND		1.15		ND	
TRICHLOROFLUOROMETHANE	0.27		0.21		0.36		0.29	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.05	U	0.06	U	ND		ND	
TRICHLOROTRIFLUOROETHANE	0.08		0.08		0.10		0.10	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	0.57		ND		0.56		0.42	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.06		0.05	U	0.16		0.05	U
BENZENE	0.20		0.25		0.36		0.31	
CARBON TETRACHLORIDE	0.05	U	0.07	U	0.07	U	0.08	U
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	0.16		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	0.07		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	0.43		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.16		0.21		0.46		0.18	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	ND		ND		0.05	U	0.02	U
TETRACHLOROETHYLENE	ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.05	U	0.03	U	0.09	U	0.05	U
m,p - XYLENE	0.07	U	0.05	U	0.13		0.05	U
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.10	U	ND		0.05	U	0.02	U
1,1,2,2 - TETRACHLOROETHANE	0.04	U	ND		ND		ND	
o - XYLENE	0.03	U	0.03	U	0.09		0.04	U
1,3,5-TRIMETHYLBENZENE	0.06	U	ND		0.03	U	0.01	U
1,2,4-TRIMETHYLBENZENE	0.12		ND		0.07	U	0.04	U
m - DICHLOROBENZENE	0.08	U	ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	0.09		ND		ND		ND	
o - DICHLOROBENZENE	0.11		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	0.41		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	0.27		ND		ND		ND	

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SAMPLE SITE #	UNVT 15568	UNVT 15580 D1	UNVT 15580 R1	UNVT 15582 D2
SAMPLE DATE	3/19/99	3/25/99	3/25/99	3/25/99
ANALYSIS DATE	4/12/99	4/22/99	4/23/99	4/22/99
FILE NAME	L9DL012	L9DU014	L9DV015	L9DU015
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.71	0.61	0.60	0.62
PROPYLENE	0.25	0.22	0.22	0.21
DICHLORODIFLUOROMETHANE	0.66	0.60	0.61	0.61
CHLOROMETHANE	0.74	0.68	0.69	0.68
DICHLOROTETRAFLUOROETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.09	0.34	0.36	0.35
ACRYLONITRILE	ND	ND	ND	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	0.10 U	0.16	0.18
TRICHLOROTRIFLUOROETHANE	0.09	0.09	0.09	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.41	0.88	0.85	0.46
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.06	0.04 U	0.05 U	0.04 U
BENZENE	0.26	0.20	0.20	0.22
CARBON TETRACHLORIDE	0.09	0.04 U	0.04 U	0.07 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	ND
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.14	0.15	0.15	0.13
DIBROMOCHLOROMETHANE	ND	0.00	ND	ND
1,2-DIBROMOETHANE	ND	ND	0.00	ND
N-OCTANE	ND	0.05 U	0.05 U	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.05 U	0.06 U	0.05 U	0.04 U
m,p - XYLENE	0.06 U	0.08	0.07 U	0.07 U
BROMOFORM	ND	ND	ND	ND
STYRENE	0.03 U	0.04 U	0.03 U	0.03 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.05	0.05	0.04	0.05
1,3,5-TRIMETHYLBENZENE	0.03 U	0.03 U	0.02 U	0.03 U
1,2,4-TRIMETHYLBENZENE	0.06 U	0.06 U	0.03 U	0.05 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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SAMPLE SITE #	UNVT 15582 R2		UNVT 15642		UNVT 15666		UNVT 15735	
SAMPLE DATE	3/25/99		4/6/99		4/12/99		4/30/99	
ANALYSIS DATE	5/7/99		4/22/99		5/10/99		5/18/99	
FILE NAME	L9ED032		L9DV006		L9EJ012		L9ER010	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.62		0.98		0.61		0.53	
PROPYLENE	0.25		0.24		0.24		0.29	
DICHLORODIFLUOROMETHANE	0.63		0.59		0.64		0.68	
CHLOROMETHANE	0.64		0.74		0.71		0.76	
DICHLOROTETRAFLUOROETHANE	ND		ND		ND		ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND	
BROMOMETHANE	ND		ND		ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.44		0.30		0.37		0.31	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.33		0.08	U	0.06	U	0.22	
TRICHLOROTRIFLUOROETHANE	0.10		0.09		0.10		0.10	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	0.67		0.39		0.37		0.63	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.07		0.05	U	0.06		0.07	
BENZENE	0.22		0.28		0.25		0.17	
CARBON TETRACHLORIDE	0.07	U	0.08	U	0.08	U	0.09	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.14		0.22		0.19		0.19	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.04	U	ND		0.05	U	0.04	U
TETRACHLOROETHYLENE	ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.05	U	0.07	U	0.06	U	0.06	U
m,p - XYLENE	0.07	U	0.11		0.09		0.08	U
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.03	U	ND		0.03	U	0.03	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.05		0.07		0.07		0.05	
1,3,5-TRIMETHYLBENZENE	0.03	U	0.04	U	0.04	U	0.03	U
1,2,4-TRIMETHYLBENZENE	0.05	U	0.06	U	0.05	U	0.05	U
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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SAMPLE SITE #	UNVT 15799 D1		UNVT 15799 R1		UNVT 15801 D2		UNVT 15801 R2	
SAMPLE DATE	5/12/99		5/12/99		5/12/99		5/12/99	
ANALYSIS DATE	6/7/99		6/9/99		6/7/99		6/9/99	
FILE NAME	L9FG007		L9FI007		L9FG008		L9FI008	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.56		0.54		0.45		0.52	
PROPYLENE	0.29		0.29		0.29		0.27	
DICHLORODIFLUOROMETHANE	0.57		0.56		0.54		0.54	
CHLOROMETHANE	0.73		0.72		0.67		0.66	
DICHLOROTETRAFLUOROETHANE	0.01	U	0.01	U	0.02	U	0.01	U
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND	
BROMOMETHANE	0.02	U	0.02	U	ND		0.01	U
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.30		0.62		0.26		0.30	
ACRYLONITRILE	ND		ND		ND		ND	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.07	U	0.09	U	0.13		0.11	
TRICHLOROTRIFLUOROETHANE	0.09		0.10		0.10		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	0.48		0.53		0.38		0.39	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	ND		ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.08		0.06		0.07		0.06	
BENZENE	0.16		0.16		0.14		0.16	
CARBON TETRACHLORIDE	0.06	U	0.05	U	0.01	U	ND	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.16		0.19		0.16		0.18	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.06	U	0.06	U	0.06	U	0.06	U
TETRACHLOROETHYLENE	ND		ND		ND		ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.08	U	0.09	U	0.06	U	0.07	U
m,p - XYLENE	0.08	U	0.10		0.07	U	0.10	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.05	U	0.06	U	0.04	U	0.06	U
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.06		0.07		0.05		0.07	
1,3,5-TRIMETHYLBENZENE	0.04	U	0.06	U	0.04	U	0.05	U
1,2,4-TRIMETHYLBENZENE	0.06	U	0.08	U	0.06	U	0.08	U
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		ND	
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Underhill, VT (UNVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	UNVT 16791		UNVT 16830		UNVT 16923		UNVT 16028	
SAMPLE DATE	5/24/99		6/5/99		6/17/99		6/29/99	
ANALYSIS DATE	6/7/99		6/17/99		6/29/99		7/20/99	
FILE NAME	L9FG009		L9FQ010		L9F#007		L9GT008	
UNITS	ppbv		ppbv		ppbv		ppbv	
ACETYLENE	0.48		0.38		0.31		0.41	
PROPYLENE	0.26		0.22		0.22		0.24	
DICHLORODIFLUOROMETHANE	0.55		0.53		0.56		0.63	
CHLOROMETHANE	0.76		0.70		0.66		0.82	
DICHLOROTETRAFLUOROETHANE	0.01	U	0.01	U	0.01	U	ND	
VINYL CHLORIDE	ND		ND		ND		ND	
1,3-BUTADIENE	ND		ND		ND		ND	
BROMOMETHANE	0.02	U	0.02	U	ND		ND	
CHLOROETHANE	ND		ND		ND		ND	
ACETONITRILE	ND		ND		ND		ND	
TRICHLOROFLUOROMETHANE	0.28		0.28		0.53		0.31	
ACRYLONITRILE	0.30		ND		ND		0.27	
1,1-DICHLOROETHENE	ND		ND		ND		ND	
METHYLENE CHLORIDE	0.06	U	0.05	U	0.09	U	0.06	U
TRICHLOROTRIFLUOROETHANE	0.09		0.09		0.09		0.09	
trans - 1,2 - DICHLOROETHYLENE	ND		ND		ND		ND	
1,1 - DICHLOROETHANE	ND		ND		ND		ND	
METHYL tert-BUTYL ETHER	ND		ND		ND		ND	
METHYL ETHYL KETONE	0.32		0.36		0.25		0.47	
CHLOROPRENE	ND		ND		ND		ND	
cis-1,2-DICHLOROETHYLENE	ND		ND		ND		ND	
BROMOCHLOROMETHANE	ND		ND		ND		ND	
CHLOROFORM	0.01	U	ND		ND		ND	
ETHYL tert-BUTYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROETHANE	ND		ND		ND		ND	
1,1,1 - TRICHLOROETHANE	0.07		0.07		0.07		0.06	
BENZENE	0.15		0.13		0.13		0.17	
CARBON TETRACHLORIDE	0.10		0.09		0.09		0.10	
tert-AMYL METHYL ETHER	ND		ND		ND		ND	
1,2 - DICHLOROPROPANE	ND		ND		ND		ND	
ETHYL ACRYLATE	ND		ND		ND		ND	
BROMODICHLOROMETHANE	ND		ND		ND		ND	
TRICHLOROETHYLENE	ND		ND		ND		ND	
METHYL METHACRYLATE	ND		ND		ND		ND	
cis -1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
METHYL ISOBUTYL KETONE	ND		ND		ND		ND	
trans - 1,3 - DICHLOROPROPENE	ND		ND		ND		ND	
1,1,2 - TRICHLOROETHANE	ND		ND		ND		ND	
TOLUENE	0.15		0.16		2.40		1.11	
DIBROMOCHLOROMETHANE	ND		ND		ND		ND	
1,2-DIBROMOETHANE	ND		ND		ND		ND	
N-OCTANE	0.06	U	0.06	U	0.06	U	0.16	
TETRACHLOROETHYLENE	0.01	U	0.01	U	ND		ND	
CHLOROBENZENE	ND		ND		ND		ND	
ETHYLBENZENE	0.06	U	0.06	U	0.07	U	0.24	
m,p - XYLENE	0.08	U	0.08		0.12		0.83	
BROMOFORM	ND		ND		ND		ND	
STYRENE	0.03	U	0.03	U	0.04	U	0.11	
1,1,2,2 - TETRACHLOROETHANE	ND		ND		ND		ND	
o - XYLENE	0.05		0.06		0.07		0.43	
1,3,5-TRIMETHYLBENZENE	0.04	U	0.04	U	0.03	U	0.11	
1,2,4-TRIMETHYLBENZENE	0.06	U	0.05	U	0.06	U	0.31	
m - DICHLOROBENZENE	ND		ND		ND		ND	
CHLOROMETHYLBENZENE	ND		ND		ND		ND	
p - DICHLOROBENZENE	ND		ND		ND		0.02	U
o - DICHLOROBENZENE	ND		ND		ND		ND	
1,2,4-TRICHLOROBENZENE	ND		ND		ND		ND	
HEXACHLORO-1,3-BUTADIENE	ND		ND		ND		ND	

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Underhill, VT (UNVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	UNVT 16265	UNVT 16265	UNVT 16273	UNVT 16491
SAMPLE DATE	7/17/99	7/23/99	8/4/99	8/16/99
ANALYSIS DATE	8/10/99	8/10/99	8/16/99	9/3/99
FILE NAME	L9HJ010	L9HJ011	L9HP008	L9IB018
UNITS	ppbv	ppbv	ppbv	ppbv
ACETYLENE	0.22	0.51	0.35	0.23
PROPYLENE	0.14	0.29	0.21	0.31
DICHLORODIFLUOROMETHANE	0.67	0.72	0.66	0.53
CHLOROMETHANE	0.98	0.97	0.76	0.61
DICHLOROTETRAFLUOROETHANE	ND	ND	0.01 U	ND
VINYL CHLORIDE	ND	ND	ND	ND
1,3-BUTADIENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
ACETONITRILE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.52	0.34	0.40	0.26
ACRYLONITRILE	ND	ND	0.25	ND
1,1-DICHLOROETHENE	ND	ND	ND	ND
METHYLENE CHLORIDE	0.09 U	0.03 U	0.05 U	0.05 U
TRICHLOROTRIFLUOROETHANE	0.11	0.10	0.11	0.09
trans - 1,2 - DICHLOROETHYLENE	ND	ND	ND	ND
1,1 - DICHLOROETHANE	ND	ND	ND	ND
METHYL tert-BUTYL ETHER	ND	ND	ND	ND
METHYL ETHYL KETONE	0.67	0.58	0.39	0.47
CHLOROPRENE	ND	ND	ND	ND
cis-1,2-DICHLOROETHYLENE	ND	ND	ND	ND
BROMOCHLOROMETHANE	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
ETHYL tert-BUTYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROETHANE	ND	ND	ND	ND
1,1,1 - TRICHLOROETHANE	0.07	0.07	0.06	0.05 U
BENZENE	0.17	0.16	0.11	0.13
CARBON TETRACHLORIDE	0.12	0.09	0.10	0.08 U
tert-AMYL METHYL ETHER	ND	ND	ND	ND
1,2 - DICHLOROPROPANE	ND	ND	ND	ND
ETHYL ACRYLATE	ND	ND	ND	ND
BROMODICHLOROMETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
METHYL METHACRYLATE	ND	ND	ND	ND
cis -1,3 - DICHLOROPROPENE	ND	ND	ND	ND
METHYL ISOBUTYL KETONE	ND	ND	ND	0.09
trans - 1,3 - DICHLOROPROPENE	ND	ND	ND	ND
1,1,2 - TRICHLOROETHANE	ND	ND	ND	ND
TOLUENE	0.20	0.21	0.14	0.18
DIBROMOCHLOROMETHANE	ND	ND	ND	ND
1,2-DIBROMOETHANE	ND	ND	ND	ND
N-OCTANE	0.05 U	0.05 U	0.03 U	0.04 U
TETRACHLOROETHYLENE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
ETHYLBENZENE	0.06 U	0.06 U	0.06 U	0.05 U
m,p - XYLENE	0.08	0.09	0.07 U	0.11
BROMOFORM	ND	ND	ND	ND
STYRENE	0.03 U	0.04 U	0.03 U	0.03 U
1,1,2,2 - TETRACHLOROETHANE	ND	ND	ND	ND
o - XYLENE	0.05	0.05	0.05	0.05
1,3,5-TRIMETHYLBENZENE	0.04 U	0.04 U	0.04 U	0.03 U
1,2,4-TRIMETHYLBENZENE	0.06 U	0.05 U	0.06 U	0.05 U
m - DICHLOROBENZENE	ND	ND	ND	ND
CHLOROMETHYLBENZENE	ND	ND	ND	ND
p - DICHLOROBENZENE	ND	ND	ND	ND
o - DICHLOROBENZENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	ND	ND	ND	ND

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1998/99 UATMP (Urban Air Toxics Monitoring Program) - Underhill, VT (UNVT)
Yearly Report (September 1998 - September 1999)

SAMPLE SITE #	UNVT 16620	UNVT 16801	UNVT 16890
SAMPLE DATE	8/28/99	9/9/99	9/21/99
ANALYSIS DATE		10/6/99	10/11/99
FILE NAME		L9JF011	L9JK009
UNITS	ppbv	ppbv	ppbv
ACETYLENE	V	0.48	0.30
PROPYLENE	V	0.43	0.51
DICHLORODIFLUOROMETHANE	V	0.63	0.67
CHLOROMETHANE	V	0.69	0.61
DICHLOROTETRAFLUOROETHANE	V	ND	ND
VINYL CHLORIDE	V	ND	ND
1,3-BUTADIENE	V	ND	ND
BROMOMETHANE	V	ND	ND
CHLOROETHANE	V	ND	ND
ACETONITRILE	V	ND	ND
TRICHLOROFLUOROMETHANE	V	0.35	0.32
ACRYLONITRILE	V	ND	ND
1,1-DICHLOROETHENE	V	ND	ND
METHYLENE CHLORIDE	V	0.09 U	0.05 U
TRICHLOROTRIFLUOROETHANE	V	0.10	0.10
trans - 1,2 - DICHLOROETHYLENE	V	ND	ND
1,1 - DICHLOROETHANE	V	ND	ND
METHYL tert-BUTYL ETHER	V	ND	ND
METHYL ETHYL KETONE	V	1.06	0.90
CHLOROPRENE	V	ND	ND
cis-1,2-DICHLOROETHYLENE	V	ND	ND
BROMOCHLOROMETHANE	V	ND	ND
CHLOROFORM	V	ND	ND
ETHYL tert-BUTYL ETHER	V	ND	ND
1,2 - DICHLOROETHANE	V	ND	ND
1,1,1 - TRICHLOROETHANE	V	0.05 U	0.06 U
BENZENE	V	0.19	0.16
CARBON TETRACHLORIDE	V	0.09	0.11
tert-AMYL METHYL ETHER	V	ND	ND
1,2 - DICHLOROPROPANE	V	ND	ND
ETHYL ACRYLATE	V	ND	ND
BROMODICHLOROMETHANE	V	ND	ND
TRICHLOROETHYLENE	V	ND	ND
METHYL METHACRYLATE	V	ND	ND
cis -1,3 - DICHLOROPROPENE	V	ND	ND
METHYL ISOBUTYL KETONE	V	ND	ND
trans - 1,3 - DICHLOROPROPENE	V	ND	ND
1,1,2 - TRICHLOROETHANE	V	ND	ND
TOLUENE	V	0.57	0.25
DIBROMOCHLOROMETHANE	V	ND	ND
1,2-DIBROMOETHANE	V	ND	ND
N-OCTANE	V	0.09 U	0.05 U
TETRACHLOROETHYLENE	V	ND	ND
CHLOROBENZENE	V	ND	ND
ETHYLBENZENE	V	0.12	0.07 U
m,p - XYLENE	V	0.18	0.14
BROMOFORM	V	ND	ND
STYRENE	V	0.11 U	0.04 U
1,1,2,2 - TETRACHLOROETHANE	V	ND	ND
o - XYLENE	V	0.10	0.07
1,3,5-TRIMETHYLBENZENE	V	0.06 U	0.04 U
1,2,4-TRIMETHYLBENZENE	V	0.11	0.06 U
m - DICHLOROBENZENE	V	ND	ND
CHLOROMETHYLBENZENE	V	ND	ND
p - DICHLOROBENZENE	V	ND	ND
o - DICHLOROBENZENE	V	ND	ND
1,2,4-TRICHLOROBENZENE	V	ND	ND
HEXACHLORO-1,3-BUTADIENE	V	ND	ND

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SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**14684**	**14811**	**15054**	**15113**
Sampling Date:	**9/2/98**	**9/14/98**	**9/26/98**	**10/8/98**
Analysis Date:	**VOID**	**10/19/98**	**10/22/98**	**10/22/98**
Compound				
Ethylene		1.42	1.60	1.89
Acetylene		1.02	1.16	1.18
Ethane		2.03	2.70	1.67
Propylene		0.56	0.57	0.66
Propane		8.25	4.51	3.20
Propyne		0.02	0.02	0.03
Isobutane		1.24	1.14	0.79
Isobutene/1-Butene		0.20	0.20	0.23
1,3-Butadiene		0.06	0.06	0.10
n-Butane		1.49	1.91	1.46
trans-2-Butene		0.17	0.21	0.17
cis-2-Butene		0.19	0.21	0.19
3-Methyl-1-butene		0.04	0.06	0.04
Isopentane		5.82	4.22	3.13
1-Pentene		0.12	0.15	0.13
2-Methyl-1-butene		0.12	0.17	0.16
n-Pentane		1.04	1.02	0.74
Isoprene		0.35	0.23	0.15
trans-2-Pentene		0.18	0.22	0.19
cis-2-Pentene		0.13	0.15	0.13
2-Methyl-2-butene		0.19	0.24	0.19
2,2-Dimethylbutane		0.22	0.23	0.17
Cyclopentene		0.08	0.07	0.04
4-Methyl-1-pentene		ND	0.01	ND
Cyclopentane		0.15	0.13	0.11
2,3-Dimethylbutane		0.48	0.61	0.44
2-Methylpentane		0.54	0.55	0.43
3-Methylpentane		0.37	0.35	0.28
2-Methyl-1-pentene		0.02	0.04	0.03
1-Hexene		0.02	0.02	0.03
2-Ethyl-1-butene		ND	ND	ND
n-Hexane		0.62	0.32	0.27
trans-2-Hexene		0.01	0.03	0.03
cis-2-Hexene		ND	0.02	0.01
Methylcyclopentane		0.23	0.20	0.18
2,4-Dimethylpentane		0.10	0.12	0.09
Benzene		0.41	0.45	0.47
Cyclohexane		17.18	0.19	0.29
2-Methylhexane		0.22	0.17	0.17
2,3-Dimethylpentane		0.16	0.16	0.15
3-Methylhexane		0.31	0.18	0.17
1-Heptene		ND	ND	ND
2,2,4-Trimethylpentane		0.26	0.23	0.21
n-Heptane		0.29	0.13	0.15
Methylcyclohexane		0.16	0.10	0.12
2,2,3-Trimethylpentane		0.05	0.04	0.04
2,3,4-Trimethylpentane		0.09	0.09	0.09
Toluene		1.64	0.90	0.94
2-Methylheptane		0.06	0.06	0.06
3-Methylheptane		0.06	0.07	0.06
1-Octene		0.01	0.005	ND
n-Octane		0.10	0.07	0.08
Ethylbenzene		0.19	0.37	0.39
m-Xylene/p-Xylene		0.68	0.70	0.76
Styrene		0.18	0.13	0.14
o-Xylene		0.20	0.27	0.26
1-Nonene		ND	ND	ND
n-Nonane		0.09	0.08	0.07
Isopropylbenzene		0.05	0.05	0.04
a-Pinene		0.24	0.12	0.14
n-Propylbenzene		0.07	0.06	0.05
m-Ethyltoluene		0.15	0.19	0.17
p-Ethyltoluene		0.08	0.09	0.08
1,3,5-Trimethylbenzene		0.06	0.06	0.06
o-Ethyltoluene		0.06	0.06	0.05
b-Pinene		0.14	0.08	0.09
1,2,4-Trimethylbenzene		ND	ND	ND
1-Decene		0.16	0.20	0.18
n-Decane		0.10	0.10	0.08
1,2,3-Trimethylbenzene		0.03	0.04	0.04
m-Diethylbenzene		0.07	0.05	0.08
p-Diethylbenzene		0.16	0.10	0.20
1-Undecene		0.02	0.02	0.02
n-Undecane		0.19	0.11	0.12
1-Dodecene		ND	ND	0.01
n-Dodecane		0.10	0.01	0.04
1-Tridecene		ND	0.003	0.01
n-Tridecane		0.01	0.01	0.01
TNMOC (speciated), ppbv		51.49	29.22	24.59
TNMOC (w/ unknowns), ppbC		405.95	245.53	267.43

The QC recovery for n-Undecane was outside of criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**15137**	**15155**	**15195**	**15237**
Sampling Date:	**10/20/98**	**11/1/98**	**11/13/98**	**11/25/98**
Analysis Date:	**12/6/98**	**11/11/98**	**12/1/98**	**12/8/98**
Compound				
Ethylene	1.33	0.72	2.51	3.36
Acetylene	1.05	0.63	1.84	2.42
Ethane	1.93	1.57	2.55	3.03
Propylene	0.57	0.37	0.92	1.07
Propane	3.42	1.92	4.15	9.21
Propyne	0.03	ND	0.05	0.06
Isobutane	1.10	0.28	1.88	1.03
Isobutene/1-Butene	0.24	0.13	0.42	0.37
1,3-Butadiene	0.05	0.02	0.13	0.15
n-Butane	2.60	0.47	3.79	1.75
trans-2-Butene	0.21	0.11	0.38	0.22
cis-2-Butene	0.21	0.13	0.35	0.22
3-Methyl-1-butene	0.04	ND	0.05	0.03
Isopentane	4.20	2.03	4.78	4.02
1-Pentene	0.12	0.07	0.22	0.14
2-Methyl-1-butene	0.18	0.04	0.29	0.18
n-Pentane	0.74	0.22	1.03	0.78
Isoprene	0.09	0.09	0.12	0.13
trans-2-Pentene	0.19	0.08	0.31	0.20
cis-2-Pentene	0.13	0.09	0.21	0.15
2-Methyl-2-butene	0.20	0.02	0.36	0.21
2,2-Dimethylbutane	0.19	0.11	0.28	0.20
Cyclopentene	0.03	0.02	0.08	0.08
4-Methyl-1-pentene	ND	ND	0.01	ND
Cyclopentane	0.10	0.07	0.16	0.13
2,3-Dimethylbutane	0.32	0.15	0.46	0.37
2-Methylpentane	0.42	0.16	0.61	0.52
3-Methylpentane	0.26	0.12	0.40	0.31
2-Methyl-1-pentene	0.03	0.02	0.05	0.03
1-Hexene	0.02	0.02	0.03	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.28	0.11	0.35	0.32
trans-2-Hexene	0.02	ND	0.03	0.04
cis-2-Hexene	0.01	ND	0.01	0.02
Methylcyclopentane	0.17	0.09	0.23	0.21
2,4-Dimethylpentane	0.10	0.09	0.13	0.11
Benzene	0.45	0.31	0.64	0.71
Cyclohexane	0.18	0.36	0.97	0.23
2-Methylhexane	0.14	0.09	0.22	0.18
2,3-Dimethylpentane	0.13	0.12	0.19	0.15
3-Methylhexane	0.15	0.09	0.21	0.21
1-Heptene	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.20	0.09	0.32	0.26
n-Heptane	0.12	0.07	0.16	0.19
Methylcyclohexane	0.09	0.07	0.13	0.13
2,2,3-Trimethylpentane	0.03	0.03	0.05	0.05
2,3,4-Trimethylpentane	0.09	0.06	0.12	0.12
Toluene	0.61	0.34	1.06	1.24
2-Methylheptane	0.06	0.05	0.08	0.08
3-Methylheptane	0.05	0.06	0.08	0.09
1-Octene	0.01	ND	0.01	0.01
n-Octane	0.07	0.07	0.09	0.11
Ethylbenzene	0.42	0.35	0.49	0.53
m-Xylene/p-Xylene	0.69	0.43	1.00	1.03
Styrene	0.16	0.13	0.12	0.13
o-Xylene	0.27	0.20	0.35	0.39
1-Nonene	ND	ND	ND	ND
n-Nonane	0.07	0.06	0.06	0.06
Isopropylbenzene	0.06	0.06	0.07	0.06
a-Pinene	0.05	0.004	0.07	0.13
n-Propylbenzene	0.08	0.06	0.08	0.09
m-Ethyltoluene	0.16	0.11	0.23	0.22
p-Ethyltoluene	0.09	0.07	0.12	0.12
1,3,5-Trimethylbenzene	0.08	0.04	0.09	0.11
o-Ethyltoluene	0.07	0.05	0.09	0.09
b-Pinene	0.07	0.05	0.02	0.03
1,2,4-Trimethylbenzene	ND	ND	ND	ND
1-Decene	0.21	0.12	0.22	0.23
n-Decane	0.08	0.06	0.08	0.09
1,2,3-Trimethylbenzene	0.13	0.08	0.14	0.10
m-Diethylbenzene	0.09	0.11	0.10	0.09
p-Diethylbenzene	0.14	0.19	0.11	0.19
1-Undecene	0.02	0.03	0.02	0.03
n-Undecane	0.10	0.14	0.08	0.06
1-Dodecene	ND	0.004	ND	0.004
n-Dodecane	0.01	0.01	0.005	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.003	ND	ND	ND
TNMOC (speciated), ppbv	26.02	14.10	37.06	38.64
TNMOC (w/ unknowns), ppbC	260.53	199.76	284.89	289.68

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**15251**	**15282**	**15304**	**15318**
Sampling Date:	**12/7/98**	**12/19/98**	**12/31/98**	**1/12/99**
Analysis Date:	**12/22/98**	**1/12/99**	**1/12/99**	**1/22/99**
Compound				
Ethylene	2.25	3.85	4.36	3.98
Acetylene	1.69	3.13	2.76	3.18
Ethane	3.18	3.21	3.35	3.69
Propylene	0.76	1.14	1.27	1.19
Propane	3.94	4.79	8.90	7.61
Propyne	0.02	0.03	0.03	0.08
Isobutane	4.94	2.31	1.66	1.80
Isobutene/1-Butene	0.33	0.59	0.80	2.88
1,3-Butadiene	0.08	0.13	0.16	0.16
n-Butane	2.40	3.77	3.29	4.30
trans-2-Butene	0.21	0.43	0.29	0.27
cis-2-Butene	0.22	0.37	0.28	0.27
3-Methyl-1-butene	0.02	ND	ND	0.04
Isopentane	10.60	4.13	4.24	3.98
1-Pentene	0.11	0.17	0.14	0.12
2-Methyl-1-butene	0.12	0.19	0.17	0.15
n-Pentane	1.30	0.95	0.89	0.93
Isoprene	0.11	0.12	0.13	0.11
trans-2-Pentene	0.17	0.22	0.19	0.18
cis-2-Pentene	0.13	0.17	0.15	0.13
2-Methyl-2-butene	0.16	0.24	0.20	0.21
2,2-Dimethylbutane	0.20	0.22	0.18	0.20
Cyclopentene	0.06	0.10	0.02	0.08
4-Methyl-1-pentene	ND	ND	0.004	0.01
Cyclopentane	0.15	0.15	0.14	0.13
2,3-Dimethylbutane	0.58	0.53	0.34	0.44
2-Methylpentane	0.70	0.57	0.53	0.60
3-Methylpentane	0.70	0.38	0.35	0.42
2-Methyl-1-pentene	0.03	0.03	0.04	0.03
1-Hexene	0.02	0.02	0.03	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	1.50	0.37	0.38	0.38
trans-2-Hexene	0.02	0.02	0.02	0.03
cis-2-Hexene	0.01	0.01	0.02	0.02
Methylcyclopentane	0.63	0.25	0.27	0.27
2,4-Dimethylpentane	0.14	0.14	0.12	0.14
Benzene	0.53	0.83	0.75	0.78
Cyclohexane	23.94	2.76	5.87	0.66
2-Methylhexane	0.24	0.35	0.25	0.22
2,3-Dimethylpentane	0.17	0.19	0.17	0.20
3-Methylhexane	0.25	0.26	0.27	0.26
1-Heptene	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.27	0.29	0.28	0.37
n-Heptane	0.21	0.19	0.23	0.21
Methylcyclohexane	0.16	0.15	0.16	0.15
2,2,3-Trimethylpentane	0.07	0.06	0.06	0.07
2,3,4-Trimethylpentane	0.11	0.12	0.12	0.14
Toluene	1.26	1.18	1.34	1.36
2-Methylheptane	0.10	0.09	0.08	0.10
3-Methylheptane	0.10	0.08	0.09	0.09
1-Octene	0.01	0.01	0.01	0.01
n-Octane	0.13	0.11	0.12	0.12
Ethylbenzene	0.40	0.50	0.56	0.53
m-Xylene/p-Xylene	0.76	1.00	0.99	1.06
Styrene	0.15	0.15	0.12	0.13
o-Xylene	0.38	0.38	0.39	0.43
1-Nonene	ND	ND	ND	ND
n-Nonane	0.09	0.09	0.10	0.06
Isopropylbenzene	0.06	0.07	0.06	0.06
a-Pinene	0.10	0.23	0.02	0.04
n-Propylbenzene	0.08	0.11	0.11	0.10
m-Ethyltoluene	0.18	0.24	0.27	0.25
p-Ethyltoluene	0.10	0.12	0.12	0.12
1,3,5-Trimethylbenzene	0.08	0.12	0.11	0.12
o-Ethyltoluene	0.07	0.09	0.09	0.09
b-Pinene	0.09	0.06	0.03	0.01
1,2,4-Trimethylbenzene	0.22	0.31	0.26	0.31
1-Decene	ND	ND	ND	ND
n-Decane	0.10	0.10	0.09	0.07
1,2,3-Trimethylbenzene	0.10	0.13	0.05	0.11
m-Diethylbenzene	0.09	0.10	0.07	0.08
p-Diethylbenzene	0.20	0.17	0.13	0.13
1-Undecene	0.04	0.05	0.03	0.01
n-Undecane	0.15	0.12 #	0.09 #	0.09
1-Dodecene	ND	ND	ND	ND
n-Dodecane	0.07	0.02	0.01	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.04	1.45	ND	0.01
TNMOC (speciated), ppbv	68.60	45.03	49.22	46.55
TNMOC (w/ unknowns), ppbC	475.52	352.91	345.01	316.07

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**15349D1**	**15349R1**	**15351D2**	**15351R2**
Sampling Date:	**1/24/99**	**1/24/99**	**1/24/99**	**1/24/99**
Analysis Date:	**2/2/99**	**2/9/99**	**2/2/99**	**2/9/99**
Compound				
Ethylene	3.25	3.14	3.37	3.20
Acetylene	2.28	2.12	2.25	2.13
Ethane	2.87	2.91	3.06	2.83
Propylene	0.95	0.94	1.00	0.95
Propane	8.51	8.06	8.61	8.17
Propyne	0.03	0.05	0.05	0.05
Isobutane	1.43	1.35	1.46	1.38
Isobutene/1-Butene	0.37	0.35	0.72	0.75
1,3-Butadiene	0.14	0.13	0.09	0.05
n-Butane	2.91	2.76	3.02	2.91
trans-2-Butene	0.24	0.22	0.22	0.22
cis-2-Butene	0.23	0.22	0.25	0.20
3-Methyl-1-butene	0.23	0.36	0.04	0.03
Isopentane	4.17	4.17	3.69	3.68
1-Pentene	0.13	0.12	0.03	0.14
2-Methyl-1-butene	0.11	0.12	0.10	0.11
n-Pentane	1.42	1.34	1.47	1.41
Isoprene	0.14	0.13	0.02	0.01
trans-2-Pentene	0.18	0.17	0.16	0.14
cis-2-Pentene	0.13	0.13	0.10	0.08
2-Methyl-2-butene	0.17	0.15	0.04	0.04
2,2-Dimethylbutane	0.20	0.18	0.19	0.18
Cyclopentene	0.08	0.09	0.31	0.46
4-Methyl-1-pentene	ND	ND	0.01	ND
Cyclopentane	0.14	0.13	0.13	0.13
2,3-Dimethylbutane	0.41	0.39	0.41	0.36
2-Methylpentane	0.53	0.53	0.54	0.48
3-Methylpentane	0.38	0.36	0.36	0.36
2-Methyl-1-pentene	0.03	0.03	0.02	0.02
1-Hexene	0.03	0.03	0.02	0.03
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.39	0.41	0.38	0.36
trans-2-Hexene	0.02	0.02	0.02	0.02
cis-2-Hexene	0.02	0.02	0.01	ND
Methylcyclopentane	0.28	0.26	0.24	0.25
2,4-Dimethylpentane	0.14	0.12	0.13	0.12
Benzene	0.65	0.60	0.62	0.59
Cyclohexane	33.54	31.68	27.38	26.03
2-Methylhexane	0.20	0.25	0.27	0.21
2,3-Dimethylpentane	0.18	0.17	0.20	0.17
3-Methylhexane	0.23	0.22	0.23	0.22
1-Heptene	ND	ND	0.05	ND
2,2,4-Trimethylpentane	0.32	0.30	0.33	0.31
n-Heptane	0.17	0.18	0.17	0.16
Methylcyclohexane	0.13	0.12	0.13	0.12
2,2,3-Trimethylpentane	0.06	0.07	0.07	0.07
2,3,4-Trimethylpentane	0.13	0.12	0.13	0.12
Toluene	1.13	1.08	1.09	1.03
2-Methylheptane	0.08	0.08	0.09	0.08
3-Methylheptane	0.08	0.07	0.09	0.09
1-Octene	ND	0.01	0.02	0.01
n-Octane	0.10	0.10	0.10	0.10
Ethylbenzene	0.36	0.35	0.29	0.28
m-Xylene/p-Xylene	0.83	0.79	0.71	0.66
Styrene	0.16	0.17	0.10	0.11
o-Xylene	0.34	0.34	0.30	0.28
1-Nonene	ND	ND	0.02	0.02
n-Nonane	0.07	0.06	0.08	0.07
Isopropylbenzene	0.05	0.05	0.05	0.05
a-Pinene	0.21	0.22	0.08	0.03
n-Propylbenzene	0.10	0.08	0.08	0.08
m-Ethyltoluene	0.24	0.21	0.23	0.21
p-Ethyltoluene	0.14	0.13	0.13	0.13
1,3,5-Trimethylbenzene	0.11	0.12	0.11	0.10
o-Ethyltoluene	0.10	0.09	0.10	0.11
b-Pinene	0.07	0.07	0.04	0.05
1,2,4-Trimethylbenzene	0.30	0.28	0.25	0.28
1-Decene	ND	ND	ND	ND
n-Decane	0.09	0.07	0.07	0.09
1,2,3-Trimethylbenzene	0.11	0.07	0.05	0.06
m-Diethylbenzene	0.08	0.08	0.08	0.07
p-Diethylbenzene	0.09	0.11	0.07	0.06
1-Undecene	0.01	0.03	1.68	2.04
n-Undecane	0.15	0.13	0.07	0.07
1-Dodecene	ND	ND	0.04	ND
n-Dodecane	0.04	0.04	0.03	0.03
1-Tridecene	0.004	0.90	ND	0.003
n-Tridecane	1.11	ND	0.03	0.03
TNMOC (speciated), ppbv	74.32	70.92	68.17	65.46
TNMOC (w/ unknowns), ppbC	462.71	442.29	468.18	468.26

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**15413**	**15443**	**15483**	**15547**
Sampling Date:	**2/5/99**	**2/17/99**	**3/1/99**	**3/13/99**
Analysis Date:	**2/23/99**	**3/4/99**	**3/11/99**	**3/24/99**
Compound				
Ethylene	1.32	1.85	0.97	1.48
Acetylene	1.05	1.28	0.79	1.19
Ethane	2.45	1.35	1.09	2.45
Propylene	0.49	0.50	0.32	0.93
Propane	3.01	4.17	2.27	3.54
Propyne	ND	0.02	ND	ND
Isobutane	0.45	0.62	1.21	0.44
Isobutene/1-Butene	0.41	0.19	0.41	0.59
1,3-Butadiene	0.07	0.07	0.04	0.07
n-Butane	0.93	1.09	1.67	0.76
trans-2-Butene	0.08	0.12	0.31	0.10
cis-2-Butene	0.11	0.10	0.25	0.13
3-Methyl-1-butene	ND	0.01	0.02	ND
Isopentane	2.33	1.60	1.66	6.63
1-Pentene	0.06	0.05	0.06	0.10
2-Methyl-1-butene	0.04	0.07	0.09	0.11
n-Pentane	0.35	0.35	0.37	0.38
Isoprene	0.07	0.03	0.03	0.08
trans-2-Pentene	0.07	0.06	0.10	0.08
cis-2-Pentene	0.07	0.04	0.07	0.08
2-Methyl-2-butene	0.04	0.10	0.11	0.10
2,2-Dimethylbutane	0.10	0.06	0.06	0.13
Cyclopentene	0.10	0.06	0.04	0.02
4-Methyl-1-pentene	ND	0.004	0.00	ND
Cyclopentane	0.06	0.04	0.05	0.05
2,3-Dimethylbutane	0.15	0.18	0.15	0.17
2-Methylpentane	0.21	0.27	0.23	0.23
3-Methylpentane	0.16	0.16	0.15	0.17
2-Methyl-1-pentene	0.02	0.01	0.01	0.02
1-Hexene	0.01	0.02	0.01	0.03
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.17	0.18	0.15	0.15
trans-2-Hexene	ND	0.02	0.01	ND
cis-2-Hexene	ND	0.07	ND	ND
Methylcyclopentane	0.11	0.11	0.08	0.13
2,4-Dimethylpentane	0.08	0.04	0.04	0.08
Benzene	0.44	0.36	0.24	0.53
Cyclohexane	0.21	0.14	0.10	0.19
2-Methylhexane	0.11	0.11	0.08	0.43
2,3-Dimethylpentane	0.11	0.06	0.06	0.11
3-Methylhexane	0.10	0.12	0.08	0.13
1-Heptene	ND	ND	ND	0.03
2,2,4-Trimethylpentane	0.13	0.15	0.09	0.13
n-Heptane	0.08	0.10	0.06	0.07
Methylcyclohexane	0.07	0.05	0.04	0.07
2,2,3-Trimethylpentane	0.02	0.04	0.02	0.05
2,3,4-Trimethylpentane	0.07	0.05	0.04	0.11
Toluene	0.47	0.73	0.37	0.48
2-Methylheptane	0.05	0.04	0.03	0.06
3-Methylheptane	0.05	0.04	0.03	0.07
1-Octene	0.005	0.005	0.00	0.02
n-Octane	0.06	0.05	0.03	0.08
Ethylbenzene	0.38	0.21	0.06	0.91
m-Xylene/p-Xylene	0.61	0.48	0.31	1.33
Styrene	0.18	0.03	0.03	0.20
o-Xylene	0.21	0.19	0.14	0.58
1-Nonene	ND	ND	ND	ND
n-Nonane	0.05	0.02	0.03	0.14
Isopropylbenzene	0.05	0.01	0.02	0.09
a-Pinene	0.05	0.08	0.04	ND
n-Propylbenzene	0.08	0.03	0.03	0.13
m-Ethyltoluene	0.12	0.12	0.07	0.26
p-Ethyltoluene	0.07	0.04	0.04	0.07
1,3,5-Trimethylbenzene	0.07	0.05	0.04	0.06
o-Ethyltoluene	0.05	0.03	0.03	1.54
b-Pinene	0.07	0.02	0.02	0.21
1,2,4-Trimethylbenzene	0.18	0.14	0.10	0.24
1-Decene	ND	ND	ND	ND
n-Decane	0.05	0.03	0.03	0.26
1,2,3-Trimethylbenzene	0.07	0.02	0.04	0.21
m-Diethylbenzene	0.08	0.02	0.03	0.23
p-Diethylbenzene	0.17	0.05	0.06	0.56
1-Undecene	0.04	0.01	0.01	0.17
n-Undecane	0.09	0.04	0.04	0.33
1-Dodecene	ND	ND	ND	0.010
n-Dodecane	0.01	0.01	0.008	0.02
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.02	0.01	0.00	0.01
TNMOC (speciated), ppbv	19.27	18.58	15.25	30.56
TNMOC (w/ unknowns), ppbC	216.25	214.83	115.19	761.45

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**15587D1**	**15587R1**	**15589D2**	**15589R2**
Sampling Date:	**3/25/99**	**3/25/99**	**3/25/99**	**3/25/99**
Analysis Date:	**4/13/99**	**4/13/99**	**4/13/99**	**4/13/99**
Compound				
Ethylene	1.99	2.05	2.14	2.19
Acetylene	1.39	1.38	1.58	1.53
Ethane	3.22	3.29	2.83	2.76
Propylene	0.77	0.75	0.72	0.73
Propane	5.94	6.16	5.63	5.78
Propyne	ND	ND	ND	ND
Isobutane	0.93	0.90	0.81	0.83
Isobutene/1-Butene	0.28	0.27	0.31	0.26
1,3-Butadiene	0.07	0.05	0.08	0.08
n-Butane	1.43	1.45	1.29	1.32
trans-2-Butene	0.24	0.21	0.23	0.23
cis-2-Butene	0.22	0.22	0.25	0.23
3-Methyl-1-butene	0.04	0.03	ND	ND
Isopentane	3.14	3.12	3.19	3.22
1-Pentene	0.09	0.09	0.11	0.11
2-Methyl-1-butene	0.19	0.13	0.15	0.14
n-Pentane	0.50	0.47	0.47	0.50
Isoprene	0.10	0.11	0.11	0.09
trans-2-Pentene	0.14	0.13	0.14	0.13
cis-2-Pentene	0.14	0.11	0.12	0.12
2-Methyl-2-butene	0.13	0.12	0.12	0.13
2,2-Dimethylbutane	0.14	0.12	0.14	0.13
Cyclopentene	0.08	0.03	0.03	0.03
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.09	0.09	0.08	0.08
2,3-Dimethylbutane	0.28	0.24	0.30	0.27
2-Methylpentane	0.40	0.35	0.33	0.32
3-Methylpentane	0.22	0.23	0.23	0.22
2-Methyl-1-pentene	0.02	0.02	0.02	0.02
1-Hexene	0.02	0.02	0.03	0.03
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.22	0.24	0.24	0.22
trans-2-Hexene	ND	ND	ND	0.02
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.17	0.18	0.19	0.18
2,4-Dimethylpentane	0.10	0.10	0.11	0.10
Benzene	0.43	0.42	0.45	0.47
Cyclohexane	0.13	0.13	0.14	0.15
2-Methylhexane	0.17	0.16	0.29	0.29
2,3-Dimethylpentane	0.15	0.14	0.16	0.15
3-Methylhexane	0.14	0.14	0.14	0.14
1-Heptene	0.01	ND	0.02	0.03
2,2,4-Trimethylpentane	0.15	0.15	0.17	0.16
n-Heptane	0.10	0.11	0.12	0.10
Methylcyclohexane	0.09	0.09	0.11	0.09
2,2,3-Trimethylpentane	0.01	0.02	0.02	0.03
2,3,4-Trimethylpentane	0.10	0.08	0.10	0.09
Toluene	0.68	0.67	0.69	0.67
2-Methylheptane	0.08	0.06	0.07	0.06
3-Methylheptane	0.07	0.07	0.07	0.07
1-Octene	0.01	ND	0.01	0.01
n-Octane	0.09	0.09	0.10	0.09
Ethylbenzene	0.94	0.31	1.00	0.37
m-Xylene/p-Xylene	0.73	0.68	0.79	0.77
Styrene	0.16	0.16	0.11	0.09
o-Xylene	0.25	0.24	0.24	0.26
1-Nonene	ND	ND	ND	0.02
n-Nonane	0.06	0.06	0.09	0.08
Isopropylbenzene	0.06	0.07	0.06	0.05
a-Pinene	0.12	0.11	0.11	0.14
n-Propylbenzene	0.07	0.06	0.05	0.08
m-Ethyltoluene	0.17	0.16	0.17	0.18
p-Ethyltoluene	0.10	0.08	0.08	0.08
1,3,5-Trimethylbenzene	0.06	0.06	0.07	0.07
o-Ethyltoluene	0.06	0.06	0.07	0.06
b-Pinene	0.05	0.05	ND	0.01
1,2,4-Trimethylbenzene	0.18	0.16	0.17	0.17
1-Decene	ND	ND	ND	ND
n-Decane	0.09	0.08	0.07	0.08
1,2,3-Trimethylbenzene	0.10	0.09	0.05	0.04
m-Diethylbenzene	0.08	0.08	0.08	0.04
p-Diethylbenzene	0.13	0.12	0.13	0.08
1-Undecene	0.02	0.04	0.02	0.02
n-Undecane	0.13	0.12	0.08	0.06
1-Dodecene	0.01	0.00	ND	ND
n-Dodecane	0.02	0.022	0.02	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.00	0.01	0.01	ND
TNMOC (speciated), ppbv	28.67	27.77	28.11	27.40
TNMOC (w/ unknowns), ppbC	252.27	245.44	238.58	245.12

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**15656**	**15826**	**15828**	**15789**
Sampling Date:	**4/6/99**	**5/12/99**	**5/12/99**	**5/18/99**
Analysis Date:	**5/10/99**	**VOID**	**VOID**	**6/7/99**
Compound				
Ethylene	1.34			1.46
Acetylene	1.15			0.91
Ethane	2.14			1.82
Propylene	0.54			0.60
Propane	4.65			4.37
Propyne	ND			0.02
Isobutane	0.93			0.69
Isobutene/1-Butene	0.23			0.26
1,3-Butadiene	0.04			0.05
n-Butane	1.48			1.36
trans-2-Butene	0.25			0.20
cis-2-Butene	0.24			0.22
3-Methyl-1-butene	0.03			0.04
Isopentane	2.76			5.05
1-Pentene	0.11			0.15
2-Methyl-1-butene	0.13			0.15
n-Pentane	0.49			0.96
Isoprene	0.08			0.11
trans-2-Pentene	0.14			0.21
cis-2-Pentene	0.12			ND
2-Methyl-2-butene	0.13			0.15
2,2-Dimethylbutane	0.15			0.23
Cyclopentene	0.04			0.07
4-Methyl-1-pentene	ND			ND
Cyclopentane	0.08			0.12
2,3-Dimethylbutane	0.29			0.42
2-Methylpentane	0.37			0.60
3-Methylpentane	0.23			0.29
2-Methyl-1-pentene	0.02			0.03
1-Hexene	0.03			0.04
2-Ethyl-1-butene	ND			ND
n-Hexane	0.24			0.29
trans-2-Hexene	0.01			0.01
cis-2-Hexene	ND			0.01
Methylcyclopentane	0.17			0.20
2,4-Dimethylpentane	0.09			0.10
Benzene	0.36			0.33
Cyclohexane	1.07			0.46
2-Methylhexane	0.30			0.27
2,3-Dimethylpentane	0.15			0.17
3-Methylhexane	0.13			0.17
1-Heptene	0.03			0.03
2,2,4-Trimethylpentane	0.13			0.18
n-Heptane	0.10			0.15
Methylcyclohexane	0.09			0.14
2,2,3-Trimethylpentane	0.03			0.04
2,3,4-Trimethylpentane	0.08			0.09
Toluene	0.69			0.70
2-Methylheptane	0.07			0.05
3-Methylheptane	0.07			0.06
1-Octene	0.01			ND
n-Octane	0.10			0.08
Ethylbenzene	0.47			0.40
m-Xylene/p-Xylene	0.67			0.54
Styrene	0.18			0.23
o-Xylene	0.23			0.15
1-Nonene	ND			ND
n-Nonane	0.09			0.07
Isopropylbenzene	0.07			0.06
a-Pinene	0.18			0.25
n-Propylbenzene	0.07			0.09
m-Ethyltoluene	0.14			0.16
p-Ethyltoluene	0.06			0.08
1,3,5-Trimethylbenzene	0.05			0.06
o-Ethyltoluene	0.05			0.06
b-Pinene	0.07			0.11
1,2,4-Trimethylbenzene	0.14			0.15
1-Decene	ND			ND
n-Decane	0.09			0.07
1,2,3-Trimethylbenzene	0.11			0.04
m-Diethylbenzene	0.08			0.07
p-Diethylbenzene	0.12			0.13
1-Undecene	0.03			0.04
n-Undecane	0.11			0.16
1-Dodecene	0.00			0.01
n-Dodecane	0.015			0.01
1-Tridecene	ND			0.00
n-Tridecane	0.00			0.01
TNMOC (speciated), ppbv	25.16			27.08
TNMOC (w/ unknowns), ppbC	275.51			275.90

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**15836**	**15838**	**15919**	**16022**
Sampling Date:	**5/30/99**	**6/5/99**	**6/17/99**	**6/29/99**
Analysis Date:	**6/17/99**	**6/17/99**	**6/29/99**	**7/20/99**
Compound				
Ethylene	1.48	1.11	1.31	1.60
Acetylene	0.89	0.78	0.88	1.12
Ethane	2.68	1.57	1.52	1.95
Propylene	0.60	0.42	0.49	0.68
Propane	6.16	3.33	2.64	3.31
Propyne	ND	ND	ND	ND
Isobutane	0.37	0.63	1.07	0.86
Isobutene/1-Butene	0.21	0.18	0.30	0.28
1,3-Butadiene	0.06	0.04	0.05	0.07
n-Butane	0.84	1.20	2.43	1.86
trans-2-Butene	0.11	0.16	0.34	0.25
cis-2-Butene	0.15	0.19	0.34	0.27
3-Methyl-1-butene	0.02	0.03	0.07	0.05
Isopentane	2.45	1.78	3.21	2.41
1-Pentene	0.11	0.11	0.28	0.20
2-Methyl-1-butene	0.09	0.10	0.24	0.20
n-Pentane	0.60	0.73	1.38	1.22
Isoprene	0.49	0.34	0.44	0.96
trans-2-Pentene	0.12	0.16	0.29	0.25
cis-2-Pentene	0.10	0.13	0.20	0.19
2-Methyl-2-butene	0.09	0.14	0.33	0.27
2,2-Dimethylbutane	0.15	0.17	0.24	0.27
Cyclopentene	0.11	0.03	0.07	0.17
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.10	0.11	0.17	0.16
2,3-Dimethylbutane	0.14	0.14	6.88	0.64
2-Methylpentane	0.42	0.45	0.69	0.68
3-Methylpentane	0.21	0.21	0.35	0.38
2-Methyl-1-pentene	0.02	0.03	0.05	0.03
1-Hexene	0.03	0.02	0.03	0.03
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.28	0.21	6.95	0.36
trans-2-Hexene	ND	ND	0.04	0.02
cis-2-Hexene	ND	ND	0.02	0.01
Methylcyclopentane	0.18	0.15	0.19	0.23
2,4-Dimethylpentane	0.10	0.09	0.13	0.13
Benzene	0.33	0.26	0.35	0.46
Cyclohexane	0.19	0.57	0.88	1.45
2-Methylhexane	0.29	0.25	4.41	0.34
2,3-Dimethylpentane	0.17	0.14	0.14	0.24
3-Methylhexane	0.14	0.12	0.17	0.25
1-Heptene	0.02	ND	0.25	ND
2,2,4-Trimethylpentane	0.16	0.16	0.18	0.26
n-Heptane	0.16	0.09	0.13	0.18
Methylcyclohexane	0.08	0.07	0.11	0.13
2,2,3-Trimethylpentane	0.04	0.02	0.04	0.06
2,3,4-Trimethylpentane	0.08	0.07	3.16	0.11
Toluene	0.68	0.56	6.80	0.99
2-Methylheptane	0.07	0.04	0.08	0.07
3-Methylheptane	0.07	0.05	2.89	0.07
1-Octene	ND	0.01	0.19	0.01
n-Octane	0.13	0.07	0.08	0.09
Ethylbenzene	0.57	0.41	0.43	0.50
m-Xylene/p-Xylene	0.80	0.34	0.69	0.81
Styrene	0.26	0.20	0.23	0.22
o-Xylene	0.28	0.13	0.17	0.34
1-Nonene	ND	ND	0.11	ND
n-Nonane	0.11	0.07	0.07	0.08
Isopropylbenzene	0.06	0.07	0.24	0.07
a-Pinene	0.26	0.02	0.14	0.10
n-Propylbenzene	0.10	0.05	0.08	0.10
m-Ethyltoluene	0.22	0.14	0.15	0.18
p-Ethyltoluene	0.08	0.07	0.07	0.10
1,3,5-Trimethylbenzene	0.06	0.06	0.06	0.09
o-Ethyltoluene	0.06	0.05	1.36	0.11
b-Pinene	0.23	0.05	0.13	0.20
1,2,4-Trimethylbenzene	0.15	0.12	0.14	0.18
1-Decene	ND	ND	ND	ND
n-Decane	0.11	0.10	0.07	0.10
1,2,3-Trimethylbenzene	0.09	0.08	0.08	0.11
m-Diethylbenzene	0.07	0.07	0.09	0.14
p-Diethylbenzene	0.17	0.19	0.43	0.22
1-Undecene	0.08	0.03	0.10	0.05
n-Undecane	0.16	0.07	0.22	0.14
1-Dodecene	ND	ND	0.04	0.01
n-Dodecane	0.02	0.009	0.04	0.02
1-Tridecene	ND	ND	0.01	ND
n-Tridecane	0.01	0.01	0.01	0.01
TNMOC (speciated), ppbv	25.91	19.56	58.65	29.65
TNMOC (w/ unknowns), ppbC	313.46	263.60	493.31	329.87

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**16269**	**16252**	**16283**	**16496**
Sampling Date:	**7/17/99**	**7/23/99**	**8/4/99**	**8/16/99**
Analysis Date:	**8/10/99**	**8/10/99**	**8/16/99**	**9/3/99**
Compound				
Ethylene	1.68	1.68	1.07	1.00
Acetylene	1.25	1.13	0.67	0.64
Ethane	2.14	1.61	1.15	1.06
Propylene	0.60	0.60	0.42	0.42
Propane	5.08	3.47	3.31	2.27
Propyne	ND	ND	ND	ND
Isobutane	0.73	0.74	0.78	0.41
Isobutene/1-Butene	0.33	0.40	0.29	0.20
1,3-Butadiene	0.06	0.06	0.04	0.03
n-Butane	1.20	1.22	1.38	0.72
trans-2-Butene	0.25	0.28	0.31	0.16
cis-2-Butene	0.30	0.29	0.32	0.19
3-Methyl-1-butene	0.05	0.05	0.06	0.03
Isopentane	1.97	2.12	2.14	4.42
1-Pentene	0.17	0.17	0.16	0.10
2-Methyl-1-butene	0.19	0.19	0.18	0.10
n-Pentane	0.85	0.78	0.83	0.84
Isoprene	1.14	0.86	0.69	0.47
trans-2-Pentene	0.25	0.23	0.26	0.14
cis-2-Pentene	0.17	0.16	0.18	0.13
2-Methyl-2-butene	0.23	0.25	0.26	0.12
2,2-Dimethylbutane	0.25	0.21	0.19	0.14
Cyclopentene	0.21	0.20	0.12	0.06
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.12	0.11	0.13	0.11
2,3-Dimethylbutane	0.20	0.19	0.19	0.15
2-Methylpentane	0.63	0.71	0.52	0.43
3-Methylpentane	0.34	0.32	0.30	0.25
2-Methyl-1-pentene	0.03	0.03	0.03	0.02
1-Hexene	0.04	0.03	0.04	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.33	0.29	0.24	0.18
trans-2-Hexene	0.03	0.03	0.03	0.02
cis-2-Hexene	0.01	0.02	ND	ND
Methylcyclopentane	0.21	0.20	0.18	0.11
2,4-Dimethylpentane	0.11	0.13	0.10	0.09
Benzene	0.45	0.44	0.32	0.30
Cyclohexane	0.10	0.18	0.18	0.15
2-Methylhexane	0.24	0.26	0.24	0.21
2,3-Dimethylpentane	0.15	0.20	0.17	0.16
3-Methylhexane	0.15	0.15	0.10	0.12
1-Heptene	ND	ND	0.03	0.02
2,2,4-Trimethylpentane	0.19	0.25	0.15	0.14
n-Heptane	0.13	0.11	0.10	0.09
Methylcyclohexane	0.11	0.09	0.10	0.10
2,2,3-Trimethylpentane	0.07	0.06	0.04	ND
2,3,4-Trimethylpentane	0.09	0.10	0.07	0.06
Toluene	0.79	0.79	0.61	0.49
2-Methylheptane	0.07	0.05	0.06	0.05
3-Methylheptane	0.06	0.05	0.05	0.05
1-Octene	0.03	0.01	0.02	0.02
n-Octane	0.08	0.07	0.06	0.06
Ethylbenzene	0.15	0.15	0.10	0.12
m-Xylene/p-Xylene	0.40	0.38	0.24	0.24
Styrene	0.31	0.20	0.12	0.21
o-Xylene	0.16	0.16	0.10	0.12
1-Nonene	0.03	0.02	0.02	0.02
n-Nonane	0.06	0.06	0.06	0.05
Isopropylbenzene	0.07	0.04	0.06	0.07
a-Pinene	0.31	0.20	0.09	0.16
n-Propylbenzene	0.08	0.06	0.06	0.07
m-Ethyltoluene	0.23	0.18	0.13	0.15
p-Ethyltoluene	0.09	0.09	0.07	0.07
1,3,5-Trimethylbenzene	0.06	0.06	0.06	0.05
o-Ethyltoluene	0.10	0.09	0.07	0.06
b-Pinene	0.40	0.15	0.17	0.16
1,2,4-Trimethylbenzene	0.23	0.19	0.15	0.11
1-Decene	ND	ND	ND	ND
n-Decane	0.09	0.11	0.09	0.08
1,2,3-Trimethylbenzene	0.10	0.11	0.08	0.08
m-Diethylbenzene	0.28	0.14	0.23	0.10
p-Diethylbenzene	0.19	0.10	0.14	0.13
1-Undecene	0.06	0.05	0.08	0.02
n-Undecane	0.19	0.17	0.24	0.17
1-Dodecene	0.02	0.01	0.01	ND
n-Dodecane	0.021	0.02	0.02	0.01
1-Tridecene	0.01	ND	0.00	ND
n-Tridecane	0.02	0.01	0.01	0.01
TNMOC (speciated), ppbv	27.49	24.35	21.27	19.29
TNMOC (w/ unknowns), ppbC	245.68	220.90	179.54	159.10

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BRVT
Brattleboro, VT
Reported in ppbv

Sample No.:	**16611**	**16614**	**16803**	**16903**
Sampling Date:	**8/28/99**	**9/3/99**	**9/9/99**	**9/21/99**
Analysis Date:	**VOID**	**9/14/99**	**10/6/99**	**10/11/99**
Compound				
Ethylene		2.44	1.71	1.71
Acetylene		1.36	1.34	1.30
Ethane		1.53	2.34	1.40
Propylene		0.80	0.58	0.60
Propane		6.46	4.31	3.86
Propyne		ND	ND	ND
Isobutane		0.40	0.79	0.46
Isobutene/1-Butene		0.27	0.26	0.32
1,3-Butadiene		0.09	0.07	0.06
n-Butane		0.63	1.54	0.79
trans-2-Butene		0.11	0.21	0.19
cis-2-Butene		0.16	0.24	0.22
3-Methyl-1-butene		0.02	0.05	0.04
Isopentane		1.20	2.58	1.31
1-Pentene		0.10	0.14	0.12
2-Methyl-1-butene		0.10	0.19	0.12
n-Pentane		0.62	1.08	0.65
Isoprene		1.31	0.69	0.15
trans-2-Pentene		0.15	0.25	0.17
cis-2-Pentene		0.12	0.17	0.13
2-Methyl-2-butene		0.12	0.25	0.18
2,2-Dimethylbutane		0.15	0.19	0.14
Cyclopentene		0.11	0.09	0.02
4-Methyl-1-pentene		ND	ND	0.01
Cyclopentane		0.10	0.14	0.10
2,3-Dimethylbutane		0.16	0.21	0.15
2-Methylpentane		0.49	0.82	0.46
3-Methylpentane		0.25	0.38	0.25
2-Methyl-1-pentene		0.03	0.04	0.02
1-Hexene		0.04	0.02	0.03
2-Ethyl-1-butene		0.23	0.32	0.21
n-Hexane		ND	ND	ND
trans-2-Hexene		0.02	0.03	0.03
cis-2-Hexene		0.01	0.01	0.01
Methylcyclopentane		0.16	0.20	0.14
2,4-Dimethylpentane		0.13	0.12	0.11
Benzene		0.45	0.43	0.37
Cyclohexane		0.32	1.08	0.10
2-Methylhexane		0.28	0.24	0.15
2,3-Dimethylpentane		0.21	0.20	0.14
3-Methylhexane		0.15	0.18	0.13
1-Heptene		0.04	0.05	0.04
2,2,4-Trimethylpentane		0.21	0.23	0.19
n-Heptane		0.14	0.14	0.11
Methylcyclohexane		0.10	0.12	0.10
2,2,3-Trimethylpentane		0.04	0.05	0.03
2,3,4-Trimethylpentane		0.09	0.09	0.09
Toluene		0.83	0.97	0.68
2-Methylheptane		0.05	0.05	0.05
3-Methylheptane		0.06	0.06	0.05
1-Octene		0.02	0.01	0.01
n-Octane		0.08	0.07	0.07
Ethylbenzene		0.16	0.15	0.13
m-Xylene/p-Xylene		0.42	0.37	0.34
Styrene		0.26	0.15	0.14
o-Xylene		0.19	0.17	0.14
1-Nonene		0.03	ND	0.02
n-Nonane		0.07	0.05	0.05
Isopropylbenzene		0.07	0.06	0.05
a-Pinene		0.29	0.16	0.33
n-Propylbenzene		0.08	0.07	0.07
m-Ethyltoluene		0.25	0.19	0.14
p-Ethyltoluene		0.08	0.09	0.07
1,3,5-Trimethylbenzene		0.08	0.08	0.05
o-Ethyltoluene		0.10	0.08	0.06
b-Pinene		0.29	0.17	0.14
1,2,4-Trimethylbenzene		ND	ND	ND
1-Decene		0.17	0.17	0.15
n-Decane		0.09	0.06	0.08
1,2,3-Trimethylbenzene		0.12	0.06	0.10
m-Diethylbenzene		0.22	0.21	0.23
p-Diethylbenzene		0.17	0.15	0.15
1-Undecene		0.07	0.06	0.07
n-Undecane		0.25	0.22	0.17
1-Dodecene		0.03	0.02	0.01
n-Dodecane		0.02	0.05	0.01
1-Tridecene		0.00	0.00	0.00
n-Tridecane		0.02	0.01	0.01
TNMOC (speciated), ppbv		26.44	28.14	20.47
TNMOC (w/ unknowns), ppbC		208.81	243.22	197.97

The QC recovery for n-Undecan

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**14818**	**15083**	**15107**	**15147**
Sampling Date:	**9/14/98**	**9/26/98**	**10/8/98**	**10/16/98**
Analysis Date:	**10/14/98**	**10/22/98**	**10/22/98**	**12/7/98**
Compound				
Ethylene	3.01	2.52	3.51	3.46
Acetylene	2.03	1.69	2.15	2.02
Ethane	2.26	3.34	2.35	2.84
Propylene	1.10	0.86	1.11	1.21
Propane	2.36	2.26	1.55	2.31
Propyne	0.06	0.06	0.05	0.05
Isobutane	0.93	0.72	1.02	1.89
Isobutene/1-Butene	0.38	0.31	0.41	0.44
1,3-Butadiene	0.16	0.12	0.18	0.16
n-Butane	1.46	1.84	2.16	3.44
trans-2-Butene	0.26	0.24	0.28	0.31
cis-2-Butene	0.26	0.22	0.25	0.30
3-Methyl-1-butene	0.05	0.04	0.06	0.04
Isopentane	6.10	5.42	4.17	6.72
1-Pentene	0.17	0.13	0.16	0.19
2-Methyl-1-butene	0.23	0.18	0.25	0.26
n-Pentane	1.14	0.94	0.99	1.06
Isoprene	0.20	0.13	0.14	0.15
trans-2-Pentene	0.27	0.23	0.28	0.29
cis-2-Pentene	0.17	0.16	0.18	0.20
2-Methyl-2-butene	0.31	0.28	0.34	0.39
2,2-Dimethylbutane	0.32	0.26	0.24	0.25
Cyclopentene	0.15	0.11	0.06	0.13
4-Methyl-1-pentene	0.02	0.01	0.01	0.01
Cyclopentane	0.16	0.12	0.13	0.14
2,3-Dimethylbutane	0.55	0.49	0.51	0.43
2-Methylpentane	0.77	0.64	0.66	0.75
3-Methylpentane	0.48	0.37	0.41	0.40
2-Methyl-1-pentene	0.05	0.03	0.04	0.06
1-Hexene	0.03	0.03	0.03	0.04
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.49	0.32	0.38	0.39
trans-2-Hexene	0.04	0.03	0.05	0.04
cis-2-Hexene	0.03	0.02	0.03	0.03
Methylcyclopentane	0.31	0.24	0.26	0.28
2,4-Dimethylpentane	0.15	0.11	0.12	0.13
Benzene	0.86	0.73	0.95	0.92
Cyclohexane	44.35	0.25	3.85	1.04
2-Methylhexane	0.24	0.20	0.25	0.25
2,3-Dimethylpentane	0.19	0.16	0.18	0.22
3-Methylhexane	0.27	0.21	0.23	0.24
1-Heptene	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.40	0.31	0.37	0.38
n-Heptane	0.18	0.14	0.18	0.17
Methylcyclohexane	0.14	0.10	0.12	0.12
2,2,3-Trimethylpentane	0.08	0.07	0.08	0.08
2,3,4-Trimethylpentane	0.14	0.11	0.15	0.15
Toluene	1.84	1.36	1.63	1.39
2-Methylheptane	0.08	0.07	0.09	0.08
3-Methylheptane	0.09	0.07	0.08	0.09
1-Octene	0.01	0.03	0.01	0.01
n-Octane	0.10	0.10	0.10	0.11
Ethylbenzene	0.28	0.23	0.31	0.25
m-Xylene/p-Xylene	0.87	0.68	0.96	0.77
Styrene	0.13	0.14	0.15	0.22
o-Xylene	0.34	0.27	0.36	0.32
1-Nonene	0.02	0.02	0.01	0.02
n-Nonane	0.07	0.06	0.07	0.08
Isopropylbenzene	0.06	0.06	0.05	0.06
a-Pinene	0.06	0.01	0.02	ND
n-Propylbenzene	0.08	0.07	0.10	0.11
m-Ethyltoluene	0.26	0.21	0.29	0.29
p-Ethyltoluene	0.13	0.11	0.14	0.15
1,3,5-Trimethylbenzene	0.13	0.10	0.13	0.16
o-Ethyltoluene	0.10	0.09	0.11	0.14
b-Pinene	0.08	0.08	0.08	0.05
1,2,4-Trimethylbenzene	0.36	0.31	0.41	0.43
1-Decene	ND	ND	ND	ND
n-Decane	0.08	0.07	0.10	0.12
1,2,3-Trimethylbenzene	0.08	0.11	0.13	0.11
m-Diethylbenzene	0.10	0.06	0.13	0.13
p-Diethylbenzene	0.05	0.04	0.09	0.10
1-Undecene	0.03	0.03	0.04	0.04
n-Undecane	0.06	0.12	0.20	0.16
1-Dodecene	0.005	0.01	0.01	0.004
n-Dodecane	0.02	0.02	0.04	0.02
1-Tridecene	ND	0.01	ND	ND
n-Tridecane	0.004	0.01	0.01	0.004
TNMOC (speciated), ppbv	78.82	31.28	36.73	39.82
TNMOC (w/ unknowns), ppbC	486.70	190.03	237.71	243.15

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**15153**	**15197**	**15235**	**15249**
Sampling Date:	**11/1/98**	**11/13/98**	**11/25/98**	**12/7/98**
Analysis Date:	**11/11/98**	**12/1/98**	**12/8/98**	**12/22/98**
Compound				
Ethylene	2.85	4.38	2.85	2.80
Acetylene	1.86	2.90	2.05	2.01
Ethane	2.74	3.20	2.84	2.95
Propylene	1.02	1.52	1.00	0.98
Propane	2.30	1.97	2.70	3.30
Propyne	0.03	0.07	0.05	0.03
Isobutane	0.81	2.04	1.46	2.13
Isobutene/1-Butene	0.33	0.56	0.35	0.32
1,3-Butadiene	0.13	0.22	0.14	0.13
n-Butane	1.51	3.47	1.71	2.17
trans-2-Butene	0.18	0.45	0.29	0.23
cis-2-Butene	0.20	0.41	0.28	0.22
3-Methyl-1-butene	0.03	0.04	0.02	0.02
Isopentane	4.95	5.61	4.19	5.32
1-Pentene	0.10	0.17	0.10	0.12
2-Methyl-1-butene	0.14	0.30	0.16	0.16
n-Pentane	0.83	1.13	0.70	0.97
Isoprene	0.15	0.18	0.14	0.15
trans-2-Pentene	0.17	0.33	0.18	0.18
cis-2-Pentene	0.13	0.21	0.14	0.14
2-Methyl-2-butene	0.20	0.41	0.20	0.20
2,2-Dimethylbutane	0.20	0.37	0.22	0.24
Cyclopentene	0.04	0.13	0.11	0.08
4-Methyl-1-pentene	ND	0.01	0.01	ND
Cyclopentane	0.12	0.18	0.11	0.13
2,3-Dimethylbutane	0.32	0.52	0.31	0.44
2-Methylpentane	0.49	0.83	0.52	0.60
3-Methylpentane	0.36	0.52	0.35	0.44
2-Methyl-1-pentene	0.03	0.06	0.04	0.03
1-Hexene	0.03	0.04	0.02	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.43	0.47	0.37	0.55
trans-2-Hexene	0.03	0.06	0.03	0.03
cis-2-Hexene	0.01	0.03	0.02	0.02
Methylcyclopentane	0.21	0.31	0.22	0.33
2,4-Dimethylpentane	0.12	0.15	0.12	0.14
Benzene	0.80	1.12	0.82	0.81
Cyclohexane	22.89	1.41	16.64	3.14
2-Methylhexane	0.18	0.29	0.18	0.25
2,3-Dimethylpentane	0.16	0.24	0.13	0.18
3-Methylhexane	0.19	0.27	0.20	0.24
1-Heptene	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.31	0.42	0.24	0.32
n-Heptane	0.15	0.22	0.16	0.17
Methylcyclohexane	0.11	0.14	0.12	0.13
2,2,3-Trimethylpentane	0.06	0.09	0.05	0.07
2,3,4-Trimethylpentane	0.13	0.16	0.09	0.13
Toluene	1.37	1.97	1.39	1.64
2-Methylheptane	0.08	0.11	0.08	0.09
3-Methylheptane	0.07	0.09	0.08	0.09
1-Octene	0.01	ND	ND	ND
n-Octane	0.09	0.12	0.09	0.10
Ethylbenzene	0.24	0.32	0.23	0.28
m-Xylene/p-Xylene	0.69	0.99	0.66	0.87
Styrene	0.12	0.11	0.13	0.11
o-Xylene	0.28	0.40	0.27	0.36
1-Nonene	0.01	0.01	0.01	0.01
n-Nonane	0.07	0.06	0.07	0.06
Isopropylbenzene	0.06	0.06	0.05	0.06
a-Pinene	0.05	0.02	0.04	0.01
n-Propylbenzene	0.08	0.10	0.07	0.09
m-Ethyltoluene	0.26	0.31	0.23	0.28
p-Ethyltoluene	0.12	0.16	0.12	0.14
1,3,5-Trimethylbenzene	0.13	0.17	0.12	0.15
o-Ethyltoluene	0.10	0.15	0.10	0.11
b-Pinene	0.05	0.03	0.05	0.05
1,2,4-Trimethylbenzene	0.33	0.47	0.32	0.32
1-Decene	ND	ND	ND	ND
n-Decane	0.10	0.08	0.11	0.09
1,2,3-Trimethylbenzene	0.10	0.15	0.13	0.14
m-Diethylbenzene	0.05	0.10	0.09	0.18
p-Diethylbenzene	0.05	0.08	0.06	0.09
1-Undecene	0.03	0.02	0.04	0.06
n-Undecane	0.14	0.12	0.08	0.17
1-Dodecene	0.01	ND	ND	ND
n-Dodecane	0.02	0.01	0.02	0.02
1-Tridecene	0.01	ND	ND	ND
n-Tridecane	0.01	ND	0.001	0.009
TNMOC (speciated), ppbv	52.79	43.84	47.27	38.60
TNMOC (w/ unknowns), ppbC	324.91	243.17	283.85	243.51

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**15284**		**15310**		**15326**	**15354D1**
Sampling Date:	**12/19/98**		**12/31/98**		**1/12/99**	**1/24/99**
Analysis Date:	**1/11/99**		**1/12/99**		**VOID**	**2/2/99**
Compound						
Ethylene	3.33		4.17			2.94
Acetylene	2.68		3.82			2.14
Ethane	3.71		3.26			3.26
Propylene	0.98		1.24			0.93
Propane	3.00		2.50			2.21
Propyne	0.03		0.05			0.03
Isobutane	1.01		0.90			1.64
Isobutene/1-Butene	0.29		0.38			0.37
1,3-Butadiene	0.12		0.17			0.13
n-Butane	2.00		2.37			3.73
trans-2-Butene	0.15		0.19			0.38
cis-2-Butene	0.18		0.23			0.27
3-Methyl-1-butene	ND		0.03			0.03
Isopentane	3.18		2.92			3.60
1-Pentene	0.10		0.10			0.13
2-Methyl-1-butene	0.12		0.13			0.13
n-Pentane	0.66		0.74			0.79
Isoprene	0.12		0.15			0.11
trans-2-Pentene	0.13		0.18			0.19
cis-2-Pentene	0.11		0.13			0.15
2-Methyl-2-butene	0.12		0.19			0.19
2,2-Dimethylbutane	0.17		0.19			0.19
Cyclopentene	0.10		0.03			0.13
4-Methyl-1-pentene	ND		ND			0.01
Cyclopentane	0.11		0.15			0.13
2,3-Dimethylbutane	0.30		0.31			0.39
2-Methylpentane	0.46		0.59			0.52
3-Methylpentane	0.34		0.43			0.35
2-Methyl-1-pentene	0.02		0.06			0.02
1-Hexene	0.02		ND			0.02
2-Ethyl-1-butene	ND		ND			ND
n-Hexane	0.41		0.40			0.30
trans-2-Hexene	0.02		0.03			0.03
cis-2-Hexene	0.01		0.02			0.02
Methylcyclopentane	0.22		0.30			0.22
2,4-Dimethylpentane	0.11		0.15			0.13
Benzene	0.79		0.93			0.61
Cyclohexane	3.78		0.27			2.62
2-Methylhexane	0.21		0.27			0.20
2,3-Dimethylpentane	0.16		0.22			0.19
3-Methylhexane	0.19		0.27			0.20
1-Heptene	ND		ND			ND
2,2,4-Trimethylpentane	0.25		0.41			0.32
n-Heptane	0.13		0.21			0.13
Methylcyclohexane	0.12		0.15			0.10
2,2,3-Trimethylpentane	0.06		0.09			0.06
2,3,4-Trimethylpentane	0.11		0.17			0.13
Toluene	1.26		1.69			1.18
2-Methylheptane	0.08		0.11			0.08
3-Methylheptane	0.07		0.11			0.09
1-Octene	ND		ND			ND
n-Octane	0.10		0.11			0.09
Ethylbenzene	0.21		0.32			0.23
m-Xylene/p-Xylene	0.57		0.98			0.70
Styrene	0.12		0.09			0.08
o-Xylene	0.25		0.41			0.29
1-Nonene	0.01		0.01			0.01
n-Nonane	0.11		0.06			0.06
Isopropylbenzene	0.05		0.07			0.06
a-Pinene	0.11		ND			0.01
n-Propylbenzene	0.09		0.10			0.08
m-Ethyltoluene	0.20		0.24			0.21
p-Ethyltoluene	0.13		0.13			0.12
1,3,5-Trimethylbenzene	0.15		0.12			0.11
o-Ethyltoluene	0.09		0.11			0.10
b-Pinene	0.04		0.01			0.03
1,2,4-Trimethylbenzene	0.29		0.28			0.32
1-Decene	ND		ND			ND
n-Decane	0.18		0.04			0.06
1,2,3-Trimethylbenzene	0.07		0.09			0.09
m-Diethylbenzene	0.09		0.05			0.07
p-Diethylbenzene	0.03		0.04			0.05
1-Undecene	0.04		0.01			0.02
n-Undecane	0.16	#	0.05	#		0.09
1-Dodecene	ND		ND			ND
n-Dodecane	0.03		ND			0.01
1-Tridecene	ND		ND			ND
n-Tridecane	0.01		0.00			0.003
TNMOC (speciated), ppbv	34.60		34.76			34.61
TNMOC (w/ unknowns), ppbC	197.61		172.17			183.21

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**15354R1**	**15356D2**	**15356R2**	**15405**
Sampling Date:	**1/24/99**	**1/24/99**	**1/24/99**	**2/5/99**
Analysis Date:	**2/9/99**	**2/3/99**	**2/9/99**	**VOID**
Compound				
Ethylene	2.84	2.96	2.86	
Acetylene	1.88	2.13	2.08	
Ethane	2.92	3.25	2.95	
Propylene	0.93	0.86	0.85	
Propane	2.14	1.71	1.68	
Propyne	0.03	0.03	0.04	
Isobutane	1.61	1.67	1.62	
Isobutene/1-Butene	0.37	0.35	0.36	
1,3-Butadiene	0.11	0.11	0.12	
n-Butane	3.63	3.78	3.58	
trans-2-Butene	0.29	0.40	0.39	
cis-2-Butene	0.26	0.26	0.26	
3-Methyl-1-butene	0.03	0.03	0.02	
Isopentane	3.59	2.96	3.28	
1-Pentene	0.11	0.13	0.11	
2-Methyl-1-butene	0.14	0.12	0.12	
n-Pentane	0.77	0.89	0.83	
Isoprene	0.10	0.13	0.11	
trans-2-Pentene	0.18	0.19	0.18	
cis-2-Pentene	0.13	0.14	0.13	
2-Methyl-2-butene	0.17	0.19	0.17	
2,2-Dimethylbutane	0.18	0.18	0.17	
Cyclopentene	0.19	0.10	0.16	
4-Methyl-1-pentene	ND	ND	ND	
Cyclopentane	0.12	0.14	0.11	
2,3-Dimethylbutane	0.37	0.39	0.36	
2-Methylpentane	0.49	0.54	0.54	
3-Methylpentane	0.34	0.35	0.34	
2-Methyl-1-pentene	0.03	0.03	0.02	
1-Hexene	0.02	0.02	0.02	
2-Ethyl-1-butene	ND	ND	ND	
n-Hexane	0.30	0.31	0.31	
trans-2-Hexene	0.02	0.02	0.02	
cis-2-Hexene	0.02	0.01	0.02	
Methylcyclopentane	0.22	0.26	0.24	
2,4-Dimethylpentane	0.13	0.14	0.13	
Benzene	0.57	0.62	0.60	
Cyclohexane	2.55	9.48	9.06	
2-Methylhexane	0.20	0.24	0.20	
2,3-Dimethylpentane	0.18	0.20	0.18	
3-Methylhexane	0.19	0.21	0.20	
1-Heptene	ND	ND	ND	
2,2,4-Trimethylpentane	0.31	0.33	0.32	
n-Heptane	0.14	0.14	0.14	
Methylcyclohexane	0.10	0.11	0.10	
2,2,3-Trimethylpentane	0.06	0.06	0.06	
2,3,4-Trimethylpentane	0.12	0.13	0.12	
Toluene	1.14	1.21	1.16	
2-Methylheptane	0.08	0.08	0.07	
3-Methylheptane	0.07	0.08	0.07	
1-Octene	0.00	ND	0.01	
n-Octane	0.08	0.09	0.09	
Ethylbenzene	0.21	0.22	0.22	
m-Xylene/p-Xylene	0.67	0.71	0.68	
Styrene	0.09	0.12	0.14	
o-Xylene	0.28	0.30	0.28	
1-Nonene	0.01	0.01	0.01	
n-Nonane	0.05	0.06	0.06	
Isopropylbenzene	0.06	0.06	0.06	
a-Pinene	ND	0.01	0.02	
n-Propylbenzene	0.08	0.08	0.08	
m-Ethyltoluene	0.21	0.21	0.21	
p-Ethyltoluene	0.12	0.12	0.12	
1,3,5-Trimethylbenzene	0.12	0.12	0.12	
o-Ethyltoluene	0.10	0.11	0.11	
b-Pinene	0.03	0.05	0.05	
1,2,4-Trimethylbenzene	0.30	0.33	0.32	
1-Decene	ND	ND	ND	
n-Decane	0.05	0.07	0.06	
1,2,3-Trimethylbenzene	0.09	0.09	0.09	
m-Diethylbenzene	0.06	0.08	0.08	
p-Diethylbenzene	0.04	0.05	0.05	
1-Undecene	0.03	0.03	0.03	
n-Undecane	0.11	0.13	0.13	
1-Dodecene	0.00	ND	0.00	
n-Dodecane	0.01	0.04	0.04	
1-Tridecene	ND	ND	ND	
n-Tridecane	0.031	0.020	0.031	
TNMOC (speciated), ppbv	33.23	40.79	39.52	
TNMOC (w/ unknowns), ppbC	178.07	228.92	225.04	

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**15449**	**15477**	**15481**	**15553**
Sampling Date:	**2/17/99**	**2/23/99**	**3/1/99**	**3/13/99**
Analysis Date:	**3/4/99**	**3/11/99**	**3/11/99**	**3/24/99**
Compound				
Ethylene	1.31	1.20	1.87	2.17
Acetylene	0.59	1.00	1.52	1.96
Ethane	1.71	1.13	1.40	2.91
Propylene	0.35	0.36	0.57	0.74
Propane	1.08	0.85	1.02	1.86
Propyne	0.02	0.01	0.02	0.02
Isobutane	0.38	0.25	0.63	0.68
Isobutene/1-Butene	0.11	0.11	0.20	0.28
1,3-Butadiene	0.05	0.05	0.08	0.09
n-Butane	0.77	0.46	1.19	1.20
trans-2-Butene	0.06	0.06	0.14	0.18
cis-2-Butene	0.05	0.06	0.13	0.19
3-Methyl-1-butene	0.10	0.01	ND	0.02
Isopentane	1.26	0.74	1.49	3.10
1-Pentene	0.03	0.03	0.05	0.09
2-Methyl-1-butene	0.05	0.04	0.09	0.17
n-Pentane	0.26	0.20	0.37	0.54
Isoprene	0.02	0.04	0.05	0.10
trans-2-Pentene	0.05	0.05	0.09	0.15
cis-2-Pentene	0.03	0.04	0.06	0.12
2-Methyl-2-butene	0.07	0.05	0.12	0.17
2,2-Dimethylbutane	0.05	0.05	0.08	0.14
Cyclopentene	0.03	0.02	0.05	0.04
4-Methyl-1-pentene	0.00	ND	ND	ND
Cyclopentane	0.03	0.03	0.06	0.09
2,3-Dimethylbutane	0.09	0.08	0.19	0.32
2-Methylpentane	0.21	0.15	0.32	0.45
3-Methylpentane	0.08	0.11	0.20	0.31
2-Methyl-1-pentene	0.01	0.01	0.02	0.03
1-Hexene	0.01	0.01	0.01	0.03
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.14	0.11	0.21	0.28
trans-2-Hexene	0.01	0.01	0.01	0.03
cis-2-Hexene	0.01	0.00	0.18	0.02
Methylcyclopentane	0.08	0.07	0.13	0.21
2,4-Dimethylpentane	0.03	0.04	0.06	0.10
Benzene	0.32	0.30	0.40	0.59
Cyclohexane	0.06	0.11	0.07	0.14
2-Methylhexane	0.09	0.07	0.11	0.24
2,3-Dimethylpentane	0.04	0.06	0.08	0.16
3-Methylhexane	0.08	0.07	0.12	0.21
1-Heptene	ND	ND	0.01	ND
2,2,4-Trimethylpentane	0.12	0.10	0.17	0.27
n-Heptane	0.05	0.05	0.09	0.12
Methylcyclohexane	0.03	0.04	0.05	0.09
2,2,3-Trimethylpentane	0.03	0.02	0.04	0.06
2,3,4-Trimethylpentane	0.04	0.04	0.07	0.10
Toluene	0.53	0.43	0.72	0.95
2-Methylheptane	0.02	0.03	0.04	0.08
3-Methylheptane	0.02	0.03	0.05	0.07
1-Octene	0.00	0.00	0.00	ND
n-Octane	0.03	0.03	0.04	0.08
Ethylbenzene	0.09	0.08	0.13	0.20
m-Xylene/p-Xylene	0.28	0.25	0.42	0.59
Styrene	0.02	0.02	0.05	0.05
o-Xylene	0.11	0.10	0.17	0.26
1-Nonene	0.01	0.00	0.01	0.01
n-Nonane	0.01	0.02	0.03	0.05
Isopropylbenzene	0.01	0.02	0.02	0.05
a-Pinene	0.04	0.01	0.01	0.02
n-Propylbenzene	0.02	0.02	0.04	0.06
m-Ethyltoluene	0.08	0.06	0.13	0.17
p-Ethyltoluene	0.04	0.03	0.06	0.09
1,3,5-Trimethylbenzene	0.04	0.03	0.07	0.07
o-Ethyltoluene	0.03	0.02	0.05	0.07
b-Pinene	0.01	0.01	0.02	0.01
1,2,4-Trimethylbenzene	0.12	0.06	0.19	0.20
1-Decene	ND	ND	ND	ND
n-Decane	0.02	0.01	0.03	0.05
1,2,3-Trimethylbenzene	0.04	0.02	0.05	0.09
m-Diethylbenzene	0.01	0.02	0.05	0.05
p-Diethylbenzene	0.01	0.03	0.02	0.04
1-Undecene	0.02	0.02	0.01	0.03
n-Undecane	0.03	0.03	0.05	0.06
1-Dodecene	ND	0.00	0.00	ND
n-Dodecane	0.01	0.00	0.01	0.00
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.008	0.008	0.003	ND
TNMOC (speciated), ppbv	11.64	9.68	16.27	24.19
TNMOC (w/ unknowns), ppbC	98.85	55.14	94.14	136.57

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**15602D1**	**15604D2**	**15644**	**15676**
Sampling Date:	**3/25/99**	**3/25/99**	**4/6/99**	**4/18/99**
Analysis Date:	**VOID**	**VOID**	**4/22/99**	**5/11/99**
Compound				
Ethylene			3.23	2.61
Acetylene			2.09	1.79
Ethane			3.45	2.92
Propylene			1.01	0.87
Propane			2.53	1.63
Propyne			ND	0.04
Isobutane			1.55	2.01
Isobutene/1-Butene			0.39	0.37
1,3-Butadiene			0.12	0.11
n-Butane			2.58	3.55
trans-2-Butene			0.28	0.33
cis-2-Butene			0.28	0.31
3-Methyl-1-butene			0.04	0.04
Isopentane			3.93	3.44
1-Pentene			0.13	0.16
2-Methyl-1-butene			0.24	0.18
n-Pentane			0.85	0.82
Isoprene			0.16	0.11
trans-2-Pentene			0.23	0.26
cis-2-Pentene			0.16	0.16
2-Methyl-2-butene			0.24	0.28
2,2-Dimethylbutane			0.21	0.20
Cyclopentene			0.07	0.04
4-Methyl-1-pentene			ND	ND
Cyclopentane			0.11	0.11
2,3-Dimethylbutane			0.40	0.42
2-Methylpentane			0.68	0.54
3-Methylpentane			0.37	0.36
2-Methyl-1-pentene			0.04	0.04
1-Hexene			0.03	0.04
2-Ethyl-1-butene			ND	ND
n-Hexane			0.37	0.30
trans-2-Hexene			0.04	0.03
cis-2-Hexene			ND	0.02
Methylcyclopentane			0.26	0.23
2,4-Dimethylpentane			0.14	0.13
Benzene			0.60	0.73
Cyclohexane			4.42	0.26
2-Methylhexane			0.22	0.26
2,3-Dimethylpentane			0.17	0.18
3-Methylhexane			0.24	0.21
1-Heptene			ND	0.04
2,2,4-Trimethylpentane			0.33	0.30
n-Heptane			0.16	0.14
Methylcyclohexane			0.13	0.10
2,2,3-Trimethylpentane			0.08	0.07
2,3,4-Trimethylpentane			0.14	0.13
Toluene			2.47	1.15
2-Methylheptane			0.07	0.09
3-Methylheptane			0.08	0.09
1-Octene			0.02	0.02
n-Octane			0.11	0.09
Ethylbenzene			0.26	0.22
m-Xylene/p-Xylene			0.75	0.66
Styrene			0.16	0.09
o-Xylene			0.32	0.28
1-Nonene			0.03	0.02
n-Nonane			0.08	0.05
Isopropylbenzene			0.07	0.07
a-Pinene			0.02	0.02
n-Propylbenzene			0.08	0.08
m-Ethyltoluene			0.23	0.22
p-Ethyltoluene			0.12	0.12
1,3,5-Trimethylbenzene			0.12	0.11
o-Ethyltoluene			0.11	0.09
b-Pinene			0.04	0.03
1,2,4-Trimethylbenzene			0.30	0.29
1-Decene			ND	ND
n-Decane			0.09	0.06
1,2,3-Trimethylbenzene			0.09	0.10
m-Diethylbenzene			0.07	0.08
p-Diethylbenzene			0.05	0.08
1-Undecene			0.05	0.05
n-Undecane			0.18	0.13
1-Dodecene			ND	0.01
n-Dodecane			0.02	0.02
1-Tridecene			ND	ND
n-Tridecane			0.006	0.003
TNMOC (speciated), ppbv			38.63	31.20
TNMOC (w/ unknowns), ppbC			235.36	188.41

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**15733**	**15795D1**	**15795R1**	**15797D2**
Sampling Date:	**4/30/99**	**5/12/99**	**5/12/99**	**5/12/99**
Analysis Date:	**5/18/99**	**6/7/99**	**6/9/99**	**6/7/99**
Compound				
Ethylene	4.03	2.55	2.49	2.48
Acetylene	2.45	1.82	1.75	1.77
Ethane	3.32	2.73	2.74	2.72
Propylene	1.39	0.91	0.90	0.82
Propane	2.14	1.32	1.31	1.32
Propyne	0.03	0.03	0.02	0.03
Isobutane	1.51	0.46	0.46	0.44
Isobutene/1-Butene	0.48	0.31	0.30	0.29
1,3-Butadiene	0.18	0.11	0.12	0.11
n-Butane	2.92	1.00	0.99	0.98
trans-2-Butene	0.32	0.17	0.16	0.17
cis-2-Butene	0.30	0.19	0.18	0.19
3-Methyl-1-butene	0.06	0.03	0.03	0.03
Isopentane	5.32	3.90	0.06	1.30
1-Pentene	0.20	0.12	0.12	0.11
2-Methyl-1-butene	0.29	0.18	0.18	0.14
n-Pentane	1.08	0.52	0.51	0.50
Isoprene	0.15	0.13	0.17	0.13
trans-2-Pentene	0.30	0.16	0.15	0.16
cis-2-Pentene	0.20	0.13	0.12	0.13
2-Methyl-2-butene	0.37	0.16	0.16	0.15
2,2-Dimethylbutane	0.35	0.23	0.22	0.22
Cyclopentene	0.09	0.03	0.03	0.04
4-Methyl-1-pentene	0.02	ND	ND	ND
Cyclopentane	0.16	0.10	0.09	0.10
2,3-Dimethylbutane	0.59	0.36	0.34	0.35
2-Methylpentane	0.89	0.48	0.48	0.50
3-Methylpentane	0.52	0.29	0.28	0.30
2-Methyl-1-pentene	0.05	0.02	0.03	0.03
1-Hexene	0.05	0.03	0.03	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.49	0.26	0.25	0.25
trans-2-Hexene	0.07	0.02	0.02	0.02
cis-2-Hexene	0.03	0.01	0.01	0.01
Methylcyclopentane	0.35	0.19	0.20	0.19
2,4-Dimethylpentane	0.20	0.15	0.16	0.15
Benzene	1.04	0.61	0.59	0.56
Cyclohexane	0.17	0.17	0.17	1.72
2-Methylhexane	0.32	0.26	0.27	0.23
2,3-Dimethylpentane	0.26	0.23	0.22	0.22
3-Methylhexane	0.30	0.20	0.20	0.17
1-Heptene	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.51	0.32	0.33	0.31
n-Heptane	0.23	0.13	0.14	0.14
Methylcyclohexane	0.14	0.10	0.10	0.10
2,2,3-Trimethylpentane	0.12	0.07	0.05	0.06
2,3,4-Trimethylpentane	0.19	0.13	0.13	0.13
Toluene	1.90	1.08	1.10	1.08
2-Methylheptane	0.11	0.08	0.07	0.08
3-Methylheptane	0.12	0.08	0.07	0.08
1-Octene	0.02	ND	ND	ND
n-Octane	0.11	0.09	0.09	0.10
Ethylbenzene	0.35	0.20	0.22	0.20
m-Xylene/p-Xylene	1.09	0.55	0.60	0.58
Styrene	0.15	0.06	0.09	0.10
o-Xylene	0.45	0.24	0.26	0.26
1-Nonene	0.03	0.01	0.01	0.02
n-Nonane	0.07	0.06	0.06	0.06
Isopropylbenzene	0.06	0.06	0.08	0.06
a-Pinene	0.06	0.05	0.05	0.05
n-Propylbenzene	0.11	0.06	0.09	0.07
m-Ethyltoluene	0.32	0.16	0.19	0.17
p-Ethyltoluene	0.16	0.09	0.13	0.10
1,3,5-Trimethylbenzene	0.17	0.09	0.11	0.11
o-Ethyltoluene	0.15	0.09	0.11	0.09
b-Pinene	0.04	0.01	0.01	0.01
1,2,4-Trimethylbenzene	0.48	0.21	0.27	0.24
1-Decene	ND	ND	ND	ND
n-Decane	0.09	0.06	0.07	0.05
1,2,3-Trimethylbenzene	0.11	0.07	0.08	0.07
m-Diethylbenzene	0.08	0.04	0.06	0.05
p-Diethylbenzene	0.05	0.03	0.05	0.04
1-Undecene	0.05	0.01	0.01	0.06
n-Undecane	0.13	0.07	0.08	0.05
1-Dodecene	0.02	ND	ND	ND
n-Dodecane	0.02	0.00	ND	ND
1-Tridecene	0.01	ND	0.01	ND
n-Tridecane	0.012	ND	ND	ND
TNMOC (speciated), ppbv	40.76	24.87	21.28	23.55
TNMOC (w/ unknowns), ppbC	250.62	140.52	147.82	136.63

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**15797R2**	**15793**	**15841**	**15921**
Sampling Date:	**5/12/99**	**5/24/99**	**6/5/99**	**6/17/99**
Analysis Date:	**6/9/99**	**6/8/99**	**6/17/99**	**6/29/99**
Compound				
Ethylene	2.37	2.08	1.98	2.54
Acetylene	1.72	1.85	1.33	1.55
Ethane	2.70	2.59	2.21	2.03
Propylene	0.80	0.79	0.70	0.88
Propane	1.31	1.63	1.39	1.35
Propyne	0.02	0.02	ND	ND
Isobutane	0.44	0.57	0.42	0.70
Isobutene/1-Butene	0.28	0.28	0.27	0.33
1,3-Butadiene	0.12	0.08	0.08	0.11
n-Butane	0.96	1.31	0.88	1.62
trans-2-Butene	0.16	0.18	0.14	0.27
cis-2-Butene	0.17	0.18	0.17	0.28
3-Methyl-1-butene	0.02	0.02	0.03	0.06
Isopentane	1.28	3.10	3.90	3.98
1-Pentene	0.10	0.15	0.14	0.17
2-Methyl-1-butene	0.16	0.13	0.13	0.27
n-Pentane	0.51	0.66	0.53	0.78
Isoprene	0.22	0.12	0.19	0.29
trans-2-Pentene	0.15	0.16	0.15	0.26
cis-2-Pentene	0.13	0.13	0.13	0.18
2-Methyl-2-butene	0.16	0.14	0.13	0.30
2,2-Dimethylbutane	0.22	0.26	0.19	0.21
Cyclopentene	0.03	0.06	0.02	0.03
4-Methyl-1-pentene	ND	ND	0.02	ND
Cyclopentane	0.12	0.12	0.11	0.13
2,3-Dimethylbutane	0.34	0.44	0.19	0.56
2-Methylpentane	0.49	0.50	0.51	0.66
3-Methylpentane	0.31	0.26	0.27	0.34
2-Methyl-1-pentene	0.04	0.02	0.03	0.03
1-Hexene	0.02	0.05	0.02	0.04
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.25	0.29	0.24	0.27
trans-2-Hexene	0.02	0.02	0.02	0.02
cis-2-Hexene	0.02	0.01	ND	0.02
Methylcyclopentane	0.20	0.18	0.18	0.20
2,4-Dimethylpentane	0.16	0.12	0.13	0.14
Benzene	0.53	0.51	0.47	0.55
Cyclohexane	1.64	0.14	0.13	0.29
2-Methylhexane	0.24	0.26	0.24	0.35
2,3-Dimethylpentane	0.22	0.19	0.19	0.24
3-Methylhexane	0.16	0.16	0.17	0.20
1-Heptene	ND	ND	ND	0.15
2,2,4-Trimethylpentane	0.31	0.28	0.28	0.31
n-Heptane	0.13	0.14	0.12	0.13
Methylcyclohexane	0.10	0.10	0.10	0.10
2,2,3-Trimethylpentane	0.06	0.06	0.06	0.06
2,3,4-Trimethylpentane	0.12	0.10	0.12	0.18
Toluene	1.06	1.02	1.05	1.39
2-Methylheptane	0.08	0.08	0.04	0.08
3-Methylheptane	0.07	0.07	0.14	0.14
1-Octene	ND	ND	0.01	0.13
n-Octane	0.09	0.11	0.09	0.10
Ethylbenzene	0.21	0.18	0.19	0.23
m-Xylene/p-Xylene	0.59	0.48	0.51	0.66
Styrene	0.10	0.23	0.19	0.25
o-Xylene	0.25	0.21	0.22	0.26
1-Nonene	0.01	0.03	0.01	0.11
n-Nonane	0.06	0.07	0.05	0.07
Isopropylbenzene	0.08	0.11	0.06	0.17
a-Pinene	0.06	0.02	0.01	0.04
n-Propylbenzene	0.09	0.09	0.08	0.08
m-Ethyltoluene	0.19	0.17	0.18	0.20
p-Ethyltoluene	0.12	0.10	0.11	0.12
1,3,5-Trimethylbenzene	0.12	0.09	0.09	0.12
o-Ethyltoluene	0.10	0.08	0.09	0.15
b-Pinene	0.01	0.12	0.06	0.20
1,2,4-Trimethylbenzene	0.08	0.22	0.26	0.28
1-Decene	ND	ND	ND	ND
n-Decane	0.22	0.06	0.06	0.08
1,2,3-Trimethylbenzene	0.07	0.06	0.10	0.12
m-Diethylbenzene	0.06	0.09	0.11	0.08
p-Diethylbenzene	0.05	0.04	0.08	0.09
1-Undecene	0.03	0.07	0.03	0.12
n-Undecane	0.06	0.11	0.12	0.20
1-Dodecene	ND	0.00	ND	0.03
n-Dodecane	0.01	0.01	0.01	0.02
1-Tridecene	ND	ND	ND	0.01
n-Tridecane	ND	0.007	0.008	0.011
TNMOC (speciated), ppbv	23.38	24.38	22.66	28.70
TNMOC (w/ unknowns), ppbC	142.18	177.62	151.49	201.08

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**16024**	**16260**	**16262**	**16277**
Sampling Date:	**6/29/99**	**7/17/99**	**7/29/99**	**8/4/99**
Analysis Date:	**7/20/99**	**8/10/99**	**8/10/99**	**8/16/99**
Compound				
Ethylene	3.06	2.88	3.66	2.95
Acetylene	1.98	1.96	2.44	1.92
Ethane	2.96	3.13	2.74	2.26
Propylene	1.05	1.07	1.28	1.07
Propane	1.93	2.19	2.06	1.62
Propyne	0.06	ND	ND	ND
Isobutane	1.13	3.30	0.82	0.46
Isobutene/1-Butene	0.48	0.53	0.47	0.36
1,3-Butadiene	0.14	0.12	0.16	0.13
n-Butane	2.27	2.84	1.85	0.94
trans-2-Butene	0.41	0.49	0.32	0.21
cis-2-Butene	0.42	0.49	0.34	0.24
3-Methyl-1-butene	0.09	0.11	0.08	0.05
Isopentane	9.26	13.24	3.31	1.68
1-Pentene	0.22	0.27	0.26	0.14
2-Methyl-1-butene	0.45	0.43	0.27	0.17
n-Pentane	1.43	2.88	1.06	0.63
Isoprene	0.37	0.39	0.38	0.28
trans-2-Pentene	0.41	0.49	0.35	0.24
cis-2-Pentene	0.25	0.31	0.24	0.17
2-Methyl-2-butene	0.49	0.58	0.39	0.27
2,2-Dimethylbutane	0.27	0.44	0.41	0.26
Cyclopentene	0.06	0.12	0.11	0.05
4-Methyl-1-pentene	0.02	0.02	0.02	0.01
Cyclopentane	0.18	0.22	0.17	0.13
2,3-Dimethylbutane	0.28	0.35	0.37	0.26
2-Methylpentane	0.83	1.27	0.94	0.72
3-Methylpentane	0.50	0.73	0.55	0.36
2-Methyl-1-pentene	0.06	0.07	0.07	0.04
1-Hexene	0.04	0.07	0.04	0.04
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.43	0.76	0.47	0.27
trans-2-Hexene	0.05	0.08	0.06	0.04
cis-2-Hexene	0.03	0.05	0.03	0.03
Methylcyclopentane	0.30	0.45	0.30	0.20
2,4-Dimethylpentane	0.20	0.23	0.22	0.16
Benzene	0.78	0.92	0.82	0.64
Cyclohexane	11.63	9.14	0.21	0.28
2-Methylhexane	0.68	0.57	0.35	0.28
2,3-Dimethylpentane	0.42	0.47	0.35	0.27
3-Methylhexane	0.75	0.63	0.28	0.22
1-Heptene	ND	ND	ND	0.02
2,2,4-Trimethylpentane	0.63	0.56	0.53	0.35
n-Heptane	0.62	0.36	0.20	0.12
Methylcyclohexane	0.21	0.31	0.13	0.09
2,2,3-Trimethylpentane	0.15	0.15	0.10	0.09
2,3,4-Trimethylpentane	0.21	0.19	0.19	0.15
Toluene	2.05	3.73	1.64	1.24
2-Methylheptane	0.11	0.15	0.10	0.09
3-Methylheptane	0.09	0.11	0.11	0.10
1-Octene	ND	0.03	0.01	0.01
n-Octane	0.12	0.18	0.12	0.09
Ethylbenzene	0.30	0.47	0.29	0.24
m-Xylene/p-Xylene	0.80	1.19	0.88	0.71
Styrene	0.23	0.40	0.20	0.16
o-Xylene	0.33	0.47	0.35	0.29
1-Nonene	0.02	0.06	0.02	0.02
n-Nonane	0.08	0.22	0.07	0.07
Isopropylbenzene	0.07	0.09	0.06	0.07
a-Pinene	0.05	0.26	0.04	0.02
n-Propylbenzene	0.09	0.14	0.11	0.09
m-Ethyltoluene	0.27	0.55	0.27	0.21
p-Ethyltoluene	0.14	0.18	0.14	0.12
1,3,5-Trimethylbenzene	0.13	0.21	0.12	0.10
o-Ethyltoluene	0.15	0.14	0.12	0.10
b-Pinene	0.12	0.17	0.13	0.10
1,2,4-Trimethylbenzene	0.36	0.47	0.37	0.31
1-Decene	ND	ND	ND	ND
n-Decane	0.11	0.25	0.12	0.09
1,2,3-Trimethylbenzene	0.08	0.13	0.18	0.08
m-Diethylbenzene	0.11	0.10	0.14	0.16
p-Diethylbenzene	0.07	0.06	0.06	0.07
1-Undecene	0.05	0.20	0.04	0.03
n-Undecane	0.21	0.30	0.17	0.13
1-Dodecene	0.01	0.01	0.01	0.02
n-Dodecane	0.06	0.06	0.02	0.02
1-Tridecene	0.01	0.01	0.01	0.00
n-Tridecane	0.008	0.031	0.012	0.015
TNMOC (speciated), ppbv	54.43	66.24	35.34	25.61
TNMOC (w/ unknowns), ppbC	365.63	512.57	258.13	191.36

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: BUVT
Burlington, VT
Reported in ppbv

Sample No.:	**16494**	**16615**	**16805**	**16901**
Sampling Date:	**8/16/99**	**8/28/99**	**9/9/99**	**9/21/99**
Analysis Date:	**9/3/99**	**9/14/99**	**10/6/99**	**10/14/99**
Compound				
Ethylene	2.21	3.43	2.23	2.74
Acetylene	1.53	2.14	1.58	1.68
Ethane	1.77	2.62	2.55	1.70
Propylene	0.99	1.35	0.75	0.93
Propane	2.44	3.41	1.30	0.91
Propyne	ND	ND	ND	ND
Isobutane	1.30	1.93	0.62	0.39
Isobutene/1-Butene	0.42	0.56	0.31	0.31
1,3-Butadiene	0.11	0.15	0.10	0.12
n-Butane	3.62	3.73	1.30	0.57
trans-2-Butene	0.48	0.59	0.21	0.13
cis-2-Butene	0.48	0.52	0.23	0.15
3-Methyl-1-butene	0.11	0.13	0.05	0.03
Isopentane	5.27	7.03	2.01	1.48
1-Pentene	0.30	0.36	0.16	0.10
2-Methyl-1-butene	0.40	0.66	0.16	0.09
n-Pentane	1.61	2.65	0.83	0.85
Isoprene	0.37	0.35	0.23	0.16
trans-2-Pentene	0.53	0.55	0.27	0.15
cis-2-Pentene	0.31	0.34	0.16	0.12
2-Methyl-2-butene	0.59	0.62	0.23	0.14
2,2-Dimethylbutane	0.40	0.41	0.22	0.16
Cyclopentene	0.06	0.07	0.06	0.04
4-Methyl-1-pentene	0.01	ND	0.01	0.03
Cyclopentane	0.23	0.27	0.14	0.11
2,3-Dimethylbutane	0.39	0.42	0.22	0.17
2-Methylpentane	1.09	1.33	0.73	0.56
3-Methylpentane	0.61	0.77	0.37	0.26
2-Methyl-1-pentene	0.07	0.06	0.04	0.03
1-Hexene	0.03	0.05	0.03	0.03
2-Ethyl-1-butene	ND	ND	0.31	0.27
n-Hexane	0.52	0.64	ND	ND
trans-2-Hexene	0.08	0.08	0.03	0.03
cis-2-Hexene	0.04	0.04	0.01	0.02
Methylcyclopentane	0.31	0.42	0.21	0.21
2,4-Dimethylpentane	0.21	0.23	0.12	0.12
Benzene	0.70	0.93	0.60	0.56
Cyclohexane	0.79	8.06	0.32	13.55
2-Methylhexane	0.34	0.39	0.29	0.29
2,3-Dimethylpentane	0.33	0.35	0.19	0.21
3-Methylhexane	0.37	0.28	0.19	0.19
1-Heptene	ND	ND	0.02	0.04
2,2,4-Trimethylpentane	0.45	0.52	0.29	0.24
n-Heptane	0.25	0.21	0.13	0.13
Methylcyclohexane	0.18	0.18	0.12	0.10
2,2,3-Trimethylpentane	0.08	0.10	0.06	0.05
2,3,4-Trimethylpentane	0.15	0.18	0.11	0.11
Toluene	1.37	3.32	1.18	1.18
2-Methylheptane	0.07	0.12	0.06	0.08
3-Methylheptane	0.08	0.13	0.08	0.06
1-Octene	0.01	0.02	0.01	0.02
n-Octane	0.10	0.15	0.10	0.08
Ethylbenzene	0.22	0.54	0.22	0.23
m-Xylene/p-Xylene	0.65	1.36	0.62	0.63
Styrene	0.15	0.31	0.19	0.30
o-Xylene	0.27	0.50	0.25	0.26
1-Nonene	0.02	0.03	0.03	0.02
n-Nonane	0.06	0.09	0.06	0.06
Isopropylbenzene	0.07	0.08	0.05	0.05
a-Pinene	0.06	0.08	0.03	0.05
n-Propylbenzene	0.07	0.10	0.07	0.09
m-Ethyltoluene	0.19	0.28	0.16	0.22
p-Ethyltoluene	0.10	0.14	0.10	0.11
1,3,5-Trimethylbenzene	0.08	0.15	0.09	0.10
o-Ethyltoluene	0.10	0.13	0.09	0.10
b-Pinene	0.08	0.07	ND	0.16
1,2,4-Trimethylbenzene	0.26	0.35	ND	ND
1-Decene	ND	ND	0.21	0.23
n-Decane	0.06	0.14	0.06	0.06
1,2,3-Trimethylbenzene	0.07	0.12	0.07	0.08
m-Diethylbenzene	0.07	0.05	0.05	0.06
p-Diethylbenzene	0.06	0.05	0.04	0.05
1-Undecene	0.03	0.05	ND	0.01
n-Undecane	0.13	0.21	0.04	0.05
1-Dodecene	ND	ND	0.01	0.01
n-Dodecane	0.02	0.02	0.02	0.02
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.012	0.012	0.008	0.009
TNMOC (speciated), ppbv	36.97	57.74	23.95	34.63
TNMOC (w/ unknowns), ppbC	261.73	402.27	166.97	235.44

- The QC recovery for n-Undecane is outside of QC criteria on 1/11/99

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**14690**	**14821**	**14976**	**15060**
Sampling Date:	**9/2/98**	**9/14/98**	**9/20/98**	**9/26/98**
Analysis Date:	**9/25/98**	**10/14/98**	**10/14/98**	**10/22/98**
Compound				
Ethylene	1.71	2.33	1.53	2.55
Acetylene	1.24	1.60	1.18	1.96
Ethane	1.67	1.81	1.85	2.98
Propylene	0.63	0.91	0.63	0.94
Propane	5.01	6.43	7.83	9.44
Propyne	0.03	0.02	ND	0.03
Isobutane	0.57	1.28	0.89	1.13
Isobutene/1-Butene	0.23	0.28	0.19	0.28
1,3-Butadiene	0.08	0.13	0.07	0.11
n-Butane	1.13	1.66	1.38	2.00
trans-2-Butene	0.16	0.28	0.20	0.26
cis-2-Butene	0.19	0.26	0.22	0.26
3-Methyl-1-butene	0.04	0.05	0.03	0.05
Isopentane	4.78	6.66	5.40	5.75
1-Pentene	0.14	0.22	0.16	0.19
2-Methyl-1-butene	0.18	0.20	0.20	0.24
n-Pentane	0.77	1.09	0.81	1.09
Isoprene	0.20	0.31	0.28	0.18
trans-2-Pentene	0.21	0.33	0.25	0.33
cis-2-Pentene	0.15	0.21	0.17	0.21
2-Methyl-2-butene	0.23	0.36	0.26	0.37
2,2-Dimethylbutane	0.21	0.37	0.25	0.33
Cyclopentene	0.09	0.09	0.08	0.08
4-Methyl-1-pentene	0.01	0.03	0.02	0.02
Cyclopentane	0.11	0.15	0.12	0.15
2,3-Dimethylbutane	0.38	0.60	0.46	0.58
2-Methylpentane	0.56	0.97	0.65	0.84
3-Methylpentane	0.40	0.53	0.37	0.53
2-Methyl-1-pentene	0.04	0.08	0.06	0.08
1-Hexene	0.03	0.04	0.04	0.04
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.49	0.48	0.32	0.50
trans-2-Hexene	0.05	0.09	0.06	0.07
cis-2-Hexene	0.02	0.05	0.04	0.04
Methylcyclopentane	0.28	0.35	0.26	0.38
2,4-Dimethylpentane	0.12	0.15	0.13	0.16
Benzene	0.55	0.72	0.53	0.72
Cyclohexane	0.22	18.14	2.12	0.20
2-Methylhexane	0.21	0.27	0.19	0.33
2,3-Dimethylpentane	0.17	0.18	0.15	0.21
3-Methylhexane	0.21	0.31	0.22	0.33
1-Heptene	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.38	0.45	0.33	0.42
n-Heptane	0.16	0.22	0.16	0.30
Methylcyclohexane	0.12	0.16	0.11	0.25
2,2,3-Trimethylpentane	0.07	0.11	0.08	0.11
2,3,4-Trimethylpentane	0.14	0.17	0.13	0.17
Toluene	1.52	1.99	1.45	3.40
2-Methylheptane	0.07	0.09	0.06	0.16
3-Methylheptane	0.08	0.11	0.08	0.14
1-Octene	0.01	0.01	0.02	0.02
n-Octane	0.12	0.12	0.10	0.23
Ethylbenzene	0.21	0.26	0.23	0.30
m-Xylene/p-Xylene	0.62	0.81	0.63	0.98
Styrene	0.23	0.30	0.20	0.19
o-Xylene	0.24	0.32	0.26	0.37
1-Nonene	0.02	0.02	0.02	0.04
n-Nonane	0.10	0.08	0.06	0.17
Isopropylbenzene	0.04	0.05	0.05	0.06
a-Pinene	0.20	0.22	0.22	0.23
n-Propylbenzene	0.07	0.08	0.07	0.12
m-Ethyltoluene	0.19	0.25	0.24	0.37
p-Ethyltoluene	0.10	0.13	0.10	0.18
1,3,5-Trimethylbenzene	0.11	0.12	0.11	0.20
o-Ethyltoluene	0.09	0.11	0.09	0.13
b-Pinene	0.17	0.22	0.18	0.12
1,2,4-Trimethylbenzene	0.26	0.33	0.27	0.52
1-Decene	ND	ND	ND	ND
n-Decane	0.15	0.11	0.11	0.19
1,2,3-Trimethylbenzene	0.08	0.11	0.08	0.12
m-Diethylbenzene	0.04	0.06	0.03	0.05
p-Diethylbenzene	0.04	0.03	0.04	0.05
1-Undecene	0.01	0.01	0.02	0.02
n-Undecane	0.09	0.08	0.09	0.09
1-Dodecene	0.02	0.02	0.01	0.02
n-Dodecane	0.06	0.05	0.04	0.07
1-Tridecene	0.01	0.01	0.004	0.01
n-Tridecane	0.01	0.01	0.01	0.02
TNMOC (speciated), ppbv	29.34	57.23	35.27	45.74
TNMOC (w/ unknowns), ppbC	179.29	356.76	198.67	257.18

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15111**	**15135**	**15157**	**15201**
Sampling Date:	**10/8/98**	**10/20/98**	**11/1/98**	**11/13/98**
Analysis Date:	**10/22/98**	**12/6/98**	**11/11/98**	**12/1/98**
Compound				
Ethylene	2.64	1.67	1.16	2.79
Acetylene	1.84	1.47	0.94	2.35
Ethane	1.85	1.96	1.70	2.31
Propylene	0.89	0.64	0.45	0.97
Propane	5.17	4.32	2.01	4.63
Propyne	0.05	0.06	ND	0.02
Isobutane	1.37	0.83	0.81	1.14
Isobutene/1-Butene	0.29	0.21	0.17	0.31
1,3-Butadiene	0.12	0.07	0.04	0.13
n-Butane	2.19	1.49	1.21	1.54
trans-2-Butene	0.28	0.20	0.21	0.30
cis-2-Butene	0.26	0.20	0.18	0.27
3-Methyl-1-butene	0.05	0.01	0.01	0.02
Isopentane	4.66	4.92	3.10	4.61
1-Pentene	0.18	0.17	0.12	0.15
2-Methyl-1-butene	0.25	0.15	0.11	0.21
n-Pentane	0.98	0.58	0.40	0.67
Isoprene	0.15	0.10	0.09	0.13
trans-2-Pentene	0.32	0.21	0.14	0.26
cis-2-Pentene	0.21	0.16	0.12	0.17
2-Methyl-2-butene	0.39	0.25	0.12	0.29
2,2-Dimethylbutane	0.26	0.19	0.15	0.23
Cyclopentene	0.07	0.07	0.02	0.10
4-Methyl-1-pentene	0.02	0.01	ND	0.02
Cyclopentane	0.14	0.10	0.08	0.14
2,3-Dimethylbutane	0.59	0.29	0.21	0.39
2-Methylpentane	0.78	0.53	0.33	0.65
3-Methylpentane	0.47	0.29	0.23	0.40
2-Methyl-1-pentene	0.08	0.05	0.02	0.06
1-Hexene	0.05	0.05	0.02	0.05
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.45	0.36	0.20	0.37
trans-2-Hexene	0.12	0.05	0.03	0.07
cis-2-Hexene	0.05	0.03	0.02	0.04
Methylcyclopentane	0.33	0.22	0.14	0.33
2,4-Dimethylpentane	0.16	0.11	0.10	0.16
Benzene	0.80	0.52	0.36	0.65
Cyclohexane	1.27	0.14	0.16	0.37
2-Methylhexane	0.28	0.19	0.14	0.26
2,3-Dimethylpentane	0.19	0.15	0.13	0.18
3-Methylhexane	0.27	0.19	0.11	0.25
1-Heptene	ND	0.05	0.01	ND
2,2,4-Trimethylpentane	0.50	0.24	0.15	0.37
n-Heptane	0.20	0.14	0.09	0.17
Methylcyclohexane	0.14	0.10	0.08	0.14
2,2,3-Trimethylpentane	0.10	0.05	0.02	0.08
2,3,4-Trimethylpentane	0.21	0.11	0.08	0.15
Toluene	1.93	0.97	0.53	1.45
2-Methylheptane	0.11	0.07	0.05	0.10
3-Methylheptane	0.11	0.07	0.07	0.11
1-Octene	0.02	0.03	0.01	0.01
n-Octane	0.15	0.12	0.08	0.11
Ethylbenzene	0.28	0.16	0.11	0.24
m-Xylene/p-Xylene	0.87	0.49	0.28	0.71
Styrene	0.20	0.13	0.20	0.09
o-Xylene	0.35	0.21	0.12	0.29
1-Nonene	0.03	0.03	0.01	0.02
n-Nonane	0.09	0.08	0.05	0.07
Isopropylbenzene	0.05	0.06	0.06	0.06
a-Pinene	0.09	0.03	0.01	0.02
n-Propylbenzene	0.08	0.07	0.06	0.09
m-Ethyltoluene	0.26	0.17	0.10	0.21
p-Ethyltoluene	0.14	0.10	0.08	0.13
1,3,5-Trimethylbenzene	0.15	0.11	0.07	0.14
o-Ethyltoluene	0.12	0.10	0.05	0.11
b-Pinene	0.12	0.02	0.10	0.01
1,2,4-Trimethylbenzene	0.38	0.27	0.14	0.32
1-Decene	ND	ND	ND	ND
n-Decane	0.13	0.08	0.04	0.07
1,2,3-Trimethylbenzene	0.11	0.09	0.04	0.09
m-Diethylbenzene	0.05	0.06	0.04	0.08
p-Diethylbenzene	0.04	0.05	0.03	0.05
1-Undecene	0.01	0.02	0.01	0.005
n-Undecane	0.13	0.06	0.04	0.05
1-Dodecene	0.04	0.01	0.02	ND
n-Dodecane	0.11	0.03	0.01	0.01
1-Tridecene	0.01	ND	ND	ND
n-Tridecane	0.03	0.004	0.003	ND
TNMOC (speciated), ppbv	37.89	27.59	18.38	33.48
TNMOC (w/ unknowns), ppbC	227.07	160.67	106.37	174.61

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15229**	**15245**	**15280**	**15306**
Sampling Date:	**11/25/98**	**12/7/98**	**12/19/98**	**12/31/98**
Analysis Date:	**12/8/98**	**12/22/98**	**1/11/99**	**1/12/99**
Compound				
Ethylene	2.49	1.19	6.60	5.45
Acetylene	2.14	1.05	4.52	3.75
Ethane	2.48	2.18	4.17	3.27
Propylene	0.89	0.53	1.85	1.55
Propane	4.34	2.90	10.25	9.44
Propyne	0.05	0.02	0.10	0.08
Isobutane	1.41	1.10	3.17	1.42
Isobutene/1-Butene	0.38	0.20	0.58	0.41
1,3-Butadiene	0.08	0.04	0.24	0.21
n-Butane	1.87	1.60	5.54	2.99
trans-2-Butene	0.28	0.21	0.48	0.28
cis-2-Butene	0.27	0.19	0.44	0.28
3-Methyl-1-butene	0.04	0.03	0.11	ND
Isopentane	3.93	2.81	6.10	4.21
1-Pentene	0.13	0.11	0.26	0.18
2-Methyl-1-butene	0.16	0.11	0.34	0.22
n-Pentane	0.72	0.58	1.41	0.92
Isoprene	0.04	0.09	0.19	0.16
trans-2-Pentene	0.23	0.15	0.38	0.27
cis-2-Pentene	0.16	0.13	0.25	0.19
2-Methyl-2-butene	0.06	0.13	0.50	0.31
2,2-Dimethylbutane	0.23	0.17	0.40	0.27
Cyclopentene	0.19	0.07	0.09	0.04
4-Methyl-1-pentene	0.01	ND	0.02	0.02
Cyclopentane	0.12	0.09	0.21	0.20
2,3-Dimethylbutane	0.33	0.25	0.65	0.45
2-Methylpentane	0.56	0.40	1.15	0.90
3-Methylpentane	0.37	0.25	0.71	0.57
2-Methyl-1-pentene	0.03	0.03	0.08	0.05
1-Hexene	0.03	0.02	0.07	0.04
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.33	0.25	0.70	0.52
trans-2-Hexene	0.04	0.02	0.09	0.06
cis-2-Hexene	0.03	ND	0.05	0.03
Methylcyclopentane	0.25	0.20	0.50	0.44
2,4-Dimethylpentane	0.11	0.10	0.19	0.18
Benzene	0.60	0.37	1.26	1.14
Cyclohexane	0.76	0.97	0.42	0.25
2-Methylhexane	0.26	0.21	0.48	0.36
2,3-Dimethylpentane	0.16	0.13	0.25	0.22
3-Methylhexane	0.22	0.15	0.42	0.37
1-Heptene	ND	0.02	ND	ND
2,2,4-Trimethylpentane	0.23	0.14	0.48	0.43
n-Heptane	0.16	0.10	0.31	0.27
Methylcyclohexane	0.12	0.10	0.19	0.18
2,2,3-Trimethylpentane	0.05	0.03	0.11	0.10
2,3,4-Trimethylpentane	0.10	0.07	0.19	0.17
Toluene	1.20	0.68	2.29	1.97
2-Methylheptane	0.09	0.06	0.15	0.14
3-Methylheptane	0.09	0.06	0.16	0.12
1-Octene	0.01	0.01	0.02	0.01
n-Octane	0.10	0.09	0.19	0.14
Ethylbenzene	0.21	0.13	0.40	0.38
m-Xylene/p-Xylene	0.58	0.35	1.26	1.16
Styrene	0.06	0.12	0.13	0.11
o-Xylene	0.23	0.15	0.50	0.48
1-Nonene	0.01	0.01	0.02	0.02
n-Nonane	0.07	0.05	0.10	0.08
Isopropylbenzene	0.06	0.05	0.08	0.08
a-Pinene	0.002	0.016	0.097	0.028
n-Propylbenzene	0.07	0.06	0.12	0.11
m-Ethyltoluene	0.17	0.11	0.35	0.30
p-Ethyltoluene	0.10	0.08	0.18	0.17
1,3,5-Trimethylbenzene	0.11	0.07	0.20	0.17
o-Ethyltoluene	0.10	0.07	0.18	0.16
b-Pinene	0.01	0.04	0.01	0.00
1,2,4-Trimethylbenzene	0.25	0.17	0.51	0.38
1-Decene	ND	ND	ND	ND
n-Decane	0.07	0.07	0.14	0.06
1,2,3-Trimethylbenzene	0.07	0.06	0.14	0.10
m-Diethylbenzene	0.05	0.04	0.06	0.05
p-Diethylbenzene	0.03	0.03	0.05	0.04
1-Undecene	ND	0.01	0.01	0.01
n-Undecane	0.04	0.04	0.07 #	0.04 #
1-Dodecene	ND	ND	ND	ND
n-Dodecane	0.01	0.02	0.02	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.003	0.003	ND	0.008
TNMOC (speciated), ppbv	31.23	22.12	63.96	49.17
TNMOC (w/ unknowns), ppbC	189.63	119.49	307.64	237.25

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15320**	**15345D1**	**15345R1**	**15347D2**
Sampling Date:	**1/12/99**	**1/24/99**	**1/24/99**	**1/24/99**
Analysis Date:	**VOID**	**2/2/99**	**2/9/99**	**2/2/99**
Compound				
Ethylene		3.55	3.39	3.45
Acetylene		2.46	2.41	2.39
Ethane		2.71	2.60	2.70
Propylene		1.11	1.10	1.05
Propane		10.38	10.06	10.28
Propyne		0.03	0.05	0.04
Isobutane		2.10	2.00	2.06
Isobutene/1-Butene		0.43	0.41	0.44
1,3-Butadiene		0.14	0.14	0.15
n-Butane		4.76	4.62	4.77
trans-2-Butene		0.50	0.48	0.61
cis-2-Butene		0.43	0.40	0.44
3-Methyl-1-butene		0.06	0.05	0.06
Isopentane		4.93	5.00	4.02
1-Pentene		0.22	0.22	0.19
2-Methyl-1-butene		0.28	0.26	0.26
n-Pentane		1.29	1.25	1.24
Isoprene		0.14	0.13	0.15
trans-2-Pentene		0.39	0.36	0.39
cis-2-Pentene		0.24	0.23	0.24
2-Methyl-2-butene		0.44	0.41	0.44
2,2-Dimethylbutane		0.30	0.29	0.29
Cyclopentene		0.14	0.20	0.14
4-Methyl-1-pentene		0.01	0.02	0.01
Cyclopentane		0.20	0.20	0.20
2,3-Dimethylbutane		0.60	0.59	0.61
2-Methylpentane		1.13	1.11	1.06
3-Methylpentane		0.69	0.67	0.69
2-Methyl-1-pentene		0.08	0.08	0.08
1-Hexene		0.04	0.05	0.05
2-Ethyl-1-butene		ND	ND	ND
n-Hexane		0.60	0.58	0.61
trans-2-Hexene		0.10	0.09	0.10
cis-2-Hexene		0.05	0.05	0.05
Methylcyclopentane		0.48	0.47	0.46
2,4-Dimethylpentane		0.21	0.20	0.20
Benzene		0.78	0.74	0.78
Cyclohexane		1.60	1.55	0.37
2-Methylhexane		0.39	0.39	0.43
2,3-Dimethylpentane		0.27	0.25	0.28
3-Methylhexane		0.40	0.38	0.40
1-Heptene		ND	ND	ND
2,2,4-Trimethylpentane		0.64	0.62	0.63
n-Heptane		0.28	0.28	0.29
Methylcyclohexane		0.18	0.19	0.18
2,2,3-Trimethylpentane		0.14	0.13	0.13
2,3,4-Trimethylpentane		0.25	0.24	0.23
Toluene		2.09	2.02	2.08
2-Methylheptane		0.16	0.15	0.16
3-Methylheptane		0.17	0.16	0.17
1-Octene		0.01	0.01	0.01
n-Octane		0.17	0.17	0.17
Ethylbenzene		0.39	0.37	0.39
m-Xylene/p-Xylene		1.36	1.30	1.36
Styrene		0.17	0.21	0.10
o-Xylene		0.54	0.51	0.54
1-Nonene		0.02	0.02	0.02
n-Nonane		0.11	0.11	0.11
Isopropylbenzene		0.09	0.08	0.09
a-Pinene		0.080	0.087	0.087
n-Propylbenzene		0.15	0.14	0.14
m-Ethyltoluene		0.41	0.38	0.40
p-Ethyltoluene		0.22	0.20	0.21
1,3,5-Trimethylbenzene		0.26	0.24	0.26
o-Ethyltoluene		0.18	0.20	0.21
b-Pinene		0.12	0.13	0.06
1,2,4-Trimethylbenzene		0.65	0.62	0.64
1-Decene		ND	ND	ND
n-Decane		0.19	0.17	0.19
1,2,3-Trimethylbenzene		0.18	0.17	0.15
m-Diethylbenzene		0.08	0.09	0.09
p-Diethylbenzene		0.07	0.07	0.06
1-Undecene		0.01	0.01	0.01
n-Undecane		0.13	0.12	0.12
1-Dodecene		ND	ND	ND
n-Dodecane		0.09	0.09	0.08
1-Tridecene		0.01	0.01	0.00
n-Tridecane		0.019	0.019	0.012
TNMOC (speciated), ppbv		54.28	52.74	51.55
TNMOC (w/ unknowns), ppbC		297.94	292.46	277.62

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15347R2**	**15409**	**15445**	**15479**
Sampling Date:	**1/24/99**	**2/5/99**	**2/17/99**	**3/1/99**
Analysis Date:	**2/9/99**	**2/23/99**	**3/4/99**	**3/11/99**
Compound				
Ethylene	3.29	1.61	0.87	1.00
Acetylene	2.41	1.44	0.70	0.89
Ethane	2.61	2.54	1.04	1.05
Propylene	1.01	0.58	0.25	0.32
Propane	9.94	3.15	1.93	1.95
Propyne	0.03	ND	ND	0.01
Isobutane	1.96	1.11	0.28	0.43
Isobutene/1-Butene	0.41	0.23	0.07	0.10
1,3-Butadiene	0.14	0.05	0.03	0.03
n-Butane	4.55	2.69	0.54	0.68
trans-2-Butene	0.56	0.22	0.04	0.08
cis-2-Butene	0.42	0.22	0.03	0.08
3-Methyl-1-butene	0.06	0.02	ND	0.01
Isopentane	4.00	3.38	1.05	1.10
1-Pentene	0.21	0.10	0.03	0.04
2-Methyl-1-butene	0.24	0.12	0.02	0.05
n-Pentane	1.21	0.66	0.17	0.21
Isoprene	0.14	0.08	0.02	0.04
trans-2-Pentene	0.37	0.18	0.03	0.06
cis-2-Pentene	0.24	0.12	0.02	0.05
2-Methyl-2-butene	0.43	0.17	0.05	0.06
2,2-Dimethylbutane	0.28	0.19	0.03	0.06
Cyclopentene	0.09	0.10	0.02	0.02
4-Methyl-1-pentene	0.02	ND	ND	ND
Cyclopentane	0.19	0.13	0.02	0.04
2,3-Dimethylbutane	0.59	0.28	0.07	0.12
2-Methylpentane	1.04	0.55	0.14	0.18
3-Methylpentane	0.67	0.36	0.08	0.12
2-Methyl-1-pentene	0.07	0.03	0.01	0.01
1-Hexene	0.04	0.03	0.01	0.01
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.57	0.34	0.10	0.12
trans-2-Hexene	0.08	0.03	0.01	0.01
cis-2-Hexene	0.05	0.02	0.00	0.01
Methylcyclopentane	0.45	0.25	0.06	0.08
2,4-Dimethylpentane	0.20	0.11	0.02	0.04
Benzene	0.81	0.47	0.19	0.23
Cyclohexane	0.37	0.78	0.02	0.05
2-Methylhexane	0.41	0.29	0.06	0.09
2,3-Dimethylpentane	0.27	0.18	0.03	0.06
3-Methylhexane	0.38	0.24	0.05	0.08
1-Heptene	ND	ND	0.01	ND
2,2,4-Trimethylpentane	0.61	0.28	0.06	0.09
n-Heptane	0.27	0.15	0.03	0.05
Methylcyclohexane	0.18	0.11	0.02	0.04
2,2,3-Trimethylpentane	0.13	0.06	0.01	0.02
2,3,4-Trimethylpentane	0.23	0.11	0.02	0.03
Toluene	2.01	0.91	0.31	0.40
2-Methylheptane	0.16	0.08	0.01	0.03
3-Methylheptane	0.16	0.09	0.01	0.03
1-Octene	0.01	0.01	0.00	0.00
n-Octane	0.16	0.09	0.02	0.04
Ethylbenzene	0.40	0.18	0.05	0.07
m-Xylene/p-Xylene	1.31	0.54	0.15	0.21
Styrene	0.11	0.07	0.03	0.03
o-Xylene	0.53	0.23	0.06	0.09
1-Nonene	0.03	0.01	0.01	0.01
n-Nonane	0.11	0.05	0.01	0.02
Isopropylbenzene	0.09	0.05	0.00	0.02
a-Pinene	0.080	0.009	0.010	0.007
n-Propylbenzene	0.13	0.07	0.01	0.02
m-Ethyltoluene	0.39	0.15	0.04	0.06
p-Ethyltoluene	0.21	0.09	0.02	0.03
1,3,5-Trimethylbenzene	0.25	0.10	0.02	0.04
o-Ethyltoluene	0.20	0.08	0.01	0.03
b-Pinene	0.07	0.01	0.00	0.01
1,2,4-Trimethylbenzene	0.62	0.22	0.05	0.10
1-Decene	ND	ND	ND	ND
n-Decane	0.18	0.04	0.01	0.03
1,2,3-Trimethylbenzene	0.16	0.05	0.01	0.03
m-Diethylbenzene	0.07	0.03	0.00	0.01
p-Diethylbenzene	0.06	0.02	0.00	0.01
1-Undecene	0.01	0.00	0.00	0.00
n-Undecane	0.11	0.03	0.01	0.02
1-Dodecene	ND	ND	0.00	0.00
n-Dodecane	0.08	0.01	0.00	0.01
1-Tridecene	0.01	ND	ND	ND
n-Tridecane	0.012	0.019	0.006	0.003
TNMOC (speciated), ppbv	49.94	27.00	9.09	11.16
TNMOC (w/ unknowns), ppbC	271.40	140.93	55.57	54.72

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15550**	**15566**	**15628D1**	**15628R1**
Sampling Date:	**3/13/99**	**3/19/99**	**3/25/99**	**3/25/99**
Analysis Date:	**3/24/99**	**4/12/99**	**4/16/99**	**4/21/99**
Compound				
Ethylene	1.23	1.37	1.12	1.14
Acetylene	1.36	1.11	1.06	1.03
Ethane	2.33	2.33	2.25	2.18
Propylene	0.51	0.59	0.40	0.46
Propane	2.44	2.34	1.97	2.04
Propyne	ND	ND	ND	ND
Isobutane	1.51	1.43	1.25	1.17
Isobutene/1-Butene	0.36	0.28	0.24	0.31
1,3-Butadiene	0.05	0.04	0.03	0.03
n-Butane	1.88	1.99	1.69	1.64
trans-2-Butene	0.28	0.30	0.28	0.24
cis-2-Butene	0.26	0.30	0.27	0.23
3-Methyl-1-butene	0.03	0.04	0.03	ND
Isopentane	1.46	3.10	0.84	1.92
1-Pentene	0.09	0.16	0.12	0.11
2-Methyl-1-butene	0.07	0.18	0.13	0.12
n-Pentane	0.41	0.49	0.43	0.40
Isoprene	0.08	0.10	0.11	0.09
trans-2-Pentene	0.14	0.20	0.16	0.16
cis-2-Pentene	0.12	0.15	0.14	0.13
2-Methyl-2-butene	0.18	0.14	0.17	0.15
2,2-Dimethylbutane	0.11	0.14	0.15	0.12
Cyclopentene	0.01	0.05	0.02	0.07
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.06	0.10	0.06	0.05
2,3-Dimethylbutane	0.12	0.25	0.23	0.21
2-Methylpentane	0.29	0.42	0.34	0.44
3-Methylpentane	0.20	0.23	0.22	0.20
2-Methyl-1-pentene	0.01	0.04	0.03	0.02
1-Hexene	0.01	0.05	0.03	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.17	0.22	0.18	0.17
trans-2-Hexene	0.02	0.02	0.03	0.03
cis-2-Hexene	0.01	0.01	ND	ND
Methylcyclopentane	0.13	0.19	0.17	0.16
2,4-Dimethylpentane	0.09	0.10	0.09	0.10
Benzene	0.38	0.37	0.33	0.31
Cyclohexane	0.09	0.16	0.13	0.11
2-Methylhexane	0.15	0.24	0.20	0.20
2,3-Dimethylpentane	0.12	0.16	0.14	0.14
3-Methylhexane	0.12	0.14	0.13	0.13
1-Heptene	ND	0.06	0.02	0.03
2,2,4-Trimethylpentane	0.13	0.14	0.13	0.12
n-Heptane	0.08	0.09	0.08	0.08
Methylcyclohexane	0.07	0.11	0.08	0.09
2,2,3-Trimethylpentane	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.07	0.07	0.07	0.06
Toluene	0.48	0.50	0.48	0.45
2-Methylheptane	0.05	0.04	0.06	0.06
3-Methylheptane	0.05	0.06	0.06	0.07
1-Octene	0.01	0.05	0.02	0.02
n-Octane	0.06	0.08	0.07	0.07
Ethylbenzene	0.10	0.11	0.11	0.11
m-Xylene/p-Xylene	0.26	0.29	0.28	0.26
Styrene	0.12	0.12	0.05	0.06
o-Xylene	0.11	0.13	0.12	0.12
1-Nonene	0.01	0.03	ND	0.02
n-Nonane	0.04	0.06	0.05	0.05
Isopropylbenzene	0.04	0.06	0.05	0.07
a-Pinene	ND	0.223	ND	ND
n-Propylbenzene	0.03	0.06	0.06	0.06
m-Ethyltoluene	0.07	0.09	0.07	0.08
p-Ethyltoluene	0.04	0.07	0.06	0.07
1,3,5-Trimethylbenzene	0.04	0.07	0.06	0.07
o-Ethyltoluene	0.04	0.07	0.06	0.06
b-Pinene	0.09	0.03	ND	ND
1,2,4-Trimethylbenzene	0.09	0.16	0.11	0.12
1-Decene	ND	ND	ND	ND
n-Decane	0.02	0.04	0.03	0.04
1,2,3-Trimethylbenzene	0.02	0.04	0.04	0.05
m-Diethylbenzene	0.01	0.04	0.03	0.03
p-Diethylbenzene	0.02	0.02	0.02	0.03
1-Undecene	ND	0.01	ND	ND
n-Undecane	0.02	0.03	0.02	0.03
1-Dodecene	0.01	0.01	ND	ND
n-Dodecane	0.01	0.01	ND	ND
1-Tridecene	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND
TNMOC (speciated), ppbv	19.10	22.50	17.44	18.42
TNMOC (w/ unknowns), ppbC	97.64	123.44	95.40	104.88

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15630D2**	**15630R2**	**15632**	**15678**
Sampling Date:	**3/25/99**	**3/25/99**	**4/6/99**	**4/18/99**
Analysis Date:	**4/16/99**	**4/21/99**	**4/22/99**	**5/11/99**
Compound				
Ethylene	1.58	1.07	2.93	1.29
Acetylene	1.47	0.96	1.95	4.33
Ethane	3.78	2.43	2.81	2.17
Propylene	0.43	0.36	0.95	0.51
Propane	2.07	2.07	12.55	5.32
Propyne	ND	ND	ND	ND
Isobutane	0.69	1.09	1.53	1.29
Isobutene/1-Butene	0.24	0.22	0.32	0.17
1,3-Butadiene	0.05	0.03	0.10	0.05
n-Butane	1.32	1.55	2.51	1.42
trans-2-Butene	0.15	0.25	0.27	0.17
cis-2-Butene	0.17	0.23	0.28	0.17
3-Methyl-1-butene	ND	0.02	0.04	0.03
Isopentane	0.72	0.86	4.14	3.74
1-Pentene	0.08	0.10	0.15	0.11
2-Methyl-1-butene	0.10	0.12	0.20	0.10
n-Pentane	0.48	0.39	0.72	0.48
Isoprene	0.08	0.11	0.13	0.10
trans-2-Pentene	0.09	0.14	0.24	0.16
cis-2-Pentene	0.10	0.11	0.17	0.12
2-Methyl-2-butene	0.05	0.12	0.25	0.12
2,2-Dimethylbutane	0.13	0.13	0.20	0.20
Cyclopentene	0.02	0.04	0.05	0.03
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.10	0.08	0.11	0.08
2,3-Dimethylbutane	0.36	0.20	0.40	0.25
2-Methylpentane	0.30	0.27	0.62	0.38
3-Methylpentane	0.21	0.20	0.41	0.25
2-Methyl-1-pentene	ND	0.01	0.05	0.03
1-Hexene	ND	0.01	0.04	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.23	0.17	0.43	0.24
trans-2-Hexene	ND	ND	0.05	0.02
cis-2-Hexene	ND	ND	0.03	0.02
Methylcyclopentane	0.17	0.14	0.27	0.16
2,4-Dimethylpentane	0.11	0.09	0.14	0.10
Benzene	0.37	0.30	0.59	0.39
Cyclohexane	0.23	0.13	0.21	6.34
2-Methylhexane	0.22	0.19	0.48	0.20
2,3-Dimethylpentane	0.15	0.13	0.25	0.15
3-Methylhexane	0.15	0.13	0.50	0.15
1-Heptene	ND	0.01	ND	ND
2,2,4-Trimethylpentane	0.16	0.11	0.33	0.20
n-Heptane	0.11	0.08	0.41	0.11
Methylcyclohexane	0.09	0.07	0.17	0.09
2,2,3-Trimethylpentane	0.04	0.02	0.10	0.05
2,3,4-Trimethylpentane	0.08	0.06	0.13	0.11
Toluene	0.70	0.45	1.83	0.83
2-Methylheptane	0.06	0.06	0.11	0.07
3-Methylheptane	0.06	0.05	0.11	0.07
1-Octene	ND	ND	0.02	0.02
n-Octane	0.09	0.06	0.13	0.10
Ethylbenzene	0.15	0.10	0.24	0.27
m-Xylene/p-Xylene	0.35	0.26	0.70	0.58
Styrene	0.15	0.06	0.10	0.39
o-Xylene	0.15	0.12	0.29	0.29
1-Nonene	0.01	0.01	0.02	0.02
n-Nonane	0.10	0.05	0.10	0.13
Isopropylbenzene	0.08	0.06	0.06	0.36
a-Pinene	0.017	ND	0.059	0.068
n-Propylbenzene	0.07	0.06	0.08	0.59
m-Ethyltoluene	0.15	0.09	0.21	0.47
p-Ethyltoluene	0.10	0.07	0.12	0.62
1,3,5-Trimethylbenzene	0.08	0.07	0.14	0.32
o-Ethyltoluene	0.07	0.06	0.12	0.47
b-Pinene	0.03	ND	0.04	0.09
1,2,4-Trimethylbenzene	0.19	0.13	0.32	0.82
1-Decene	ND	ND	ND	ND
n-Decane	0.13	0.04	0.10	0.32
1,2,3-Trimethylbenzene	0.12	0.04	0.08	0.49
m-Diethylbenzene	0.11	0.04	0.05	1.23
p-Diethylbenzene	0.15	0.02	0.04	0.80
1-Undecene	0.03	0.00	0.01	0.03
n-Undecane	0.20	0.03	0.06	0.79
1-Dodecene	ND	ND	ND	0.01
n-Dodecane	0.01	0.01	0.02	0.03
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.007	ND	0.005	0.020
TNMOC (speciated), ppbv	20.27	16.73	43.37	41.73
TNMOC (w/ unknowns), ppbC	141.01	93.91	209.82	249.27

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15731**	**15822**	**15824**	**15784**
Sampling Date:	**4/30/99**	**5/12/99**	**5/12/99**	**5/24/99**
Analysis Date:	**5/19/99**	**VOID**	**VOID**	**6/7/99**
Compound				
Ethylene	2.27			1.55
Acetylene	1.62			1.14
Ethane	2.13			1.94
Propylene	0.87			0.65
Propane	11.74			5.57
Propyne	0.02			ND
Isobutane	1.52			0.48
Isobutene/1-Butene	0.31			0.20
1,3-Butadiene	0.09			0.05
n-Butane	3.12			0.74
trans-2-Butene	0.30			0.21
cis-2-Butene	0.30			0.16
3-Methyl-1-butene	0.07			0.02
Isopentane	6.18			1.11
1-Pentene	0.26			0.05
2-Methyl-1-butene	0.37			0.14
n-Pentane	1.11			0.79
Isoprene	0.13			0.15
trans-2-Pentene	0.39			0.14
cis-2-Pentene	0.25			0.13
2-Methyl-2-butene	0.44			0.10
2,2-Dimethylbutane	0.33			0.18
Cyclopentene	0.08			0.03
4-Methyl-1-pentene	0.02			ND
Cyclopentane	0.18			0.11
2,3-Dimethylbutane	0.57			0.28
2-Methylpentane	0.84			0.38
3-Methylpentane	0.51			0.26
2-Methyl-1-pentene	0.06			0.03
1-Hexene	0.05			0.02
2-Ethyl-1-butene	ND			ND
n-Hexane	0.50			0.70
trans-2-Hexene	0.07			0.02
cis-2-Hexene	0.04			ND
Methylcyclopentane	0.33			0.25
2,4-Dimethylpentane	0.18			0.11
Benzene	0.64			0.34
Cyclohexane	0.23			13.76
2-Methylhexane	0.32			0.23
2,3-Dimethylpentane	0.25			0.18
3-Methylhexane	0.25			0.16
1-Heptene	0.04			ND
2,2,4-Trimethylpentane	0.44			0.20
n-Heptane	0.20			0.12
Methylcyclohexane	0.14			0.11
2,2,3-Trimethylpentane	0.12			0.04
2,3,4-Trimethylpentane	0.17			0.09
Toluene	1.50			1.00
2-Methylheptane	0.10			0.07
3-Methylheptane	0.11			0.07
1-Octene	0.05			ND
n-Octane	0.12			0.10
Ethylbenzene	0.23			0.17
m-Xylene/p-Xylene	0.73			0.40
Styrene	0.43			0.24
o-Xylene	0.30			0.18
1-Nonene	0.16			0.02
n-Nonane	0.10			0.10
Isopropylbenzene	0.08			0.05
a-Pinene	0.151			0.025
n-Propylbenzene	0.10			0.06
m-Ethyltoluene	0.23			0.12
p-Ethyltoluene	0.14			0.09
1,3,5-Trimethylbenzene	0.14			0.08
o-Ethyltoluene	0.11			0.08
b-Pinene	0.35			0.11
1,2,4-Trimethylbenzene	0.92			0.17
1-Decene	ND			ND
n-Decane	0.14			0.14
1,2,3-Trimethylbenzene	0.09			0.05
m-Diethylbenzene	0.07			0.04
p-Diethylbenzene	0.06			0.03
1-Undecene	2.04			ND
n-Undecane	2.97			0.07
1-Dodecene	4.96			0.01
n-Dodecane	6.17			0.04
1-Tridecene	7.98			ND
n-Tridecane	8.177			0.012
TNMOC (speciated), ppbv	78.75			36.44
TNMOC (w/ unknowns), ppbC	672.90			239.44

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**15904**	**15925**	**16026**	**16258**
Sampling Date:	**6/5/99**	**6/17/99**	**6/29/99**	**7/17/99**
Analysis Date:	**6/24/99**	**VOID**	**7/20/99**	**8/10/99**
Compound				
Ethylene	2.02		2.66	1.59
Acetylene	2.13		1.90	1.29
Ethane	1.70		2.25	2.13
Propylene	0.71		0.97	0.69
Propane	5.20		7.51	5.86
Propyne	ND		ND	ND
Isobutane	0.56		1.14	0.80
Isobutene/1-Butene	0.24		0.40	0.27
1,3-Butadiene	0.07		0.10	0.05
n-Butane	1.22		2.07	1.31
trans-2-Butene	0.16		0.33	0.18
cis-2-Butene	0.19		0.35	0.25
3-Methyl-1-butene	0.03		0.07	0.04
Isopentane	1.36		7.96	1.45
1-Pentene	0.20		0.20	0.25
2-Methyl-1-butene	0.22		0.43	0.18
n-Pentane	0.74		1.50	0.83
Isoprene	0.25		0.38	0.61
trans-2-Pentene	0.21		0.37	0.26
cis-2-Pentene	0.16		0.24	0.18
2-Methyl-2-butene	0.20		0.46	0.28
2,2-Dimethylbutane	0.23		0.30	0.23
Cyclopentene	0.07		0.12	0.15
4-Methyl-1-pentene	ND		0.01	ND
Cyclopentane	0.12		0.19	0.14
2,3-Dimethylbutane	0.23		0.32	0.24
2-Methylpentane	0.62		0.95	0.79
3-Methylpentane	0.36		0.56	0.38
2-Methyl-1-pentene	0.04		0.07	0.05
1-Hexene	0.07		0.04	0.04
2-Ethyl-1-butene	ND		ND	ND
n-Hexane	0.33		0.55	0.35
trans-2-Hexene	0.03		0.07	0.03
cis-2-Hexene	0.02		0.03	0.03
Methylcyclopentane	0.26		0.40	0.27
2,4-Dimethylpentane	0.14		0.19	0.13
Benzene	0.48		0.70	0.55
Cyclohexane	2.64		73.52	0.26
2-Methylhexane	0.31		0.82	0.38
2,3-Dimethylpentane	0.20		0.46	0.24
3-Methylhexane	0.21		1.04	0.26
1-Heptene	0.05		0.05	ND
2,2,4-Trimethylpentane	0.29		0.45	0.32
n-Heptane	0.17		0.87	0.17
Methylcyclohexane	0.12		0.35	0.12
2,2,3-Trimethylpentane	0.08		0.17	0.08
2,3,4-Trimethylpentane	0.14		0.18	0.13
Toluene	1.35		3.67	1.35
2-Methylheptane	0.09		0.13	0.09
3-Methylheptane	0.09		0.10	0.07
1-Octene	0.04		0.02	0.02
n-Octane	0.14		0.22	0.10
Ethylbenzene	0.28		0.42	0.23
m-Xylene/p-Xylene	0.87		0.98	0.69
Styrene	0.41		0.51	0.37
o-Xylene	0.37		0.39	0.26
1-Nonene	0.06		0.04	0.02
n-Nonane	0.08		0.17	0.08
Isopropylbenzene	0.06		0.07	0.07
a-Pinene	0.153		0.524	0.176
n-Propylbenzene	0.11		0.13	0.09
m-Ethyltoluene	0.29		0.37	0.21
p-Ethyltoluene	0.13		0.17	0.11
1,3,5-Trimethylbenzene	0.15		0.20	0.10
o-Ethyltoluene	0.14		0.20	0.11
b-Pinene	0.31		0.33	0.30
1,2,4-Trimethylbenzene	0.39		0.42	0.27
1-Decene	ND		ND	ND
n-Decane	0.13		0.56	0.12
1,2,3-Trimethylbenzene	0.10		0.15	0.09
m-Diethylbenzene	0.06		0.07	0.07
p-Diethylbenzene	0.05		0.06	0.05
1-Undecene	0.01		0.01	0.01
n-Undecane	0.07		0.51	0.08
1-Dodecene	0.02		0.02	0.02
n-Dodecane	0.06		0.26	0.05
1-Tridecene	ND		0.01	0.01
n-Tridecane	0.011		0.052	0.024
TNMOC (speciated), ppbv	30.79		124.47	29.06
TNMOC (w/ unknowns), ppbC	205.53		853.77	233.88

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**16250**	**16275**	**16487**	**16609**
Sampling Date:	**7/23/99**	**8/4/99**	**8/16/99**	**8/28/99**
Analysis Date:	**8/10/99**	**8/16/99**	**9/3/99**	**9/14/99**
Compound				
Ethylene	1.98	1.62	1.67	1.95
Acetylene	1.31	1.08	1.17	1.51
Ethane	1.81	1.25	1.22	1.73
Propylene	0.78	0.67	0.77	0.86
Propane	7.10	5.31	4.44	6.14
Propyne	ND	ND	ND	ND
Isobutane	1.02	0.66	0.58	0.98
Isobutene/1-Butene	0.36	0.27	0.24	0.27
1,3-Butadiene	0.07	0.07	0.06	0.07
n-Butane	1.86	1.15	1.01	1.13
trans-2-Butene	0.34	0.24	0.21	0.22
cis-2-Butene	0.34	0.26	0.23	0.24
3-Methyl-1-butene	0.07	0.05	0.04	0.05
Isopentane	2.92	1.86	1.60	1.81
1-Pentene	0.22	0.17	0.15	0.17
2-Methyl-1-butene	0.27	0.26	0.17	0.18
n-Pentane	1.07	0.67	0.69	0.75
Isoprene	1.10	0.41	0.37	0.34
trans-2-Pentene	0.38	0.26	0.26	0.31
cis-2-Pentene	0.24	0.18	0.17	0.21
2-Methyl-2-butene	0.37	0.24	0.24	0.28
2,2-Dimethylbutane	0.29	0.21	0.18	0.20
Cyclopentene	0.18	0.08	0.06	0.07
4-Methyl-1-pentene	0.04	0.02	ND	ND
Cyclopentane	0.17	0.12	0.15	0.15
2,3-Dimethylbutane	0.28	0.23	0.21	0.23
2-Methylpentane	0.96	0.63	0.70	0.71
3-Methylpentane	0.51	0.32	0.36	0.37
2-Methyl-1-pentene	0.06	0.04	0.04	0.05
1-Hexene	0.05	0.03	0.04	0.03
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.46	0.26	0.35	0.38
trans-2-Hexene	0.07	0.03	0.04	0.04
cis-2-Hexene	0.04	0.03	0.03	0.03
Methylcyclopentane	0.33	0.21	0.22	0.23
2,4-Dimethylpentane	0.16	0.11	0.14	0.13
Benzene	0.60	0.41	0.55	0.70
Cyclohexane	0.21	3.38	0.11	0.17
2-Methylhexane	0.37	0.28	0.21	0.28
2,3-Dimethylpentane	0.24	0.19	0.17	0.22
3-Methylhexane	0.23	0.17	0.30	0.20
1-Heptene	ND	ND	ND	0.03
2,2,4-Trimethylpentane	0.36	0.27	0.30	0.25
n-Heptane	0.19	0.14	0.16	0.14
Methylcyclohexane	0.12	0.10	0.14	0.13
2,2,3-Trimethylpentane	0.08	0.06	0.06	0.06
2,3,4-Trimethylpentane	0.14	0.12	0.12	0.12
Toluene	1.58	1.23	1.26	1.38
2-Methylheptane	0.10	0.08	0.09	0.06
3-Methylheptane	0.10	0.09	0.09	0.07
1-Octene	0.02	0.02	0.02	0.01
n-Octane	0.12	0.12	0.14	0.12
Ethylbenzene	0.24	0.20	0.23	0.24
m-Xylene/p-Xylene	0.68	0.48	0.65	0.64
Styrene	0.37	0.22	0.16	0.18
o-Xylene	0.28	0.21	0.24	0.26
1-Nonene	0.02	0.02	0.02	0.02
n-Nonane	0.08	0.08	0.07	0.07
Isopropylbenzene	0.05	0.04	0.05	0.06
a-Pinene	0.343	0.287	0.286	0.242
n-Propylbenzene	0.09	0.07	0.07	0.07
m-Ethyltoluene	0.27	0.17	0.20	0.20
p-Ethyltoluene	0.12	0.10	0.09	0.10
1,3,5-Trimethylbenzene	0.12	0.08	0.10	0.11
o-Ethyltoluene	0.12	0.11	0.09	0.10
b-Pinene	0.33	0.21	0.15	0.17
1,2,4-Trimethylbenzene	0.29	0.21	0.23	0.24
1-Decene	ND	ND	ND	ND
n-Decane	0.12	0.13	0.10	0.13
1,2,3-Trimethylbenzene	0.10	0.06	0.07	0.08
m-Diethylbenzene	0.07	0.05	0.03	0.04
p-Diethylbenzene	0.05	0.04	0.03	0.04
1-Undecene	0.01	0.01	0.01	ND
n-Undecane	0.06	0.08	0.04	0.06
1-Dodecene	0.05	0.03	0.01	0.01
n-Dodecane	0.05	0.04	0.04	0.06
1-Tridecene	0.01	0.01	0.00	0.00
n-Tridecane	0.032	0.016	0.020	0.015
TNMOC (speciated), ppbv	35.62	28.65	24.54	28.88
TNMOC (w/ unknowns), ppbC	233.80	187.23	157.04	184.81

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: RUVT
Rutland, VT
Reported in ppbv

Sample No.:	**16807**	**16899**
Sampling Date:	**9/9/99**	**9/21/99**
Analysis Date:	**10/6/99**	**VOID**
Compound		
Ethylene	1.88	
Acetylene	1.47	
Ethane	2.23	
Propylene	0.64	
Propane	5.08	
Propyne	ND	
Isobutane	1.16	
Isobutene/1-Butene	0.27	
1,3-Butadiene	0.08	
n-Butane	1.21	
trans-2-Butene	0.22	
cis-2-Butene	0.23	
3-Methyl-1-butene	0.05	
Isopentane	2.60	
1-Pentene	0.18	
2-Methyl-1-butene	0.18	
n-Pentane	0.85	
Isoprene	0.35	
trans-2-Pentene	0.28	
cis-2-Pentene	0.19	
2-Methyl-2-butene	0.28	
2,2-Dimethylbutane	0.20	
Cyclopentene	0.04	
4-Methyl-1-pentene	ND	
Cyclopentane	0.15	
2,3-Dimethylbutane	0.24	
2-Methylpentane	0.75	
3-Methylpentane	0.36	
2-Methyl-1-pentene	0.05	
1-Hexene	0.04	
2-Ethyl-1-butene	0.32	
n-Hexane	ND	
trans-2-Hexene	0.04	
cis-2-Hexene	0.02	
Methylcyclopentane	0.24	
2,4-Dimethylpentane	0.14	
Benzene	0.58	
Cyclohexane	0.70	
2-Methylhexane	0.25	
2,3-Dimethylpentane	0.20	
3-Methylhexane	0.20	
1-Heptene	ND	
2,2,4-Trimethylpentane	0.33	
n-Heptane	0.17	
Methylcyclohexane	0.12	
2,2,3-Trimethylpentane	0.09	
2,3,4-Trimethylpentane	0.13	
Toluene	1.40	
2-Methylheptane	0.07	
3-Methylheptane	0.09	
1-Octene	0.02	
n-Octane	0.13	
Ethylbenzene	0.25	
m-Xylene/p-Xylene	0.66	
Styrene	0.27	
o-Xylene	0.26	
1-Nonene	0.02	
n-Nonane	0.07	
Isopropylbenzene	0.06	
a-Pinene	0.360	
n-Propylbenzene	0.08	
m-Ethyltoluene	0.21	
p-Ethyltoluene	0.10	
1,3,5-Trimethylbenzene	0.10	
o-Ethyltoluene	0.10	
b-Pinene	0.33	
1,2,4-Trimethylbenzene	ND	
1-Decene	0.22	
n-Decane	0.13	
1,2,3-Trimethylbenzene	0.06	
m-Diethylbenzene	0.04	
p-Diethylbenzene	0.04	
1-Undecene	0.01	
n-Undecane	0.06	
1-Dodecene	0.03	
n-Dodecane	0.08	
1-Tridecene	0.01	
n-Tridecane	0.016	
TNMOC (speciated), ppbv	30.09	
TNMOC (w/ unknowns), ppbC	196.96	

- The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**14680**	**14815**		**15052**	**15109**
Sampling Date:	**9/2/98**	**9/14/98**		**9/26/98**	**10/8/98**
Analysis Date:	**VOID**	**10/19/98**		**10/22/98**	**10/22/98**
Compound					
Ethylene		0.43		0.42	0.75
Acetylene		0.37		0.45	0.55
Ethane		1.33		2.44	1.59
Propylene		0.25		0.18	0.28
Propane		0.83		1.43	1.10
Propyne		ND		ND	ND
Isobutane		0.14		0.26	0.37
Isobutene/1-Butene		0.11		0.09	0.11
1,3-Butadiene		ND		ND	0.02
n-Butane		0.24		0.45	0.54
trans-2-Butene		0.08		0.06	0.06
cis-2-Butene		0.09		0.09	0.08
3-Methyl-1-butene		ND		ND	ND
Isopentane		ND	@	2.55	2.30
1-Pentene		0.05		0.03	0.05
2-Methyl-1-butene		0.02		0.03	0.03
n-Pentane		0.16		0.24	0.29
Isoprene		0.17		0.14	0.10
trans-2-Pentene		0.06		0.04	0.05
cis-2-Pentene		0.07		0.06	0.06
2-Methyl-2-butene		0.01		0.01	0.02
2,2-Dimethylbutane		0.07		0.09	0.10
Cyclopentene		0.03		0.02	0.03
4-Methyl-1-pentene		ND		ND	ND
Cyclopentane		0.04		0.07	0.06
2,3-Dimethylbutane		0.10		0.12	0.19
2-Methylpentane		0.12		0.16	0.25
3-Methylpentane		0.09		0.10	0.18
2-Methyl-1-pentene		0.01		ND	0.01
1-Hexene		0.02		0.01	0.01
2-Ethyl-1-butene		ND		ND	ND
n-Hexane		0.12		0.12	0.23
trans-2-Hexene		0.004		0.03	0.003
cis-2-Hexene		ND		ND	ND
Methylcyclopentane		0.06		0.07	0.09
2,4-Dimethylpentane		0.06		0.06	0.06
Benzene		0.18		0.19	0.25
Cyclohexane		1.28		0.31	3.72
2-Methylhexane		0.07		0.13	0.11
2,3-Dimethylpentane		0.09		0.09	0.09
3-Methylhexane		0.06		0.08	0.10
1-Heptene		0.03		0.01	0.02
2,2,4-Trimethylpentane		0.06		0.07	0.08
n-Heptane		0.05		0.05	0.13
Methylcyclohexane		0.05		0.05	0.11
2,2,3-Trimethylpentane		0.03		0.02	0.03
2,3,4-Trimethylpentane		0.04		0.04	0.05
Toluene		0.19		0.23	0.44
2-Methylheptane		0.03		0.03	0.04
3-Methylheptane		0.03		0.04	0.04
1-Octene		0.02		0.02	0.01
n-Octane		0.05		0.05	0.05
Ethylbenzene		0.05		0.07	0.07
m-Xylene/p-Xylene		0.09		0.10	0.16
Styrene		0.09		0.11	0.11
o-Xylene		0.05		0.07	0.07
1-Nonene		0.02		0.01	0.01
n-Nonane		0.02		0.09	0.05
Isopropylbenzene		0.04		0.09	0.04
a-Pinene		0.04		0.04	0.04
n-Propylbenzene		0.04		0.17	0.04
m-Ethyltoluene		0.05		0.19	0.06
p-Ethyltoluene		0.04		0.03	0.05
1,3,5-Trimethylbenzene		0.03		0.37	0.04
o-Ethyltoluene		0.03		0.03	0.05
b-Pinene		0.04		0.04	0.07
1,2,4-Trimethylbenzene		0.06		0.52	0.09
1-Decene		ND		ND	ND
n-Decane		0.03		0.03	0.05
1,2,3-Trimethylbenzene		0.02		0.12	0.03
m-Diethylbenzene		0.03		0.03	0.02
p-Diethylbenzene		0.02		0.02	0.02
1-Undecene		0.01		0.01	0.01
n-Undecane		0.03		0.03	0.10
1-Dodecene		0.01		0.01	0.01
n-Dodecane		0.01		0.01	0.05
1-Tridecene		ND		0.002	0.004
n-Tridecane		ND		0.01	0.01
TNMOC (speciated), ppbv		8.29		13.40	16.05
TNMOC (w/ unknowns), ppbC		158.52		82.66	101.39

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
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Sample No.:	**15139**	**15159**	**15199**	**15225**
Sampling Date:	**10/20/98**	**11/1/98**	**11/13/98**	**11/25/98**
Analysis Date:	**12/6/98**	**11/11/98**	**12/1/98**	**12/8/98**
Compound				
Ethylene	0.62	0.45	0.59	0.40
Acetylene	0.40	0.47	0.61	0.52
Ethane	1.77	1.56	1.85	1.84
Propylene	0.32	0.22	0.26	0.16
Propane	1.26	1.01	1.36	1.21
Propyne	ND	ND	ND	0.01
Isobutane	0.19	0.24	1.48	0.23
Isobutene/1-Butene	0.13	0.10	0.16	0.10
1,3-Butadiene	0.01	0.01	ND	ND
n-Butane	0.40	0.37	1.56	0.41
trans-2-Butene	0.08	0.09	0.14	0.07
cis-2-Butene	0.10	0.10	0.16	0.11
3-Methyl-1-butene	0.05	ND	0.07	ND
Isopentane	2.43	1.61	2.83	1.53
1-Pentene	0.07	0.07	0.09	0.05
2-Methyl-1-butene	0.02	ND	0.08	0.02
n-Pentane	0.21	0.18	0.41	0.17
Isoprene	0.06	0.07	0.08	0.06
trans-2-Pentene	0.06	0.07	0.10	0.05
cis-2-Pentene	0.07	0.08	0.10	0.06
2-Methyl-2-butene	0.01	0.01	0.08	0.01
2,2-Dimethylbutane	0.08	0.09	0.12	0.08
Cyclopentene	0.09	0.02	0.04	0.04
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.05	0.05	0.06	0.05
2,3-Dimethylbutane	0.09	0.11	0.15	0.08
2-Methylpentane	0.23	0.08	0.20	0.10
3-Methylpentane	0.09	0.10	0.18	0.09
2-Methyl-1-pentene	0.01	0.01	0.02	0.003
1-Hexene	0.02	0.01	0.01	0.01
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.12	0.12	0.34	0.09
trans-2-Hexene	0.04	0.05	0.01	0.03
cis-2-Hexene	ND	ND	0.01	ND
Methylcyclopentane	0.11	0.07	0.15	0.08
2,4-Dimethylpentane	0.08	0.07	0.07	0.06
Benzene	0.24	0.23	0.22	0.17
Cyclohexane	0.11	0.25	57.37	0.10
2-Methylhexane	0.14	0.14	0.09	0.09
2,3-Dimethylpentane	0.08	0.11	0.10	0.09
3-Methylhexane	0.06	0.06	0.10	0.05
1-Heptene	0.03	0.02	ND	0.01
2,2,4-Trimethylpentane	0.06	0.06	0.08	0.05
n-Heptane	0.05	0.06	0.07	0.05
Methylcyclohexane	0.06	0.07	0.07	0.05
2,2,3-Trimethylpentane	0.01	0.03	0.04	0.01
2,3,4-Trimethylpentane	0.05	0.05	0.05	0.04
Toluene	0.19	0.19	0.32	0.16
2-Methylheptane	0.04	0.04	0.04	0.04
3-Methylheptane	0.03	0.04	0.04	0.03
1-Octene	0.02	0.01	0.01	0.01
n-Octane	0.05	0.05	0.05	0.04
Ethylbenzene	0.07	0.06	0.06	0.06
m-Xylene/p-Xylene	0.10	0.11	0.11	0.09
Styrene	0.13	0.07	0.13	0.10
o-Xylene	0.06	0.06	0.06	0.05
1-Nonene	0.02	0.01	0.01	0.01
n-Nonane	0.04	0.04	0.04	0.03
Isopropylbenzene	0.05	0.05	0.05	0.05
a-Pinene	0.00	0.01	0.09	ND
n-Propylbenzene	0.04	0.04	0.05	0.04
m-Ethyltoluene	0.05	0.05	0.06	0.04
p-Ethyltoluene	0.05	0.05	0.07	0.04
1,3,5-Trimethylbenzene	0.04	0.04	0.05	0.04
o-Ethyltoluene	0.04	0.04	0.05	0.04
b-Pinene	0.01	0.01	0.05	0.02
1,2,4-Trimethylbenzene	0.08	0.07	0.09	0.07
1-Decene	ND	ND	ND	ND
n-Decane	0.03	0.04	0.05	0.03
1,2,3-Trimethylbenzene	0.04	0.04	0.06	0.04
m-Diethylbenzene	0.05	0.04	0.06	0.03
p-Diethylbenzene	0.03	0.03	0.04	0.02
1-Undecene	0.01	0.002	ND	0.01
n-Undecane	0.04	0.04	0.06	0.03
1-Dodecene	ND	0.001	0.004	ND
n-Dodecane	0.005	0.003	0.02	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	ND	ND	0.003	ND
TNMOC (speciated), ppbv	11.50	9.79	73.32	9.56
TNMOC (w/ unknowns), ppbC	141.21	56.75	438.64	51.07

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
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Sample No.:	**15247**	**15288**		**15308**	**15322**
Sampling Date:	**12/7/98**	**12/19/98**		**12/31/98**	**1/12/99**
Analysis Date:	**12/22/98**	**1/11/99**		**1/21/99**	**1/21/99**
Compound					
Ethylene	0.49	1.22		0.59	0.93
Acetylene	0.50	1.11		0.77	0.92
Ethane	2.14	2.66		1.82	2.64
Propylene	0.19	0.38		0.19	0.24
Propane	1.31	2.25		2.42	2.05
Propyne	ND	ND		ND	ND
Isobutane	0.32	0.56		0.28	0.41
Isobutene/1-Butene	0.10	0.15		0.11	0.12
1,3-Butadiene	ND	0.03		ND	0.01
n-Butane	0.61	0.92		0.52	0.79
trans-2-Butene	0.08	0.09		0.04	0.07
cis-2-Butene	0.11	0.11		0.08	0.10
3-Methyl-1-butene	ND	ND		ND	ND
Isopentane	1.77	2.48		0.20	0.38
1-Pentene	0.06	0.06		0.05	0.06
2-Methyl-1-butene	0.03	0.05		0.03	0.02
n-Pentane	0.23	0.62		0.19	0.29
Isoprene	0.07	0.10		0.06	0.08
trans-2-Pentene	0.06	0.07		0.05	0.05
cis-2-Pentene	0.07	0.08		0.06	0.06
2-Methyl-2-butene	ND	0.05		ND	0.01
2,2-Dimethylbutane	0.09	0.12		0.10	0.09
Cyclopentene	0.06	0.09		0.08	0.04
4-Methyl-1-pentene	ND	ND		ND	0.01
Cyclopentane	0.06	0.09		0.05	0.06
2,3-Dimethylbutane	0.12	0.16		0.09	0.12
2-Methylpentane	0.13	0.22		0.11	0.13
3-Methylpentane	0.11	0.18		0.09	0.12
2-Methyl-1-pentene	0.01	0.01		ND	0.02
1-Hexene	0.01	0.01		ND	0.01
2-Ethyl-1-butene	ND	ND		ND	ND
n-Hexane	0.12	0.25		0.12	0.13
trans-2-Hexene	ND	ND		ND	ND
cis-2-Hexene	ND	ND		ND	ND
Methylcyclopentane	0.07	0.13		0.07	0.09
2,4-Dimethylpentane	0.07	0.08		0.06	0.07
Benzene	0.23	0.35		0.24	0.28
Cyclohexane	0.13	27.73		0.18	0.50
2-Methylhexane	0.10	0.10		0.11	0.09
2,3-Dimethylpentane	0.10	0.10		0.09	0.10
3-Methylhexane	0.06	0.10		0.05	0.07
1-Heptene	0.01	ND		ND	ND
2,2,4-Trimethylpentane	0.07	0.10		0.06	0.07
n-Heptane	0.06	0.09		0.05	0.06
Methylcyclohexane	0.06	0.09		0.05	0.06
2,2,3-Trimethylpentane	0.02	0.03		ND	ND
2,3,4-Trimethylpentane	0.04	0.06		0.03	0.05
Toluene	0.19	1.06		0.16	0.27
2-Methylheptane	0.03	0.05		0.03	0.04
3-Methylheptane	0.04	0.06		0.04	0.04
1-Octene	ND	0.01		ND	ND
n-Octane	0.05	0.08		0.04	0.05
Ethylbenzene	0.06	0.13		0.04	0.06
m-Xylene/p-Xylene	0.10	0.25		0.08	0.11
Styrene	0.07	0.11		0.04	0.03
o-Xylene	0.05	0.12		0.03	0.05
1-Nonene	0.01	0.01		ND	ND
n-Nonane	0.04	0.07		0.03	0.03
Isopropylbenzene	0.05	0.05		0.04	0.04
a-Pinene	ND	0.11		ND	ND
n-Propylbenzene	0.03	0.05		0.03	0.04
m-Ethyltoluene	0.04	0.18		0.03	0.03
p-Ethyltoluene	0.05	0.06		0.03	0.04
1,3,5-Trimethylbenzene	0.04	0.05		0.03	0.04
o-Ethyltoluene	0.03	0.06		0.03	0.04
b-Pinene	0.02	0.04		ND	ND
1,2,4-Trimethylbenzene	0.06	0.10		0.05	0.06
1-Decene	ND	ND		ND	ND
n-Decane	0.03	0.11		0.02	0.02
1,2,3-Trimethylbenzene	0.03	0.04		0.03	0.03
m-Diethylbenzene	0.04	0.04		0.02	0.02
p-Diethylbenzene	0.02	0.02		0.02	0.01
1-Undecene	ND	0.00		ND	ND
n-Undecane	0.03	0.08	#	0.02	0.01
1-Dodecene	ND	ND		ND	ND
n-Dodecane	0.01	0.03		0.00	ND
1-Tridecene	ND	ND		ND	ND
n-Tridecane	ND	0.009		ND	0.011
TNMOC (speciated), ppbv	10.98	46.08		9.92	12.46
TNMOC (w/ unknowns), ppbC	56.74	270.43		52.03	59.34

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
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Rutland, VT
Reported in ppbv

Sample No.:	**15358D1**	**15358R1**	**15360D2**	**15360R2**
Sampling Date:	**1/24/99**	**1/24/99**	**1/24/99**	**1/24/99**
Analysis Date:	**2/3/99**	**2/9/99**	**2/3/99**	**2/11/99**
Compound				
Ethylene	0.58	0.55	0.55	1.11
Acetylene	0.55	0.53	0.59	0.86
Ethane	1.91	1.70	1.97	2.04
Propylene	0.18	0.20	0.18	0.35
Propane	1.27	1.22	1.20	1.68
Propyne	ND	ND	ND	ND
Isobutane	0.34	0.31	0.30	0.47
Isobutene/1-Butene	0.10	0.11	0.09	0.14
1,3-Butadiene	ND	0.01	0.01	0.07
n-Butane	0.61	0.58	0.59	1.26
trans-2-Butene	0.07	0.05	0.06	0.09
cis-2-Butene	0.11	0.10	0.11	0.12
3-Methyl-1-butene	ND	ND	ND	ND
Isopentane	0.92	0.96	0.31	0.75
1-Pentene	0.07	0.06	0.05	0.07
2-Methyl-1-butene	0.01	0.01	0.20	0.04
n-Pentane	0.21	0.21	ND	0.30
Isoprene	0.06	0.06	0.07	0.08
trans-2-Pentene	0.06	0.06	0.05	0.08
cis-2-Pentene	0.07	0.07	0.07	0.08
2-Methyl-2-butene	0.01	ND	ND	0.04
2,2-Dimethylbutane	0.09	0.08	0.08	0.09
Cyclopentene	0.07	0.09	0.05	0.13
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.06	0.04	0.06	0.07
2,3-Dimethylbutane	0.14	0.13	0.13	0.17
2-Methylpentane	0.14	0.14	0.11	0.22
3-Methylpentane	0.12	0.11	0.12	0.20
2-Methyl-1-pentene	0.01	0.01	0.01	0.01
1-Hexene	0.01	0.01	0.00	0.01
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.11	0.12	0.12	0.25
trans-2-Hexene	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.09	0.08	ND	0.12
2,4-Dimethylpentane	0.08	0.07	0.07	0.08
Benzene	0.21	0.20	0.20	0.26
Cyclohexane	2.79	2.69	0.80	0.69
2-Methylhexane	0.11	0.11	0.09	0.12
2,3-Dimethylpentane	0.10	0.09	0.10	0.11
3-Methylhexane	0.07	0.07	0.06	0.09
1-Heptene	0.01	0.01	0.01	ND
2,2,4-Trimethylpentane	0.08	0.07	0.07	0.11
n-Heptane	0.06	0.05	0.06	0.06
Methylcyclohexane	0.06	0.05	0.07	0.06
2,2,3-Trimethylpentane	ND	ND	0.05	0.02
2,3,4-Trimethylpentane	0.05	0.04	0.04	0.06
Toluene	0.24	0.23	0.24	0.42
2-Methylheptane	0.04	0.03	0.04	0.04
3-Methylheptane	0.04	0.04	0.04	0.04
1-Octene	0.01	0.01	ND	0.01
n-Octane	0.05	0.05	0.05	0.07
Ethylbenzene	0.06	0.06	0.06	0.09
m-Xylene/p-Xylene	0.12	0.12	0.12	0.20
Styrene	0.09	0.09	0.08	0.12
o-Xylene	0.06	0.06	0.06	0.10
1-Nonene	0.01	0.00	ND	0.01
n-Nonane	0.04	0.04	0.05	0.05
Isopropylbenzene	0.05	0.05	0.05	0.06
a-Pinene	0.01	0.00	0.01	0.08
n-Propylbenzene	0.04	0.04	0.04	0.06
m-Ethyltoluene	0.05	0.05	0.05	0.08
p-Ethyltoluene	0.05	0.05	0.05	0.07
1,3,5-Trimethylbenzene	0.04	0.04	0.04	0.06
o-Ethyltoluene	0.04	0.05	0.04	0.06
b-Pinene	0.03	0.02	0.03	0.04
1,2,4-Trimethylbenzene	0.07	0.08	0.07	0.12
1-Decene	ND	ND	ND	ND
n-Decane	0.04	0.04	0.04	0.05
1,2,3-Trimethylbenzene	0.04	0.04	0.03	0.04
m-Diethylbenzene	0.04	0.05	0.04	0.05
p-Diethylbenzene	0.03	0.03	0.03	0.03
1-Undecene	ND	0.00	0.00	ND
n-Undecane	0.04	0.04	0.03	0.06
1-Dodecene	ND	ND	ND	ND
n-Dodecane	0.01	0.01	0.00	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.016	0.029	ND	0.026
TNMOC (speciated), ppbv	12.93	12.40	10.02	15.25
TNMOC (w/ unknowns), ppbC	73.34	73.15	55.72	79.97

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**15417**	**15447**	**15485**	**15544**
Sampling Date:	**2/5/99**	**2/17/99**	**3/1/99**	**3/13/99**
Analysis Date:	**2/23/99**	**3/4/99**	**3/11/99**	**3/24/99**
Compound				
Ethylene	0.44	0.24	0.33	0.51
Acetylene	0.59	0.29	0.37	0.76
Ethane	2.11	0.82	0.86	2.28
Propylene	0.18	0.05	0.10	0.22
Propane	1.36	0.52	0.69	1.47
Propyne	ND	ND	ND	ND
Isobutane	0.28	0.11	0.51	0.33
Isobutene/1-Butene	0.10	0.02	0.05	0.12
1,3-Butadiene	ND	ND	0.01	ND
n-Butane	0.56	0.20	0.28	0.52
trans-2-Butene	0.06	ND	0.02	0.08
cis-2-Butene	0.08	0.00	0.03	0.11
3-Methyl-1-butene	0.08	ND	ND	ND
Isopentane	0.71	0.34	1.20	2.07
1-Pentene	0.05	ND	0.02	0.07
2-Methyl-1-butene	ND	ND	0.09	0.02
n-Pentane	0.21	0.07	0.15	0.23
Isoprene	0.05	ND	0.03	0.06
trans-2-Pentene	0.05	ND	0.02	0.06
cis-2-Pentene	0.06	ND	0.03	0.07
2-Methyl-2-butene	0.02	0.01	0.01	ND
2,2-Dimethylbutane	0.08	0.01	0.03	0.09
Cyclopentene	0.10	0.03	0.01	0.01
4-Methyl-1-pentene	0.03	ND	ND	ND
Cyclopentane	0.05	0.01	0.03	0.05
2,3-Dimethylbutane	0.10	0.03	0.05	0.10
2-Methylpentane	0.10	0.05	0.09	0.16
3-Methylpentane	0.10	0.02	0.06	0.12
2-Methyl-1-pentene	ND	ND	0.00	ND
1-Hexene	ND	ND	0.00	ND
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.11	0.02	0.10	0.11
trans-2-Hexene	0.04	ND	0.01	ND
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.07	0.02	0.04	0.07
2,4-Dimethylpentane	0.06	0.01	0.03	0.06
Benzene	0.26	0.08	0.11	0.25
Cyclohexane	0.09	0.05	8.20	1.68
2-Methylhexane	0.14	0.04	0.04	0.11
2,3-Dimethylpentane	0.09	0.01	0.03	0.09
3-Methylhexane	0.06	0.01	0.04	0.08
1-Heptene	0.11	ND	ND	ND
2,2,4-Trimethylpentane	0.06	0.01	0.03	0.05
n-Heptane	0.05	0.01	0.03	0.07
Methylcyclohexane	0.05	0.00	0.03	0.05
2,2,3-Trimethylpentane	0.02	0.01	ND	ND
2,3,4-Trimethylpentane	0.04	0.01	0.02	0.04
Toluene	0.18	0.08	0.15	0.19
2-Methylheptane	0.03	0.00	0.01	0.03
3-Methylheptane	0.04	ND	0.01	0.04
1-Octene	0.01	ND	0.00	ND
n-Octane	0.05	0.00	0.02	0.04
Ethylbenzene	0.08	0.01	0.03	0.05
m-Xylene/p-Xylene	0.13	0.02	0.05	0.08
Styrene	0.12	0.04	0.05	0.06
o-Xylene	0.07	0.01	0.03	0.04
1-Nonene	0.02	ND	0.00	0.01
n-Nonane	0.04	0.00	0.02	0.04
Isopropylbenzene	0.05	0.00	0.02	0.03
a-Pinene	0.04	ND	0.01	0.01
n-Propylbenzene	0.04	0.00	0.01	0.03
m-Ethyltoluene	0.04	0.01	0.02	0.03
p-Ethyltoluene	0.05	0.00	0.02	0.03
1,3,5-Trimethylbenzene	0.08	ND	0.02	0.02
o-Ethyltoluene	0.04	ND	0.02	0.03
b-Pinene	0.01	0.02	0.01	0.02
1,2,4-Trimethylbenzene	0.15	0.01	0.03	0.05
1-Decene	ND	ND	ND	ND
n-Decane	0.03	0.00	0.03	0.02
1,2,3-Trimethylbenzene	0.03	ND	0.01	0.02
m-Diethylbenzene	0.03	ND	0.01	0.02
p-Diethylbenzene	0.01	ND	0.01	0.01
1-Undecene	0.02	ND	ND	ND
n-Undecane	0.02	0.00	0.02	0.02
1-Dodecene	0.006	ND	ND	0.023
n-Dodecane	0.00	0.00	0.01	0.01
1-Tridecene	0.01	ND	ND	ND
n-Tridecane	0.003	0.007	0.002	0.005
TNMOC (speciated), ppbv	10.24	3.31	14.41	13.17
TNMOC (w/ unknowns), ppbC	64.92	32.31	81.94	69.71

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**15568**	**15580D1**	**15580R1**	**15582D2**
Sampling Date:	**3/19/99**	**3/25/99**	**3/25/99**	**3/25/99**
Analysis Date:	**4/12/99**	**4/22/99**	**4/23/99**	**4/16/99**
Compound				
Ethylene	0.34	0.42	0.39	0.39
Acetylene	0.57	0.53	0.46	0.55
Ethane	2.14	1.91	1.91	2.04
Propylene	0.22	0.19	0.24	0.18
Propane	1.19	0.98	0.94	0.93
Propyne	ND	ND	ND	ND
Isobutane	0.22	0.21	0.21	0.20
Isobutene/1-Butene	0.12	0.11	0.11	0.10
1,3-Butadiene	ND	ND	ND	0.01
n-Butane	0.38	0.34	0.35	0.35
trans-2-Butene	0.11	0.12	0.09	0.11
cis-2-Butene	0.11	0.11	0.12	0.10
3-Methyl-1-butene	ND	ND	ND	ND
Isopentane	0.55	0.80	0.85	0.16
1-Pentene	0.10	0.07	0.08	0.05
2-Methyl-1-butene	0.03	0.03	0.05	0.04
n-Pentane	0.17	0.14	0.13	0.14
Isoprene	0.07	0.08	0.07	0.07
trans-2-Pentene	0.07	0.06	0.06	0.07
cis-2-Pentene	0.08	0.07	0.07	0.08
2-Methyl-2-butene	ND	ND	0.02	ND
2,2-Dimethylbutane	0.09	0.10	0.09	0.10
Cyclopentene	ND	0.02	0.03	0.02
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.04	0.04	0.04	0.05
2,3-Dimethylbutane	0.10	0.10	0.11	0.11
2-Methylpentane	0.10	0.11	0.12	0.10
3-Methylpentane	0.09	0.10	0.11	0.10
2-Methyl-1-pentene	ND	0.01	ND	ND
1-Hexene	ND	0.02	ND	ND
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.10	0.09	0.11	0.10
trans-2-Hexene	0.05	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.07	0.09	0.09	0.08
2,4-Dimethylpentane	0.08	0.06	0.06	0.07
Benzene	0.19	0.18	0.19	0.19
Cyclohexane	0.13	0.77	0.79	0.53
2-Methylhexane	0.12	0.16	0.16	0.11
2,3-Dimethylpentane	0.09	0.10	0.10	0.10
3-Methylhexane	0.06	0.06	0.06	0.06
1-Heptene	ND	0.01	0.02	ND
2,2,4-Trimethylpentane	0.06	0.05	0.06	0.04
n-Heptane	0.05	0.05	0.06	0.05
Methylcyclohexane	0.06	0.05	0.04	0.05
2,2,3-Trimethylpentane	0.02	ND	ND	ND
2,3,4-Trimethylpentane	0.04	0.04	0.04	0.04
Toluene	0.14	0.13	0.15	0.13
2-Methylheptane	0.03	0.04	0.04	0.04
3-Methylheptane	0.05	0.03	0.05	0.05
1-Octene	0.03	0.02	0.02	ND
n-Octane	0.06	0.06	0.06	0.05
Ethylbenzene	0.06	0.05	0.05	0.04
m-Xylene/p-Xylene	0.08	0.07	0.09	0.08
Styrene	0.08	0.06	0.06	0.09
o-Xylene	0.03	0.05	0.05	0.04
1-Nonene	0.02	0.02	0.01	ND
n-Nonane	0.03	0.03	0.04	0.04
Isopropylbenzene	0.05	0.05	0.05	0.05
a-Pinene	ND	ND	ND	ND
n-Propylbenzene	0.04	0.05	0.04	0.04
m-Ethyltoluene	0.03	0.04	0.03	0.03
p-Ethyltoluene	0.05	0.04	0.04	0.05
1,3,5-Trimethylbenzene	0.04	0.04	0.03	0.04
o-Ethyltoluene	0.04	0.05	0.04	0.05
b-Pinene	0.01	ND	ND	0.02
1,2,4-Trimethylbenzene	0.07	0.07	0.05	0.07
1-Decene	ND	ND	ND	ND
n-Decane	0.03	0.02	0.03	0.03
1,2,3-Trimethylbenzene	0.03	0.03	0.03	0.03
m-Diethylbenzene	0.03	0.03	0.02	0.03
p-Diethylbenzene	0.02	0.02	0.01	0.02
1-Undecene	0.01	ND	ND	0.01
n-Undecane	0.02	0.03	0.03	0.02
1-Dodecene	0.007	ND	ND	ND
n-Dodecane	ND	0.01	0.01	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	ND	0.012	ND	0.010
TNMOC (speciated), ppbv	9.12	9.43	9.43	8.50
TNMOC (w/ unknowns), ppbC	56.47	63.02	64.01	52.44

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**15582R2**	**15642**	**15666**	**15735**
Sampling Date:	**3/25/99**	**4/6/99**	**4/12/99**	**4/30/99**
Analysis Date:	**4/22/99**	**4/22/99**	**5/10/99**	**5/18/99**
Compound				
Ethylene	0.35	0.57	0.36	0.37
Acetylene	0.53	0.80	0.52	0.33
Ethane	1.97	1.99	1.99	1.48
Propylene	0.17	0.22	0.19	0.21
Propane	0.91	1.12	0.97	0.63
Propyne	ND	ND	ND	ND
Isobutane	0.19	0.25	0.19	0.15
Isobutene/1-Butene	0.10	0.11	0.10	0.11
1,3-Butadiene	ND	ND	ND	ND
n-Butane	0.37	0.41	0.34	0.21
trans-2-Butene	0.06	0.08	0.06	0.08
cis-2-Butene	0.12	0.12	0.10	0.10
3-Methyl-1-butene	ND	ND	ND	ND
Isopentane	0.19	2.38	0.60	0.94
1-Pentene	0.07	0.06	0.06	0.08
2-Methyl-1-butene	0.03	ND	ND	ND
n-Pentane	0.14	0.19	0.14	0.16
Isoprene	0.07	0.07	0.07	0.07
trans-2-Pentene	0.07	0.05	0.06	0.06
cis-2-Pentene	0.07	0.08	0.07	0.07
2-Methyl-2-butene	ND	0.01	ND	ND
2,2-Dimethylbutane	0.08	0.10	0.09	0.08
Cyclopentene	0.02	0.03	0.02	0.03
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.03	0.04	0.05	0.05
2,3-Dimethylbutane	0.10	0.11	0.10	0.10
2-Methylpentane	0.09	0.10	0.09	0.11
3-Methylpentane	0.09	0.10	0.10	0.08
2-Methyl-1-pentene	ND	ND	0.01	0.03
1-Hexene	ND	ND	0.01	ND
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.09	0.10	0.08	0.10
trans-2-Hexene	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.09	0.07	0.07	0.08
2,4-Dimethylpentane	0.07	0.07	0.07	0.07
Benzene	0.17	0.22	0.20	0.13
Cyclohexane	0.48	0.10	0.08	1.09
2-Methylhexane	0.15	0.11	0.11	0.13
2,3-Dimethylpentane	0.10	0.10	0.11	0.10
3-Methylhexane	0.06	0.06	0.06	0.06
1-Heptene	ND	0.01	0.01	0.03
2,2,4-Trimethylpentane	0.05	0.07	0.06	0.06
n-Heptane	0.05	0.06	0.05	0.06
Methylcyclohexane	0.05	0.04	0.06	0.04
2,2,3-Trimethylpentane	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.04	0.04	0.05	0.04
Toluene	0.13	0.21	0.16	0.16
2-Methylheptane	0.04	0.04	0.04	0.04
3-Methylheptane	0.04	0.05	0.04	0.04
1-Octene	ND	0.01	0.02	0.04
n-Octane	0.05	0.06	0.05	0.05
Ethylbenzene	0.04	0.07	0.07	0.06
m-Xylene/p-Xylene	0.08	0.10	0.08	0.08
Styrene	0.09	0.07	0.08	0.07
o-Xylene	0.04	0.06	0.05	0.05
1-Nonene	ND	0.01	0.01	0.02
n-Nonane	0.04	0.04	0.04	0.03
Isopropylbenzene	0.05	0.05	0.05	0.05
a-Pinene	ND	ND	ND	ND
n-Propylbenzene	0.04	0.05	0.04	0.04
m-Ethyltoluene	0.03	0.04	0.04	0.03
p-Ethyltoluene	0.05	0.05	0.05	0.04
1,3,5-Trimethylbenzene	0.04	0.04	0.03	0.03
o-Ethyltoluene	0.04	0.04	0.04	0.03
b-Pinene	0.02	0.02	0.02	0.01
1,2,4-Trimethylbenzene	0.06	0.07	0.06	0.07
1-Decene	ND	ND	ND	ND
n-Decane	0.02	0.03	0.03	0.02
1,2,3-Trimethylbenzene	0.02	0.03	0.03	0.03
m-Diethylbenzene	0.04	0.04	0.04	0.03
p-Diethylbenzene	0.02	0.02	0.02	0.02
1-Undecene	ND	ND	ND	0.01
n-Undecane	0.02	0.03	0.03	0.02
1-Dodecene	ND	ND	0.003	ND
n-Dodecane	0.01	ND	0.01	0.01
1-Tridecene	ND	ND	ND	ND
n-Tridecane	0.007	ND	ND	ND
TNMOC (speciated), ppbv	8.25	11.28	8.42	8.59
TNMOC (w/ unknowns), ppbC	54.14	60.06	54.35	62.96

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**15799D1**	**15799R1**	**15801D2**	**15801R2**
Sampling Date:	**5/12/99**	**5/12/99**	**5/12/99**	**5/12/99**
Analysis Date:	**6/7/99**	**6/9/99**	**6/7/99**	**6/9/99**
Compound				
Ethylene	0.36	0.38	0.36	0.37
Acetylene	0.47	0.48	0.45	0.48
Ethane	1.62	1.68	1.65	1.68
Propylene	0.23	0.23	0.20	0.21
Propane	0.70	0.75	0.64	0.66
Propyne	ND	ND	ND	ND
Isobutane	0.15	0.17	0.22	0.22
Isobutene/1-Butene	0.11	0.10	0.10	ND
1,3-Butadiene	ND	ND	ND	ND
n-Butane	0.24	0.26	0.23	0.24
trans-2-Butene	0.12	0.08	0.11	0.09
cis-2-Butene	0.11	0.11	0.10	0.12
3-Methyl-1-butene	ND	ND	ND	ND
Isopentane	0.60	0.76	0.26	0.28
1-Pentene	0.08	0.08	0.08	0.08
2-Methyl-1-butene	0.02	ND	0.02	0.08
n-Pentane	0.14	0.11	0.21	0.25
Isoprene	0.09	0.16	0.08	0.11
trans-2-Pentene	0.06	0.15	0.06	0.07
cis-2-Pentene	0.08	0.08	0.08	0.08
2-Methyl-2-butene	0.01	0.02	0.01	0.02
2,2-Dimethylbutane	0.13	0.12	0.11	0.12
Cyclopentene	0.02	0.04	0.02	0.02
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.04	0.05	0.06	0.06
2,3-Dimethylbutane	0.10	0.10	0.11	0.11
2-Methylpentane	0.15	0.14	0.10	0.09
3-Methylpentane	0.09	0.10	0.09	0.10
2-Methyl-1-pentene	0.01	0.01	0.01	0.01
1-Hexene	0.01	0.02	0.02	0.02
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.09	0.11	0.12	0.13
trans-2-Hexene	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.07	0.10	0.07	0.08
2,4-Dimethylpentane	0.07	0.08	0.06	0.07
Benzene	0.13	0.14	0.13	0.14
Cyclohexane	0.18	0.18	0.22	0.23
2-Methylhexane	0.15	0.17	0.15	0.17
2,3-Dimethylpentane	0.11	0.11	0.11	0.12
3-Methylhexane	0.05	0.06	0.06	0.06
1-Heptene	0.02	0.02	0.02	0.02
2,2,4-Trimethylpentane	0.06	0.06	0.05	0.06
n-Heptane	0.05	0.05	0.06	0.06
Methylcyclohexane	0.06	0.07	0.05	0.07
2,2,3-Trimethylpentane	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.04	0.04	0.04	0.04
Toluene	0.15	0.18	0.16	0.16
2-Methylheptane	0.03	0.05	0.04	0.05
3-Methylheptane	0.04	0.04	0.04	0.04
1-Octene	ND	ND	ND	ND
n-Octane	0.05	0.05	0.05	0.06
Ethylbenzene	0.06	0.08	0.06	0.07
m-Xylene/p-Xylene	0.09	0.10	0.08	0.10
Styrene	0.05	0.08	0.04	0.06
o-Xylene	0.05	0.06	0.04	0.07
1-Nonene	0.01	0.01	0.01	0.02
n-Nonane	0.04	0.04	0.03	0.04
Isopropylbenzene	ND	0.06	0.05	0.06
a-Pinene	ND	0.01	ND	ND
n-Propylbenzene	0.04	0.06	0.03	0.06
m-Ethyltoluene	0.04	0.05	0.04	0.05
p-Ethyltoluene	0.04	0.06	0.04	0.06
1,3,5-Trimethylbenzene	0.03	0.05	0.03	0.05
o-Ethyltoluene	0.04	0.06	0.04	0.05
b-Pinene	ND	0.01	ND	ND
1,2,4-Trimethylbenzene	0.06	0.09	0.06	0.08
1-Decene	ND	ND	ND	ND
n-Decane	0.03	0.04	0.03	0.04
1,2,3-Trimethylbenzene	0.03	0.04	0.03	0.04
m-Diethylbenzene	0.03	0.05	0.03	0.05
p-Diethylbenzene	0.02	0.03	0.02	0.03
1-Undecene	0.01	0.01	ND	0.01
n-Undecane	0.03	0.04	0.02	0.04
1-Dodecene	ND	ND	ND	ND
n-Dodecane	ND	ND	ND	ND
1-Tridecene	ND	ND	ND	ND
n-Tridecane	ND	ND	ND	ND
TNMOC (speciated), ppbv	7.79	8.70	7.47	8.10
TNMOC (w/ unknowns), ppbC	58.59	67.00	50.30	56.04

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**15791**	**15830**	**15923**	**16028**
Sampling Date:	**5/24/99**	**6/5/99**	**6/17/99**	**6/29/99**
Analysis Date:	**6/7/99**	**6/17/99**	**6/29/99**	**7/20/99**
Compound				
Ethylene	0.33	0.30	0.30	0.40
Acetylene	0.38	0.37	0.23	0.43
Ethane	1.59	1.31	1.13	1.84
Propylene	0.20	0.18	0.21	0.21
Propane	0.82	0.57	0.61	1.08
Propyne	ND	ND	ND	ND
Isobutane	0.13	0.13	0.12	0.19
Isobutene/1-Butene	0.11	0.10	0.10	0.12
1,3-Butadiene	ND	ND	ND	ND
n-Butane	0.22	0.22	0.22	0.31
trans-2-Butene	0.08	0.07	0.11	0.06
cis-2-Butene	0.11	0.10	0.12	0.13
3-Methyl-1-butene	ND	0.02	ND	ND
Isopentane	0.17	0.17	0.20	0.38
1-Pentene	0.06	0.05	0.08	0.11
2-Methyl-1-butene	ND	ND	ND	0.00
n-Pentane	0.16	0.13	0.16	0.23
Isoprene	0.08	0.25	0.35	0.71
trans-2-Pentene	0.06	0.06	0.06	0.06
cis-2-Pentene	ND	0.07	0.08	0.08
2-Methyl-2-butene	0.07	0.02	0.01	0.03
2,2-Dimethylbutane	0.11	0.11	0.10	0.13
Cyclopentene	0.05	0.03	0.03	0.04
4-Methyl-1-pentene	ND	0.01	ND	ND
Cyclopentane	0.05	0.05	0.06	0.06
2,3-Dimethylbutane	0.10	0.10	0.35	0.13
2-Methylpentane	0.11	0.18	0.16	0.18
3-Methylpentane	0.09	0.09	0.09	0.12
2-Methyl-1-pentene	ND	ND	ND	0.01
1-Hexene	ND	ND	ND	0.01
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.08	0.10	0.51	0.14
trans-2-Hexene	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.08	0.08	0.05	0.09
2,4-Dimethylpentane	0.07	0.07	0.06	0.10
Benzene	0.12	0.11	0.10	0.16
Cyclohexane	0.17	0.62	0.28	4.11
2-Methylhexane	0.15	0.15	0.44	0.31
2,3-Dimethylpentane	0.11	0.10	0.11	0.23
3-Methylhexane	0.04	0.05	0.06	0.32
1-Heptene	0.02	0.01	0.15	0.03
2,2,4-Trimethylpentane	0.06	0.06	0.05	0.23
n-Heptane	0.06	0.05	0.05	0.24
Methylcyclohexane	0.05	0.05	0.05	0.12
2,2,3-Trimethylpentane	ND	ND	ND	0.07
2,3,4-Trimethylpentane	0.04	0.04	0.28	0.12
Toluene	0.14	0.15	1.95	1.17
2-Methylheptane	0.04	0.04	0.04	0.13
3-Methylheptane	0.04	0.04	0.40	0.12
1-Octene	ND	0.01	0.12	0.04
n-Octane	0.05	0.03	0.05	0.16
Ethylbenzene	0.05	0.05	0.06	0.26
m-Xylene/p-Xylene	0.07	0.07	0.10	0.93
Styrene	0.12	0.13	0.16	0.13
o-Xylene	0.04	0.05	0.06	0.41
1-Nonene	ND	ND	0.10	0.03
n-Nonane	0.03	0.03	0.04	0.08
Isopropylbenzene	0.04	0.06	0.18	0.06
a-Pinene	ND	0.06	0.06	0.18
n-Propylbenzene	0.04	0.04	0.04	0.09
m-Ethyltoluene	0.03	0.04	0.05	0.25
p-Ethyltoluene	0.04	0.04	0.05	0.13
1,3,5-Trimethylbenzene	0.04	0.03	0.04	0.14
o-Ethyltoluene	0.04	0.04	0.71	0.15
b-Pinene	0.07	0.08	0.11	0.04
1,2,4-Trimethylbenzene	0.06	0.05	0.06	0.32
1-Decene	ND	ND	ND	ND
n-Decane	0.03	0.03	0.03	0.14
1,2,3-Trimethylbenzene	0.03	0.02	0.03	0.11
m-Diethylbenzene	0.03	0.03	0.03	0.06
p-Diethylbenzene	0.02	0.02	0.34	0.05
1-Undecene	0.01	ND	0.06	0.01
n-Undecane	0.04	0.03	0.07	0.18
1-Dodecene	ND	ND	0.025	ND
n-Dodecane	0.01	0.01	0.01	0.03
1-Tridecene	ND	ND	0.00	ND
n-Tridecane	ND	0.009	0.012	ND
TNMOC (speciated), ppbv	7.21	7.38	12.06	18.72
TNMOC (w/ unknowns), ppbC	56.62	139.67	107.16	151.96

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**16265**	**16255**	**16273**	**16491**
Sampling Date:	**7/17/99**	**7/23/99**	**8/4/99**	**8/16/99**
Analysis Date:	**8/10/99**	**8/10/99**	**8/16/99**	**9/3/99**
Compound				
Ethylene	0.47	0.47	0.30	0.39
Acetylene	0.45	0.39	0.29	0.27
Ethane	1.77	1.14	0.92	0.84
Propylene	0.25	0.25	0.18	0.33
Propane	1.09	0.89	0.62	1.06
Propyne	ND	ND	ND	ND
Isobutane	0.19	0.14	0.10	0.16
Isobutene/1-Butene	0.11	0.12	0.10	0.09
1,3-Butadiene	ND	ND	ND	ND
n-Butane	0.32	0.25	0.18	0.22
trans-2-Butene	0.08	0.07	0.07	0.06
cis-2-Butene	0.14	0.12	0.10	0.20
3-Methyl-1-butene	ND	ND	ND	0.25
Isopentane	0.23	0.20	0.16	ND
1-Pentene	0.07	0.08	0.06	0.06
2-Methyl-1-butene	0.04	0.03	0.02	ND
n-Pentane	0.23	0.20	0.19	0.13
Isoprene	1.33	0.96	0.22	0.46
trans-2-Pentene	0.13	0.07	0.05	0.05
cis-2-Pentene	0.09	0.08	0.07	0.07
2-Methyl-2-butene	0.05	0.02	0.02	ND
2,2-Dimethylbutane	0.12	0.11	0.11	0.10
Cyclopentene	0.12	0.11	0.03	0.03
4-Methyl-1-pentene	ND	ND	ND	ND
Cyclopentane	0.05	0.05	0.05	0.06
2,3-Dimethylbutane	0.11	0.10	0.10	0.11
2-Methylpentane	0.25	0.15	0.12	0.19
3-Methylpentane	0.09	0.09	0.09	0.13
2-Methyl-1-pentene	ND	0.01	0.01	ND
1-Hexene	ND	0.01	0.02	ND
2-Ethyl-1-butene	ND	ND	ND	ND
n-Hexane	0.12	0.10	0.10	0.13
trans-2-Hexene	ND	ND	ND	ND
cis-2-Hexene	ND	ND	ND	ND
Methylcyclopentane	0.10	0.08	0.07	0.06
2,4-Dimethylpentane	0.08	0.06	0.06	0.07
Benzene	0.17	0.13	0.10	0.13
Cyclohexane	10.01	0.17	0.14	0.22
2-Methylhexane	0.19	0.18	0.16	0.19
2,3-Dimethylpentane	0.11	0.09	0.10	0.11
3-Methylhexane	0.07	0.05	0.05	0.25
1-Heptene	0.02	0.02	0.01	ND
2,2,4-Trimethylpentane	0.07	0.09	0.06	0.07
n-Heptane	0.06	0.05	0.04	0.06
Methylcyclohexane	0.06	0.05	0.05	0.06
2,2,3-Trimethylpentane	ND	ND	ND	ND
2,3,4-Trimethylpentane	0.05	0.04	0.04	0.05
Toluene	0.20	0.20	0.12	0.21
2-Methylheptane	0.04	0.04	0.03	0.05
3-Methylheptane	0.04	0.04	0.04	0.04
1-Octene	0.02	0.01	ND	0.01
n-Octane	0.05	0.05	0.05	0.06
Ethylbenzene	0.07	0.05	0.04	0.26
m-Xylene/p-Xylene	0.10	0.11	0.07	0.37
Styrene	0.15	0.18	0.11	0.27
o-Xylene	0.05	0.05	0.04	0.14
1-Nonene	0.01	ND	ND	0.01
n-Nonane	0.05	0.04	0.03	0.05
Isopropylbenzene	0.07	0.05	0.04	0.05
a-Pinene	0.17	0.17	0.12	0.08
n-Propylbenzene	0.05	0.04	0.03	0.05
m-Ethyltoluene	0.06	0.07	0.04	0.08
p-Ethyltoluene	0.05	0.04	0.04	0.05
1,3,5-Trimethylbenzene	0.04	0.03	0.03	0.03
o-Ethyltoluene	0.05	0.06	0.05	0.06
b-Pinene	0.12	0.14	0.08	0.17
1,2,4-Trimethylbenzene	0.07	0.07	0.06	0.06
1-Decene	ND	ND	ND	ND
n-Decane	0.04	0.03	0.03	0.07
1,2,3-Trimethylbenzene	0.03	0.03	0.03	0.07
m-Diethylbenzene	0.04	0.04	0.05	0.06
p-Diethylbenzene	0.02	0.03	0.02	0.11
1-Undecene	0.01	0.01	ND	0.04
n-Undecane	0.04	0.03	0.04	0.14
1-Dodecene	0.010	0.011	0.009	0.004
n-Dodecane	0.01	0.01	0.01	0.01
1-Tridecene	0.00	0.00	ND	0.00
n-Tridecane	0.010	0.012	0.013	0.015
TNMOC (speciated), ppbv	20.50	8.89	6.38	9.29
TNMOC (w/ unknowns), ppbC	153.82	89.29	60.28	184.17

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

SNMOC OPTION REPORT
SITE CODE: UNVT
Rutland, VT
Reported in ppbv

Sample No.:	**16611**	**16801**	**16890**
Sampling Date:	**8/28/99**	**9/9/99**	**9/21/99**
Analysis Date:	**VOID**	**10/6/99**	**10/11/99**
Compound			
Ethylene		0.62	0.57
Acetylene		0.43	0.37
Ethane		1.63	1.07
Propylene		0.34	0.41
Propane		0.96	0.88
Propyne		ND	ND
Isobutane		0.28	0.18
Isobutene/1-Butene		0.13	0.13
1,3-Butadiene		ND	ND
n-Butane		0.30	0.24
trans-2-Butene		0.08	0.06
cis-2-Butene		0.09	0.10
3-Methyl-1-butene		ND	ND
Isopentane		0.80	0.18
1-Pentene		0.13	0.06
2-Methyl-1-butene		0.07	0.02
n-Pentane		0.36	0.12
Isoprene		0.32	0.08
trans-2-Pentene		0.06	0.07
cis-2-Pentene		0.07	0.07
2-Methyl-2-butene		0.02	0.03
2,2-Dimethylbutane		0.15	0.09
Cyclopentene		0.03	0.03
4-Methyl-1-pentene		ND	ND
Cyclopentane		0.08	0.06
2,3-Dimethylbutane		0.10	0.09
2-Methylpentane		0.21	0.27
3-Methylpentane		0.13	0.10
2-Methyl-1-pentene		0.01	0.01
1-Hexene		0.07	0.01
2-Ethyl-1-butene		0.12	0.08
n-Hexane		ND	ND
trans-2-Hexene		ND	0.01
cis-2-Hexene		ND	ND
Methylcyclopentane		0.07	0.05
2,4-Dimethylpentane		0.08	0.06
Benzene		0.15	0.13
Cyclohexane		10.17	0.09
2-Methylhexane		0.17	0.19
2,3-Dimethylpentane		0.10	0.10
3-Methylhexane		0.08	0.25
1-Heptene		0.05	0.01
2,2,4-Trimethylpentane		0.08	0.08
n-Heptane		0.06	0.05
Methylcyclohexane		0.05	0.07
2,2,3-Trimethylpentane		ND	ND
2,3,4-Trimethylpentane		0.05	0.05
Toluene		0.48	0.22
2-Methylheptane		0.07	0.05
3-Methylheptane		0.04	0.04
1-Octene		ND	0.01
n-Octane		0.08	0.05
Ethylbenzene		0.33	0.27
m-Xylene/p-Xylene		0.25	0.29
Styrene		0.37	0.22
o-Xylene		0.15	0.13
1-Nonene		0.05	ND
n-Nonane		0.13	0.05
Isopropylbenzene		0.05	0.06
a-Pinene		0.13	ND
n-Propylbenzene		0.07	0.05
m-Ethyltoluene		0.10	0.07
p-Ethyltoluene		0.07	0.04
1,3,5-Trimethylbenzene		0.07	0.02
o-Ethyltoluene		0.06	0.04
b-Pinene		0.26	0.04
1,2,4-Trimethylbenzene		ND	ND
1-Decene		0.10	0.07
n-Decane		0.14	0.04
1,2,3-Trimethylbenzene		0.06	0.05
m-Diethylbenzene		0.11	0.10
p-Diethylbenzene		0.14	0.15
1-Undecene		0.03	0.02
n-Undecane		0.18	0.09
1-Dodecene		0.015	0.003
n-Dodecane		0.02	0.01
1-Tridecene		ND	ND
n-Tridecane		0.003	0.003
TNMOC (speciated), ppbv		22.26	8.69
TNMOC (w/ unknowns), ppbC		296.65	191.28

@ - Isopentane can not be quantitated in the 9/14/98 sample due to an analytical interference.
# - The QC recovery for n-Undecane was outside of QC criteria on 1/11/99.

APPENDIX G

1998/1999 CARBONYL RAW MONITORING DATA

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA **B2LA**

SAMPLE #	14781	14896	15065	15127	15168	15176	15188
SAMPLE DATE	9/8/98	9/20/98	10/2/98	10/14/98	11/1/98	11/7/99	11/13/98
ANALYSIS DATE	10/28/98	11/12/98	11/16/98	11/16/98	VOID	12/22/98	12/22/98
FILE NAME	Q8J-023	Q8KK023	Q8KP008	Q8KP009	VOID	Q8LU019	Q8LU027
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	1.11	1.63	3.76	VOID	1.40	1.24
Acetaldehyde	VOID	0.60	0.61	1.68	VOID	0.70	0.97
Acrolein	VOID	0.01	0.05	0.03	VOID	0.04	0.02
Acetone	VOID	0.70	0.46	2.91	VOID	0.78	1.25
Propionaldehyde	VOID	0.10	0.09	0.23	VOID	0.08	0.08
Crotonaldehyde	VOID	ND	ND	ND	VOID	0.05	ND
Butyr/Isobutyraldehyde	VOID	0.81	0.09	0.50	VOID	0.21	0.27
Benzaldehyde	VOID	0.06	0.07	0.11	VOID	0.03	0.05
Isovaleraldehyde	VOID	0.02	0.01	0.02	VOID	0.01	0.02
Valeraldehyde	VOID	0.03	0.02	0.05	VOID	0.03	0.02
Tolualdehydes	VOID	ND	ND	0.03	VOID	0.04	ND
Hexaldehyde	VOID	0.03	0.02	0.04	VOID	0.02	0.02
2,5-Dimethylbenzaldehyde	VOID	ND	0.02	ND	VOID	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	15204	15214	15244	15366	15369	15436	15438	15468
SAMPLE DATE	11/19/98	11/25/98	12/1/98	1/30/99	1/30/99	2/11/99	2/17/99	2/25/99
ANALYSIS DATE	12/22/98	12/22/98	12/22/98	VOID	3/16/99	VOID	VOID	VOID
FILE NAME	Q8LU029	Q8LU033	Q8LU036	VOID	09CO024	VOID	VOID	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.52	1.76	1.40	VOID	0.72	VOID	VOID	VOID
Acetaldehyde	1.10	1.11	0.82	VOID	0.36	VOID	VOID	VOID
Acrolein	0.01	0.02	0.01	VOID	ND	VOID	VOID	VOID
Acetone	0.74	1.17	0.79	VOID	0.50	VOID	VOID	VOID
Propionaldehyde	0.15	0.11	0.08	VOID	0.07	VOID	VOID	VOID
Crotonaldehyde	ND	ND	ND	VOID	0.02	VOID	VOID	VOID
Butyr/Isobutyraldehyde	0.14	0.17	0.21	VOID	0.02	VOID	VOID	VOID
Benzaldehyde	0.08	0.05	0.04	VOID	0.02	VOID	VOID	VOID
Isovaleraldehyde	0.02	0.03	0.01	VOID	ND	VOID	VOID	VOID
Valeraldehyde	0.04	0.04	0.02	VOID	0.02	VOID	VOID	VOID
Tolualdehydes	0.03	0.04	0.01	VOID	0.02	VOID	VOID	VOID
Hexaldehyde	0.02	0.02	0.02	VOID	0.01	VOID	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	ND	0.01	VOID	ND	VOID	VOID	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	15490	15510	15533	15673	15696	15698	15708	15760
SAMPLE DATE	3/7/99	3/13/99	3/19/99	4/19/99	4/20/99	4/20/99	4/26/99	4/30/99
ANALYSIS DATE	3/17/99	VOID	4/1/99	VOID	5/20/99	VOID	VOID	VOID
FILE NAME	O9CQ008	VOID	O9C%030	VOID	O9ES020	VOID	VOID	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.73	VOID	1.87	VOID	0.85	VOID	VOID	VOID
Acetaldehyde	0.56	VOID	0.99	VOID	0.56	VOID	VOID	VOID
Acrolein	ND	VOID	0.02	VOID	ND	VOID	VOID	VOID
Acetone	0.79	VOID	1.51	VOID	0.40	VOID	VOID	VOID
Propionaldehyde	0.10	VOID	0.22	VOID	0.07	VOID	VOID	VOID
Crotonaldehyde	0.03	VOID	0.06	VOID	0.01	VOID	VOID	VOID
Butyr/Isobutyraldehyde	0.04	VOID	0.06	VOID	0.04	VOID	VOID	VOID
Benzaldehyde	0.01	VOID	0.02	VOID	0.02	VOID	VOID	VOID
Isovaleraldehyde	ND	VOID	ND	VOID	ND	VOID	VOID	VOID
Valeraldehyde	0.01	VOID	0.04	VOID	0.02	VOID	VOID	VOID
Tolualdehydes	0.02	VOID	0.02	VOID	ND	VOID	VOID	VOID
Hexaldehyde	0.02	VOID	0.07	VOID	0.02	VOID	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	VOID	ND	VOID	ND	VOID	VOID	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	15761	15757	15779	15816	15833	16040	16134	16247
SAMPLE DATE	4/30/99	5/2/99	5/25/99	6/4/99	6/11/99	7/5/99	7/23/99	7/29/99
ANALYSIS DATE	VOID	VOID	VOID	6/10/99	6/19/99	8/6/99	VOID	8/24/99
FILE NAME	VOID	VOID	VOID	Q9FH031	O9FR021	O9HE013	VOID	O9HX011
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	VOID	VOID	2.78	1.67	2.69	VOID	1.89
Acetaldehyde	VOID	VOID	VOID	0.36	0.47	0.95	VOID	0.68
Acrolein	VOID	VOID	VOID	0.06	ND	0.02	VOID	ND
Acetone	VOID	VOID	VOID	0.11	0.07	0.12	VOID	0.10
Propionaldehyde	VOID	VOID	VOID	0.10	0.08	0.18	VOID	0.09
Crotonaldehyde	VOID	VOID	VOID	ND	ND	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	VOID	VOID	0.26	0.27	0.21	VOID	0.09
Benzaldehyde	VOID	VOID	VOID	0.02	0.03	0.05	VOID	0.03
Isovaleraldehyde	VOID	VOID	VOID	ND	0.01	0.02	VOID	0.01
Valeraldehyde	VOID	VOID	VOID	0.03	0.04	0.09	VOID	0.05
Tolualdehydes	VOID	VOID	VOID	0.06	0.06	0.04	VOID	0.04
Hexaldehyde	VOID	VOID	VOID	0.06	0.07	0.17	VOID	0.08
2,5-Dimethylbenzaldehyde	VOID	VOID	VOID	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	16317	16476	16696	16722	16870
SAMPLE DATE	8/10/99	8/22/99	9/5/99	9/15/99	9/27/99
ANALYSIS DATE	VOID	9/11/99	VOID	10/1/99	VOID
FILE NAME	VOID	O9IJ020	VOID	O9I$036	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	1.21	VOID	4.16	VOID
Acetaldehyde	VOID	0.46	VOID	1.12	VOID
Acrolein	VOID	0.01	VOID	0.004	VOID
Acetone	VOID	0.07	VOID	1.85	VOID
Propionaldehyde	VOID	0.08	VOID	0.18	VOID
Crotonaldehyde	VOID	ND	VOID	ND	VOID
Butyr/Isobutyraldehyde	VOID	0.18	VOID	0.19	VOID
Benzaldehyde	VOID	0.02	VOID	0.07	VOID
Isovaleraldehyde	VOID	0.01	VOID	0.01	VOID
Valeraldehyde	VOID	0.02	VOID	0.03	VOID
Tolualdehydes	VOID	0.02	VOID	0.05	VOID
Hexaldehyde	VOID	0.04	VOID	0.03	VOID
2,5-Dimethylbenzaldehyde	VOID	ND	VOID	ND	VOID

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Baton Rouge, LA
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK009	O9C%013	VOID	VOID
FB ID	14897 FB	15534 FB	15758 FB	15780 FB
Sample date	9/20/98	3/19/99	5/2/99	5/23/99
Date Analyzed	11/11/98	3/31/99	VOID	VOID
Formaldehyde	1.21	2.14	VOID	VOID
Acetaldehyde	0.21	1.95	VOID	VOID
Acrolein	0.02	0.00	VOID	VOID
Acetone	0.45	3.91	VOID	VOID
Propionaldehyde	0.00	0.31	VOID	VOID
Crotonaldehyde	0.00	0.09	VOID	VOID
Butyr/Isobutyraldehyde	0.91	0.05	VOID	VOID
Benzaldehyde	0.00	0.00	VOID	VOID
Isovaleraldehyde	0.00	0.00	VOID	VOID
Valeraldehyde	0.00	0.00	VOID	VOID
Tolualdehydes	0.00	0.09	VOID	VOID
Hexaldehyde	0.04	0.03	VOID	VOID
2,5-Dimethylbenzaldehyde	0.00	0.00	VOID	VOID

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK009	O9C%013	VOID	VOID
FB ID	14897 FB	15534 FB	15758 FB	15780 FB
Date Analyzed	11/11/98	3/31/99	VOID	VOID
Formaldehyde	0.69	1.22	VOID	VOID
Acetaldehyde	0.16	1.53	VOID	VOID
Acrolein	0.02	ND	VOID	VOID
Acetone	0.44	3.81	VOID	VOID
Propionaldehyde	ND	0.30	VOID	VOID
Crotonaldehyde	ND	0.10	VOID	VOID
Butyraldehyde	1.04	0.06	VOID	VOID
Benzaldehyde	ND	ND	VOID	VOID
Isovaleraldehyde	ND	ND	VOID	VOID
Valeraldehyde	ND	ND	VOID	VOID
Tolualdehydes	ND	0.15	VOID	VOID
Hexaldehyde	0.06	0.05	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	ND	VOID	VOID

1998 UATMP CARBONYLS

Sample site: Beulah, ND **BUND**

Derivatized Conc. (ug/mL)	15375 D1	15375 R1	15376 D2	15376 R2	15408	15430	15442	15452	15498	15538 D1
SAMPLE DATE	2/3/99	2/3/99	2/3/99	2/3/99	2/13/99	2/17/99	2/23/99	3/1/99	3/7/99	3/13/99
ANALYSIS DATE	3/17/99	3/17/99	3/17/99	3/17/99	3/16/99	3/16/99	3/16/99	3/17/99	3/17/99	4/1/99
FILE NAME	09CO076	09CO077	09CO078	09CO079	09CO032	09CO033	09CO042	O9CQ006	O9CQ007	O9C%038
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.11	1.10	1.01	1.05	0.98	0.88	0.88	0.76	0.81	0.50
Acetaldehyde	0.62	0.63	0.76	0.76	0.58	0.56	0.47	0.43	0.48	0.28
Acrolein	ND	ND	0.04	0.04	ND	ND	ND	ND	ND	ND
Acetone	1.72	1.73	3.71	3.70	0.79	0.70	0.68	0.71	0.77	0.54
Propionaldehyde	0.05	0.05	0.06	0.06	0.07	0.09	0.08	0.07	0.07	0.04
Crotonaldehyde	ND	ND	ND	ND	0.02	0.02	0.02	ND	0.02	0.01
Butyr/Isobutyraldehyde	0.05	0.04	0.04	0.04	0.05	0.05	0.04	0.02	0.03	0.02
Benzaldehyde	0.02	0.02	0.03	0.03	0.01	0.01	0.01	ND	0.01	0.003
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002
Valeraldehyde	0.04	0.04	0.06	0.06	0.05	0.04	0.03	0.02	0.04	0.03
Tolualdehydes	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	ND
Hexaldehyde	0.09	0.09	0.18	0.18	0.10	0.03	0.05	0.09	0.05	0.07
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	15538 R1	15539 D2	15539 R2	15541 D1	15541 R1	15543 D2	15543 R2	15571	15641	15647
SAMPLE DATE	3/13/99	3/13/99	3/13/99	3/19/99	3/19/99	3/19/99	3/19/99	3/25/99	3/31/99	4/6/99
ANALYSIS DATE	4/1/99	4/1/99	4/1/99	4/1/99	4/1/99	4/1/99	4/1/99	4/14/99	5/12/99	5/12/99
FILE NAME	O9C%039	O9C%035	O9C%036	O9C%042	O9C%043	O9C%040	O9C%041	O9DM027	O9EK019	O9EK024
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.50	1.05	1.04	0.50	0.50	1.00	1.05	0.75	0.64	0.79
Acetaldehyde	0.28	0.59	0.58	0.20	0.20	0.52	0.52	0.45	0.41	0.43
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.53	1.14	1.13	0.34	0.35	0.92	0.92	0.78	0.71	1.09
Propionaldehyde	0.04	0.09	0.09	0.03	0.03	0.07	0.07	0.07	0.06	0.06
Crotonaldehyde	0.01	0.01	0.01	0.01	0.01	0.02	0.02	ND	0.02	0.01
Butyr/Isobutyraldehyde	0.02	0.04	0.04	0.01	0.01	0.04	0.04	0.02	0.04	0.03
Benzaldehyde	0.01	0.01	0.01	ND	0.003	0.004	0.01	ND	0.01	0.01
Isovaleraldehyde	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.03	0.05	0.05	0.01	0.02	0.04	0.03	0.02	0.02	0.02
Tolualdehydes	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	ND	ND
Hexaldehyde	0.07	0.07	0.08	0.06	0.06	0.07	0.07	0.02	0.06	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	15638	15683 D1	15683 R1	15685 D2	15685 R2	15706	15713	15728	15730	15774
SAMPLE DATE	4/12/99	4/18/99	4/18/99	4/18/99	4/18/99	4/24/99	4/30/99	5/6/99	5/6/99	5/18/99
ANALYSIS DATE	5/19/99	5/20/99	5/20/99	5/20/99	5/20/99	6/4/99	6/4/99	VOID	VOID	6/9/99
FILE NAME	O9ES016	O9ES038	O9ES039	O9ES040	O9ES041	Q9FD015	Q9FD016	VOID	VOID	Q9FH018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.54	0.72	0.75	0.29	0.29	0.70	1.00	VOID	VOID	1.42
Acetaldehyde	0.37	0.48	0.47	0.22	0.22	0.65	0.67	VOID	VOID	0.69
Acrolein	0.02	ND	ND	ND	ND	0.01	0.02	VOID	VOID	0.05
Acetone	0.78	1.07	1.06	0.47	0.47	1.40	1.50	VOID	VOID	1.20
Propionaldehyde	0.05	0.07	0.07	0.04	0.03	0.07	0.06	VOID	VOID	0.09
Crotonaldehyde	0.02	0.02	0.02	0.01	0.01	ND	ND	VOID	VOID	ND
Butyr/Isobutyraldehyde	0.03	0.03	0.03	0.01	0.01	0.29	0.40	VOID	VOID	0.43
Benzaldehyde	0.01	0.005	0.007	0.004	0.005	ND	ND	VOID	VOID	0.03
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	VOID	VOID	0.025
Valeraldehyde	0.02	0.02	0.02	0.01	0.01	ND	0.02	VOID	VOID	0.07
Tolualdehydes	ND	ND	ND	ND	ND	ND	ND	VOID	VOID	0.06
Hexaldehyde	0.06	0.04	0.04	0.04	0.04	0.08	0.06	VOID	VOID	0.10
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	VOID	VOID	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	15772	15835	15900	15930	15970	16004	16136	16147	16204	16282
SAMPLE DATE	5/24/99	6/11/99	6/17/99	6/23/99	6/29/99	7/5/99	7/17/99	7/23/99	7/29/99	8/4/99
ANALYSIS DATE	6/10/99	6/18/99	7/7/99	7/7/99	7/7/99	8/6/99	8/6/99	8/6/99	8/6/99	8/24/99
FILE NAME	Q9FH022	O9FR018	O9GF017	O9GF022	O9GF024	O9HE014	O9HE029	O9HE034	O9HE036	O9HX013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.34	1.23	1.86	1.76	1.15	1.21	1.27	2.14	3.50	2.71
Acetaldehyde	0.57	0.49	0.48	0.61	0.52	0.47	0.56	0.83	1.77	1.61
Acrolein	0.03	0.04	0.04	0.05	0.03	0.03	0.03	0.03	0.04	0.03
Acetone	1.25	0.89	1.09	1.47	1.12	1.17	0.95	1.87	3.46	2.18
Propionaldehyde	0.08	0.07	0.07	0.09	0.07	0.06	0.08	0.10	0.22	0.18
Crotonaldehyde	ND	0.01	ND	ND	0.01	ND	ND	ND	0.01	ND
Butyr/Isobutyraldehyde	0.46	0.08	0.09	0.09	0.07	0.04	0.07	0.12	0.21	0.20
Benzaldehyde	0.03	0.03	0.04	0.03	0.05	0.02	0.03	0.05	0.07	0.07
Isovaleraldehyde	0.032	0.01	ND	0.01	0.01	ND	0.01	0.012	0.04	0.03
Valeraldehyde	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.05	0.09	0.08
Tolualdehydes	ND	0.02	0.02	0.03	0.02	0.02	ND	0.02	0.03	0.03
Hexaldehyde	0.08	0.09	0.07	0.10	0.06	0.09	0.08	0.07	0.14	0.11
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	16315	16360	16441	16600	16675	16703	16787 D1	16787 R1	16789 D2	16789 R2	16800
SAMPLE DATE	8/10/99	8/16/99	8/22/99	8/28/99	9/3/99	9/9/99	9/15/99	9/15/99	9/15/99	9/15/99	9/21/99
ANALYSIS DATE	8/24/99	VOID	9/11/99	9/23/99	9/23/99	9/23/99	10/2/99	10/2/99	10/2/99	10/2/99	10/13/99
FILE NAME	O9HX014	VOID	O9IJ023	O9IV022	O9IV021	O9IV023	O9I$053	O9I$054	O9I$055	O9I$056	O9JM019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.44	VOID	2.45	2.21	1.35	1.33	1.30	1.29	1.28	1.24	1.63
Acetaldehyde	1.30	VOID	0.86	0.85	0.80	0.48	0.46	0.46	0.44	0.42	0.72
Acrolein	0.04	VOID	0.03	0.04	0.06	0.03	ND	ND	ND	ND	0.02
Acetone	1.91	VOID	1.83	1.45	1.06	1.73	1.78	1.78	1.59	1.53	2.20
Propionaldehyde	0.15	VOID	0.10	0.10	0.07	0.05	0.06	0.06	0.06	0.06	0.10
Crotonaldehyde	ND	VOID	ND	ND	ND	ND	ND	0.01	ND	ND	0.01
Butyr/Isobutyraldehyde	0.19	VOID	0.12	0.12	0.09	0.07	0.07	0.08	0.07	0.07	0.12
Benzaldehyde	0.06	VOID	0.03	0.03	0.02	0.02	0.01	0.02	0.01	0.01	0.03
Isovaleraldehyde	0.02	VOID	0.01	0.01	0.01	ND	ND	ND	ND	ND	0.01
Valeraldehyde	0.07	VOID	0.05	0.06	0.04	0.04	0.04	0.04	0.03	0.03	0.04
Tolualdehydes	0.03	VOID	0.02	0.03	0.03	0.02	ND	ND	ND	ND	ND
Hexaldehyde	0.10	VOID	0.09	0.09	0.09	0.07	0.08	0.07	0.06	0.05	0.05
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	16839 D1	16839 R1	16841 D2	16841 R2
SAMPLE DATE	9/27/99	9/27/99	9/27/99	9/27/99
ANALYSIS DATE	10/14/99	10/14/99	10/14/99	10/14/99
FILE NAME	O9JM026	O9JM027	O9JM028	O9JM029
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.99	1.02	1.10	1.10
Acetaldehyde	0.39	0.39	0.38	0.38
Acrolein	0.02	0.02	0.02	0.01
Acetone	0.93	0.96	0.88	0.88
Propionaldehyde	0.05	0.05	0.05	0.05
Crotonaldehyde	0.01	0.01	0.01	0.01
Butyr/Isobutyraldehyde	0.06	0.06	0.07	0.07
Benzaldehyde	0.02	0.02	0.02	0.02
Isovaleraldehyde	ND	ND	0.01	0.01
Valeraldehyde	0.03	0.03	0.02	0.03
Tolualdehydes	0.02	0.02	0.02	0.01
Hexaldehyde	0.05	0.06	0.04	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND

u - Concentration is below the detection limi

FIELD BLANK DATA

Sample site: Beulah, ND
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	O9ES007	Q9FD008	Q9FH009
FB ID	15639 FB	15714 FB	15775 FB
Sample date	4/12/99	4/30/99	5/18/99
Date Analyzed	5/19/99	6/4/99	6/9/99
Formaldehyde	0.02	0.10	0.08
Acetaldehyde	0.08	0.10	0.10
Acrolein	0.05	0.00	0.00
Acetone	0.14	0.00	0.17
Propionaldehyde	0.00	0.29	0.00
Crotonaldehyde	0.00	0.05	0.00
Butyr/Isobutyraldehyde	0.00	0.29	0.39
Benzaldehyde	0.00	0.00	0.00
Isovaleraldehyde	0.00	0.00	0.00
Valeraldehyde	0.00	0.00	0.00
Tolualdehydes	0.00	0.00	0.00
Hexaldehyde	0.00	0.05	0.00
2,5-Dimethylbenzaldeh	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	O9ES007	Q9FD008	Q9FH009
FB ID	15639 FB	15714 FB	15775 FB
Date Analyzed	5/19/99	6/4/99	6/9/99
Formaldehyde	0.01	0.05	0.05
Acetaldehyde	0.07	0.08	0.08
Acrolein	0.05	ND	ND
Acetone	0.14	0.00	0.17
Propionaldehyde	ND	0.29	ND
Crotonaldehyde	ND	0.05	ND
Butyraldehyde	ND	0.33	0.45
Benzaldehyde	ND	ND	ND
Isovaleraldehyde	ND	ND	ND
Valeraldehyde	ND	ND	ND
Tolualdehydes	ND	ND	ND
Hexaldehyde	ND	0.07	ND
2,5-Dimethylbenzaldeh	ND	ND	ND

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont BRVT

Derivatized Conc. (ug/mL)	14685	14812	15055	15114	15138	15156	15196
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98
ANALYSIS DATE	10/27/98	10/28/98	11/12/98	11/16/98	11/16/98	11/25/98	11/25/98
FILE NAME	Q8J~012	Q8J~029	Q8KK024	Q8KP012	Q8KP013	Q8KW021	Q8KW025
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.22	1.56	1.41	1.08	1.00	0.72	1.17
Acetaldehyde	0.44	0.79	0.71	0.66	0.52	0.36	0.75
Acrolein	0.02	0.09	ND	0.05	ND	0.01	0.03
Acetone	0.79	0.90	1.16	0.69	1.18	0.86	1.33
Propionaldehyde	0.07	0.10	0.09	0.08	0.07	0.05	0.09
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.24	0.11	0.11	0.27	0.27	0.28	0.22
Benzaldehyde	0.04	0.07	0.08	0.03	0.03	0.03	0.05
Isovaleraldehyde	0.01	0.01	0.02	0.01	ND	ND	0.015
Valeraldehyde	0.02	0.03	0.03	0.03	0.02	0.02	0.02
Tolualdehydes	0.02	0.04	0.04	ND	ND	0.02	0.03
Hexaldehyde	0.04	0.05	0.06	0.03	0.03	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	0.01

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15238	15252	15283	15305	15319	15350 D1	15350 R1
SAMPLE DATE	11/25/98	12/7/98	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99
ANALYSIS DATE	12/21/98	12/21/98	1/8/99	2/20/99	2/20/99	2/20/99	2/20/99
FILE NAME	Q8LU010	Q8LU014	O9AG034	O9BS016	O9BS022	O9BS027	O9BS028
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.11	1.12	1.32	2.26	1.69	0.88	0.90
Acetaldehyde	0.56	0.74	0.87	1.17	1.08	0.56	0.57
Acrolein	0.02	0.01	0.04	0.05	0.03	0.01	0.01
Acetone	1.16	0.94	1.12	1.42	1.40	0.72	0.74
Propionaldehyde	0.07	0.10	0.10	0.12	0.13	0.06	0.06
Crotonaldehyde	ND	0.04	0.01	0.03	0.02	0.01	0.01
Butyr/Isobutyraldehyde	0.11	0.13	0.14	0.19	0.13	0.06	0.06
Benzaldehyde	0.05	0.03	0.05	0.07	0.07	0.04	0.04
Isovaleraldehyde	0.01	0.02	0.01	0.02	0.01	0.01	0.01
Valeraldehyde	0.02	0.03	0.02	0.04	0.03	0.02	0.02
Tolualdehydes	0.03	0.03	0.04	0.05	0.06	0.02	0.02
Hexaldehyde	0.03	0.03	0.03	0.05	0.05	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15352 D2	15352 R2	15414	15444	15484	15548	15588 D1
SAMPLE DATE	1/24/99	1/24/99	2/5/99	2/15/99	3/1/99	3/13/99	3/25/99
ANALYSIS DATE	2/20/99	2/20/99	3/16/99	3/16/99	3/16/99	3/31/99	4/14/99
FILE NAME	O9BS029	O9BS030	09CO026	09CO034	09CO051	O9C%020	O9DM044
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.93	0.89	0.83	1.47	1.36	1.02	0.93
Acetaldehyde	0.58	0.58	0.41	0.96	0.71	0.54	0.42
Acrolein	0.01	0.01	ND	ND	ND	ND	ND
Acetone	0.75	0.75	0.71	2.62	1.09	0.76	0.78
Propionaldehyde	0.06	0.06	0.08	0.15	0.11	0.10	0.07
Crotonaldehyde	0.01	0.01	0.04	0.12	0.09	0.03	ND
Butyr/Isobutyraldehyde	0.06	0.06	0.03	0.07	0.05	0.05	0.03
Benzaldehyde	0.04	0.05	0.02	0.06	0.04	0.04	0.02
Isovaleraldehyde	0.010	0.01	ND	ND	ND	ND	ND
Valeraldehyde	0.02	0.02	0.04	0.04	0.04	0.03	0.02
Tolualdehydes	0.03	0.03	0.03	0.06	0.05	0.02	0.02
Hexaldehyde	0.04	0.04	0.02	0.06	0.05	0.03	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15588 R1	15590 D2	15590 R2	15657	15827	15829	15790
SAMPLE DATE	3/25/99	3/25/99	3/25/99	4/6/99	5/12/99	5/12/99	5/18/99
ANALYSIS DATE	4/14/99	4/14/99	4/14/99	5/12/99	VOID	VOID	6/9/99
FILE NAME	O9DM045	O9DM046	O9DM048	O9EK025	VOID	VOID	Q9FH019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.95	0.93	0.93	1.57	VOID	VOID	1.83
Acetaldehyde	0.43	0.40	0.40	0.80	VOID	VOID	1.14
Acrolein	ND	ND	ND	ND	VOID	VOID	0.04
Acetone	0.79	0.75	0.75	1.37	VOID	VOID	0.76
Propionaldehyde	0.07	0.07	0.07	0.12	VOID	VOID	0.13
Crotonaldehyde	ND	ND	ND	0.04	VOID	VOID	ND
Butyr/Isobutyraldehyde	0.03	0.03	0.03	0.06	VOID	VOID	0.26
Benzaldehyde	0.02	0.02	0.02	0.03	VOID	VOID	0.06
Isovaleraldehyde	ND	ND	ND	ND	VOID	VOID	0.047
Valeraldehyde	0.02	0.02	0.02	0.02	VOID	VOID	0.05
Tolualdehydes	0.02	0.02	0.02	0.00	VOID	VOID	0.04
Hexaldehyde	0.02	0.02	0.02	0.04	VOID	VOID	0.11
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	VOID	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15837	15839	15920	16023	16270	16253	16311
SAMPLE DATE	5/30/99	6/5/99	6/17/99	6/29/99	7/17/99	7/23/99	8/2/99
ANALYSIS DATE	6/18/99	6/18/99	7/7/99	8/5/99	8/19/99	8/19/99	8/24/99
FILE NAME	O9FR013	O9FR014	O9GF016	O9HE009	O9HQ025	O9HQ030	O9HX012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.54	2.50	2.23	1.94	2.93	3.55	3.15
Acetaldehyde	1.51	0.96	0.73	0.78	0.72	1.12	0.82
Acrolein	0.04	0.02	0.01	0.01	0.02	ND	ND
Acetone	1.41	2.01	1.50	0.22	0.18	1.35	1.72
Propionaldehyde	0.24	0.15	0.11	0.08	0.14	0.16	0.09
Crotonaldehyde	0.01	0.01	ND	ND	ND	0.01	ND
Butyr/Isobutyraldehyde	0.19	0.16	0.13	0.07	0.15	0.18	0.17
Benzaldehyde	0.16	0.13	0.09	0.04	0.06	ND	0.16
Isovaleraldehyde	0.032	0.02	0.02	0.02	0.03	ND	0.02
Valeraldehyde	0.10	0.06	0.04	0.05	0.11	0.08	0.07
Tolualdehydes	0.06	0.07	0.05	0.04	0.06	0.07	0.07
Hexaldehyde	0.17	0.11	0.06	0.06	0.14	0.11	0.08
2,5-Dimethylbenzaldehyde	0.00	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	16497	16612	16614	16804	16904
SAMPLE DATE	8/16/99	8/28/99	9/3/99	9/9/99	9/21/99
ANALYSIS DATE	9/11/99	VOID	9/23/99	10/1/99	10/13/99
FILE NAME	O9IJ016	VOID	O9IV027	O9I$034	O9JM011
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.85	VOID	2.82	2.76	1.08
Acetaldehyde	0.60	VOID	0.73	0.89	0.46
Acrolein	ND	VOID	ND	ND	0.01
Acetone	1.15	VOID	1.26	0.81	0.59
Propionaldehyde	0.08	VOID	0.12	0.10	0.07
Crotonaldehyde	ND	VOID	ND	ND	0.01
Butyr/Isobutyraldehyde	0.14	VOID	0.11	0.09	0.10
Benzaldehyde	0.04	VOID	0.06	0.04	0.04
Isovaleraldehyde	ND	VOID	0.01	ND	ND
Valeraldehyde	0.04	VOID	0.05	0.04	0.03
Tolualdehydes	0.04	VOID	0.05	0.03	0.05
Hexaldehyde	0.06	VOID	0.08	0.08	0.05
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	0.01

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Brattleboro, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J~008	O9C%008
FB ID	14813 FB	15549 FB
Sample date	9/14/98	3/13/99
Date Analyzed	10/27/98	3/31/99
Formaldehyde	0.03	0.19
Acetaldehyde	0.05	0.10
Acrolein	0.00	0.03
Acetone	0.34	0.17
Propionaldehyde	0.00	0.02
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.28	0.01
Benzaldehyde	0.00	0.04
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.01
Tolualdehydes	0.00	0.02
Hexaldehyde	0.02	0.03
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J~008	O9C%008
FB ID	14813 FB	15549 FB
Date Analyzed	10/27/98	3/31/99
Formaldehyde	0.02	0.11
Acetaldehyde	0.04	0.08
Acrolein	ND	0.03
Acetone	0.33	0.16
Propionaldehyde	ND	0.02
Crotonaldehyde	ND	ND
Butyraldehyde	0.33	0.01
Benzaldehyde	ND	0.06
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	0.02
Tolualdehydes	ND	0.03
Hexaldehyde	0.02	0.05
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Burlington, VT BUVT

Derivatized Conc. (ug/mL)	14678	14819	15084	15108	15148	15154	15198	15236	15250
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98	11/25/98	12/7/98
ANALYSIS DATE	10/27/98	10/29/98	11/12/98	11/16/98	11/16/98	11/25/98	11/25/98	12/21/98	12/22/98
FILE NAME	Q8J~013	Q8J#019	Q8KK025	Q8KP014	Q8KP016	Q8KW022	Q8KW027	Q8LU011	Q8LU016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.56	1.86	2.68	2.67	3.10	1.97	2.75	1.62	1.87
Acetaldehyde	0.85	0.79	1.17	0.98	0.83	0.72	0.87	0.59	0.69
Acrolein	0.10	0.20	ND	0.03	0.02	0.03	0.02	0.02	0.02
Acetone	1.00	0.66	1.03	1.19	1.89	1.07	1.60	0.88	1.22
Propionaldehyde	0.10	0.09	0.13	0.12	0.11	0.07	0.09	0.07	0.09
Crotonaldehyde	ND	ND	ND	0.05	ND	ND	ND	0.03	ND
Butyr/Isobutyraldehyde	0.11	0.10	0.18	0.48	0.41	0.34	0.17	0.10	0.12
Benzaldehyde	0.05	0.06	0.06	0.08	0.06	0.06	0.06	0.04	0.05
Isovaleraldehyde	ND	0.01	0.02	ND	ND	0.02	ND	0.01	0.01
Valeraldehyde	0.02	0.03	0.04	0.03	0.02	0.02	0.03	0.02	0.02
Tolualdehydes	0.04	0.04	0.04	0.05	0.04	0.04	0.06	0.03	0.04
Hexaldehyde	0.01	0.02	0.04	0.03	0.02	0.02	0.02	0.02	0.02
2,5-Dimethylbenzaldehyde	ND	ND	0.02	0.01	ND	0.01	0.02	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	15285	15311	15327	15355 D1	15355 R1	15357 D2	15357 R2	15406	15450
SAMPLE DATE	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99	1/24/99	1/24/99	2/5/99	2/17/99
ANALYSIS DATE	1/8/99	2/20/99	VOID	2/20/99	2/20/99	2/20/99	2/20/99	VOID	3/16/99
FILE NAME	O9AG035	O9BS017	VOID	O9BS031	O9BS032	O9BS033	O9BS034	VOID	09CO035
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.65	1.66	VOID	2.01	2.01	2.04	2.04	VOID	2.53
Acetaldehyde	0.90	1.01	VOID	0.75	0.75	0.73	0.73	VOID	1.03
Acrolein	0.04	0.03	VOID	0.01	0.01	0.01	0.01	VOID	ND
Acetone	0.93	0.90	VOID	0.84	0.84	0.82	0.82	VOID	1.23
Propionaldehyde	0.10	0.11	VOID	0.09	0.09	0.08	0.09	VOID	0.16
Crotonaldehyde	0.004	0.01	VOID	0.01	0.004	0.005	0.005	VOID	0.11
Butyr/Isobutyraldehyde	0.11	0.09	VOID	0.08	0.07	0.08	0.08	VOID	0.06
Benzaldehyde	0.05	0.06	VOID	0.05	0.05	0.04	0.05	VOID	0.07
Isovaleraldehyde	0.01	0.01	VOID	0.01	0.01	0.01	0.009	VOID	ND
Valeraldehyde	0.02	0.03	VOID	0.02	0.02	0.02	0.02	VOID	0.03
Tolualdehydes	0.03	0.03	VOID	0.04	0.04	0.04	0.04	VOID	0.05
Hexaldehyde	0.02	0.03	VOID	0.04	0.04	0.03	0.04	VOID	0.02
2,5-Dimethylbenzaldehyde	ND	0.003	VOID	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	15478	15482	15554	15603 D1	15603 R1	15605 D2	15605 R2	15645	15677
SAMPLE DATE	2/23/99	3/1/99	3/13/99	3/25/99	3/25/99	3/25/99	3/25/99	4/6/99	4/18/99
ANALYSIS DATE	3/16/99	3/16/99	3/31/99	5/12/99	5/12/99	5/12/99	5/12/99	5/12/99	5/19/99
FILE NAME	09CO043	09CO052	O9C%021	O9EK033	O9EK034	O9EK035	O9EK036	O9EK027	O9ES017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.16	2.90	2.20	2.19	2.20	2.01	2.01	3.16	2.47
Acetaldehyde	0.94	1.06	0.77	0.57	0.57	0.54	0.54	1.12	0.74
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.93	1.15	0.83	0.98	0.96	0.91	0.91	1.28	0.94
Propionaldehyde	0.15	0.17	0.12	0.08	0.08	0.07	0.07	0.16	0.11
Crotonaldehyde	0.10	ND	0.05	0.05	0.05	0.04	0.04	0.08	0.08
Butyr/Isobutyraldehyde	0.05	0.06	0.04	0.03	0.03	0.03	0.03	0.08	0.07
Benzaldehyde	0.05	0.07	0.03	0.04	0.04	0.04	0.04	0.05	0.04
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.03	ND	0.02	0.01	0.01	0.01	0.01	0.02	0.02
Tolualdehydes	0.04	0.07	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Hexaldehyde	0.02	0.04	0.01	0.02	0.01	0.01	0.01	0.03	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	0.004	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	15734	15796 D1	15796 R1	15798 D2	15798 R2	15794	15841	15922	16025
SAMPLE DATE	4/30/99	5/12/99	5/12/99	5/12/99	5/12/99	5/24/99	6/5/99	6/17/99	6/29/99
ANALYSIS DATE	6/5/99	6/10/99	6/10/99	6/10/99	6/10/99	6/10/99	6/18/99	7/7/99	8/5/99
FILE NAME	Q9FD017	Q9FH036	Q9FH037	Q9FH038	Q9FH039	Q9FH023	O9FR016	O9GF018	O9HE010
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	4.99	3.25	3.25	3.52	3.54	3.26	4.43	4.34	1.72
Acetaldehyde	1.67	1.05	1.09	1.13	1.09	1.04	1.43	1.09	0.07
Acrolein	0.02	0.02	0.04	0.02	0.02	0.02	ND	0.03	0.006
Acetone	2.02	1.69	1.69	1.75	1.78	1.24	2.26	1.99	0.08
Propionaldehyde	0.20	0.13	0.11	0.14	0.14	0.12	0.20	0.15	0.02
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.59	0.29	0.31	0.29	0.27	0.50	0.20	0.15	ND
Benzaldehyde	0.15	0.07	0.07	0.08	0.06	0.07	0.11	0.09	0.06
Isovaleraldehyde	0.04	0.02	0.04	ND	0.02	0.02	0.02	0.01	ND
Valeraldehyde	0.04	0.03	0.03	0.04	0.04	0.04	0.05	0.04	0.02
Tolualdehydes	0.08	0.06	0.09	0.07	0.07	0.04	0.05	0.05	0.04
Hexaldehyde	0.11	0.02	0.02	0.04	0.04	0.05	0.05	0.04	0.02
2,5-Dimethylbenzaldehyde	0.01	ND	ND	ND	0.01	ND	0.01	0.01	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	16261	16263	16278	16495	16616	16806	16902
SAMPLE DATE	7/17/99	7/29/99	8/4/99	8/16/99	8/28/99	9/9/99	9/21/99
ANALYSIS DATE	8/19/99	8/19/99	8/24/99	9/11/99	9/23/99	10/1/99	10/13/99
FILE NAME	O9HQ027	O9HQ031	O9HX015	O9IJ017	O9IV025	O9I$038	O9JM012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.59	6.52	2.75	4.18	4.61	3.39	1.19
Acetaldehyde	1.63	1.47	1.06	1.38	1.01	1.00	0.50
Acrolein	0.03	0.02	0.09	ND	ND	0.01	0.03
Acetone	0.18	0.28	0.39	1.50	0.57	1.32	0.62
Propionaldehyde	0.25	0.21	0.14	0.17	0.18	0.12	0.07
Crotonaldehyde	0.01	0.02	ND	ND	ND	ND	0.01
Butyr/Isobutyraldehyde	0.19	0.23	0.22	0.23	0.13	0.12	0.07
Benzaldehyde	0.05	0.16	0.06	0.08	0.06	0.11	0.05
Isovaleraldehyde	0.02	0.03	0.02	0.03	ND	ND	ND
Valeraldehyde	0.06	0.07	0.04	0.07	0.05	0.06	0.03
Tolualdehydes	0.06	0.06	0.04	0.06	0.05	0.06	0.05
Hexaldehyde	0.08	0.06	0.03	0.06	0.06	0.06	0.03
2,5-Dimethylbenzaldehyde	ND	ND	0.009	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Burlington, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J#008	O9C%009
FB ID	14820 FB	15555 FB
Sample date	9/14/98	3/13/99
Date Analyzed	10/29/98	3/31/99
Formaldehyde	0.03	0.12
Acetaldehyde	0.21	0.10
Acrolein	0.00	0.05
Acetone	0.38	0.16
Propionaldehyde	0.00	0.04
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.32	0.00
Benzaldehyde	0.00	0.00
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.01
Tolualdehydes	0.00	0.02
Hexaldehyde	0.00	0.00
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J#008	O9C%009
FB ID	14820 FB	15555 FB
Date Analyzed	10/29/98	3/31/99
Formaldehyde	0.02	0.07
Acetaldehyde	0.17	0.08
Acrolein	ND	0.04
Acetone	0.38	0.15
Propionaldehyde	ND	0.04
Crotonaldehyde	ND	ND
Butyraldehyde	0.36	ND
Benzaldehyde	ND	ND
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	0.01
Tolualdehydes	ND	0.04
Hexaldehyde	ND	ND
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Camden, NJ **CANJ**

Derivatized Conc. (ug/mL)	14770	14890	14970	15086	15121	15144	15178
SAMPLE DATE	9/8/98	9/14/98	9/20/98	10/2/98	10/14/98	10/26/98	11/7/98
ANALYSIS DATE	10/28/98	10/28/98	11/12/98	11/16/98	11/16/98	11/25/98	12/22/98
FILE NAME	Q8J~024	Q8J~030	Q8KK033	Q8KP017	Q8KP018	Q8KW014	Q8LU020
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.46	3.95	3.80	3.20	2.03	4.37	2.64
Acetaldehyde	1.20	1.67	2.44	1.77	1.19	2.71	1.96
Acrolein	0.02	0.08	0.20	0.03	0.03	0.06	0.04
Acetone	1.46	1.19	1.26	3.01	1.93	3.73	2.10
Propionaldehyde	0.19	0.32	0.39	0.36	0.18	0.45	0.37
Crotonaldehyde	ND	ND	ND	ND	ND	ND	0.04
Butyr/Isobutyraldehyde	0.54	0.49	0.39	1.09	0.77	1.23	0.71
Benzaldehyde	0.04	0.10	0.09	0.05	0.04	0.12	0.07
Isovaleraldehyde	0.02	0.02	0.02	0.04	ND	0.04	0.059
Valeraldehyde	0.27	0.23	0.28	0.55	0.18	0.64	0.62
Tolualdehydes	ND	0.02	0.04	0.03	ND	0.04	0.06
Hexaldehyde	0.07	0.10	0.07	0.12	0.05	0.14	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	0.02

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15212	15218	15228	15263	15277	15317
SAMPLE DATE	11/19/98	12/1/98	12/1/98	12/13/98	12/25/98	1/6/99
ANALYSIS DATE	12/22/98	VOID	12/22/98	1/8/99	1/8/99	2/20/99
FILE NAME	Q8LU030	VOID	Q8LU034	O9AG028	O9AG039	O9BS020
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.78	VOID	1.92	2.81	3.23	2.46
Acetaldehyde	1.87	VOID	1.18	1.81	1.95	1.53
Acrolein	0.02	VOID	0.02	0.02	0.04	0.02
Acetone	3.13	VOID	1.75	2.28	1.96	1.68
Propionaldehyde	0.29	VOID	0.12	0.36	0.48	0.41
Crotonaldehyde	ND	VOID	ND	0.02	0.02	0.02
Butyr/Isobutyraldehyde	0.63	VOID	0.26	0.59	0.71	0.51
Benzaldehyde	0.06	VOID	0.04	0.09	0.05	0.05
Isovaleraldehyde	0.04	VOID	0.01	0.04	0.03	0.03
Valeraldehyde	0.43	VOID	0.03	0.52	0.68	0.46
Tolualdehydes	0.04	VOID	ND	0.05	0.04	0.04
Hexaldehyde	0.03	VOID	0.06	0.18	0.17	0.13
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15378 D1	15378 R1	15380 D2	15380 R2	15454	15464	15512
SAMPLE DATE	1/30/99	1/30/99	1/30/99	1/30/99	2/17/99	2/23/99	3/7/99
ANALYSIS DATE	2/20/99	2/20/99	2/20/99	2/20/99	3/16/99	3/16/99	3/17/99
FILE NAME	O9BS044	O9BS045	O9BS046	O9BS047	09CO049	09CO045	O9CQ009
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.39	2.39	2.30	2.31	3.68	2.75	2.44
Acetaldehyde	1.18	1.18	1.13	1.14	1.78	1.56	1.11
Acrolein	0.005	0.005	0.005	0.005	ND	ND	ND
Acetone	1.93	1.93	1.83	1.83	2.92	2.79	1.33
Propionaldehyde	0.22	0.21	0.20	0.20	0.34	0.40	0.24
Crotonaldehyde	0.01	0.01	0.01	0.01	0.12	0.06	0.05
Butyr/Isobutyraldehyde	0.33	0.33	0.31	0.31	0.26	0.49	0.25
Benzaldehyde	0.05	0.05	0.05	0.05	0.06	0.04	0.02
Isovaleraldehyde	0.01	0.02	0.01	0.02	0.05	0.09	0.05
Valeraldehyde	0.25	0.25	0.23	0.23	0.23	0.49	0.23
Tolualdehydes	0.05	0.05	0.05	0.04	0.09	0.04	0.02
Hexaldehyde	0.09	0.09	0.08	0.07	0.10	0.13	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15536	15625 D1	15625 R1	15627 D2	15627 R2	15687	15710
SAMPLE DATE	3/13/99	3/25/99	3/25/99	3/25/99	3/25/99	4/18/99	4/30/99
ANALYSIS DATE	3/31/99	5/12/99	5/12/99	5/12/99	5/12/99	VOID	6/5/99
FILE NAME	O9C%022	O9EK038	O9EK039	O9EK040	O9EK041	VOID	Q9FD018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.11	2.50	2.57	2.51	2.57	VOID	1.51
Acetaldehyde	1.30	1.12	1.12	1.11	1.12	VOID	0.82
Acrolein	ND	0.04	0.04	0.02	0.02	VOID	0.01
Acetone	1.65	1.96	1.96	1.95	1.96	VOID	1.72
Propionaldehyde	0.31	0.23	0.23	0.23	0.23	VOID	0.12
Crotonaldehyde	0.04	0.04	0.04	0.03	0.03	VOID	ND
Butyr/Isobutyraldehyde	0.34	0.21	0.22	0.21	0.21	VOID	0.36
Benzaldehyde	0.04	0.02	0.02	0.03	0.03	VOID	0.03
Isovaleraldehyde	0.06	ND	ND	ND	ND	VOID	ND
Valeraldehyde	0.32	0.14	0.13	0.12	0.12	VOID	0.12
Tolualdehydes	ND	0.001	0.002	0.004	0.003	VOID	0.04
Hexaldehyde	0.06	0.05	0.05	0.05	0.05	VOID	0.07
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15787	15903	15996	16001	16037	16188	16242
SAMPLE DATE	5/24/99	6/5/99	6/17/99	7/5/99	7/11/99	7/23/99	8/4/99
ANALYSIS DATE	6/10/99	7/6/99	7/28/99	8/6/99	8/6/99	8/6/99	8/24/99
FILE NAME	Q9FH024	O9GF013	O9G!014	O9HE016	O9HE020	O9HE035	O9HX016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.69	4.76	2.49	8.75	4.03	8.02	5.73
Acetaldehyde	2.16	2.32	1.58	3.13	1.81	3.25	2.69
Acrolein	0.03	0.02	ND	0.04	0.02	0.04	0.02
Acetone	2.09	2.97	2.57	1.43	2.11	1.80	1.13
Propionaldehyde	0.36	0.44	0.49	0.74	0.55	0.69	0.48
Crotonaldehyde	ND	0.01	ND	ND	ND	0.02	0.01
Butyr/Isobutyraldehyde	1.10	0.50	0.59	0.89	0.70	0.54	0.54
Benzaldehyde	0.11	0.11	0.08	0.23	0.09	0.13	0.13
Isovaleraldehyde	0.112	0.03	0.03	0.05	0.04	0.03	0.04
Valeraldehyde	0.50	0.35	0.51	0.78	0.67	0.30	0.34
Tolualdehydes	0.07	0.04	0.03	0.06	ND	0.07	0.09
Hexaldehyde	0.11	0.15	0.20	0.29	0.23	0.14	0.15
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	16364	16602	16714	16792 D1	16792 R1	16793 D2	16793 R2
SAMPLE DATE	8/16/99	8/28/99	9/9/99	9/15/99	9/15/99	9/15/99	9/15/99
ANALYSIS DATE	8/25/99	9/23/99	9/23/99	10/2/99	10/2/99	10/2/99	10/2/99
FILE NAME	O9HX017	O9IV019	O9IV020	O9I$048	O9I$049	O9I$051	O9I$052
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.33	6.08	3.99	2.87	2.87	2.79	2.85
Acetaldehyde	2.62	2.85	2.10	1.71	1.64	1.67	1.65
Acrolein	0.02	0.03	0.04	ND	ND	ND	ND
Acetone	0.94	0.94	1.55	1.21	1.21	1.26	1.27
Propionaldehyde	0.50	0.57	0.42	0.37	0.37	0.36	0.37
Crotonaldehyde	0.01	0.03	0.02	ND	ND	0.005	0.01
Butyr/Isobutyraldehyde	0.54	0.53	0.53	0.38	0.35	0.35	0.36
Benzaldehyde	0.17	0.08	0.09	0.08	0.05	0.05	0.06
Isovaleraldehyde	0.03	0.03	0.03	0.03	0.04	0.02	0.03
Valeraldehyde	0.40	0.40	0.33	0.31	0.31	0.30	0.31
Tolualdehydes	0.07	0.03	0.03	0.03	0.03	0.04	0.04
Hexaldehyde	0.15	0.15	0.16	0.13	0.13	0.12	0.13
2,5-Dimethylbenzaldehyde	ND	0.01	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Camden, NJ
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J~009	Q8KK010	Q8KK018	Q9FD009	Q9FH011	O9G!008	O9HX007	O9IV007
FB ID	14891 FB	14971 FB	15087 FB	15711 FB	15788 FB	16038 FB	16243 FB	16603 FB
Sample date	9/14/98	9/20/98	10/2/98	4/30/99	5/24/99	7/11/99	8/4/99	8/28/99
Date Analyzed	10/27/98	11/11/98	11/12/98	6/4/99	6/9/99	6/19/97	7/15/97	7/31/97
Formaldehyde	0.09	0.15	0.07	0.05	0.28	0.09	0.08	0.07
Acetaldehyde	0.07	0.08	0.07	0.10	0.15	0.06	0.06	0.14
Acrolein	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acetone	0.35	0.41	0.36	0.00	0.28	0.10	0.09	0.16
Propionaldehyde	0.00	0.00	0.00	0.22	0.00	0.00	0.01	0.01
Crotonaldehyde	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Butyr/Isobutyraldehyde	0.46	0.69	0.56	0.27	0.63	0.05	0.00	0.00
Benzaldehyde	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Isovaleraldehyde	0.00	0.00	0.00	0.04	0.00	0.02	0.00	0.00
Valeraldehyde	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02
Tolualdehydes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexaldehyde	0.02	0.00	0.02	0.16	0.00	0.01	0.02	0.03
2,5-Dimethylbenzaldehyde	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J~009	Q8KK010	Q8KK018	Q9FD009	Q9FH011	O9G!008	O9HX007	O9IV007
FB ID	14891 FB	14971 FB	15087 FB	15711 FB	15788 FB	16038 FB	16243 FB	16603 FB
Date Analyzed	10/27/98	11/11/98	11/12/98	6/4/99	6/9/99	6/19/97	7/15/97	7/31/97
Formaldehyde	0.05	0.09	0.04	0.03	0.16	0.07	0.06	0.05
Acetaldehyde	0.05	0.07	0.06	0.08	0.12	0.06	0.06	0.14
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.34	0.40	0.35	0.00	0.27	0.13	0.10	0.20
Propionaldehyde	ND	ND	ND	0.21	ND	ND	0.01	0.02
Crotonaldehyde	ND	ND	ND	0.05	ND	ND	ND	ND
Butyraldehyde	0.53	0.79	0.64	0.31	0.72	0.08	ND	ND
Benzaldehyde	ND	ND	ND	ND	ND	0.03	ND	0.04
Isovaleraldehyde	ND	ND	ND	0.05	ND	0.03	ND	ND
Valeraldehyde	ND	ND	ND	ND	ND	0.03	0.03	0.04
Tolualdehydes	ND	ND	ND	ND	ND	ND	ND	ND
Hexaldehyde	0.03	ND	0.03	0.23	ND	0.02	0.04	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

1998 UATMP CARBONYLS

Sample Site: El Paso, TX **EPTX**

Derivatized Conc. (ug/mL)	14894	15001	15067	15129	15130	15150	15184	15208
SAMPLE DATE	9/14/98	9/20/98	10/2/98	10/2/98	10/14/98	10/26/98	11/7/98	11/19/98
ANALYSIS DATE	10/29/98	11/12/98	VOID	VOID	VOID	11/25/98	12/22/98	12/22/98
FILE NAME	Q8J#020	Q8KK034	VOID	VOID	VOID	Q8KW016	Q8LU021	Q8LU028
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	14.32d	3.68	VOID	VOID	VOID	20.13d	11.84d	3.44
Acetaldehyde	4.83	1.34	VOID	VOID	VOID	4.36	2.23	1.10
Acrolein	0.12	0.03	VOID	VOID	VOID	0.40	0.11	0.03
Acetone	1.60	1.18	VOID	VOID	VOID	0.72	1.92	1.33
Propionaldehyde	0.31	0.14	VOID	VOID	VOID	0.25	0.12	0.10
Crotonaldehyde	0.02	ND	VOID	VOID	VOID	0.05	0.02	ND
Butyr/Isobutyraldehyde	0.40	0.34	VOID	VOID	VOID	0.42	0.23	0.14
Benzaldehyde	0.33	0.07	VOID	VOID	VOID	0.38	0.20	0.07
Isovaleraldehyde	0.33	0.01	VOID	VOID	VOID	0.32	0.18	0.04
Valeraldehyde	0.16	0.04	VOID	VOID	VOID	0.19	0.10	0.05
Tolualdehydes	0.26	0.03	VOID	VOID	VOID	0.31	0.25	0.05
Hexaldehyde	0.23	0.03	VOID	VOID	VOID	0.25	0.15	0.02
2,5-Dimethylbenzaldehyde	0.02	0.01	VOID	VOID	VOID	0.02	0.02	0.02

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15234	15267	15291	15344	15390	15402 D1	15402 R1
SAMPLE DATE	12/1/98	12/13/98	12/25/98	1/6/99	1/30/99	2/11/99	2/11/99
ANALYSIS DATE	12/22/98	1/8/99	1/8/99	VOID	3/16/99	3/16/99	3/16/99
FILE NAME	Q8LU035	O9AG029	O9AG040	VOID	09CO023	09CO063	09CO064
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.94	4.09	5.38	VOID	2.80	1.46	1.48
Acetaldehyde	1.19	2.42	2.43	VOID	1.20	0.54	0.54
Acrolein	0.02	0.04	0.05	VOID	ND	ND	ND
Acetone	1.48	2.25	2.57	VOID	1.32	0.51	0.51
Propionaldehyde	0.11	0.26	0.25	VOID	0.17	0.08	0.09
Crotonaldehyde	ND	0.02	0.02	VOID	0.07	0.05	0.05
Butyr/Isobutyraldehyde	0.14	0.22	0.24	VOID	0.07	0.03	0.03
Benzaldehyde	0.08	0.11	0.13	VOID	0.06	0.02	0.03
Isovaleraldehyde	0.02	0.01	0.02	VOID	ND	ND	ND
Valeraldehyde	0.03	0.05	0.07	VOID	0.04	0.02	0.03
Tolualdehydes	0.05	0.10	0.13	VOID	0.05	0.03	0.03
Hexaldehyde	0.01	0.05	0.06	VOID	0.03	0.01	0.01
2,5-Dimethylbenzaldehyde	ND	ND	ND	VOID	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15404 D2	15404 R2	15434	15466	15456	15496	15528	15526
SAMPLE DATE	2/11/99	2/11/99	2/17/99	2/23/99	3/1/99	3/7/99	3/13/99	3/19/99
ANALYSIS DATE	3/16/99	3/16/99	3/16/99	3/16/99	3/17/99	VOID	3/31/99	4/1/99
FILE NAME	09CO065	09CO066	09CO036	09CO046	O9CQ010	VOID	O9C%023	O9C%028
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.28	1.28	6.41d	6.01	2.94	VOID	2.55	3.04
Acetaldehyde	0.50	0.50	2.57	2.38	0.86	VOID	0.96	1.13
Acrolein	ND	ND	ND	0.02	0.01	VOID	ND	0.02
Acetone	0.49	0.49	2.52	1.97	1.11	VOID	1.40	1.40
Propionaldehyde	0.07	0.08	0.24	0.23	0.13	VOID	0.15	0.18
Crotonaldehyde	0.05	0.05	0.10	0.14	0.06	VOID	0.06	0.07
Butyr/Isobutyraldehyde	0.03	0.03	0.12	0.11	0.05	VOID	0.06	0.07
Benzaldehyde	0.02	0.03	0.15	0.14	0.04	VOID	0.05	0.05
Isovaleraldehyde	ND	ND	ND	ND	ND	VOID	ND	ND
Valeraldehyde	0.02	0.03	ND	0.15	0.02	VOID	0.02	0.02
Tolualdehydes	0.02	0.02	0.09	0.08	0.04	VOID	0.04	0.04
Hexaldehyde	0.01	0.01	0.14	0.13	0.03	VOID	0.02	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	VOID	ND	0.01

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15617	15635	15669 D1	15669 R1	15671 D2	15671 R2	15689	15703
SAMPLE DATE	3/31/99	4/6/99	4/12/99	4/12/99	4/12/99	4/12/99	4/18/99	4/24/99
ANALYSIS DATE	5/12/99	5/12/99	5/20/99	5/20/99	5/20/99	5/20/99	VOID	5/20/99
FILE NAME	O9EK020	O9EK028	O9ES029	O9ES030	O9ES031	O9ES032	VOID	O9ES023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.57	5.80	4.13	4.13	3.72	3.71	VOID	2.23
Acetaldehyde	0.70	2.78	1.74	1.76	1.51	1.49	VOID	0.88
Acrolein	ND	0.02	ND	ND	ND	ND	VOID	ND
Acetone	0.95	2.45	1.95	1.97	1.62	1.60	VOID	0.92
Propionaldehyde	0.08	0.28	0.31	0.31	0.27	0.28	VOID	0.15
Crotonaldehyde	0.03	0.09	0.10	0.11	0.08	0.08	VOID	0.03
Butyr/Isobutyraldehyde	0.05	0.15	0.13	0.13	0.11	0.11	VOID	0.07
Benzaldehyde	0.04	0.16	0.10	0.09	0.09	0.08	VOID	0.04
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	VOID	ND
Valeraldehyde	0.02	0.07	0.05	0.05	0.05	0.05	VOID	0.03
Tolualdehydes	0.01	0.07	0.05	0.06	0.06	0.06	VOID	0.01
Hexaldehyde	0.02	0.12	0.04	0.04	0.04	0.04	VOID	0.03
2,5-Dimethylbenzaldehyde	ND	0.01	0.01	0.01	0.01	0.01	VOID	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15724 D1	15724 R1	15726 D2	15726 R2	15782	15814	15845	15934
SAMPLE DATE	5/6/99	5/6/99	5/6/99	5/6/99	5/18/99	5/30/99	6/11/99	6/23/99
ANALYSIS DATE	6/5/99	6/5/99	6/5/99	6/5/99	6/9/99	6/10/99	6/19/99	7/7/99
FILE NAME	Q9FD033	Q9FD034	Q9FD035	Q9FD036	Q9FH020	Q9FH029	O9FR024	O9GF023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.51	2.63	2.45	2.47	3.57	3.58	3.14	3.90
Acetaldehyde	0.72	0.74	0.68	0.64	1.19	1.03	0.82	1.39
Acrolein	0.01	0.01	0.01	0.01	ND	0.01	0.02	0.02
Acetone	1.04	1.09	0.95	0.92	1.27	1.34	1.06	1.93
Propionaldehyde	0.12	0.09	0.10	0.08	0.15	0.11	0.10	0.19
Crotonaldehyde	ND	ND	ND	ND	0.02	ND	0.01	0.01
Butyr/Isobutyraldehyde	0.21	0.19	0.18	0.18	0.27	0.20	0.09	0.17
Benzaldehyde	0.06	0.06	0.06	0.04	0.05	0.05	0.07	0.08
Isovaleraldehyde	0.03	0.02	0.04	0.02	0.03	0.04	0.01	0.01
Valeraldehyde	0.03	0.03	0.03	0.02	0.04	0.04	0.04	0.05
Tolualdehydes	0.04	0.04	0.05	0.04	0.05	0.06	0.07	0.07
Hexaldehyde	0.02	0.07	0.01	0.02	0.02	0.03	0.06	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15979	16129	16197	16329	16445	16687
SAMPLE DATE	7/5/99	7/17/99	7/29/99	8/10/99	8/22/99	9/3/99
ANALYSIS DATE	8/6/99	8/6/99	8/6/99	8/25/99	9/11/99	9/23/99
FILE NAME	O9HE017	O9HE030	O9HE038	O9HX019	O9IJ024	O9IV018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	21.09d	30.14d	29.15d	7.20	9.44d	6.95
Acetaldehyde	6.68d	6.79	6.75	2.47	3.04	2.01
Acrolein	0.51d	0.75	0.66	0.18	0.12	0.12
Acetone	0.51d	0.22	0.38	0.84	1.77	1.37
Propionaldehyde	0.29d	0.30	0.25	0.11	0.28	0.16
Crotonaldehyde	0.05d	0.06	0.06	0.01	0.01	0.01
Butyr/Isobutyraldehyde	0.27d	0.21	0.20	0.17	0.34	0.18
Benzaldehyde	0.63d	0.65	0.63	0.17	0.18	0.14
Isovaleraldehyde	ND	ND	ND	0.01	0.020	ND
Valeraldehyde	0.20d	0.33	0.24	0.07	0.09	0.05
Tolualdehydes	0.23d	0.17	0.16	0.09	0.10	0.08
Hexaldehyde	0.27d	0.24	0.26	0.07	0.10	0.06
2,5-Dimethylbenzaldehyde	0.03d	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

FIELD BLANK DATA

Sample site: El Paso, TX
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK011	O9C$010	O9EK008	O9ES008	Q9FH010
FB ID	15002 FB	15529 FB	15636 FB	15704 FB	15783 FB
Sample date	9/20/98	3/13/99	4/6/99	4/24/99	5/18/99
Date Analyzed	11/11/98	3/30/99	5/11/99	5/19/99	6/9/99
Formaldehyde	0.09	0.00	0.06	0.08	0.42
Acetaldehyde	0.36	0.00	0.08	0.08	0.09
Acrolein	0.00	0.00	0.00	0.05	0.00
Acetone	0.44	0.03	0.33	0.15	0.23
Propionaldehyde	0.00	0.00	0.00	0.00	0.00
Crotonaldehyde	0.00	0.00	0.00	0.00	0.00
Butyr/Isobutyraldehyde	0.45	0.00	0.00	0.00	0.38
Benzaldehyde	0.00	0.00	0.00	0.00	0.00
Isovaleraldehyde	0.00	0.07	0.00	0.00	0.00
Valeraldehyde	0.00	0.00	0.00	0.00	0.00
Tolualdehydes	0.00	0.00	0.00	0.00	0.00
Hexaldehyde	0.00	0.00	0.00	0.00	0.04
2,5-Dimethylbenzaldehyde	0.00	0.00	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK011	O9C$010	O9EK008	O9ES008	Q9FH010
FB ID	15002 FB	15529 FB	15636 FB	15704 FB	15783 FB
Date Analyzed	11/11/98	3/30/99	5/11/99	5/19/99	6/9/99
Formaldehyde	0.05	ND	0.04	0.05	0.24
Acetaldehyde	0.28	ND	0.06	0.07	0.07
Acrolein	ND	ND	ND	0.05	ND
Acetone	0.42	0.02	0.32	0.15	0.22
Propionaldehyde	ND	ND	ND	ND	ND
Crotonaldehyde	ND	ND	ND	ND	ND
Butyraldehyde	0.51	ND	ND	ND	0.44
Benzaldehyde	ND	ND	ND	ND	ND
Isovaleraldehyde	ND	0.10	ND	ND	ND
Valeraldehyde	ND	ND	ND	ND	ND
Tolualdehydes	ND	ND	ND	ND	ND
Hexaldehyde	ND	ND	ND	ND	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND

1998 UATMP CARBONYLS

Sample Site: Garyville, LA **GALA**

Derivatized Conc. (ug/mL)	14801	14805	15099	15117	15134	15172	15182	15232	15265
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/14/98	10/28/98	11/7/98	11/19/98	12/1/98
ANALYSIS DATE	10/28/98	10/30/98	11/12/98	11/16/98	11/16/98	11/25/98	12/22/98	VOID	1/8/99
FILE NAME	Q8J~018	Q8J#021	Q8KK035	Q8KP019	Q8KP020	Q8KW020	Q8LU022	VOID	O9AG027
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.69	1.84	2.15	2.15	3.26	2.26	1.71	VOID	1.80
Acetaldehyde	0.59	1.39	1.00	1.11	1.39	1.33	1.30	VOID	1.36
Acrolein	0.04	0.03	0.04	0.02	0.02	0.03	0.02	VOID	0.01
Acetone	0.48	0.25	0.31	0.69	0.79	0.42	0.86	VOID	0.62
Propionaldehyde	0.11	0.18	0.23	0.23	0.27	0.27	0.22	VOID	0.25
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	VOID	0.01
Butyr/Isobutyraldehyde	0.17	0.33	0.40	0.42	0.45	0.48	0.27	VOID	0.19
Benzaldehyde	0.09	0.04	0.07	0.07	0.06	0.08	0.08	VOID	0.04
Isovaleraldehyde	0.02	0.01	0.03	0.03	0.03	0.06	0.044	VOID	0.01
Valeraldehyde	0.05	0.22	0.24	0.31	0.23	0.27	0.23	VOID	0.18
Tolualdehydes	0.02	ND	0.04	0.02	0.04	0.03	0.04	VOID	0.03
Hexaldehyde	0.05	0.08	0.09	0.09	0.09	0.10	0.12	VOID	0.10
2,5-Dimethylbenzaldehyde	0.01	ND	ND	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15257	15295	15398 D1	15398 R1	15396 D2	15396 R2	15412	15460
SAMPLE DATE	12/13/98	12/25/98	2/5/99	2/5/99	2/5/99	2/5/99	2/17/99	2/23/99
ANALYSIS DATE	1/8/99	1/8/99	3/16/99	3/16/99	3/16/99	3/17/99	3/16/99	3/16/99
FILE NAME	O9AG030	O9AG041	09CO072	09CO073	09CO074	09CO075	09CO037	09CO047
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.88	0.58	2.64	2.63	2.40	2.40	VOID	VOID
Acetaldehyde	0.63	0.50	1.29	1.29	1.22	1.22	VOID	VOID
Acrolein	0.01	0.02	ND	ND	ND	ND	VOID	VOID
Acetone	0.65	0.51	0.50	0.46	0.62	0.59	VOID	VOID
Propionaldehyde	0.15	0.11	0.34	0.32	0.32	0.30	VOID	VOID
Crotonaldehyde	0.005	0.005	0.07	0.07	0.07	0.08	VOID	VOID
Butyr/Isobutyraldehyde	0.14	0.11	0.18	0.18	0.16	0.17	VOID	VOID
Benzaldehyde	0.03	0.03	0.05	0.05	0.05	0.06	VOID	VOID
Isovaleraldehyde	0.01	0.01	0.04	0.04	0.04	0.040	VOID	VOID
Valeraldehyde	0.15	0.12	0.29	0.30	0.27	0.27	VOID	VOID
Tolualdehydes	0.02	0.02	0.03	0.03	0.03	0.03	VOID	VOID
Hexaldehyde	0.07	0.07	0.13	0.14	0.11	0.11	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	0.003	ND	ND	ND	ND	VOID	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15505	15524	15561	15592 D1	15592 R1	15594 D2	15594 R2	15621
SAMPLE DATE	3/7/99	3/13/99	3/19/99	3/25/99	3/25/99	3/25/99	3/25/99	3/31/99
ANALYSIS DATE	3/17/99	4/1/99	4/14/99	4/14/99	4/14/99	4/14/99	4/14/99	5/12/99
FILE NAME	O9CQ011	O9C%024	O9DM023	O9DM049	O9DM050	O9DM051	O9DM052	O9EK021
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.24	1.55	2.95	1.34	1.35	1.69	1.73	1.67
Acetaldehyde	1.24	0.70	1.21	0.50	0.50	0.63	0.64	0.93
Acrolein	ND	ND	ND	ND	ND	ND	ND	0.01
Acetone	0.76	0.31	0.52	0.51	0.52	0.48	0.48	0.35
Propionaldehyde	0.31	0.22	0.26	0.15	0.15	0.16	0.15	0.14
Crotonaldehyde	0.04	0.02	ND	ND	ND	ND	ND	0.03
Butyr/Isobutyraldehyde	0.21	0.11	0.12	0.06	0.06	0.07	0.07	0.09
Benzaldehyde	0.05	0.02	0.03	0.02	0.02	0.02	0.02	0.03
Isovaleraldehyde	0.05	0.04	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.37	0.24	0.15	0.09	0.09	0.11	0.11	0.08
Tolualdehydes	0.05	0.01	0.02	0.01	0.01	0.01	0.01	0.001
Hexaldehyde	0.11	0.07	0.08	0.04	0.05	0.07	0.07	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15663 D1	15663 R1	15665 D2	15665 R2	15691	15693 D1	15693 R1	15694 D2
SAMPLE DATE	4/12/99	4/12/99	4/12/99	4/12/99	4/18/99	4/24/99	4/24/99	4/24/99
ANALYSIS DATE	5/20/99	5/20/99	5/20/99	5/20/99	VOID	6/5/99	6/5/99	6/5/99
FILE NAME	O9ES033	O9ES034	O9ES035	O9ES036	VOID	Q9FD029	Q9FD030	Q9FD031
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.66	3.67	3.59	3.69	VOID	2.38	2.48	2.26
Acetaldehyde	0.99	1.00	0.98	0.98	VOID	0.80	0.81	0.80
Acrolein	ND	ND	ND	ND	VOID	0.02	0.03	0.02
Acetone	1.04	1.04	0.64	0.64	VOID	0.47	0.49	0.32
Propionaldehyde	0.23	0.17	0.22	0.22	VOID	0.19	0.21	0.19
Crotonaldehyde	0.12	0.04	0.04	0.04	VOID	ND	ND	ND
Butyr/Isobutyraldehyde	0.11	0.11	0.10	0.10	VOID	ND	ND	ND
Benzaldehyde	0.03	0.03	0.03	0.03	VOID	0.12	0.12	0.11
Isovaleraldehyde	ND	ND	ND	ND	VOID	ND	ND	ND
Valeraldehyde	0.11	0.14	0.11	0.14	VOID	0.12	0.12	0.10
Tolualdehydes	ND	ND	0.00	ND	VOID	0.10	0.05	0.05
Hexaldehyde	0.06	0.06	0.06	0.06	VOID	ND	ND	ND
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	VOID	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15694 R2	15741	15753	15755	15777	15767 D1	15767 R1	15768 D2
SAMPLE DATE	4/24/99	4/30/99	5/6/99	5/6/99	5/12/99	5/18/99	5/18/99	5/18/99
ANALYSIS DATE	6/5/99	6/5/99	VOID	VOID	6/9/99	6/10/99	6/10/99	6/10/99
FILE NAME	Q9FD032	Q9FD019	VOID	VOID	Q9FH017	Q9FH040	Q9FH041	Q9FH042
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.22	3.25	VOID	VOID	2.10	4.54	4.56	4.76
Acetaldehyde	0.76	1.00	VOID	VOID	0.80	1.21	1.25	1.23
Acrolein	0.01	0.01	VOID	VOID	0.02	0.04	0.04	0.04
Acetone	0.32	0.96	VOID	VOID	0.32	0.80	0.82	0.48
Propionaldehyde	0.19	0.24	VOID	VOID	0.17	0.24	0.23	0.26
Crotonaldehyde	ND	ND	VOID	VOID	ND	ND	ND	ND
Butyr/Isobutyraldehyde	ND	ND	VOID	VOID	0.38	0.52	0.47	0.44
Benzaldehyde	0.12	0.09	VOID	VOID	0.08	0.12	0.05	0.10
Isovaleraldehyde	ND	ND	VOID	VOID	0.055	0.038	0.075	0.035
Valeraldehyde	0.10	0.20	VOID	VOID	0.07	0.16	0.12	0.16
Tolualdehydes	0.05	0.04	VOID	VOID	0.05	0.07	0.06	0.05
Hexaldehyde	ND	ND	VOID	VOID	0.04	0.08	0.08	0.08
2,5-Dimethylbenzaldehyde	ND	ND	VOID	VOID	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15768 R2	15818	15857	15986	16058	16206	16350	16684
SAMPLE DATE	5/18/99	5/30/99	6/11/99	7/5/99	7/17/99	7/29/99	8/10/99	9/3/99
ANALYSIS DATE	6/10/99	6/10/99	6/18/99	8/6/99	8/6/99	8/6/99	8/25/99	9/23/99
FILE NAME	Q9FH043	Q9FH030	O9FR019	O9HE018	O9HE040	O9HE039	O9HX020	O9IV017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	4.65	2.21	2.18	1.91	3.22	4.57	2.37	1.84
Acetaldehyde	1.25	1.17	1.06	0.77	1.93	1.71	1.26	1.03
Acrolein	0.02	0.04	ND	ND	ND	ND	ND	ND
Acetone	0.46	0.38	0.42	0.29	0.29	0.38	0.49	0.31
Propionaldehyde	0.25	0.33	0.27	0.25	0.29	0.44	0.38	0.34
Crotonaldehyde	ND	0.12	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.40	0.42	0.25	0.19	0.23	0.31	0.30	0.19
Benzaldehyde	0.10	0.07	0.12	0.06	0.10	0.18	0.09	0.06
Isovaleraldehyde	0.086	0.026	0.02	0.02	0.02	0.02	0.02	ND
Valeraldehyde	0.17	0.16	0.21	0.23	0.21	0.34	0.30	0.22
Tolualdehydes	0.03	0.07	0.05	0.05	0.05	0.07	0.07	0.03
Hexaldehyde	0.06	0.07	0.10	0.13	0.14	0.18	0.15	0.16
2,5-Dimethylbenzaldehyde	ND	0.01	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Garyville, LA
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK013
FB ID	15100 FB
Sample date	9/26/98
Date Analyzed	11/11/98
Formaldehyde	0.04
Acetaldehyde	0.31
Acrolein	0.00
Acetone	0.45
Propionaldehyde	0.02
Crotonaldehyde	0.00
Butyr/Isobutyraldehyde	0.51
Benzaldehyde	0.04
Isovaleraldehyde	0.00
Valeraldehyde	0.02
Tolualdehydes	0.00
Hexaldehyde	0.04
2,5-Dimethylbenzaldehyde	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK013
FB ID	15100 FB
Date Analyzed	11/11/98
Formaldehyde	0.02
Acetaldehyde	0.24
Acrolein	ND
Acetone	0.44
Propionaldehyde	0.02
Crotonaldehyde	ND
Butyraldehyde	0.58
Benzaldehyde	0.06
Isovaleraldehyde	ND
Valeraldehyde	0.03
Tolualdehydes	ND
Hexaldehyde	0.06
2,5-Dimethylbenzaldehyde	ND

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA **HALA**

Derivatized Conc. (ug/mL)	15105	15102	15132	15170	15180	15224	15222	15255
SAMPLE DATE	9/14/98	9/26/98	10/14/98	10/26/98	11/7/98	11/19/98	12/1/98	12/13/98
ANALYSIS DATE	10/30/98	11/12/98	11/17/98	11/25/98	12/22/98	12/22/98	VOID	1/8/99
FILE NAME	Q8J#022	Q8KK036	Q8KP022	Q8KW017	Q8LU024	Q8LU031	VOID	O9AG032
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.05	1.97	VOID	4.04	2.09	5.04	VOID	0.83
Acetaldehyde	0.30	0.41	VOID	1.04	1.12	1.38	VOID	0.48
Acrolein	0.01	0.02	VOID	0.03	0.04	0.19	VOID	0.02
Acetone	0.18	0.17	VOID	1.37	1.27	0.77	VOID	0.90
Propionaldehyde	0.05	0.10	VOID	0.14	0.15	0.25	VOID	0.06
Crotonaldehyde	ND	ND	VOID	ND	ND	ND	VOID	0.003
Butyr/Isobutyraldehyde	0.10	0.25	VOID	0.40	0.24	0.20	VOID	0.16
Benzaldehyde	0.02	0.03	VOID	0.06	0.05	0.04	VOID	0.02
Isovaleraldehyde	0.03	0.04	VOID	0.08	0.06	0.12	VOID	0.002
Valeraldehyde	0.03	0.04	VOID	0.05	0.05	0.06	VOID	0.04
Tolualdehydes	ND	ND	VOID	0.03	0.06	0.06	VOID	0.02
Hexaldehyde	0.06	0.06	VOID	0.07	0.05	0.06	VOID	0.03
2,5-Dimethylbenzaldehyde	ND	ND	VOID	ND	ND	0.02	VOID	0.002

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15293	15315	15392 D1	15392 R1	15394 D2	15394 R2	15416	15458
SAMPLE DATE	12/25/98	1/9/99	2/5/99	2/5/99	2/5/99	2/5/99	2/13/99	2/23/99
ANALYSIS DATE	1/8/99	2/20/99	3/16/99	3/16/99	3/16/99	3/16/99	VOID	3/16/99
FILE NAME	O9AG043	O9BS021	09CO068	09CO069	09CO070	09CO071	09CO050	09CO050
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.74	1.03	2.71	2.68	2.59	2.56	VOID	1.43
Acetaldehyde	0.37	0.67	1.12	1.10	1.08	1.03	VOID	0.80
Acrolein	0.01	0.005	ND	ND	ND	ND	VOID	ND
Acetone	0.70	1.02	0.88	0.86	0.83	0.83	VOID	1.13
Propionaldehyde	0.06	0.11	0.32	0.31	0.31	0.31	VOID	0.20
Crotonaldehyde	0.004	0.01	0.13	0.13	0.12	0.11	VOID	0.06
Butyr/Isobutyraldehyde	0.29	0.15	0.11	0.11	0.11	0.10	VOID	0.10
Benzaldehyde	0.02	0.02	0.06	0.08	0.08	0.06	VOID	0.04
Isovaleraldehyde	0.01	ND	0.02	0.03	ND	ND	VOID	0.03
Valeraldehyde	0.04	0.14	0.23	0.26	0.25	0.24	VOID	0.21
Tolualdehydes	0.02	0.01	0.02	0.03	0.03	0.03	VOID	0.05
Hexaldehyde	0.03	0.04	0.06	0.07	0.06	0.07	VOID	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15494	15492	15557 D1	15559 D2	15596	15619	15681	15659 D1
SAMPLE DATE	3/1/99	3/7/99	3/19/99	3/19/99	3/25/99	3/31/99	4/6/99	4/18/99
ANALYSIS DATE	3/17/99	3/17/99	6/5/99	6/5/99	4/14/99	VOID	VOID	5/20/99
FILE NAME	O9CQ014	O9CQ016	Q9FD042	Q9FD044	O9DM029	VOID	VOID	O9ES042
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	VOID	VOID	3.10	0.03	VOID	VOID	1.49
Acetaldehyde	VOID	VOID	VOID	1.44	0.04	VOID	VOID	1.05
Acrolein	VOID	VOID	VOID	0.02	ND	VOID	VOID	ND
Acetone	VOID	VOID	VOID	1.43	0.09	VOID	VOID	1.19
Propionaldehyde	VOID	VOID	VOID	0.19	0.01	VOID	VOID	0.19
Crotonaldehyde	VOID	VOID	VOID	ND	ND	VOID	VOID	0.07
Butyr/Isobutyraldehyde	VOID	VOID	VOID	0.58	0.01	VOID	VOID	0.07
Benzaldehyde	VOID	VOID	VOID	0.06	ND	VOID	VOID	0.02
Isovaleraldehyde	VOID	VOID	VOID	ND	ND	VOID	VOID	ND
Valeraldehyde	VOID	VOID	VOID	0.14	ND	VOID	VOID	0.05
Tolualdehydes	VOID	VOID	VOID	0.04	0.003	VOID	VOID	0.01
Hexaldehyde	VOID	VOID	VOID	0.08	ND	VOID	VOID	0.06
2,5-Dimethylbenzaldehyde	VOID	VOID	VOID	ND	ND	VOID	VOID	0.00

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15659 R1	15661 D2	15661 R2	15738 D1	15738 R1	15739 D2	15739 R2	15763
SAMPLE DATE	4/18/99	4/18/99	4/18/99	4/30/99	4/30/99	4/30/99	4/30/99	5/6/99
ANALYSIS DATE	5/20/99	5/20/99	5/20/99	6/5/99	6/5/99	6/5/99	6/5/99	VOID
FILE NAME	O9ES043	O9ES044	O9ES045	Q9FD038	Q9FD039	Q9FD040	Q9FD041	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.50	1.75	1.74	1.70	1.68	1.92	1.85	VOID
Acetaldehyde	1.04	1.13	1.12	0.54	0.52	0.55	0.55	VOID
Acrolein	ND	ND	ND	0.01	0.01	0.01	0.01	VOID
Acetone	1.19	1.27	1.26	1.22	1.20	1.17	1.13	VOID
Propionaldehyde	0.19	0.20	0.20	0.06	0.06	0.06	0.05	VOID
Crotonaldehyde	0.07	0.07	0.08	ND	ND	ND	ND	VOID
Butyr/Isobutyraldehyde	0.08	0.08	0.08	ND	ND	ND	ND	VOID
Benzaldehyde	0.02	0.02	0.02	ND	ND	ND	ND	VOID
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	VOID
Valeraldehyde	0.04	0.05	0.05	ND	ND	0.03	0.02	VOID
Tolualdehydes	0.00	0.01	0.01	0.04	0.03	0.04	0.02	VOID
Hexaldehyde	0.05	0.06	0.06	0.02	0.02	0.02	0.02	VOID
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15765	15770	15820 D1	15820 R1	15821 D2	15821 R2	15855	15984
SAMPLE DATE	5/6/99	5/18/99	5/30/99	5/30/99	5/30/99	5/30/99	6/11/99	7/5/99
ANALYSIS DATE	VOID	6/9/99	6/11/99	6/11/99	6/11/99	6/11/99	6/18/99	8/6/99
FILE NAME	VOID	Q9FH021	Q9FK004	Q9FK005	Q9FK006	Q9FK007	O9FR020	O9HE019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	2.99	1.24	1.29	1.34	1.35	1.33	1.17
Acetaldehyde	VOID	1.33	0.53	0.55	0.60	0.58	0.56	0.38
Acrolein	VOID	0.05	0.01	0.02	0.02	0.01	ND	ND
Acetone	VOID	0.49	0.29	0.28	0.28	0.28	0.48	0.03
Propionaldehyde	VOID	0.18	0.09	0.08	0.10	0.09	0.12	0.06
Crotonaldehyde	VOID	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	VOID	0.16	0.23	0.23	0.23	0.25	0.10	0.05
Benzaldehyde	VOID	0.06	0.05	0.04	0.03	0.03	0.06	0.03
Isovaleraldehyde	VOID	0.03	0.03	ND	0.02	0.03	0.01	0.01
Valeraldehyde	VOID	0.09	0.03	0.03	0.02	0.03	0.05	0.02
Tolualdehydes	VOID	0.04	ND	ND	0.03	0.03	0.03	0.01
Hexaldehyde	VOID	0.06	0.04	0.04	0.04	0.04	0.07	0.04
2,5-Dimethylbenzaldehyde	VOID	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	16061	16202	16348	16449	16678
SAMPLE DATE	7/17/99	7/29/99	8/10/99	8/22/99	9/3/99
ANALYSIS DATE	8/6/99	VOID	8/25/99	9/11/99	9/23/99
FILE NAME	O9HE031	VOID	O9HX021	O9IJ025	O9IV016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.01	VOID	0.93	1.02	0.61
Acetaldehyde	0.40	VOID	0.17	0.36	0.33
Acrolein	0.00	VOID	ND	0.01	0.01
Acetone	0.03	VOID	0.06	0.04	0.04
Propionaldehyde	0.05	VOID	0.04	0.05	0.03
Crotonaldehyde	ND	VOID	ND	ND	ND
Butyr/Isobutyraldehyde	ND	VOID	ND	0.17	0.03
Benzaldehyde	0.01	VOID	0.02	0.02	0.01
Isovaleraldehyde	ND	VOID	0.01	0.01	0.01
Valeraldehyde	0.03	VOID	0.03	0.03	0.01
Tolualdehydes	ND	VOID	0.02	0.01	ND
Hexaldehyde	0.04	VOID	0.03	0.02	0.03
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Hahnville, LA
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK014
FB ID	15103 FB
Sample date	9/26/98
Date Analyzed	11/11/98
Formaldehyde	0.11
Acetaldehyde	0.17
Acrolein	0.03
Acetone	0.44
Propionaldehyde	0.00
Crotonaldehyde	0.00
Butyr/Isobutyraldehyde	0.68
Benzaldehyde	0.00
Isovaleraldehyde	0.00
Valeraldehyde	0.04
Tolualdehydes	0.00
Hexaldehyde	0.05
2,5-Dimethylbenzaldehyde	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK014
FB ID	15103 FB
Date Analyzed	11/11/98
Formaldehyde	0.06
Acetaldehyde	0.14
Acrolein	0.02
Acetone	0.43
Propionaldehyde	ND
Crotonaldehyde	ND
Butyraldehyde	0.77
Benzaldehyde	ND
Isovaleraldehyde	ND
Valeraldehyde	0.05
Tolualdehydes	ND
Hexaldehyde	0.07
2,5-Dimethylbenzaldehyde	ND

1998 UATMP CARBONYLS

Sample Site: N. Little Rock, AK **PARR**

Derivatized Conc. (ug/mL)	14683	14699	14966	15125	15146	15186	15210	15242
SAMPLE DATE	9/3/98	9/8/98	9/20/98	10/14/98	10/26/98	11/7/98	11/19/98	12/1/98
ANALYSIS DATE	10/28/98	10/28/98	11/12/98	11/17/98	VOID	12/22/98	12/22/98	12/22/98
FILE NAME	Q8J~022	Q8J~026	Q8KK041	Q8KP023	VOID	Q8LU025	Q8LU032	Q8LU039
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	5.04	1.94	2.74	VOID	1.51	VOID	1.20
Acetaldehyde	VOID	1.22	0.75	1.14	VOID	1.02	VOID	0.65
Acrolein	VOID	0.04	0.10	0.04	VOID	0.02	VOID	0.02
Acetone	VOID	1.85	0.51	2.18	VOID	1.57	VOID	1.20
Propionaldehyde	VOID	0.12	0.11	0.15	VOID	0.09	VOID	0.06
Crotonaldehyde	VOID	ND	ND	ND	VOID	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	0.43	0.14	0.64	VOID	0.20	VOID	0.21
Benzaldehyde	VOID	0.21	0.04	0.09	VOID	0.05	VOID	0.04
Isovaleraldehyde	VOID	0.02	0.03	0.01	VOID	0.04	VOID	0.04
Valeraldehyde	VOID	0.02	0.06	0.05	VOID	0.03	VOID	0.03
Tolualdehydes	VOID	0.12	0.05	0.04	VOID	0.04	VOID	0.03
Hexaldehyde	VOID	0.04	0.07	0.03	VOID	0.01	VOID	0.02
2,5-Dimethylbenzaldehyde	VOID	ND	0.03	ND	VOID	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: N. Little Rock, AK

Derivatized Conc. (ug/mL)	15261	15279	15325	15363	15373	15400	15432	15462
SAMPLE DATE	12/13/98	12/25/98	1/6/99	1/18/99	1/30/99	2/11/99	2/17/99	2/23/99
ANALYSIS DATE	1/8/99	1/8/99	2/20/99	2/20/99	3/16/99	3/16/99	3/16/99	3/16/99
FILE NAME	O9AG033	O9AG044	O9BS024	O9BS025	09CO025	09CO030	09CO041	09CO048
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.75	1.60	2.34	1.26	1.26	1.01	1.36	1.83
Acetaldehyde	0.47	1.24	1.19	0.70	0.49	0.43	0.62	0.79
Acrolein	0.01	0.04	0.02	0.02	ND	ND	ND	ND
Acetone	0.83	1.00	1.58	1.25	0.78	0.46	1.28	1.38
Propionaldehyde	0.06	0.12	0.13	0.10	0.08	0.08	0.11	0.14
Crotonaldehyde	ND	0.01	0.01	0.004	ND	0.03	0.08	0.09
Butyr/Isobutyraldehyde	0.10	0.13	0.14	0.09	0.04	0.03	0.04	0.05
Benzaldehyde	0.02	0.04	0.04	0.04	0.04	0.02	0.05	0.05
Isovaleraldehyde	0.01	0.01	0.01	0.01	ND	ND	ND	ND
Valeraldehyde	0.01	0.02	0.03	0.03	ND	ND	0.03	0.04
Tolualdehydes	0.01	0.02	0.03	0.03	0.03	0.03	0.04	0.04
Hexaldehyde	0.02	0.04	0.04	0.03	0.02	0.03	0.04	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: N. Little Rock, AK

Derivatized Conc. (ug/mL)	15514	15506	15598 D1	15598 R1	15600 D2	15600 R2	15585	15615
SAMPLE DATE	3/1/99	3/7/99	3/17/99	3/17/99	3/17/99	3/17/99	3/25/99	3/31/99
ANALYSIS DATE	3/17/99	3/17/99	4/14/99	4/14/99	4/14/99	4/14/99	4/14/99	5/12/99
FILE NAME	O9CQ018	O9CQ017	O9DM035	O9DM037	O9DM038	O9DM039	O9DM028	O9EK023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.99	1.09	1.55	1.57	1.54	1.59	1.39	1.50
Acetaldehyde	1.34	0.52	0.68	0.68	0.67	0.67	0.69	0.70
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	2.02	0.87	1.25	1.26	1.25	1.26	1.28	0.82
Propionaldehyde	0.24	0.09	0.11	0.11	0.11	0.11	0.12	0.12
Crotonaldehyde	0.14	0.04	ND	ND	ND	ND	ND	0.06
Butyr/Isobutyraldehyde	0.09	0.05	0.04	0.04	0.04	0.04	0.05	0.06
Benzaldehyde	0.07	0.01	0.03	0.03	0.03	0.03	0.02	0.04
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.06	ND	0.02	0.01	0.02	0.02	0.02	0.02
Tolualdehydes	0.05	0.02	0.02	0.02	0.02	0.02	0.01	0.00
Hexaldehyde	0.05	0.02	0.03	0.02	0.02	0.02	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: N. Little Rock, AR
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK012	O9DM010
FB ID	14967 FB	15586 FB
Sample date	9/21/98	3/25/99
Date Analyzed	11/11/98	4/13/99
Formaldehyde	0.10	0.14
Acetaldehyde	0.07	0.06
Acrolein	0.00	0.00
Acetone	0.37	0.13
Propionaldehyde	0.00	0.02
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.61	0.00
Benzaldehyde	0.00	0.00
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.00
Tolualdehydes	0.00	0.02
Hexaldehyde	0.03	0.00
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK012	O9DM010
FB ID	14967 FB	15586 FB
Date Analyzed	11/11/98	4/13/99
Formaldehyde	0.06	0.08
Acetaldehyde	0.06	0.05
Acrolein	ND	ND
Acetone	0.36	0.12
Propionaldehyde	ND	0.02
Crotonaldehyde	ND	ND
Butyraldehyde	0.70	ND
Benzaldehyde	ND	ND
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	ND
Tolualdehydes	ND	0.03
Hexaldehyde	0.05	ND
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Rutland, VT RUVT

Derivatized Conc. (ug/mL)	14691	14822	15061	15112	15136	15158	15202	15230
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98	11/25/98
ANALYSIS DATE	10/28/98	10/30/98	11/12/98	11/17/98	11/17/98	11/25/98	11/25/98	12/21/98
FILE NAME	Q8J~020	Q8J#023	Q8KK042	Q8KP024	Q8KP025	Q8KW023	Q8KW028	Q8LU012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.18	1.47	1.70	1.53	1.60	1.13	1.75	1.44
Acetaldehyde	0.93	0.86	1.07	1.06	0.77	0.63	0.83	0.77
Acrolein	0.04	0.14	0.15	0.05	0.01	0.02	0.03	0.02
Acetone	ND	0.83	1.18	1.04	1.46	0.94	1.27	1.00
Propionaldehyde	1.36	0.11	0.15	0.14	0.08	0.06	0.09	0.07
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.39	0.11	0.15	0.44	0.41	0.33	0.21	0.16
Benzaldehyde	0.06	0.06	0.05	0.05	0.03	0.03	0.05	0.05
Isovaleraldehyde	0.01	0.02	0.03	0.03	ND	ND	0.020	0.02
Valeraldehyde	0.03	0.03	0.05	0.04	0.02	0.02	0.02	0.02
Tolualdehydes	ND	0.03	0.04	0.04	ND	ND	0.04	0.03
Hexaldehyde	0.04	0.05	0.06	0.03	0.02	0.01	0.02	0.02
2,5-Dimethylbenzaldehyde	ND	ND	0.02	ND	ND	ND	0.01	0.02

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15246	15281	15307	15321	15346 D1	15346 R1	15348 D2	15348 R2
SAMPLE DATE	12/7/98	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE	12/22/98	1/8/99	2/20/99	VOID	2/20/99	2/20/99	2/20/99	2/20/99
FILE NAME	Q8LU017	O9AG036	O9BS018	VOID	O9BS035	O9BS036	O9BS038	O9BS039
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.36	2.13	2.02	VOID	1.08	1.11	1.11	1.13
Acetaldehyde	0.62	1.47	1.29	VOID	0.80	0.80	0.80	0.81
Acrolein	0.01	0.07	0.06	VOID	0.01	0.01	0.01	0.01
Acetone	0.99	1.35	1.08	VOID	0.96	0.95	0.94	0.96
Propionaldehyde	0.07	0.17	0.13	VOID	0.09	0.08	0.09	0.09
Crotonaldehyde	ND	0.02	0.02	VOID	0.01	0.01	0.01	0.01
Butyr/Isobutyraldehyde	0.12	0.19	0.14	VOID	0.08	0.08	0.08	0.09
Benzaldehyde	0.03	0.09	0.08	VOID	0.05	0.05	0.05	0.05
Isovaleraldehyde	ND	0.02	0.01	VOID	0.01	0.01	0.01	0.01
Valeraldehyde	0.02	0.03	0.03	VOID	0.02	0.02	0.02	0.02
Tolualdehydes	0.03	0.08	0.07	VOID	0.04	0.04	0.04	0.04
Hexaldehyde	0.02	0.04	0.03	VOID	0.05	0.05	0.04	0.04
2,5-Dimethylbenzaldehyde	0.01	ND	ND	VOID	ND	0.00	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15410	15446	15480	15551	15567	15629 D1	15629 R1	15631 D2
SAMPLE DATE	2/5/99	2/17/99	3/1/99	3/13/99	3/19/99	3/25/99	3/25/99	3/25/99
ANALYSIS DATE	3/16/99	3/16/99	VOID	4/1/99	4/14/99	5/12/99	5/12/99	5/12/99
FILE NAME	09CO027	09CO038	VOID	O9C%025	O9DM024	O9EK042	O9EK043	O9EK044
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.10	1.91	VOID	1.32	1.44	1.46	1.48	1.55
Acetaldehyde	0.59	0.98	VOID	0.66	0.68	0.58	0.58	0.58
Acrolein	ND	ND	VOID	ND	ND	0.02	0.02	0.02
Acetone	0.72	1.25	VOID	0.76	0.65	0.81	0.81	0.82
Propionaldehyde	0.10	0.16	VOID	0.11	0.10	0.09	0.09	0.09
Crotonaldehyde	0.04	0.10	VOID	0.04	ND	0.02	0.02	0.02
Butyr/Isobutyraldehyde	0.04	0.06	VOID	0.04	0.04	0.04	0.04	0.04
Benzaldehyde	0.02	0.05	VOID	0.02	0.01	0.01	0.01	0.02
Isovaleraldehyde	ND	ND	VOID	ND	ND	ND	ND	ND
Valeraldehyde	0.03	0.03	VOID	0.02	0.01	0.01	0.01	0.01
Tolualdehydes	0.02	0.04	VOID	0.01	0.01	ND	ND	0.00
Hexaldehyde	0.01	0.04	VOID	0.005	0.01	0.01	0.01	0.01
2,5-Dimethylbenzaldehyde	ND	ND	VOID	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15631 R2	15633	15679	15732	15823	15825	15785	15905
SAMPLE DATE	3/25/99	4/6/99	4/18/99	4/30/99	5/12/99	5/12/99	5/24/99	6/5/99
ANALYSIS DATE	5/12/99	5/19/99	5/19/99	6/5/99	VOID	VOID	6/10/99	7/6/99
FILE NAME	O9EK045	O9ES013	O9ES018	Q9FD020	VOID	VOID	Q9FH025	O9GF014
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.59	2.19	0.64	3.20	VOID	VOID	2.25	3.56
Acetaldehyde	0.59	1.11	0.30	1.65	VOID	VOID	0.85	1.50
Acrolein	0.02	ND	ND	0.02	VOID	VOID	0.03	ND
Acetone	0.82	1.41	0.46	2.23	VOID	VOID	1.22	2.31
Propionaldehyde	0.09	0.17	0.05	0.19	VOID	VOID	0.11	0.23
Crotonaldehyde	0.02	0.07	0.02	ND	VOID	VOID	ND	ND
Butyr/Isobutyraldehyde	0.04	0.09	0.02	0.48	VOID	VOID	0.34	0.33
Benzaldehyde	0.02	0.05	0.01	0.08	VOID	VOID	0.06	0.15
Isovaleraldehyde	ND	ND	ND	0.013	VOID	VOID	ND	0.03
Valeraldehyde	0.01	0.03	0.01	0.07	VOID	VOID	0.04	0.06
Tolualdehydes	ND	0.01	ND	0.06	VOID	VOID	0.04	0.05
Hexaldehyde	0.01	0.03	0.01	0.11	VOID	VOID	0.03	0.08
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	VOID	VOID	ND	0.01

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15926	16027	16259	16251	16276	16488	16610	16808
SAMPLE DATE	6/17/99	6/29/99	7/17/99	7/23/99	8/4/99	8/16/99	8/28/99	9/9/99
ANALYSIS DATE	VOID	8/6/99	8/19/99	8/19/99	8/25/99	9/11/99	VOID	10/1/99
FILE NAME	VOID	O9HE011	O9HQ028	O9HQ032	O9HX024	O9IJ018	VOID	O9I$035
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	3.35	5.11	4.44	2.67	2.35	VOID	2.63
Acetaldehyde	VOID	1.10	1.52	1.57	0.96	1.04	VOID	1.06
Acrolein	VOID	ND	0.02	0.02	ND	ND	VOID	ND
Acetone	VOID	0.20	0.49	1.49	1.00	1.31	VOID	1.57
Propionaldehyde	VOID	0.20	0.32	0.26	0.17	0.15	VOID	0.15
Crotonaldehyde	VOID	ND	0.01	ND	ND	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	0.21	0.24	0.24	0.24	0.17	VOID	0.15
Benzaldehyde	VOID	0.09	0.09	ND	0.07	0.05	VOID	0.11
Isovaleraldehyde	VOID	0.02	0.03	0.03	0.03	0.02	VOID	0.03
Valeraldehyde	VOID	0.07	0.10	0.08	0.06	0.05	VOID	0.05
Tolualdehydes	VOID	0.05	0.04	0.05	0.05	0.05	VOID	0.05
Hexaldehyde	VOID	0.09	0.10	0.07	0.05	0.06	VOID	0.09
2,5-Dimethylbenzaldehyde	VOID	0.01	ND	ND	0.01	0.01	VOID	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Rutland, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J#009	O9C%011
FB ID	14823 FB	15552 FB
Sample date	9/14/98	3/13/99
Date Analyzed	10/29/98	3/30/99
Formaldehyde	0.03	0.05
Acetaldehyde	0.05	0.08
Acrolein	0.00	0.00
Acetone	0.35	0.16
Propionaldehyde	0.00	0.00
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.37	0.00
Benzaldehyde	0.00	0.00
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.00
Tolualdehydes	0.00	0.02
Hexaldehyde	0.00	0.00
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J#009	O9C%011
FB ID	14823 FB	15552 FB
Date Analyzed	10/29/98	3/30/99
Formaldehyde	0.02	0.03
Acetaldehyde	0.04	0.06
Acrolein	ND	ND
Acetone	0.34	0.16
Propionaldehyde	ND	ND
Crotonaldehyde	ND	ND
Butyraldehyde	0.43	ND
Benzaldehyde	ND	ND
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	ND
Tolualdehydes	ND	0.04
Hexaldehyde	ND	ND
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Texarkana, AK GREY

Derivatized Conc. (ug/mL)	14557	14696	14887	15119	15142	15174	15220	15240
SAMPLE DATE	9/1/98	9/5/98	9/17/98	10/14/98	10/25/98	11/7/98	11/13/98	12/3/98
ANALYSIS DATE	VOID	10/28/98	10/30/98	11/17/98	11/25/98	12/22/98	VOID	12/22/98
FILE NAME	VOID	Q8J-027	Q8J#028	Q8KP021	Q8KW013	Q8LU023	VOID	Q8LU038
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	VOID	VOID	4.18	VOID	1.49	VOID	1.93
Acetaldehyde	VOID	VOID	VOID	1.21	VOID	0.82	VOID	0.39
Acrolein	VOID	VOID	VOID	0.03	VOID	0.01	VOID	0.03
Acetone	VOID	VOID	VOID	1.16	VOID	0.89	VOID	1.35
Propionaldehyde	VOID	VOID	VOID	0.10	VOID	0.08	VOID	0.04
Crotonaldehyde	VOID	VOID	VOID	ND	VOID	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	VOID	VOID	0.41	VOID	0.14	VOID	0.21
Benzaldehyde	VOID	VOID	VOID	0.06	VOID	0.03	VOID	0.04
Isovaleraldehyde	VOID	VOID	VOID	0.01	VOID	0.02	VOID	0.03
Valeraldehyde	VOID	VOID	VOID	0.07	VOID	0.02	VOID	0.01
Tolualdehydes	VOID	VOID	VOID	0.04	VOID	0.03	VOID	0.05
Hexaldehyde	VOID	VOID	VOID	0.15	VOID	0.02	VOID	0.03
2,5-Dimethylbenzaldehyde	VOID	VOID	VOID	ND	VOID	ND	VOID	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: Texarkana, AK

Derivatized Conc. (ug/mL)	15259	15287	15313	15365	15371	15420	15440	15488
SAMPLE DATE	12/13/98	12/25/98	1/6/99	1/18/99	1/30/99	2/11/99	2/23/99	3/7/99
ANALYSIS DATE	1/8/99	VOID	VOID	VOID	VOID	3/16/99	3/16/99	3/17/99
FILE NAME	O9AG031	VOID	VOID	VOID	VOID	09CO031	09CO044	O9CQ012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.50	VOID	VOID	VOID	VOID	2.24	1.11	2.04
Acetaldehyde	0.31	VOID	VOID	VOID	VOID	0.99	0.63	0.91
Acrolein	0.002u	VOID	VOID	VOID	VOID	ND	ND	ND
Acetone	0.86	VOID	VOID	VOID	VOID	0.55	1.26	1.38
Propionaldehyde	0.03	VOID	VOID	VOID	VOID	ND	0.09	0.14
Crotonaldehyde	ND	VOID	VOID	VOID	VOID	0.07	0.04	0.05
Butyr/Isobutyraldehyde	0.11	VOID	VOID	VOID	VOID	0.05	0.03	0.05
Benzaldehyde	0.05	VOID	VOID	VOID	VOID	0.05	0.02	0.03
Isovaleraldehyde	ND	VOID	VOID	VOID	VOID	ND	ND	ND
Valeraldehyde	0.02	VOID	VOID	VOID	VOID	0.05	0.03	ND
Tolualdehydes	0.03	VOID	VOID	VOID	VOID	0.03	0.02	0.03
Hexaldehyde	0.07	VOID	VOID	VOID	VOID	0.04	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	VOID	VOID	VOID	VOID	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: Texarkana, AK

Derivatized Conc. (ug/mL)	15508	15531	15565	15623
SAMPLE DATE	3/13/99	3/19/99	3/25/99	3/31/99
ANALYSIS DATE	3/17/99	4/1/99	5/12/99	5/12/99
FILE NAME	O9CQ013	O9C%029	O9EK018	O9EK022
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.37	2.02	0.38	0.76
Acetaldehyde	0.65	0.92	0.35	0.49
Acrolein	ND	ND	0.01	ND
Acetone	0.65	1.23	0.41	0.74
Propionaldehyde	0.10	0.22	0.03	0.05
Crotonaldehyde	0.05	0.04	0.01	0.02
Butyr/Isobutyraldehyde	0.04	0.05	0.02	0.03
Benzaldehyde	0.03	0.03	0.01	0.01
Isovaleraldehyde	ND	ND	ND	ND
Valeraldehyde	0.03	0.05	0.004	0.01
Tolualdehydes	0.02	0.02	ND	ND
Hexaldehyde	0.03	0.03	0.01	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

FIELD BLANK DATA

Sample site: GREY
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J~007	Q8J#011	Q8KP007
FB ID	14558 FB	14888 FB	15097 FB
Sample date	9/1/98	9/17/98	10/6/98
Date Analyzed	10/27/98	10/29/98	11/16/98
Formaldehyde	VOID	VOID	15.46
Acetaldehyde	VOID	VOID	2.32
Acrolein	VOID	VOID	0.13
Acetone	VOID	VOID	2.36
Propionaldehyde	VOID	VOID	0.19
Crotonaldehyde	VOID	VOID	0.00
Butyr/Isobutyraldehyde	VOID	VOID	0.96
Benzaldehyde	VOID	VOID	0.25
Isovaleraldehyde	VOID	VOID	0.05
Valeraldehyde	VOID	VOID	0.39
Tolualdehydes	VOID	VOID	0.00
Hexaldehyde	VOID	VOID	1.58
2,5-Dimethylbenzaldehyde	VOID	VOID	0.12

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J~007	Q8J#011	Q8KP007
FB ID	14558 FB	14888 FB	15097 FB
Date Analyzed	10/27/98	10/29/98	11/16/98
Formaldehyde	VOID	VOID	8.84
Acetaldehyde	VOID	VOID	1.82
Acrolein	VOID	VOID	0.12
Acetone	VOID	VOID	2.30
Propionaldehyde	VOID	VOID	0.18
Crotonaldehyde	VOID	VOID	ND
Butyraldehyde	VOID	VOID	1.10
Benzaldehyde	VOID	VOID	0.37
Isovaleraldehyde	VOID	VOID	0.07
Valeraldehyde	VOID	VOID	0.51
Tolualdehydes	VOID	VOID	ND
Hexaldehyde	VOID	VOID	2.25
2,5-Dimethylbenzaldehyde	VOID	VOID	0.21

1998 UATMP CARBONYLS

Sample Site: Underhill, VT **UNVT**

Derivatized Conc. (ug/mL)	14681	14816	15053	15110	15140	15160	15200	15226
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98	11/25/98
ANALYSIS DATE	10/28/98	10/30/98	11/12/98	11/17/98	11/17/98	11/25/98	11/25/98	12/21/98
FILE NAME	Q8J~021	Q8J#024	Q8KK043	Q8KP027	Q8KP028	Q8KW024	Q8KW029	Q8LU013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.84	0.57	1.06	0.70	0.70	0.52	0.45	0.46
Acetaldehyde	0.32	0.33	0.71	0.50	0.39	0.28	0.30	0.29
Acrolein	0.03	0.07	0.11	ND	ND	0.01	0.01	0.01
Acetone	0.56	0.55	1.07	0.84	1.14	0.72	0.80	0.69
Propionaldehyde	0.04	0.03	0.08	0.06	0.05	0.04	0.03	0.03
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	0.01
Butyr/Isobutyraldehyde	0.04	0.04	0.09	0.48	0.31	0.29	0.15	0.08
Benzaldehyde	0.01	0.02	0.04	0.02	0.02	0.03	0.02	0.02
Isovaleraldehyde	0.01	ND	0.01	ND	ND	0.01	ND	0.01
Valeraldehyde	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01
Tolualdehydes	ND	ND	ND	ND	ND	0.02	ND	0.01
Hexaldehyde	0.01	0.01	0.02	0.02	0.01	0.02	ND	0.01
2,5-Dimethylbenzaldehyde	0.01	ND	0.02	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	15248	15289	15309	15323	15359 D1	15359 R1	15361 D2	15361 R2
SAMPLE DATE	12/7/98	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE	12/22/98	1/8/99	2/20/99	2/20/99	2/20/99	2/20/99	2/20/99	2/20/99
FILE NAME	Q8LU018	O9AG038	O9BS019	O9BS023	O9BS040	O9BS041	O9BS042	O9BS043
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.65	0.63	0.58	0.87	0.51	0.52	0.54	0.56
Acetaldehyde	0.33	0.46	0.39	0.72	0.29	0.29	0.34	0.34
Acrolein	0.01	0.01	0.01	0.01	0.0007u	0.0003u	0.0006u	0.0008u
Acetone	0.80	0.70	0.55	0.90	0.55	0.54	0.61	0.61
Propionaldehyde	0.04	0.06	0.04	0.08	0.04	0.04	0.04	0.04
Crotonaldehyde	ND	0.003	ND	0.004	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.08	0.08	0.04	0.08	0.03	0.03	0.05	0.04
Benzaldehyde	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Isovaleraldehyde	0.01	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Tolualdehydes	0.02	0.01	0.01	0.01	ND	ND	ND	ND
Hexaldehyde	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
2,5-Dimethylbenzaldehyde	0.01	0.01	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	15418	15448	15486	15545	15569	15581 D1	15581 R1
SAMPLE DATE	2/5/99	2/17/99	3/1/99	3/13/99	3/19/99	3/25/99	3/25/99
ANALYSIS DATE	3/16/99	3/16/99	3/16/99	4/1/99	4/14/99	4/14/99	4/14/99
FILE NAME	09CO029	09CO040	09CO053	O9C%027	O9DM026	O9DM053	O9DM054
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.50	1.20	0.87	0.85	0.55	0.45	0.46
Acetaldehyde	0.30	0.63	0.36	0.44	0.24	0.23	0.23
Acrolein	ND	ND	ND	ND	ND	ND	ND
Acetone	0.59	0.97	0.79	0.67	0.49	0.60	0.59
Propionaldehyde	0.05	0.10	0.07	0.07	0.04	0.04	0.04
Crotonaldehyde	0.02	0.04	0.02	0.03	ND	ND	ND
Butyr/Isobutyraldehyde	0.02	0.04	0.02	0.02	0.01	0.01	0.01
Benzaldehyde	0.01	0.02	0.01	0.01	0.003	0.004	0.004
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	ND	0.02	ND	0.01	0.003	0.002	ND
Tolualdehydes	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Hexaldehyde	0.01	0.01	ND	0.01	0.01	0.01	0.01
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: *Underhill, VT*

Derivatized Conc. (ug/mL)	15583 D2	15583 R2	15643	15667	15736	15800 D1	15800 R1	15802 D2
SAMPLE DATE	3/25/99	3/25/99	4/6/99	4/12/99	4/30/99	5/12/99	5/12/99	5/12/99
ANALYSIS DATE	4/14/99	4/14/99	5/19/99	5/19/99	6/5/99	6/10/99	6/10/99	6/11/99
FILE NAME	O9DM055	O9DM056	O9ES015	O9ES019	Q9FD021	Q9FH044	Q9FH045	Q9FK002
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.52	0.51	1.11	0.78	1.42	1.10	1.07	1.25
Acetaldehyde	0.26	0.26	0.52	0.33	0.63	0.49	0.52	0.50
Acrolein	ND	ND	0.02	ND	0.01	ND	ND	ND
Acetone	0.69	0.69	0.97	0.80	1.34	1.36	1.35	1.39
Propionaldehyde	0.04	0.04	0.07	0.04	0.06	0.07	0.06	0.06
Crotonaldehyde	ND	ND	0.03	0.02	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.01	0.01	0.03	0.02	0.26	0.26	0.25	0.21
Benzaldehyde	0.003	0.005	0.01	0.01	0.03	0.03	0.03	0.07
Isovaleraldehyde	ND	ND	ND	ND	ND	0.03	0.03	ND
Valeraldehyde	0.001	0.001	0.01	0.01	0.03	0.02	0.02	0.02
Tolualdehydes	0.01	0.01	ND	ND	0.04	0.04	0.05	0.03
Hexaldehyde	0.01	0.01	0.01	0.01	0.04	0.05	0.02	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	15802 R2	15792	15831	15924	16029	16266	16256	16274
SAMPLE DATE	5/12/99	5/24/99	6/5/99	6/17/99	6/29/99	7/17/99	7/23/99	8/4/99
ANALYSIS DATE	6/11/99	6/10/99	6/18/99	7/7/99	8/6/99	8/19/99	8/19/99	8/25/99
FILE NAME	Q9FK003	Q9FH026	O9FR017	O9GF019	O9HE012	O9HQ029	O9HQ033	O9HX025
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.21	1.26	2.15	1.69	1.57	3.18	2.96	1.08
Acetaldehyde	0.49	0.42	0.62	0.50	0.57	0.80	0.81	0.45
Acrolein	ND	0.01	ND	0.02	ND	0.02	ND	ND
Acetone	1.33	1.02	1.90	1.56	0.26	1.39	1.04	0.92
Propionaldehyde	0.06	0.06	0.08	0.08	0.08	0.12	0.11	0.05
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.27	0.34	0.12	0.08	0.12	0.12	0.11	0.08
Benzaldehyde	0.03	0.02	0.05	0.04	0.05	0.12	ND	0.05
Isovaleraldehyde	ND	ND	ND	0.01	0.01	0.01	0.02	0.01
Valeraldehyde	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.02
Tolualdehydes	0.05	0.04	0.04	0.03	0.03	0.04	0.04	0.04
Hexaldehyde	0.04	0.03	0.02	0.03	0.04	0.04	0.06	0.02
2,5-Dimethylbenzaldehyde	ND	ND	0.00	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	16492	16621	16802	16891
SAMPLE DATE	8/16/99	8/28/99	9/9/99	9/21/99
ANALYSIS DATE	9/11/99	VOID	10/1/99	10/13/99
FILE NAME	O9IJ019	VOID	O9I$033	O9JM013
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.61	VOID	1.41	0.60
Acetaldehyde	0.42	VOID	0.47	0.29
Acrolein	0.01	VOID	ND	ND
Acetone	0.86	VOID	1.18	0.47
Propionaldehyde	0.06	VOID	0.06	0.04
Crotonaldehyde	ND	VOID	ND	0.004
Butyr/Isobutyraldehyde	0.07	VOID	0.06	0.05
Benzaldehyde	0.04	VOID	0.05	0.02
Isovaleraldehyde	0.01	VOID	0.01	ND
Valeraldehyde	0.02	VOID	0.02	0.02
Tolualdehydes	0.03	VOID	0.02	0.02
Hexaldehyde	0.03	VOID	0.04	0.02
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Underhill, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J#010	O9C$012	O9HQ009
FB ID	14817 FB	15546 FB	16267 FB
Sample date	9/14/98	3/13/99	7/17/99
Date Analyzed	10/29/98	3/30/99	8/18/99
Formaldehyde	0.08	0.06	0.10
Acetaldehyde	0.21	0.09	0.08
Acrolein	0.00	0.00	0.00
Acetone	0.37	0.18	0.12
Propionaldehyde	0.00	0.00	0.01
Crotonaldehyde	0.00	0.00	0.01
Butyr/Isobutyraldehyde	0.50	0.00	0.10
Benzaldehyde	0.03	0.00	0.03
Isovaleraldehyde	0.00	0.00	0.00
Valeraldehyde	0.00	0.00	0.02
Tolualdehydes	0.00	0.03	0.00
Hexaldehyde	0.00	0.01	0.02
2,5-Dimethylbenzaldehyde	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J#010	O9C$012	O9HQ009
FB ID	14817 FB	15546 FB	16267 FB
Date Analyzed	10/29/98	3/30/99	8/18/99
Formaldehyde	0.04	0.03	0.07
Acetaldehyde	0.16	0.07	0.08
Acrolein	ND	ND	ND
Acetone	0.36	0.17	0.14
Propionaldehyde	ND	ND	0.01
Crotonaldehyde	ND	ND	0.01
Butyraldehyde	0.57	ND	0.15
Benzaldehyde	0.05	ND	0.05
Isovaleraldehyde	ND	ND	ND
Valeraldehyde	ND	ND	0.03
Tolualdehydes	ND	0.04	ND
Hexaldehyde	ND	0.01	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND

APPENDIX G

1998/1999 CARBONYL RAW MONITORING DATA

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA B2LA

SAMPLE #	14781	14896	15065	15127	15168	15176	15188
SAMPLE DATE	9/8/98	9/20/98	10/2/98	10/14/98	11/1/98	11/7/99	11/13/98
ANALYSIS DATE	10/28/98	11/12/98	11/16/98	11/16/98	VOID	12/22/98	12/22/98
FILE NAME	Q8J-023	Q8KK023	Q8KP008	Q8KP009	VOID	Q8LU019	Q8LU027
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	1.11	1.63	3.76	VOID	1.40	1.24
Acetaldehyde	VOID	0.60	0.61	1.68	VOID	0.70	0.97
Acrolein	VOID	0.01	0.05	0.03	VOID	0.04	0.02
Acetone	VOID	0.70	0.46	2.91	VOID	0.78	1.25
Propionaldehyde	VOID	0.10	0.09	0.23	VOID	0.08	0.08
Crotonaldehyde	VOID	ND	ND	ND	VOID	0.05	ND
Butyr/Isobutyraldehyde	VOID	0.81	0.09	0.50	VOID	0.21	0.27
Benzaldehyde	VOID	0.06	0.07	0.11	VOID	0.03	0.05
Isovaleraldehyde	VOID	0.02	0.01	0.02	VOID	0.01	0.02
Valeraldehyde	VOID	0.03	0.02	0.05	VOID	0.03	0.02
Tolualdehydes	VOID	ND	ND	0.03	VOID	0.04	ND
Hexaldehyde	VOID	0.03	0.02	0.04	VOID	0.02	0.02
2,5-Dimethylbenzaldehyde	VOID	ND	0.02	ND	VOID	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	15204	15214	15244	15366	15369	15436	15438	15468
SAMPLE DATE	11/19/98	11/25/98	12/1/98	1/30/99	1/30/99	2/11/99	2/17/99	2/25/99
ANALYSIS DATE	12/22/98	12/22/98	12/22/98	VOID	3/16/99	VOID	VOID	VOID
FILE NAME	Q8LU029	Q8LU033	Q8LU036	VOID	09CO024	VOID	VOID	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.52	1.76	1.40	VOID	0.72	VOID	VOID	VOID
Acetaldehyde	1.10	1.11	0.82	VOID	0.36	VOID	VOID	VOID
Acrolein	0.01	0.02	0.01	VOID	ND	VOID	VOID	VOID
Acetone	0.74	1.17	0.79	VOID	0.50	VOID	VOID	VOID
Propionaldehyde	0.15	0.11	0.08	VOID	0.07	VOID	VOID	VOID
Crotonaldehyde	ND	ND	ND	VOID	0.02	VOID	VOID	VOID
Butyr/Isobutyraldehyde	0.14	0.17	0.21	VOID	0.02	VOID	VOID	VOID
Benzaldehyde	0.08	0.05	0.04	VOID	0.02	VOID	VOID	VOID
Isovaleraldehyde	0.02	0.03	0.01	VOID	ND	VOID	VOID	VOID
Valeraldehyde	0.04	0.04	0.02	VOID	0.02	VOID	VOID	VOID
Tolualdehydes	0.03	0.04	0.01	VOID	0.02	VOID	VOID	VOID
Hexaldehyde	0.02	0.02	0.02	VOID	0.01	VOID	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	ND	0.01	VOID	ND	VOID	VOID	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	15490	15510	15533	15673	15696	15698	15708	15760
SAMPLE DATE	3/7/99	3/13/99	3/19/99	4/19/99	4/20/99	4/20/99	4/26/99	4/30/99
ANALYSIS DATE	3/17/99	VOID	4/1/99	VOID	5/20/99	VOID	VOID	VOID
FILE NAME	O9CQ008	VOID	O9C%030	VOID	O9ES020	VOID	VOID	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.73	VOID	1.87	VOID	0.85	VOID	VOID	VOID
Acetaldehyde	0.56	VOID	0.99	VOID	0.56	VOID	VOID	VOID
Acrolein	ND	VOID	0.02	VOID	ND	VOID	VOID	VOID
Acetone	0.79	VOID	1.51	VOID	0.40	VOID	VOID	VOID
Propionaldehyde	0.10	VOID	0.22	VOID	0.07	VOID	VOID	VOID
Crotonaldehyde	0.03	VOID	0.06	VOID	0.01	VOID	VOID	VOID
Butyr/Isobutyraldehyde	0.04	VOID	0.06	VOID	0.04	VOID	VOID	VOID
Benzaldehyde	0.01	VOID	0.02	VOID	0.02	VOID	VOID	VOID
Isovaleraldehyde	ND	VOID	ND	VOID	ND	VOID	VOID	VOID
Valeraldehyde	0.01	VOID	0.04	VOID	0.02	VOID	VOID	VOID
Tolualdehydes	0.02	VOID	0.02	VOID	ND	VOID	VOID	VOID
Hexaldehyde	0.02	VOID	0.07	VOID	0.02	VOID	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	VOID	ND	VOID	ND	VOID	VOID	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	15761	15757	15779	15816	15833	16040	16134	16247
SAMPLE DATE	4/30/99	5/2/99	5/25/99	6/4/99	6/11/99	7/5/99	7/23/99	7/29/99
ANALYSIS DATE	VOID	VOID	VOID	6/10/99	6/19/99	8/6/99	VOID	8/24/99
FILE NAME	VOID	VOID	VOID	Q9FH031	O9FR021	O9HE013	VOID	O9HX011
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	VOID	VOID	2.78	1.67	2.69	VOID	1.89
Acetaldehyde	VOID	VOID	VOID	0.36	0.47	0.95	VOID	0.68
Acrolein	VOID	VOID	VOID	0.06	ND	0.02	VOID	ND
Acetone	VOID	VOID	VOID	0.11	0.07	0.12	VOID	0.10
Propionaldehyde	VOID	VOID	VOID	0.10	0.08	0.18	VOID	0.09
Crotonaldehyde	VOID	VOID	VOID	ND	ND	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	VOID	VOID	0.26	0.27	0.21	VOID	0.09
Benzaldehyde	VOID	VOID	VOID	0.02	0.03	0.05	VOID	0.03
Isovaleraldehyde	VOID	VOID	VOID	ND	0.01	0.02	VOID	0.01
Valeraldehyde	VOID	VOID	VOID	0.03	0.04	0.09	VOID	0.05
Tolualdehydes	VOID	VOID	VOID	0.06	0.06	0.04	VOID	0.04
Hexaldehyde	VOID	VOID	VOID	0.06	0.07	0.17	VOID	0.08
2,5-Dimethylbenzaldehyde	VOID	VOID	VOID	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Baton Rouge, LA

SAMPLE #	16317	16476	16696	16722	16870
SAMPLE DATE	8/10/99	8/22/99	9/5/99	9/15/99	9/27/99
ANALYSIS DATE	VOID	9/11/99	VOID	10/1/99	VOID
FILE NAME	VOID	O9IJ020	VOID	O9I$036	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	1.21	VOID	4.16	VOID
Acetaldehyde	VOID	0.46	VOID	1.12	VOID
Acrolein	VOID	0.01	VOID	0.004	VOID
Acetone	VOID	0.07	VOID	1.85	VOID
Propionaldehyde	VOID	0.08	VOID	0.18	VOID
Crotonaldehyde	VOID	ND	VOID	ND	VOID
Butyr/Isobutyraldehyde	VOID	0.18	VOID	0.19	VOID
Benzaldehyde	VOID	0.02	VOID	0.07	VOID
Isovaleraldehyde	VOID	0.01	VOID	0.01	VOID
Valeraldehyde	VOID	0.02	VOID	0.03	VOID
Tolualdehydes	VOID	0.02	VOID	0.05	VOID
Hexaldehyde	VOID	0.04	VOID	0.03	VOID
2,5-Dimethylbenzaldehyde	VOID	ND	VOID	ND	VOID

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Baton Rouge, LA
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK009	O9C%013	VOID	VOID
FB ID	14897 FB	15534 FB	15758 FB	15780 FB
Sample date	9/20/98	3/19/99	5/2/99	5/23/99
Date Analyzed	11/11/98	3/31/99	VOID	VOID
Formaldehyde	1.21	2.14	VOID	VOID
Acetaldehyde	0.21	1.95	VOID	VOID
Acrolein	0.02	0.00	VOID	VOID
Acetone	0.45	3.91	VOID	VOID
Propionaldehyde	0.00	0.31	VOID	VOID
Crotonaldehyde	0.00	0.09	VOID	VOID
Butyr/Isobutyraldehyde	0.91	0.05	VOID	VOID
Benzaldehyde	0.00	0.00	VOID	VOID
Isovaleraldehyde	0.00	0.00	VOID	VOID
Valeraldehyde	0.00	0.00	VOID	VOID
Tolualdehydes	0.00	0.09	VOID	VOID
Hexaldehyde	0.04	0.03	VOID	VOID
2,5-Dimethylbenzaldehyde	0.00	0.00	VOID	VOID

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK009	O9C%013	VOID	VOID
FB ID	14897 FB	15534 FB	15758 FB	15780 FB
Date Analyzed	11/11/98	3/31/99	VOID	VOID
Formaldehyde	0.69	1.22	VOID	VOID
Acetaldehyde	0.16	1.53	VOID	VOID
Acrolein	0.02	ND	VOID	VOID
Acetone	0.44	3.81	VOID	VOID
Propionaldehyde	ND	0.30	VOID	VOID
Crotonaldehyde	ND	0.10	VOID	VOID
Butyraldehyde	1.04	0.06	VOID	VOID
Benzaldehyde	ND	ND	VOID	VOID
Isovaleraldehyde	ND	ND	VOID	VOID
Valeraldehyde	ND	ND	VOID	VOID
Tolualdehydes	ND	0.15	VOID	VOID
Hexaldehyde	0.06	0.05	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	ND	VOID	VOID

1998 UATMP CARBONYLS

Sample site: Beulah, ND **BUND**

Derivatized Conc. (ug/mL)	15375 D1	15375 R1	15376 D2	15376 R2	15408	15430	15442	15452	15498	15538 D1
SAMPLE DATE	2/3/99	2/3/99	2/3/99	2/3/99	2/13/99	2/17/99	2/23/99	3/1/99	3/7/99	3/13/99
ANALYSIS DATE	3/17/99	3/17/99	3/17/99	3/17/99	3/16/99	3/16/99	3/16/99	3/17/99	3/17/99	4/1/99
FILE NAME	09CO076	09CO077	09CO078	09CO079	09CO032	09CO033	09CO042	O9CQ006	O9CQ007	O9C%038
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.11	1.10	1.01	1.05	0.98	0.88	0.88	0.76	0.81	0.50
Acetaldehyde	0.62	0.63	0.76	0.76	0.58	0.56	0.47	0.43	0.48	0.28
Acrolein	ND	ND	0.04	0.04	ND	ND	ND	ND	ND	ND
Acetone	1.72	1.73	3.71	3.70	0.79	0.70	0.68	0.71	0.77	0.54
Propionaldehyde	0.05	0.05	0.06	0.06	0.07	0.09	0.08	0.07	0.07	0.04
Crotonaldehyde	ND	ND	ND	ND	0.02	0.02	0.02	ND	0.02	0.01
Butyr/Isobutyraldehyde	0.05	0.04	0.04	0.04	0.05	0.05	0.04	0.02	0.03	0.02
Benzaldehyde	0.02	0.02	0.03	0.03	0.01	0.01	0.01	ND	0.01	0.003
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002
Valeraldehyde	0.04	0.04	0.06	0.06	0.05	0.04	0.03	0.02	0.04	0.03
Tolualdehydes	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	ND
Hexaldehyde	0.09	0.09	0.18	0.18	0.10	0.03	0.05	0.09	0.05	0.07
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	15538 R1	15539 D2	15539 R2	15541 D1	15541 R1	15543 D2	15543 R2	15571	15641	15647
SAMPLE DATE	3/13/99	3/13/99	3/13/99	3/19/99	3/19/99	3/19/99	3/19/99	3/25/99	3/31/99	4/6/99
ANALYSIS DATE	4/1/99	4/1/99	4/1/99	4/1/99	4/1/99	4/1/99	4/1/99	4/14/99	5/12/99	5/12/99
FILE NAME	O9C%039	O9C%035	O9C%036	O9C%042	O9C%043	O9C%040	O9C%041	O9DM027	O9EK019	O9EK024
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.50	1.05	1.04	0.50	0.50	1.00	1.05	0.75	0.64	0.79
Acetaldehyde	0.28	0.59	0.58	0.20	0.20	0.52	0.52	0.45	0.41	0.43
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.53	1.14	1.13	0.34	0.35	0.92	0.92	0.78	0.71	1.09
Propionaldehyde	0.04	0.09	0.09	0.03	0.03	0.07	0.07	0.07	0.06	0.06
Crotonaldehyde	0.01	0.01	0.01	0.01	0.01	0.02	0.02	ND	0.02	0.01
Butyr/Isobutyraldehyde	0.02	0.04	0.04	0.01	0.01	0.04	0.04	0.02	0.04	0.03
Benzaldehyde	0.01	0.01	0.01	ND	0.003	0.004	0.01	ND	0.01	0.01
Isovaleraldehyde	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.03	0.05	0.05	0.01	0.02	0.04	0.03	0.02	0.02	0.02
Tolualdehydes	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	ND	ND
Hexaldehyde	0.07	0.07	0.08	0.06	0.06	0.07	0.07	0.02	0.06	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	15638	15683 D1	15683 R1	15685 D2	15685 R2	15706	15713	15728	15730	15774
SAMPLE DATE	4/12/99	4/18/99	4/18/99	4/18/99	4/18/99	4/24/99	4/30/99	5/6/99	5/6/99	5/18/99
ANALYSIS DATE	5/19/99	5/20/99	5/20/99	5/20/99	5/20/99	6/4/99	6/4/99	VOID	VOID	6/9/99
FILE NAME	O9ES016	O9ES038	O9ES039	O9ES040	O9ES041	Q9FD015	Q9FD016	VOID	VOID	Q9FH018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.54	0.72	0.75	0.29	0.29	0.70	1.00	VOID	VOID	1.42
Acetaldehyde	0.37	0.48	0.47	0.22	0.22	0.65	0.67	VOID	VOID	0.69
Acrolein	0.02	ND	ND	ND	ND	0.01	0.02	VOID	VOID	0.05
Acetone	0.78	1.07	1.06	0.47	0.47	1.40	1.50	VOID	VOID	1.20
Propionaldehyde	0.05	0.07	0.07	0.04	0.03	0.07	0.06	VOID	VOID	0.09
Crotonaldehyde	0.02	0.02	0.02	0.01	0.01	ND	ND	VOID	VOID	ND
Butyr/Isobutyraldehyde	0.03	0.03	0.03	0.01	0.01	0.29	0.40	VOID	VOID	0.43
Benzaldehyde	0.01	0.005	0.007	0.004	0.005	ND	ND	VOID	VOID	0.03
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	VOID	VOID	0.025
Valeraldehyde	0.02	0.02	0.02	0.01	0.01	ND	0.02	VOID	VOID	0.07
Tolualdehydes	ND	ND	ND	ND	ND	ND	ND	VOID	VOID	0.06
Hexaldehyde	0.06	0.04	0.04	0.04	0.04	0.08	0.06	VOID	VOID	0.10
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	VOID	VOID	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	15772	15835	15900	15930	15970	16004	16136	16147	16204	16282
SAMPLE DATE	5/24/99	6/11/99	6/17/99	6/23/99	6/29/99	7/5/99	7/17/99	7/23/99	7/29/99	8/4/99
ANALYSIS DATE	6/10/99	6/18/99	7/7/99	7/7/99	7/7/99	8/6/99	8/6/99	8/6/99	8/6/99	8/24/99
FILE NAME	Q9FH022	O9FR018	O9GF017	O9GF022	O9GF024	O9HE014	O9HE029	O9HE034	O9HE036	O9HX013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.34	1.23	1.86	1.76	1.15	1.21	1.27	2.14	3.50	2.71
Acetaldehyde	0.57	0.49	0.48	0.61	0.52	0.47	0.56	0.83	1.77	1.61
Acrolein	0.03	0.04	0.04	0.05	0.03	0.03	0.03	0.03	0.04	0.03
Acetone	1.25	0.89	1.09	1.47	1.12	1.17	0.95	1.87	3.46	2.18
Propionaldehyde	0.08	0.07	0.07	0.09	0.07	0.06	0.08	0.10	0.22	0.18
Crotonaldehyde	ND	0.01	ND	ND	0.01	ND	ND	ND	0.01	ND
Butyr/Isobutyraldehyde	0.46	0.08	0.09	0.09	0.07	0.04	0.07	0.12	0.21	0.20
Benzaldehyde	0.03	0.03	0.04	0.03	0.05	0.02	0.03	0.05	0.07	0.07
Isovaleraldehyde	0.032	0.01	ND	0.01	0.01	ND	0.01	0.012	0.04	0.03
Valeraldehyde	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.05	0.09	0.08
Tolualdehydes	ND	0.02	0.02	0.03	0.02	0.02	ND	0.02	0.03	0.03
Hexaldehyde	0.08	0.09	0.07	0.10	0.06	0.09	0.08	0.07	0.14	0.11
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	16315	16360	16441	16600	16675	16703	16787 D1	16787 R1	16789 D2	16789 R2	16800
SAMPLE DATE	8/10/99	8/16/99	8/22/99	8/28/99	9/3/99	9/9/99	9/15/99	9/15/99	9/15/99	9/15/99	9/21/99
ANALYSIS DATE	8/24/99	VOID	9/11/99	9/23/99	9/23/99	9/23/99	10/2/99	10/2/99	10/2/99	10/2/99	10/13/99
FILE NAME	O9HX014	VOID	O9IJ023	O9IV022	O9IV021	O9IV023	O9I$053	O9I$054	O9I$055	O9I$056	O9JM019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.44	VOID	2.45	2.21	1.35	1.33	1.30	1.29	1.28	1.24	1.63
Acetaldehyde	1.30	VOID	0.86	0.85	0.80	0.48	0.46	0.46	0.44	0.42	0.72
Acrolein	0.04	VOID	0.03	0.04	0.06	0.03	ND	ND	ND	ND	0.02
Acetone	1.91	VOID	1.83	1.45	1.06	1.73	1.78	1.78	1.59	1.53	2.20
Propionaldehyde	0.15	VOID	0.10	0.10	0.07	0.05	0.06	0.06	0.06	0.06	0.10
Crotonaldehyde	ND	VOID	ND	ND	ND	ND	ND	0.01	ND	ND	0.01
Butyr/Isobutyraldehyde	0.19	VOID	0.12	0.12	0.09	0.07	0.07	0.08	0.07	0.07	0.12
Benzaldehyde	0.06	VOID	0.03	0.03	0.02	0.02	0.01	0.02	0.01	0.01	0.03
Isovaleraldehyde	0.02	VOID	0.01	0.01	0.01	ND	ND	ND	ND	ND	0.01
Valeraldehyde	0.07	VOID	0.05	0.06	0.04	0.04	0.04	0.04	0.03	0.03	0.04
Tolualdehydes	0.03	VOID	0.02	0.03	0.03	0.02	ND	ND	ND	ND	ND
Hexaldehyde	0.10	VOID	0.09	0.09	0.09	0.07	0.08	0.07	0.06	0.05	0.05
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limi

1998 UATMP CARBONYLS

Sample site: Beulah, ND

Derivatized Conc. (ug/mL)	16839 D1	16839 R1	16841 D2	16841 R2
SAMPLE DATE	9/27/99	9/27/99	9/27/99	9/27/99
ANALYSIS DATE	10/14/99	10/14/99	10/14/99	10/14/99
FILE NAME	O9JM026	O9JM027	O9JM028	O9JM029
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.99	1.02	1.10	1.10
Acetaldehyde	0.39	0.39	0.38	0.38
Acrolein	0.02	0.02	0.02	0.01
Acetone	0.93	0.96	0.88	0.88
Propionaldehyde	0.05	0.05	0.05	0.05
Crotonaldehyde	0.01	0.01	0.01	0.01
Butyr/Isobutyraldehyde	0.06	0.06	0.07	0.07
Benzaldehyde	0.02	0.02	0.02	0.02
Isovaleraldehyde	ND	ND	0.01	0.01
Valeraldehyde	0.03	0.03	0.02	0.03
Tolualdehydes	0.02	0.02	0.02	0.01
Hexaldehyde	0.05	0.06	0.04	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND

u - Concentration is below the detection limi

FIELD BLANK DATA

Sample site: Beulah, ND
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	O9ES007	Q9FD008	Q9FH009
FB ID	15639 FB	15714 FB	15775 FB
Sample date	4/12/99	4/30/99	5/18/99
Date Analyzed	5/19/99	6/4/99	6/9/99
Formaldehyde	0.02	0.10	0.08
Acetaldehyde	0.08	0.10	0.10
Acrolein	0.05	0.00	0.00
Acetone	0.14	0.00	0.17
Propionaldehyde	0.00	0.29	0.00
Crotonaldehyde	0.00	0.05	0.00
Butyr/Isobutyraldehyde	0.00	0.29	0.39
Benzaldehyde	0.00	0.00	0.00
Isovaleraldehyde	0.00	0.00	0.00
Valeraldehyde	0.00	0.00	0.00
Tolualdehydes	0.00	0.00	0.00
Hexaldehyde	0.00	0.05	0.00
2,5-Dimethylbenzaldeh	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	O9ES007	Q9FD008	Q9FH009
FB ID	15639 FB	15714 FB	15775 FB
Date Analyzed	5/19/99	6/4/99	6/9/99
Formaldehyde	0.01	0.05	0.05
Acetaldehyde	0.07	0.08	0.08
Acrolein	0.05	ND	ND
Acetone	0.14	0.00	0.17
Propionaldehyde	ND	0.29	ND
Crotonaldehyde	ND	0.05	ND
Butyraldehyde	ND	0.33	0.45
Benzaldehyde	ND	ND	ND
Isovaleraldehyde	ND	ND	ND
Valeraldehyde	ND	ND	ND
Tolualdehydes	ND	ND	ND
Hexaldehyde	ND	0.07	ND
2,5-Dimethylbenzaldeh	ND	ND	ND

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont BRVT

Derivatized Conc. (ug/mL)	14685	14812	15055	15114	15138	15156	15196
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98
ANALYSIS DATE	10/27/98	10/28/98	11/12/98	11/16/98	11/16/98	11/25/98	11/25/98
FILE NAME	Q8J~012	Q8J~029	Q8KK024	Q8KP012	Q8KP013	Q8KW021	Q8KW025
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.22	1.56	1.41	1.08	1.00	0.72	1.17
Acetaldehyde	0.44	0.79	0.71	0.66	0.52	0.36	0.75
Acrolein	0.02	0.09	ND	0.05	ND	0.01	0.03
Acetone	0.79	0.90	1.16	0.69	1.18	0.86	1.33
Propionaldehyde	0.07	0.10	0.09	0.08	0.07	0.05	0.09
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.24	0.11	0.11	0.27	0.27	0.28	0.22
Benzaldehyde	0.04	0.07	0.08	0.03	0.03	0.03	0.05
Isovaleraldehyde	0.01	0.01	0.02	0.01	ND	ND	0.015
Valeraldehyde	0.02	0.03	0.03	0.03	0.02	0.02	0.02
Tolualdehydes	0.02	0.04	0.04	ND	ND	0.02	0.03
Hexaldehyde	0.04	0.05	0.06	0.03	0.03	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	0.01

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15238	15252	15283	15305	15319	15350 D1	15350 R1
SAMPLE DATE	11/25/98	12/7/98	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99
ANALYSIS DATE	12/21/98	12/21/98	1/8/99	2/20/99	2/20/99	2/20/99	2/20/99
FILE NAME	Q8LU010	Q8LU014	O9AG034	O9BS016	O9BS022	O9BS027	O9BS028
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.11	1.12	1.32	2.26	1.69	0.88	0.90
Acetaldehyde	0.56	0.74	0.87	1.17	1.08	0.56	0.57
Acrolein	0.02	0.01	0.04	0.05	0.03	0.01	0.01
Acetone	1.16	0.94	1.12	1.42	1.40	0.72	0.74
Propionaldehyde	0.07	0.10	0.10	0.12	0.13	0.06	0.06
Crotonaldehyde	ND	0.04	0.01	0.03	0.02	0.01	0.01
Butyr/Isobutyraldehyde	0.11	0.13	0.14	0.19	0.13	0.06	0.06
Benzaldehyde	0.05	0.03	0.05	0.07	0.07	0.04	0.04
Isovaleraldehyde	0.01	0.02	0.01	0.02	0.01	0.01	0.01
Valeraldehyde	0.02	0.03	0.02	0.04	0.03	0.02	0.02
Tolualdehydes	0.03	0.03	0.04	0.05	0.06	0.02	0.02
Hexaldehyde	0.03	0.03	0.03	0.05	0.05	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15352 D2	15352 R2	15414	15444	15484	15548	15588 D1
SAMPLE DATE	1/24/99	1/24/99	2/5/99	2/15/99	3/1/99	3/13/99	3/25/99
ANALYSIS DATE	2/20/99	2/20/99	3/16/99	3/16/99	3/16/99	3/31/99	4/14/99
FILE NAME	O9BS029	O9BS030	09CO026	09CO034	09CO051	O9C%020	O9DM044
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.93	0.89	0.83	1.47	1.36	1.02	0.93
Acetaldehyde	0.58	0.58	0.41	0.96	0.71	0.54	0.42
Acrolein	0.01	0.01	ND	ND	ND	ND	ND
Acetone	0.75	0.75	0.71	2.62	1.09	0.76	0.78
Propionaldehyde	0.06	0.06	0.08	0.15	0.11	0.10	0.07
Crotonaldehyde	0.01	0.01	0.04	0.12	0.09	0.03	ND
Butyr/Isobutyraldehyde	0.06	0.06	0.03	0.07	0.05	0.05	0.03
Benzaldehyde	0.04	0.05	0.02	0.06	0.04	0.04	0.02
Isovaleraldehyde	0.010	0.01	ND	ND	ND	ND	ND
Valeraldehyde	0.02	0.02	0.04	0.04	0.04	0.03	0.02
Tolualdehydes	0.03	0.03	0.03	0.06	0.05	0.02	0.02
Hexaldehyde	0.04	0.04	0.02	0.06	0.05	0.03	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15588 R1	15590 D2	15590 R2	15657	15827	15829	15790
SAMPLE DATE	3/25/99	3/25/99	3/25/99	4/6/99	5/12/99	5/12/99	5/18/99
ANALYSIS DATE	4/14/99	4/14/99	4/14/99	5/12/99	VOID	VOID	6/9/99
FILE NAME	O9DM045	O9DM046	O9DM048	O9EK025	VOID	VOID	Q9FH019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.95	0.93	0.93	1.57	VOID	VOID	1.83
Acetaldehyde	0.43	0.40	0.40	0.80	VOID	VOID	1.14
Acrolein	ND	ND	ND	ND'	VOID	VOID	0.04
Acetone	0.79	0.75	0.75	1.37	VOID	VOID	0.76
Propionaldehyde	0.07	0.07	0.07	0.12	VOID	VOID	0.13
Crotonaldehyde	ND	ND	ND	0.04	VOID	VOID	ND
Butyr/Isobutyraldehyde	0.03	0.03	0.03	0.06	VOID	VOID	0.26
Benzaldehyde	0.02	0.02	0.02	0.03	VOID	VOID	0.06
Isovaleraldehyde	ND	ND	ND	ND	VOID	VOID	0.047
Valeraldehyde	0.02	0.02	0.02	0.02	VOID	VOID	0.05
Tolualdehydes	0.02	0.02	0.02	0.00	VOID	VOID	0.04
Hexaldehyde	0.02	0.02	0.02	0.04	VOID	VOID	0.11
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	VOID	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	15837	15839	15920	16023	16270	16253	16311
SAMPLE DATE	5/30/99	6/5/99	6/17/99	6/29/99	7/17/99	7/23/99	8/2/99
ANALYSIS DATE	6/18/99	6/18/99	7/7/99	8/5/99	8/19/99	8/19/99	8/24/99
FILE NAME	O9FR013	O9FR014	O9GF016	O9HE009	O9HQ025	O9HQ030	O9HX012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.54	2.50	2.23	1.94	2.93	3.55	3.15
Acetaldehyde	1.51	0.96	0.73	0.78	0.72	1.12	0.82
Acrolein	0.04	0.02	0.01	0.01	0.02	ND	ND
Acetone	1.41	2.01	1.50	0.22	0.18	1.35	1.72
Propionaldehyde	0.24	0.15	0.11	0.08	0.14	0.16	0.09
Crotonaldehyde	0.01	0.01	ND	ND	ND	0.01	ND
Butyr/Isobutyraldehyde	0.19	0.16	0.13	0.07	0.15	0.18	0.17
Benzaldehyde	0.16	0.13	0.09	0.04	0.06	ND	0.16
Isovaleraldehyde	0.032	0.02	0.02	0.02	0.03	ND	0.02
Valeraldehyde	0.10	0.06	0.04	0.05	0.11	0.08	0.07
Tolualdehydes	0.06	0.07	0.05	0.04	0.06	0.07	0.07
Hexaldehyde	0.17	0.11	0.06	0.06	0.14	0.11	0.08
2,5-Dimethylbenzaldehyde	0.00	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Brattleboro, Vermont

Derivatized Conc. (ug/mL)	16497	16612	16614	16804	16904
SAMPLE DATE	8/16/99	8/28/99	9/3/99	9/9/99	9/21/99
ANALYSIS DATE	9/11/99	VOID	9/23/99	10/1/99	10/13/99
FILE NAME	O9IJ016	VOID	O9IV027	O9I$034	O9JM011
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.85	VOID	2.82	2.76	1.08
Acetaldehyde	0.60	VOID	0.73	0.89	0.46
Acrolein	ND	VOID	ND	ND	0.01
Acetone	1.15	VOID	1.26	0.81	0.59
Propionaldehyde	0.08	VOID	0.12	0.10	0.07
Crotonaldehyde	ND	VOID	ND	ND	0.01
Butyr/Isobutyraldehyde	0.14	VOID	0.11	0.09	0.10
Benzaldehyde	0.04	VOID	0.06	0.04	0.04
Isovaleraldehyde	ND	VOID	0.01	ND	ND
Valeraldehyde	0.04	VOID	0.05	0.04	0.03
Tolualdehydes	0.04	VOID	0.05	0.03	0.05
Hexaldehyde	0.06	VOID	0.08	0.08	0.05
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	0.01

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Brattleboro, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J~008	O9C%008
FB ID	14813 FB	15549 FB
Sample date	9/14/98	3/13/99
Date Analyzed	10/27/98	3/31/99
Formaldehyde	0.03	0.19
Acetaldehyde	0.05	0.10
Acrolein	0.00	0.03
Acetone	0.34	0.17
Propionaldehyde	0.00	0.02
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.28	0.01
Benzaldehyde	0.00	0.04
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.01
Tolualdehydes	0.00	0.02
Hexaldehyde	0.02	0.03
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J~008	O9C%008
FB ID	14813 FB	15549 FB
Date Analyzed	10/27/98	3/31/99
Formaldehyde	0.02	0.11
Acetaldehyde	0.04	0.08
Acrolein	ND	0.03
Acetone	0.33	0.16
Propionaldehyde	ND	0.02
Crotonaldehyde	ND	ND
Butyraldehyde	0.33	0.01
Benzaldehyde	ND	0.06
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	0.02
Tolualdehydes	ND	0.03
Hexaldehyde	0.02	0.05
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Burlington, VT BUVT

Derivatized Conc. (ug/mL)	14678	14819	15084	15108	15148	15154	15198	15236	15250
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98	11/25/98	12/7/98
ANALYSIS DATE	10/27/98	10/29/98	11/12/98	11/16/98	11/16/98	11/25/98	11/25/98	12/21/98	12/22/98
FILE NAME	Q8J~013	Q8J#019	Q8KK025	Q8KP014	Q8KP016	Q8KW022	Q8KW027	Q8LU011	Q8LU016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.56	1.86	2.68	2.67	3.10	1.97	2.75	1.62	1.87
Acetaldehyde	0.85	0.79	1.17	0.98	0.83	0.72	0.87	0.59	0.69
Acrolein	0.10	0.20	ND	0.03	0.02	0.03	0.02	0.02	0.02
Acetone	1.00	0.66	1.03	1.19	1.89	1.07	1.60	0.88	1.22
Propionaldehyde	0.10	0.09	0.13	0.12	0.11	0.07	0.09	0.07	0.09
Crotonaldehyde	ND	ND	ND	0.05	ND	ND	ND	0.03	ND
Butyr/Isobutyraldehyde	0.11	0.10	0.18	0.48	0.41	0.34	0.17	0.10	0.12
Benzaldehyde	0.05	0.06	0.06	0.08	0.06	0.06	0.06	0.04	0.05
Isovaleraldehyde	ND	0.01	0.02	ND	ND	0.02	ND	0.01	0.01
Valeraldehyde	0.02	0.03	0.04	0.03	0.02	0.02	0.03	0.02	0.02
Tolualdehydes	0.04	0.04	0.04	0.05	0.04	0.04	0.06	0.03	0.04
Hexaldehyde	0.01	0.02	0.04	0.03	0.02	0.02	0.02	0.02	0.02
2,5-Dimethylbenzaldehyde	ND	ND	0.02	0.01	ND	0.01	0.02	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	15285	15311	15327	15355 D1	15355 R1	15357 D2	15357 R2	15406	15450
SAMPLE DATE	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99	1/24/99	1/24/99	2/5/99	2/17/99
ANALYSIS DATE	1/8/99	2/20/99	VOID	2/20/99	2/20/99	2/20/99	2/20/99	VOID	3/16/99
FILE NAME	O9AG035	O9BS017	VOID	O9BS031	O9BS032	O9BS033	O9BS034	VOID	09CO035
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.65	1.66	VOID	2.01	2.01	2.04	2.04	VOID	2.53
Acetaldehyde	0.90	1.01	VOID	0.75	0.75	0.73	0.73	VOID	1.03
Acrolein	0.04	0.03	VOID	0.01	0.01	0.01	0.01	VOID	ND
Acetone	0.93	0.90	VOID	0.84	0.84	0.82	0.82	VOID	1.23
Propionaldehyde	0.10	0.11	VOID	0.09	0.09	0.08	0.09	VOID	0.16
Crotonaldehyde	0.004	0.01	VOID	0.01	0.004	0.005	0.005	VOID	0.11
Butyr/Isobutyraldehyde	0.11	0.09	VOID	0.08	0.07	0.08	0.08	VOID	0.06
Benzaldehyde	0.05	0.06	VOID	0.05	0.05	0.04	0.05	VOID	0.07
Isovaleraldehyde	0.01	0.01	VOID	0.01	0.01	0.01	0.009	VOID	ND
Valeraldehyde	0.02	0.03	VOID	0.02	0.02	0.02	0.02	VOID	0.03
Tolualdehydes	0.03	0.03	VOID	0.04	0.04	0.04	0.04	VOID	0.05
Hexaldehyde	0.02	0.03	VOID	0.04	0.04	0.03	0.04	VOID	0.02
2,5-Dimethylbenzaldehyde	ND	0.003	VOID	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	15478	15482	15554	15603 D1	15603 R1	15605 D2	15605 R2	15645	15677
SAMPLE DATE	2/23/99	3/1/99	3/13/99	3/25/99	3/25/99	3/25/99	3/25/99	4/6/99	4/18/99
ANALYSIS DATE	3/16/99	3/16/99	3/31/99	5/12/99	5/12/99	5/12/99	5/12/99	5/12/99	5/19/99
FILE NAME	09CO043	09CO052	O9C%021	O9EK033	O9EK034	O9EK035	O9EK036	O9EK027	O9ES017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.16	2.90	2.20	2.19	2.20	2.01	2.01	3.16	2.47
Acetaldehyde	0.94	1.06	0.77	0.57	0.57	0.54	0.54	1.12	0.74
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.93	1.15	0.83	0.98	0.96	0.91	0.91	1.28	0.94
Propionaldehyde	0.15	0.17	0.12	0.08	0.08	0.07	0.07	0.16	0.11
Crotonaldehyde	0.10	ND	0.05	0.05	0.05	0.04	0.04	0.08	0.08
Butyr/Isobutyraldehyde	0.05	0.06	0.04	0.03	0.03	0.03	0.03	0.08	0.07
Benzaldehyde	0.05	0.07	0.03	0.04	0.04	0.04	0.04	0.05	0.04
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.03	ND	0.02	0.01	0.01	0.01	0.01	0.02	0.02
Tolualdehydes	0.04	0.07	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Hexaldehyde	0.02	0.04	0.01	0.02	0.01	0.01	0.01	0.03	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	0.004	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	15734	15796 D1	15796 R1	15798 D2	15798 R2	15794	15841	15922	16025
SAMPLE DATE	4/30/99	5/12/99	5/12/99	5/12/99	5/12/99	5/24/99	6/5/99	6/17/99	6/29/99
ANALYSIS DATE	6/5/99	6/10/99	6/10/99	6/10/99	6/10/99	6/10/99	6/18/99	7/7/99	8/5/99
FILE NAME	Q9FD017	Q9FH036	Q9FH037	Q9FH038	Q9FH039	Q9FH023	O9FR016	O9GF018	O9HE010
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	4.99	3.25	3.25	3.52	3.54	3.26	4.43	4.34	1.72
Acetaldehyde	1.67	1.05	1.09	1.13	1.09	1.04	1.43	1.09	0.07
Acrolein	0.02	0.02	0.04	0.02	0.02	0.02	ND	0.03	0.006
Acetone	2.02	1.69	1.69	1.75	1.78	1.24	2.26	1.99	0.08
Propionaldehyde	0.20	0.13	0.11	0.14	0.14	0.12	0.20	0.15	0.02
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.59	0.29	0.31	0.29	0.27	0.50	0.20	0.15	ND
Benzaldehyde	0.15	0.07	0.07	0.08	0.06	0.07	0.11	0.09	0.06
Isovaleraldehyde	0.04	0.02	0.04	ND	0.02	0.02	0.02	0.01	ND
Valeraldehyde	0.04	0.03	0.03	0.04	0.04	0.04	0.05	0.04	0.02
Tolualdehydes	0.08	0.06	0.09	0.07	0.07	0.04	0.05	0.05	0.04
Hexaldehyde	0.11	0.02	0.02	0.04	0.04	0.05	0.05	0.04	0.02
2,5-Dimethylbenzaldehyde	0.01	ND	ND	ND	0.01	ND	0.01	0.01	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Burlington, VT

Derivatized Conc. (ug/mL)	16261	16263	16278	16495	16616	16806	16902
SAMPLE DATE	7/17/99	7/29/99	8/4/99	8/16/99	8/28/99	9/9/99	9/21/99
ANALYSIS DATE	8/19/99	8/19/99	8/24/99	9/11/99	9/23/99	10/1/99	10/13/99
FILE NAME	O9HQ027	O9HQ031	O9HX015	O9IJ017	O9IV025	O9I$038	O9JM012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.59	6.52	2.75	4.18	4.61	3.39	1.19
Acetaldehyde	1.63	1.47	1.06	1.38	1.01	1.00	0.50
Acrolein	0.03	0.02	0.09	ND	ND	0.01	0.03
Acetone	0.18	0.28	0.39	1.50	0.57	1.32	0.62
Propionaldehyde	0.25	0.21	0.14	0.17	0.18	0.12	0.07
Crotonaldehyde	0.01	0.02	ND	ND	ND	ND	0.01
Butyr/Isobutyraldehyde	0.19	0.23	0.22	0.23	0.13	0.12	0.07
Benzaldehyde	0.05	0.16	0.06	0.08	0.06	0.11	0.05
Isovaleraldehyde	0.02	0.03	0.02	0.03	ND	ND	ND
Valeraldehyde	0.06	0.07	0.04	0.07	0.05	0.06	0.03
Tolualdehydes	0.06	0.06	0.04	0.06	0.05	0.06	0.05
Hexaldehyde	0.08	0.06	0.03	0.06	0.06	0.06	0.03
2,5-Dimethylbenzaldehyde	ND	ND	0.009	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Burlington, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J#008	O9C%009
FB ID	14820 FB	15555 FB
Sample date	9/14/98	3/13/99
Date Analyzed	10/29/98	3/31/99
Formaldehyde	0.03	0.12
Acetaldehyde	0.21	0.10
Acrolein	0.00	0.05
Acetone	0.38	0.16
Propionaldehyde	0.00	0.04
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.32	0.00
Benzaldehyde	0.00	0.00
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.01
Tolualdehydes	0.00	0.02
Hexaldehyde	0.00	0.00
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J#008	O9C%009
FB ID	14820 FB	15555 FB
Date Analyzed	10/29/98	3/31/99
Formaldehyde	0.02	0.07
Acetaldehyde	0.17	0.08
Acrolein	ND	0.04
Acetone	0.38	0.15
Propionaldehyde	ND	0.04
Crotonaldehyde	ND	ND
Butyraldehyde	0.36	ND
Benzaldehyde	ND	ND
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	0.01
Tolualdehydes	ND	0.04
Hexaldehyde	ND	ND
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Camden, NJ **CANJ**

Derivatized Conc. (ug/mL)	14770	14890	14970	15086	15121	15144	15178
SAMPLE DATE	9/8/98	9/14/98	9/20/98	10/2/98	10/14/98	10/26/98	11/7/98
ANALYSIS DATE	10/28/98	10/28/98	11/12/98	11/16/98	11/16/98	11/25/98	12/22/98
FILE NAME	Q8J~024	Q8J~030	Q8KK033	Q8KP017	Q8KP018	Q8KW014	Q8LU020
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.46	3.95	3.80	3.20	2.03	4.37	2.64
Acetaldehyde	1.20	1.67	2.44	1.77	1.19	2.71	1.96
Acrolein	0.02	0.08	0.20	0.03	0.03	0.06	0.04
Acetone	1.46	1.19	1.26	3.01	1.93	3.73	2.10
Propionaldehyde	0.19	0.32	0.39	0.36	0.18	0.45	0.37
Crotonaldehyde	ND	ND	ND	ND	ND	ND	0.04
Butyr/Isobutyraldehyde	0.54	0.49	0.39	1.09	0.77	1.23	0.71
Benzaldehyde	0.04	0.10	0.09	0.05	0.04	0.12	0.07
Isovaleraldehyde	0.02	0.02	0.02	0.04	ND	0.04	0.059
Valeraldehyde	0.27	0.23	0.28	0.55	0.18	0.64	0.62
Tolualdehydes	ND	0.02	0.04	0.03	ND	0.04	0.06
Hexaldehyde	0.07	0.10	0.07	0.12	0.05	0.14	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	0.02

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15212	15218	15228	15263	15277	15317
SAMPLE DATE	11/19/98	12/1/98	12/1/98	12/13/98	12/25/98	1/6/99
ANALYSIS DATE	12/22/98	VOID	12/22/98	1/8/99	1/8/99	2/20/99
FILE NAME	Q8LU030	VOID	Q8LU034	O9AG028	O9AG039	O9BS020
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.78	VOID	1.92	2.81	3.23	2.46
Acetaldehyde	1.87	VOID	1.18	1.81	1.95	1.53
Acrolein	0.02	VOID	0.02	0.02	0.04	0.02
Acetone	3.13	VOID	1.75	2.28	1.96	1.68
Propionaldehyde	0.29	VOID	0.12	0.36	0.48	0.41
Crotonaldehyde	ND	VOID	ND	0.02	0.02	0.02
Butyr/Isobutyraldehyde	0.63	VOID	0.26	0.59	0.71	0.51
Benzaldehyde	0.06	VOID	0.04	0.09	0.05	0.05
Isovaleraldehyde	0.04	VOID	0.01	0.04	0.03	0.03
Valeraldehyde	0.43	VOID	0.03	0.52	0.68	0.46
Tolualdehydes	0.04	VOID	ND	0.05	0.04	0.04
Hexaldehyde	0.03	VOID	0.06	0.18	0.17	0.13
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15378 D1	15378 R1	15380 D2	15380 R2	15454	15464	15512
SAMPLE DATE	1/30/99	1/30/99	1/30/99	1/30/99	2/17/99	2/23/99	3/7/99
ANALYSIS DATE	2/20/99	2/20/99	2/20/99	2/20/99	3/16/99	3/16/99	3/17/99
FILE NAME	O9BS044	O9BS045	O9BS046	O9BS047	09CO049	09CO045	O9CQ009
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.39	2.39	2.30	2.31	3.68	2.75	2.44
Acetaldehyde	1.18	1.18	1.13	1.14	1.78	1.56	1.11
Acrolein	0.005	0.005	0.005	0.005	ND	ND	ND
Acetone	1.93	1.93	1.83	1.83	2.92	2.79	1.33
Propionaldehyde	0.22	0.21	0.20	0.20	0.34	0.40	0.24
Crotonaldehyde	0.01	0.01	0.01	0.01	0.12	0.06	0.05
Butyr/Isobutyraldehyde	0.33	0.33	0.31	0.31	0.26	0.49	0.25
Benzaldehyde	0.05	0.05	0.05	0.05	0.06	0.04	0.02
Isovaleraldehyde	0.01	0.02	0.01	0.02	0.05	0.09	0.05
Valeraldehyde	0.25	0.25	0.23	0.23	0.23	0.49	0.23
Tolualdehydes	0.05	0.05	0.05	0.04	0.09	0.04	0.02
Hexaldehyde	0.09	0.09	0.08	0.07	0.10	0.13	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15536	15625 D1	15625 R1	15627 D2	15627 R2	15687	15710
SAMPLE DATE	3/13/99	3/25/99	3/25/99	3/25/99	3/25/99	4/18/99	4/30/99
ANALYSIS DATE	3/31/99	5/12/99	5/12/99	5/12/99	5/12/99	VOID	6/5/99
FILE NAME	O9C%022	O9EK038	O9EK039	O9EK040	O9EK041	VOID	Q9FD018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.11	2.50	2.57	2.51	2.57	VOID	1.51
Acetaldehyde	1.30	1.12	1.12	1.11	1.12	VOID	0.82
Acrolein	ND	0.04	0.04	0.02	0.02	VOID	0.01
Acetone	1.65	1.96	1.96	1.95	1.96	VOID	1.72
Propionaldehyde	0.31	0.23	0.23	0.23	0.23	VOID	0.12
Crotonaldehyde	0.04	0.04	0.04	0.03	0.03	VOID	ND
Butyr/Isobutyraldehyde	0.34	0.21	0.22	0.21	0.21	VOID	0.36
Benzaldehyde	0.04	0.02	0.02	0.03	0.03	VOID	0.03
Isovaleraldehyde	0.06	ND	ND	ND	ND	VOID	ND
Valeraldehyde	0.32	0.14	0.13	0.12	0.12	VOID	0.12
Tolualdehydes	ND	0.001	0.002	0.004	0.003	VOID	0.04
Hexaldehyde	0.06	0.05	0.05	0.05	0.05	VOID	0.07
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	15787	15903	15996	16001	16037	16188	16242
SAMPLE DATE	5/24/99	6/5/99	6/17/99	7/5/99	7/11/99	7/23/99	8/4/99
ANALYSIS DATE	6/10/99	7/6/99	7/28/99	8/6/99	8/6/99	8/6/99	8/24/99
FILE NAME	Q9FH024	O9GF013	O9G!014	O9HE016	O9HE020	O9HE035	O9HX016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.69	4.76	2.49	8.75	4.03	8.02	5.73
Acetaldehyde	2.16	2.32	1.58	3.13	1.81	3.25	2.69
Acrolein	0.03	0.02	ND	0.04	0.02	0.04	0.02
Acetone	2.09	2.97	2.57	1.43	2.11	1.80	1.13
Propionaldehyde	0.36	0.44	0.49	0.74	0.55	0.69	0.48
Crotonaldehyde	ND	0.01	ND	ND	ND	0.02	0.01
Butyr/Isobutyraldehyde	1.10	0.50	0.59	0.89	0.70	0.54	0.54
Benzaldehyde	0.11	0.11	0.08	0.23	0.09	0.13	0.13
Isovaleraldehyde	0.112	0.03	0.03	0.05	0.04	0.03	0.04
Valeraldehyde	0.50	0.35	0.51	0.78	0.67	0.30	0.34
Tolualdehydes	0.07	0.04	0.03	0.06	ND	0.07	0.09
Hexaldehyde	0.11	0.15	0.20	0.29	0.23	0.14	0.15
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Camden, NJ

Derivatized Conc. (ug/mL)	16364	16602	16714	16792 D1	16792 R1	16793 D2	16793 R2
SAMPLE DATE	8/16/99	8/28/99	9/9/99	9/15/99	9/15/99	9/15/99	9/15/99
ANALYSIS DATE	8/25/99	9/23/99	9/23/99	10/2/99	10/2/99	10/2/99	10/2/99
FILE NAME	O9HX017	O9IV019	O9IV020	O9I$048	O9I$049	O9I$051	O9I$052
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	5.33	6.08	3.99	2.87	2.87	2.79	2.85
Acetaldehyde	2.62	2.85	2.10	1.71	1.64	1.67	1.65
Acrolein	0.02	0.03	0.04	ND	ND	ND	ND
Acetone	0.94	0.94	1.55	1.21	1.21	1.26	1.27
Propionaldehyde	0.50	0.57	0.42	0.37	0.37	0.36	0.37
Crotonaldehyde	0.01	0.03	0.02	ND	ND	0.005	0.01
Butyr/Isobutyraldehyde	0.54	0.53	0.53	0.38	0.35	0.35	0.36
Benzaldehyde	0.17	0.08	0.09	0.08	0.05	0.05	0.06
Isovaleraldehyde	0.03	0.03	0.03	0.03	0.04	0.02	0.03
Valeraldehyde	0.40	0.40	0.33	0.31	0.31	0.30	0.31
Tolualdehydes	0.07	0.03	0.03	0.03	0.03	0.04	0.04
Hexaldehyde	0.15	0.15	0.16	0.13	0.13	0.12	0.13
2,5-Dimethylbenzaldehyde	ND	0.01	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Camden, NJ
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J~009	Q8KK010	Q8KK018	Q9FD009	Q9FH011	O9GI008	O9HX007	O9IV007
FB ID	14891 FB	14971 FB	15087 FB	15711 FB	15788 FB	16038 FB	16243 FB	16603 FB
Sample date	9/14/98	9/20/98	10/2/98	4/30/99	5/24/99	7/11/99	8/4/99	8/28/99
Date Analyzed	10/27/98	11/11/98	11/12/98	6/4/99	6/9/99	6/19/97	7/15/97	7/31/97
Formaldehyde	0.09	0.15	0.07	0.05	0.28	0.09	0.08	0.07
Acetaldehyde	0.07	0.08	0.07	0.10	0.15	0.06	0.06	0.14
Acrolein	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acetone	0.35	0.41	0.36	0.00	0.28	0.10	0.09	0.16
Propionaldehyde	0.00	0.00	0.00	0.22	0.00	0.00	0.01	0.01
Crotonaldehyde	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Butyr/Isobutyraldehyde	0.46	0.69	0.56	0.27	0.63	0.05	0.00	0.00
Benzaldehyde	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Isovaleraldehyde	0.00	0.00	0.00	0.04	0.00	0.02	0.00	0.00
Valeraldehyde	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02
Tolualdehydes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexaldehyde	0.02	0.00	0.02	0.16	0.00	0.01	0.02	0.03
2,5-Dimethylbenzaldehyde	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J~009	Q8KK010	Q8KK018	Q9FD009	Q9FH011	O9GI008	O9HX007	O9IV007
FB ID	14891 FB	14971 FB	15087 FB	15711 FB	15788 FB	16038 FB	16243 FB	16603 FB
Date Analyzed	10/27/98	11/11/98	11/12/98	6/4/99	6/9/99	6/19/97	7/15/97	7/31/97
Formaldehyde	0.05	0.09	0.04	0.03	0.16	0.07	0.06	0.05
Acetaldehyde	0.05	0.07	0.06	0.08	0.12	0.06	0.06	0.14
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.34	0.40	0.35	0.00	0.27	0.13	0.10	0.20
Propionaldehyde	ND	ND	ND	0.21	ND	ND	0.01	0.02
Crotonaldehyde	ND	ND	ND	0.05	ND	ND	ND	ND
Butyraldehyde	0.53	0.79	0.64	0.31	0.72	0.08	ND	ND
Benzaldehyde	ND	ND	ND	ND	ND	0.03	ND	0.04
Isovaleraldehyde	ND	ND	ND	0.05	ND	0.03	ND	ND
Valeraldehyde	ND	ND	ND	ND	ND	0.03	0.03	0.04
Tolualdehydes	ND	ND	ND	ND	ND	ND	ND	ND
Hexaldehyde	0.03	ND	0.03	0.23	ND	0.02	0.04	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

1998 UATMP CARBONYLS

Sample Site: El Paso, TX **EPTX**

Derivatized Conc. (ug/mL)	14894	15001	15067	15129	15130	15150	15184	15208
SAMPLE DATE	9/14/98	9/20/98	10/2/98	10/2/98	10/14/98	10/26/98	11/7/98	11/19/98
ANALYSIS DATE	10/29/98	11/12/98	VOID	VOID	VOID	11/25/98	12/22/98	12/22/98
FILE NAME	Q8J#020	Q8KK034	VOID	VOID	VOID	Q8KW016	Q8LU021	Q8LU028
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	14.32d	3.68	VOID	VOID	VOID	20.13d	11.84d	3.44
Acetaldehyde	4.83	1.34	VOID	VOID	VOID	4.36	2.23	1.10
Acrolein	0.12	0.03	VOID	VOID	VOID	0.40	0.11	0.03
Acetone	1.60	1.18	VOID	VOID	VOID	0.72	1.92	1.33
Propionaldehyde	0.31	0.14	VOID	VOID	VOID	0.25	0.12	0.10
Crotonaldehyde	0.02	ND	VOID	VOID	VOID	0.05	0.02	ND
Butyr/Isobutyraldehyde	0.40	0.34	VOID	VOID	VOID	0.42	0.23	0.14
Benzaldehyde	0.33	0.07	VOID	VOID	VOID	0.38	0.20	0.07
Isovaleraldehyde	0.33	0.01	VOID	VOID	VOID	0.32	0.18	0.04
Valeraldehyde	0.16	0.04	VOID	VOID	VOID	0.19	0.10	0.05
Tolualdehydes	0.26	0.03	VOID	VOID	VOID	0.31	0.25	0.05
Hexaldehyde	0.23	0.03	VOID	VOID	VOID	0.25	0.15	0.02
2,5-Dimethylbenzaldehyde	0.02	0.01	VOID	VOID	VOID	0.02	0.02	0.02

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15234	15267	15291	15344	15390	15402 D1	15402 R1
SAMPLE DATE	12/1/98	12/13/98	12/25/98	1/6/99	1/30/99	2/11/99	2/11/99
ANALYSIS DATE	12/22/98	1/8/99	1/8/99	VOID	3/16/99	3/16/99	3/16/99
FILE NAME	Q8LU035	O9AG029	O9AG040	VOID	09CO023	09CO063	09CO064
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.94	4.09	5.38	VOID	2.80	1.46	1.48
Acetaldehyde	1.19	2.42	2.43	VOID	1.20	0.54	0.54
Acrolein	0.02	0.04	0.05	VOID	ND	ND	ND
Acetone	1.48	2.25	2.57	VOID	1.32	0.51	0.51
Propionaldehyde	0.11	0.26	0.25	VOID	0.17	0.08	0.09
Crotonaldehyde	ND	0.02	0.02	VOID	0.07	0.05	0.05
Butyr/Isobutyraldehyde	0.14	0.22	0.24	VOID	0.07	0.03	0.03
Benzaldehyde	0.08	0.11	0.13	VOID	0.06	0.02	0.03
Isovaleraldehyde	0.02	0.01	0.02	VOID	ND	ND	ND
Valeraldehyde	0.03	0.05	0.07	VOID	0.04	0.02	0.03
Tolualdehydes	0.05	0.10	0.13	VOID	0.05	0.03	0.03
Hexaldehyde	0.01	0.05	0.06	VOID	0.03	0.01	0.01
2,5-Dimethylbenzaldehyde	ND	ND	ND	VOID	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15404 D2	15404 R2	15434	15466	15456	15496	15528	15526
SAMPLE DATE	2/11/99	2/11/99	2/17/99	2/23/99	3/1/99	3/7/99	3/13/99	3/19/99
ANALYSIS DATE	3/16/99	3/16/99	3/16/99	3/16/99	3/17/99	VOID	3/31/99	4/1/99
FILE NAME	09CO065	09CO066	09CO036	09CO046	O9CQ010	VOID	O9C%023	O9C%028
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.28	1.28	6.41d	6.01	2.94	VOID	2.55	3.04
Acetaldehyde	0.50	0.50	2.57	2.38	0.86	VOID	0.96	1.13
Acrolein	ND	ND	ND	0.02	0.01	VOID	ND	0.02
Acetone	0.49	0.49	2.52	1.97	1.11	VOID	1.40	1.40
Propionaldehyde	0.07	0.08	0.24	0.23	0.13	VOID	0.15	0.18
Crotonaldehyde	0.05	0.05	0.10	0.14	0.06	VOID	0.06	0.07
Butyr/Isobutyraldehyde	0.03	0.03	0.12	0.11	0.05	VOID	0.06	0.07
Benzaldehyde	0.02	0.03	0.15	0.14	0.04	VOID	0.05	0.05
Isovaleraldehyde	ND	ND	ND	ND	ND	VOID	ND	ND
Valeraldehyde	0.02	0.03	ND	0.15	0.02	VOID	0.02	0.02
Tolualdehydes	0.02	0.02	0.09	0.08	0.04	VOID	0.04	0.04
Hexaldehyde	0.01	0.01	0.14	0.13	0.03	VOID	0.02	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	VOID	ND	0.01

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15617	15635	15669 D1	15669 R1	15671 D2	15671 R2	15689	15703
SAMPLE DATE	3/31/99	4/6/99	4/12/99	4/12/99	4/12/99	4/12/99	4/18/99	4/24/99
ANALYSIS DATE	5/12/99	5/12/99	5/20/99	5/20/99	5/20/99	5/20/99	VOID	5/20/99
FILE NAME	O9EK020	O9EK028	O9ES029	O9ES030	O9ES031	O9ES032	VOID	O9ES023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.57	5.80	4.13	4.13	3.72	3.71	VOID	2.23
Acetaldehyde	0.70	2.78	1.74	1.76	1.51	1.49	VOID	0.88
Acrolein	ND	0.02	ND	ND	ND	ND	VOID	ND
Acetone	0.95	2.45	1.95	1.97	1.62	1.60	VOID	0.92
Propionaldehyde	0.08	0.28	0.31	0.31	0.27	0.28	VOID	0.15
Crotonaldehyde	0.03	0.09	0.10	0.11	0.08	0.08	VOID	0.03
Butyr/Isobutyraldehyde	0.05	0.15	0.13	0.13	0.11	0.11	VOID	0.07
Benzaldehyde	0.04	0.16	0.10	0.09	0.09	0.08	VOID	0.04
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	VOID	ND
Valeraldehyde	0.02	0.07	0.05	0.05	0.05	0.05	VOID	0.03
Tolualdehydes	0.01	0.07	0.05	0.06	0.06	0.06	VOID	0.01
Hexaldehyde	0.02	0.12	0.04	0.04	0.04	0.04	VOID	0.03
2,5-Dimethylbenzaldehyde	ND	0.01	0.01	0.01	0.01	0.01	VOID	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15724 D1	15724 R1	15726 D2	15726 R2	15782	15814	15845	15934
SAMPLE DATE	5/6/99	5/6/99	5/6/99	5/6/99	5/18/99	5/30/99	6/11/99	6/23/99
ANALYSIS DATE	6/5/99	6/5/99	6/5/99	6/5/99	6/9/99	6/10/99	6/19/99	7/7/99
FILE NAME	Q9FD033	Q9FD034	Q9FD035	Q9FD036	Q9FH020	Q9FH029	O9FR024	O9GF023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.51	2.63	2.45	2.47	3.57	3.58	3.14	3.90
Acetaldehyde	0.72	0.74	0.68	0.64	1.19	1.03	0.82	1.39
Acrolein	0.01	0.01	0.01	0.01	ND	0.01	0.02	0.02
Acetone	1.04	1.09	0.95	0.92	1.27	1.34	1.06	1.93
Propionaldehyde	0.12	0.09	0.10	0.08	0.15	0.11	0.10	0.19
Crotonaldehyde	ND	ND	ND	ND	0.02	ND	0.01	0.01
Butyr/Isobutyraldehyde	0.21	0.19	0.18	0.18	0.27	0.20	0.09	0.17
Benzaldehyde	0.06	0.06	0.06	0.04	0.05	0.05	0.07	0.08
Isovaleraldehyde	0.03	0.02	0.04	0.02	0.03	0.04	0.01	0.01
Valeraldehyde	0.03	0.03	0.03	0.02	0.04	0.04	0.04	0.05
Tolualdehydes	0.04	0.04	0.05	0.04	0.05	0.06	0.07	0.07
Hexaldehyde	0.02	0.07	0.01	0.02	0.02	0.03	0.06	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: El Paso, TX

Derivatized Conc. (ug/mL)	15979	16129	16197	16329	16445	16687
SAMPLE DATE	7/5/99	7/17/99	7/29/99	8/10/99	8/22/99	9/3/99
ANALYSIS DATE	8/6/99	8/6/99	8/6/99	8/25/99	9/11/99	9/23/99
FILE NAME	O9HE017	O9HE030	O9HE038	O9HX019	O9IJ024	O9IV018
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	21.09d	30.14d	29.15d	7.20	9.44d	6.95
Acetaldehyde	6.68d	6.79	6.75	2.47	3.04	2.01
Acrolein	0.51d	0.75	0.66	0.18	0.12	0.12
Acetone	0.51d	0.22	0.38	0.84	1.77	1.37
Propionaldehyde	0.29d	0.30	0.25	0.11	0.28	0.16
Crotonaldehyde	0.05d	0.06	0.06	0.01	0.01	0.01
Butyr/Isobutyraldehyde	0.27d	0.21	0.20	0.17	0.34	0.18
Benzaldehyde	0.63d	0.65	0.63	0.17	0.18	0.14
Isovaleraldehyde	ND	ND	ND	0.01	0.020	ND
Valeraldehyde	0.20d	0.33	0.24	0.07	0.09	0.05
Tolualdehydes	0.23d	0.17	0.16	0.09	0.10	0.08
Hexaldehyde	0.27d	0.24	0.26	0.07	0.10	0.06
2,5-Dimethylbenzaldehyde	0.03d	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

FIELD BLANK DATA

Sample site: El Paso, TX
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK011	O9C$010	O9EK008	O9ES008	Q9FH010
FB ID	15002 FB	15529 FB	15636 FB	15704 FB	15783 FB
Sample date	9/20/98	3/13/99	4/6/99	4/24/99	5/18/99
Date Analyzed	11/11/98	3/30/99	5/11/99	5/19/99	6/9/99
Formaldehyde	0.09	0.00	0.06	0.08	0.42
Acetaldehyde	0.36	0.00	0.08	0.08	0.09
Acrolein	0.00	0.00	0.00	0.05	0.00
Acetone	0.44	0.03	0.33	0.15	0.23
Propionaldehyde	0.00	0.00	0.00	0.00	0.00
Crotonaldehyde	0.00	0.00	0.00	0.00	0.00
Butyr/Isobutyraldehyde	0.45	0.00	0.00	0.00	0.38
Benzaldehyde	0.00	0.00	0.00	0.00	0.00
Isovaleraldehyde	0.00	0.07	0.00	0.00	0.00
Valeraldehyde	0.00	0.00	0.00	0.00	0.00
Tolualdehydes	0.00	0.00	0.00	0.00	0.00
Hexaldehyde	0.00	0.00	0.00	0.00	0.04
2,5-Dimethylbenzaldehyde	0.00	0.00	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK011	O9C$010	O9EK008	O9ES008	Q9FH010
FB ID	15002 FB	15529 FB	15636 FB	15704 FB	15783 FB
Date Analyzed	11/11/98	3/30/99	5/11/99	5/19/99	6/9/99
Formaldehyde	0.05	ND	0.04	0.05	0.24
Acetaldehyde	0.28	ND	0.06	0.07	0.07
Acrolein	ND	ND	ND	0.05	ND
Acetone	0.42	0.02	0.32	0.15	0.22
Propionaldehyde	ND	ND	ND	ND	ND
Crotonaldehyde	ND	ND	ND	ND	ND
Butyraldehyde	0.51	ND	ND	ND	0.44
Benzaldehyde	ND	ND	ND	ND	ND
Isovaleraldehyde	ND	0.10	ND	ND	ND
Valeraldehyde	ND	ND	ND	ND	ND
Tolualdehydes	ND	ND	ND	ND	ND
Hexaldehyde	ND	ND	ND	ND	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND

1998 UATMP CARBONYLS

Sample Site: Garyville, LA **GALA**

Derivatized Conc. (ug/mL)	14801	14805	15099	15117	15134	15172	15182	15232	15265
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/14/98	10/28/98	11/7/98	11/19/98	12/1/98
ANALYSIS DATE	10/28/98	10/30/98	11/12/98	11/16/98	11/16/98	11/25/98	12/22/98	VOID	1/8/99
FILE NAME	Q8J~018	Q8J#021	Q8KK035	Q8KP019	Q8KP020	Q8KW020	Q8LU022	VOID	O9AG027
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.69	1.84	2.15	2.15	3.26	2.26	1.71	VOID	1.80
Acetaldehyde	0.59	1.39	1.00	1.11	1.39	1.33	1.30	VOID	1.36
Acrolein	0.04	0.03	0.04	0.02	0.02	0.03	0.02	VOID	0.01
Acetone	0.48	0.25	0.31	0.69	0.79	0.42	0.86	VOID	0.62
Propionaldehyde	0.11	0.18	0.23	0.23	0.27	0.27	0.22	VOID	0.25
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	VOID	0.01
Butyr/Isobutyraldehyde	0.17	0.33	0.40	0.42	0.45	0.48	0.27	VOID	0.19
Benzaldehyde	0.09	0.04	0.07	0.07	0.06	0.08	0.08	VOID	0.04
Isovaleraldehyde	0.02	0.01	0.03	0.03	0.03	0.06	0.044	VOID	0.01
Valeraldehyde	0.05	0.22	0.24	0.31	0.23	0.27	0.23	VOID	0.18
Tolualdehydes	0.02	ND	0.04	0.02	0.04	0.03	0.04	VOID	0.03
Hexaldehyde	0.05	0.08	0.09	0.09	0.09	0.10	0.12	VOID	0.10
2,5-Dimethylbenzaldehyde	0.01	ND	ND	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15257	15295	15398 D1	15398 R1	15396 D2	15396 R2	15412	15460
SAMPLE DATE	12/13/98	12/25/98	2/5/99	2/5/99	2/5/99	2/5/99	2/17/99	2/23/99
ANALYSIS DATE	1/8/99	1/8/99	3/16/99	3/16/99	3/16/99	3/17/99	3/16/99	3/16/99
FILE NAME	O9AG030	O9AG041	09CO072	09CO073	09CO074	09CO075	09CO037	09CO047
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.88	0.58	2.64	2.63	2.40	2.40	VOID	VOID
Acetaldehyde	0.63	0.50	1.29	1.29	1.22	1.22	VOID	VOID
Acrolein	0.01	0.02	ND	ND	ND	ND	VOID	VOID
Acetone	0.65	0.51	0.50	0.46	0.62	0.59	VOID	VOID
Propionaldehyde	0.15	0.11	0.34	0.32	0.32	0.30	VOID	VOID
Crotonaldehyde	0.005	0.005	0.07	0.07	0.07	0.08	VOID	VOID
Butyr/Isobutyraldehyde	0.14	0.11	0.18	0.18	0.16	0.17	VOID	VOID
Benzaldehyde	0.03	0.03	0.05	0.05	0.05	0.06	VOID	VOID
Isovaleraldehyde	0.01	0.01	0.04	0.04	0.04	0.040	VOID	VOID
Valeraldehyde	0.15	0.12	0.29	0.30	0.27	0.27	VOID	VOID
Tolualdehydes	0.02	0.02	0.03	0.03	0.03	0.03	VOID	VOID
Hexaldehyde	0.07	0.07	0.13	0.14	0.11	0.11	VOID	VOID
2,5-Dimethylbenzaldehyde	ND	0.003	ND	ND	ND	ND	VOID	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15505	15524	15561	15592 D1	15592 R1	15594 D2	15594 R2	15621
SAMPLE DATE	3/7/99	3/13/99	3/19/99	3/25/99	3/25/99	3/25/99	3/25/99	3/31/99
ANALYSIS DATE	3/17/99	4/1/99	4/14/99	4/14/99	4/14/99	4/14/99	4/14/99	5/12/99
FILE NAME	O9CQ011	O9C%024	O9DM023	O9DM049	O9DM050	O9DM051	O9DM052	O9EK021
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.24	1.55	2.95	1.34	1.35	1.69	1.73	1.67
Acetaldehyde	1.24	0.70	1.21	0.50	0.50	0.63	0.64	0.93
Acrolein	ND	ND	ND	ND	ND	ND	ND	0.01
Acetone	0.76	0.31	0.52	0.51	0.52	0.48	0.48	0.35
Propionaldehyde	0.31	0.22	0.26	0.15	0.15	0.16	0.15	0.14
Crotonaldehyde	0.04	0.02	ND	ND	ND	ND	ND	0.03
Butyr/Isobutyraldehyde	0.21	0.11	0.12	0.06	0.06	0.07	0.07	0.09
Benzaldehyde	0.05	0.02	0.03	0.02	0.02	0.02	0.02	0.03
Isovaleraldehyde	0.05	0.04	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.37	0.24	0.15	0.09	0.09	0.11	0.11	0.08
Tolualdehydes	0.05	0.01	0.02	0.01	0.01	0.01	0.01	0.001
Hexaldehyde	0.11	0.07	0.08	0.04	0.05	0.07	0.07	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15663 D1	15663 R1	15665 D2	15665 R2	15691	15693 D1	15693 R1	15694 D2
SAMPLE DATE	4/12/99	4/12/99	4/12/99	4/12/99	4/18/99	4/24/99	4/24/99	4/24/99
ANALYSIS DATE	5/20/99	5/20/99	5/20/99	5/20/99	VOID	6/5/99	6/5/99	6/5/99
FILE NAME	O9ES033	O9ES034	O9ES035	O9ES036	VOID	Q9FD029	Q9FD030	Q9FD031
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	3.66	3.67	3.59	3.69	VOID	2.38	2.48	2.26
Acetaldehyde	0.99	1.00	0.98	0.98	VOID	0.80	0.81	0.80
Acrolein	ND	ND	ND	ND	VOID	0.02	0.03	0.02
Acetone	1.04	1.04	0.64	0.64	VOID	0.47	0.49	0.32
Propionaldehyde	0.23	0.17	0.22	0.22	VOID	0.19	0.21	0.19
Crotonaldehyde	0.12	0.04	0.04	0.04	VOID	ND	ND	ND
Butyr/Isobutyraldehyde	0.11	0.11	0.10	0.10	VOID	ND	ND	ND
Benzaldehyde	0.03	0.03	0.03	0.03	VOID	0.12	0.12	0.11
Isovaleraldehyde	ND	ND	ND	ND	VOID	ND	ND	ND
Valeraldehyde	0.11	0.14	0.11	0.14	VOID	0.12	0.12	0.10
Tolualdehydes	ND	ND	0.00	ND	VOID	0.10	0.05	0.05
Hexaldehyde	0.06	0.06	0.06	0.06	VOID	ND	ND	ND
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	VOID	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15694 R2	15741	15753	15755	15777	15767 D1	15767 R1	15768 D2
SAMPLE DATE	4/24/99	4/30/99	5/6/99	5/6/99	5/12/99	5/18/99	5/18/99	5/18/99
ANALYSIS DATE	6/5/99	6/5/99	VOID	VOID	6/9/99	6/10/99	6/10/99	6/10/99
FILE NAME	Q9FD032	Q9FD019	VOID	VOID	Q9FH017	Q9FH040	Q9FH041	Q9FH042
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.22	3.25	VOID	VOID	2.10	4.54	4.56	4.76
Acetaldehyde	0.76	1.00	VOID	VOID	0.80	1.21	1.25	1.23
Acrolein	0.01	0.01	VOID	VOID	0.02	0.04	0.04	0.04
Acetone	0.32	0.96	VOID	VOID	0.32	0.80	0.82	0.48
Propionaldehyde	0.19	0.24	VOID	VOID	0.17	0.24	0.23	0.26
Crotonaldehyde	ND	ND	VOID	VOID	ND	ND	ND	ND
Butyr/Isobutyraldehyde	ND	ND	VOID	VOID	0.38	0.52	0.47	0.44
Benzaldehyde	0.12	0.09	VOID	VOID	0.08	0.12	0.05	0.10
Isovaleraldehyde	ND	ND	VOID	VOID	0.055	0.038	0.075	0.035
Valeraldehyde	0.10	0.20	VOID	VOID	0.07	0.16	0.12	0.16
Tolualdehydes	0.05	0.04	VOID	VOID	0.05	0.07	0.06	0.05
Hexaldehyde	ND	ND	VOID	VOID	0.04	0.08	0.08	0.08
2,5-Dimethylbenzaldehyde	ND	ND	VOID	VOID	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Garyville, LA

Derivatized Conc. (ug/mL)	15768 R2	15818	15857	15986	16058	16206	16350	16684
SAMPLE DATE	5/18/99	5/30/99	6/11/99	7/5/99	7/17/99	7/29/99	8/10/99	9/3/99
ANALYSIS DATE	6/10/99	6/10/99	6/18/99	8/6/99	8/6/99	8/6/99	8/25/99	9/23/99
FILE NAME	Q9FH043	Q9FH030	O9FR019	O9HE018	O9HE040	O9HE039	O9HX020	O9IV017
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	4.65	2.21	2.18	1.91	3.22	4.57	2.37	1.84
Acetaldehyde	1.25	1.17	1.06	0.77	1.93	1.71	1.26	1.03
Acrolein	0.02	0.04	ND	ND	ND	ND	ND	ND
Acetone	0.46	0.38	0.42	0.29	0.29	0.38	0.49	0.31
Propionaldehyde	0.25	0.33	0.27	0.25	0.29	0.44	0.38	0.34
Crotonaldehyde	ND	0.12	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.40	0.42	0.25	0.19	0.23	0.31	0.30	0.19
Benzaldehyde	0.10	0.07	0.12	0.06	0.10	0.18	0.09	0.06
Isovaleraldehyde	0.086	0.026	0.02	0.02	0.02	0.02	0.02	ND
Valeraldehyde	0.17	0.16	0.21	0.23	0.21	0.34	0.30	0.22
Tolualdehydes	0.03	0.07	0.05	0.05	0.05	0.07	0.07	0.03
Hexaldehyde	0.06	0.07	0.10	0.13	0.14	0.18	0.15	0.16
2,5-Dimethylbenzaldehyde	ND	0.01	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Garyville, LA
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK013
FB ID	15100 FB
Sample date	9/26/98
Date Analyzed	11/11/98
Formaldehyde	0.04
Acetaldehyde	0.31
Acrolein	0.00
Acetone	0.45
Propionaldehyde	0.02
Crotonaldehyde	0.00
Butyr/Isobutyraldehyde	0.51
Benzaldehyde	0.04
Isovaleraldehyde	0.00
Valeraldehyde	0.02
Tolualdehydes	0.00
Hexaldehyde	0.04
2,5-Dimethylbenzaldehyde	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK013
FB ID	15100 FB
Date Analyzed	11/11/98
Formaldehyde	0.02
Acetaldehyde	0.24
Acrolein	ND
Acetone	0.44
Propionaldehyde	0.02
Crotonaldehyde	ND
Butyraldehyde	0.58
Benzaldehyde	0.06
Isovaleraldehyde	ND
Valeraldehyde	0.03
Tolualdehydes	ND
Hexaldehyde	0.06
2,5-Dimethylbenzaldehyde	ND

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA **HALA**

Derivatized Conc. (ug/mL)	15105	15102	15132	15170	15180	15224	15222	15255
SAMPLE DATE	9/14/98	9/26/98	10/14/98	10/26/98	11/7/98	11/19/98	12/1/98	12/13/98
ANALYSIS DATE	10/30/98	11/12/98	11/17/98	11/25/98	12/22/98	12/22/98	VOID	1/8/99
FILE NAME	Q8J#022	Q8KK036	Q8KP022	Q8KW017	Q8LU024	Q8LU031	VOID	O9AG032
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.05	1.97	VOID	4.04	2.09	5.04	VOID	0.83
Acetaldehyde	0.30	0.41	VOID	1.04	1.12	1.38	VOID	0.48
Acrolein	0.01	0.02	VOID	0.03	0.04	0.19	VOID	0.02
Acetone	0.18	0.17	VOID	1.37	1.27	0.77	VOID	0.90
Propionaldehyde	0.05	0.10	VOID	0.14	0.15	0.25	VOID	0.06
Crotonaldehyde	ND	ND	VOID	ND	ND	ND	VOID	0.003
Butyr/Isobutyraldehyde	0.10	0.25	VOID	0.40	0.24	0.20	VOID	0.16
Benzaldehyde	0.02	0.03	VOID	0.06	0.05	0.04	VOID	0.02
Isovaleraldehyde	0.03	0.04	VOID	0.08	0.06	0.12	VOID	0.002
Valeraldehyde	0.03	0.04	VOID	0.05	0.05	0.06	VOID	0.04
Tolualdehydes	ND	ND	VOID	0.03	0.06	0.06	VOID	0.02
Hexaldehyde	0.06	0.06	VOID	0.07	0.05	0.06	VOID	0.03
2,5-Dimethylbenzaldehyde	ND	ND	VOID	ND	ND	0.02	VOID	0.002

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15293	15315	15392 D1	15392 R1	15394 D2	15394 R2	15416	15458
SAMPLE DATE	12/25/98	1/9/99	2/5/99	2/5/99	2/5/99	2/5/99	2/13/99	2/23/99
ANALYSIS DATE	1/8/99	2/20/99	3/16/99	3/16/99	3/16/99	3/16/99	VOID	3/16/99
FILE NAME	O9AG043	O9BS021	09CO068	09CO069	09CO070	09CO071	09CO050	09CO050
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.74	1.03	2.71	2.68	2.59	2.56	VOID	1.43
Acetaldehyde	0.37	0.67	1.12	1.10	1.08	1.03	VOID	0.80
Acrolein	0.01	0.005	ND	ND	ND	ND	VOID	ND
Acetone	0.70	1.02	0.88	0.86	0.83	0.83	VOID	1.13
Propionaldehyde	0.06	0.11	0.32	0.31	0.31	0.31	VOID	0.20
Crotonaldehyde	0.004	0.01	0.13	0.13	0.12	0.11	VOID	0.06
Butyr/Isobutyraldehyde	0.29	0.15	0.11	0.11	0.11	0.10	VOID	0.10
Benzaldehyde	0.02	0.02	0.06	0.08	0.08	0.06	VOID	0.04
Isovaleraldehyde	0.01	ND	0.02	0.03	ND	ND	VOID	0.03
Valeraldehyde	0.04	0.14	0.23	0.26	0.25	0.24	VOID	0.21
Tolualdehydes	0.02	0.01	0.02	0.03	0.03	0.03	VOID	0.05
Hexaldehyde	0.03	0.04	0.06	0.07	0.06	0.07	VOID	0.05
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15494	15492	15557 D1	15559 D2	15596	15619	15681	15659 D1
SAMPLE DATE	3/1/99	3/7/99	3/19/99	3/19/99	3/25/99	3/31/99	4/6/99	4/18/99
ANALYSIS DATE	3/17/99	3/17/99	6/5/99	6/5/99	4/14/99	VOID	VOID	5/20/99
FILE NAME	O9CQ014	O9CQ016	Q9FD042	Q9FD044	O9DM029	VOID	VOID	O9ES042
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	VOID	VOID	3.10	0.03	VOID	VOID	1.49
Acetaldehyde	VOID	VOID	VOID	1.44	0.04	VOID	VOID	1.05
Acrolein	VOID	VOID	VOID	0.02	ND	VOID	VOID	ND
Acetone	VOID	VOID	VOID	1.43	0.09	VOID	VOID	1.19
Propionaldehyde	VOID	VOID	VOID	0.19	0.01	VOID	VOID	0.19
Crotonaldehyde	VOID	VOID	VOID	ND	ND	VOID	VOID	0.07
Butyr/Isobutyraldehyde	VOID	VOID	VOID	0.58	0.01	VOID	VOID	0.07
Benzaldehyde	VOID	VOID	VOID	0.06	ND	VOID	VOID	0.02
Isovaleraldehyde	VOID	VOID	VOID	ND	ND	VOID	VOID	ND
Valeraldehyde	VOID	VOID	VOID	0.14	ND	VOID	VOID	0.05
Tolualdehydes	VOID	VOID	VOID	0.04	0.003	VOID	VOID	0.01
Hexaldehyde	VOID	VOID	VOID	0.08	ND	VOID	VOID	0.06
2,5-Dimethylbenzaldehyde	VOID	VOID	VOID	ND	ND	VOID	VOID	0.00

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15659 R1	15661 D2	15661 R2	15738 D1	15738 R1	15739 D2	15739 R2	15763
SAMPLE DATE	4/18/99	4/18/99	4/18/99	4/30/99	4/30/99	4/30/99	4/30/99	5/6/99
ANALYSIS DATE	5/20/99	5/20/99	5/20/99	6/5/99	6/5/99	6/5/99	6/5/99	VOID
FILE NAME	O9ES043	O9ES044	O9ES045	Q9FD038	Q9FD039	Q9FD040	Q9FD041	VOID
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.50	1.75	1.74	1.70	1.68	1.92	1.85	VOID
Acetaldehyde	1.04	1.13	1.12	0.54	0.52	0.55	0.55	VOID
Acrolein	ND	ND	ND	0.01	0.01	0.01	0.01	VOID
Acetone	1.19	1.27	1.26	1.22	1.20	1.17	1.13	VOID
Propionaldehyde	0.19	0.20	0.20	0.06	0.06	0.06	0.05	VOID
Crotonaldehyde	0.07	0.07	0.08	ND	ND	ND	ND	VOID
Butyr/Isobutyraldehyde	0.08	0.08	0.08	ND	ND	ND	ND	VOID
Benzaldehyde	0.02	0.02	0.02	ND	ND	ND	ND	VOID
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	VOID
Valeraldehyde	0.04	0.05	0.05	ND	ND	0.03	0.02	VOID
Tolualdehydes	0.00	0.01	0.01	0.04	0.03	0.04	0.02	VOID
Hexaldehyde	0.05	0.06	0.06	0.02	0.02	0.02	0.02	VOID
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	VOID

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	15765	15770	15820 D1	15820 R1	15821 D2	15821 R2	15855	15984
SAMPLE DATE	5/6/99	5/18/99	5/30/99	5/30/99	5/30/99	5/30/99	6/11/99	7/5/99
ANALYSIS DATE	VOID	6/9/99	6/11/99	6/11/99	6/11/99	6/11/99	6/18/99	8/6/99
FILE NAME	VOID	Q9FH021	Q9FK004	Q9FK005	Q9FK006	Q9FK007	O9FR020	O9HE019
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	2.99	1.24	1.29	1.34	1.35	1.33	1.17
Acetaldehyde	VOID	1.33	0.53	0.55	0.60	0.58	0.56	0.38
Acrolein	VOID	0.05	0.01	0.02	0.02	0.01	ND	ND
Acetone	VOID	0.49	0.29	0.28	0.28	0.28	0.48	0.03
Propionaldehyde	VOID	0.18	0.09	0.08	0.10	0.09	0.12	0.06
Crotonaldehyde	VOID	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	VOID	0.16	0.23	0.23	0.23	0.25	0.10	0.05
Benzaldehyde	VOID	0.06	0.05	0.04	0.03	0.03	0.06	0.03
Isovaleraldehyde	VOID	0.03	0.03	ND	0.02	0.03	0.01	0.01
Valeraldehyde	VOID	0.09	0.03	0.03	0.02	0.03	0.05	0.02
Tolualdehydes	VOID	0.04	ND	ND	0.03	0.03	0.03	0.01
Hexaldehyde	VOID	0.06	0.04	0.04	0.04	0.04	0.07	0.04
2,5-Dimethylbenzaldehyde	VOID	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Hahnville, LA

Derivatized Conc. (ug/mL)	16061	16202	16348	16449	16678
SAMPLE DATE	7/17/99	7/29/99	8/10/99	8/22/99	9/3/99
ANALYSIS DATE	8/6/99	VOID	8/25/99	9/11/99	9/23/99
FILE NAME	O9HE031	VOID	O9HX021	O9IJ025	O9IV016
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.01	VOID	0.93	1.02	0.61
Acetaldehyde	0.40	VOID	0.17	0.36	0.33
Acrolein	0.00	VOID	ND	0.01	0.01
Acetone	0.03	VOID	0.06	0.04	0.04
Propionaldehyde	0.05	VOID	0.04	0.05	0.03
Crotonaldehyde	ND	VOID	ND	ND	ND
Butyr/Isobutyraldehyde	ND	VOID	ND	0.17	0.03
Benzaldehyde	0.01	VOID	0.02	0.02	0.01
Isovaleraldehyde	ND	VOID	0.01	0.01	0.01
Valeraldehyde	0.03	VOID	0.03	0.03	0.01
Tolualdehydes	ND	VOID	0.02	0.01	ND
Hexaldehyde	0.04	VOID	0.03	0.02	0.03
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Hahnville, LA
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK014
FB ID	15103 FB
Sample date	9/26/98
Date Analyzed	11/11/98
Formaldehyde	0.11
Acetaldehyde	0.17
Acrolein	0.03
Acetone	0.44
Propionaldehyde	0.00
Crotonaldehyde	0.00
Butyr/Isobutyraldehyde	0.68
Benzaldehyde	0.00
Isovaleraldehyde	0.00
Valeraldehyde	0.04
Tolualdehydes	0.00
Hexaldehyde	0.05
2,5-Dimethylbenzaldehyde	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK014
FB ID	15103 FB
Date Analyzed	11/11/98
Formaldehyde	0.06
Acetaldehyde	0.14
Acrolein	0.02
Acetone	0.43
Propionaldehyde	ND
Crotonaldehyde	ND
Butyraldehyde	0.77
Benzaldehyde	ND
Isovaleraldehyde	ND
Valeraldehyde	0.05
Tolualdehydes	ND
Hexaldehyde	0.07
2,5-Dimethylbenzaldehyde	ND

1998 UATMP CARBONYLS

Sample Site: N. Little Rock, AK **PARR**

Derivatized Conc. (ug/mL)	14683	14699	14966	15125	15146	15186	15210	15242
SAMPLE DATE	9/3/98	9/8/98	9/20/98	10/14/98	10/26/98	11/7/98	11/19/98	12/1/98
ANALYSIS DATE	10/28/98	10/28/98	11/12/98	11/17/98	VOID	12/22/98	12/22/98	12/22/98
FILE NAME	Q8J~022	Q8J~026	Q8KK041	Q8KP023	VOID	Q8LU025	Q8LU032	Q8LU039
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	5.04	1.94	2.74	VOID	1.51	VOID	1.20
Acetaldehyde	VOID	1.22	0.75	1.14	VOID	1.02	VOID	0.65
Acrolein	VOID	0.04	0.10	0.04	VOID	0.02	VOID	0.02
Acetone	VOID	1.85	0.51	2.18	VOID	1.57	VOID	1.20
Propionaldehyde	VOID	0.12	0.11	0.15	VOID	0.09	VOID	0.06
Crotonaldehyde	VOID	ND	ND	ND	VOID	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	0.43	0.14	0.64	VOID	0.20	VOID	0.21
Benzaldehyde	VOID	0.21	0.04	0.09	VOID	0.05	VOID	0.04
Isovaleraldehyde	VOID	0.02	0.03	0.01	VOID	0.04	VOID	0.04
Valeraldehyde	VOID	0.02	0.06	0.05	VOID	0.03	VOID	0.03
Tolualdehydes	VOID	0.12	0.05	0.04	VOID	0.04	VOID	0.03
Hexaldehyde	VOID	0.04	0.07	0.03	VOID	0.01	VOID	0.02
2,5-Dimethylbenzaldehyde	VOID	ND	0.03	ND	VOID	ND	VOID	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: N. Little Rock, AK

Derivatized Conc. (ug/mL)	15261	15279	15325	15363	15373	15400	15432	15462
SAMPLE DATE	12/13/98	12/25/98	1/6/99	1/18/99	1/30/99	2/11/99	2/17/99	2/23/99
ANALYSIS DATE	1/8/99	1/8/99	2/20/99	2/20/99	3/16/99	3/16/99	3/16/99	3/16/99
FILE NAME	O9AG033	O9AG044	O9BS024	O9BS025	09CO025	09CO030	09CO041	09CO048
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.75	1.60	2.34	1.26	1.26	1.01	1.36	1.83
Acetaldehyde	0.47	1.24	1.19	0.70	0.49	0.43	0.62	0.79
Acrolein	0.01	0.04	0.02	0.02	ND	ND	ND	ND
Acetone	0.83	1.00	1.58	1.25	0.78	0.46	1.28	1.38
Propionaldehyde	0.06	0.12	0.13	0.10	0.08	0.08	0.11	0.14
Crotonaldehyde	ND	0.01	0.01	0.004	ND	0.03	0.08	0.09
Butyr/Isobutyraldehyde	0.10	0.13	0.14	0.09	0.04	0.03	0.04	0.05
Benzaldehyde	0.02	0.04	0.04	0.04	0.04	0.02	0.05	0.05
Isovaleraldehyde	0.01	0.01	0.01	0.01	ND	ND	ND	ND
Valeraldehyde	0.01	0.02	0.03	0.03	ND	ND	0.03	0.04
Tolualdehydes	0.01	0.02	0.03	0.03	0.03	0.03	0.04	0.04
Hexaldehyde	0.02	0.04	0.04	0.03	0.02	0.03	0.04	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: N. Little Rock, AK

Derivatized Conc. (ug/mL)	15514	15506	15598 D1	15598 R1	15600 D2	15600 R2	15585	15615
SAMPLE DATE	3/1/99	3/7/99	3/17/99	3/17/99	3/17/99	3/17/99	3/25/99	3/31/99
ANALYSIS DATE	3/17/99	3/17/99	4/14/99	4/14/99	4/14/99	4/14/99	4/14/99	5/12/99
FILE NAME	O9CQ018	O9CQ017	O9DM035	O9DM037	O9DM038	O9DM039	O9DM028	O9EK023
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.99	1.09	1.55	1.57	1.54	1.59	1.39	1.50
Acetaldehyde	1.34	0.52	0.68	0.68	0.67	0.67	0.69	0.70
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	2.02	0.87	1.25	1.26	1.25	1.26	1.28	0.82
Propionaldehyde	0.24	0.09	0.11	0.11	0.11	0.11	0.12	0.12
Crotonaldehyde	0.14	0.04	ND	ND	ND	ND	ND	0.06
Butyr/Isobutyraldehyde	0.09	0.05	0.04	0.04	0.04	0.04	0.05	0.06
Benzaldehyde	0.07	0.01	0.03	0.03	0.03	0.03	0.02	0.04
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.06	ND	0.02	0.01	0.02	0.02	0.02	0.02
Tolualdehydes	0.05	0.02	0.02	0.02	0.02	0.02	0.01	0.00
Hexaldehyde	0.05	0.02	0.03	0.02	0.02	0.02	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: N. Little Rock, AR
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8KK012	O9DM010
FB ID	14967 FB	15586 FB
Sample date	9/21/98	3/25/99
Date Analyzed	11/11/98	4/13/99
Formaldehyde	0.10	0.14
Acetaldehyde	0.07	0.06
Acrolein	0.00	0.00
Acetone	0.37	0.13
Propionaldehyde	0.00	0.02
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.61	0.00
Benzaldehyde	0.00	0.00
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.00
Tolualdehydes	0.00	0.02
Hexaldehyde	0.03	0.00
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8KK012	O9DM010
FB ID	14967 FB	15586 FB
Date Analyzed	11/11/98	4/13/99
Formaldehyde	0.06	0.08
Acetaldehyde	0.06	0.05
Acrolein	ND	ND
Acetone	0.36	0.12
Propionaldehyde	ND	0.02
Crotonaldehyde	ND	ND
Butyraldehyde	0.70	ND
Benzaldehyde	ND	ND
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	ND
Tolualdehydes	ND	0.03
Hexaldehyde	0.05	ND
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Rutland, VT RUVT

Derivatized Conc. (ug/mL)	14691	14822	15061	15112	15136	15158	15202	15230
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98	11/25/98
ANALYSIS DATE	10/28/98	10/30/98	11/12/98	11/17/98	11/17/98	11/25/98	11/25/98	12/21/98
FILE NAME	Q8J~020	Q8J#023	Q8KK042	Q8KP024	Q8KP025	Q8KW023	Q8KW028	Q8LU012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	2.18	1.47	1.70	1.53	1.60	1.13	1.75	1.44
Acetaldehyde	0.93	0.86	1.07	1.06	0.77	0.63	0.83	0.77
Acrolein	0.04	0.14	0.15	0.05	0.01	0.02	0.03	0.02
Acetone	ND	0.83	1.18	1.04	1.46	0.94	1.27	1.00
Propionaldehyde	1.36	0.11	0.15	0.14	0.08	0.06	0.09	0.07
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.39	0.11	0.15	0.44	0.41	0.33	0.21	0.16
Benzaldehyde	0.06	0.06	0.05	0.05	0.03	0.03	0.05	0.05
Isovaleraldehyde	0.01	0.02	0.03	0.03	ND	ND	0.020	0.02
Valeraldehyde	0.03	0.03	0.05	0.04	0.02	0.02	0.02	0.02
Tolualdehydes	ND	0.03	0.04	0.04	ND	ND	0.04	0.03
Hexaldehyde	0.04	0.05	0.06	0.03	0.02	0.01	0.02	0.02
2,5-Dimethylbenzaldehyde	ND	ND	0.02	ND	ND	ND	0.01	0.02

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15246	15281	15307	15321	15346 D1	15346 R1	15348 D2	15348 R2
SAMPLE DATE	12/7/98	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE	12/22/98	1/8/99	2/20/99	VOID	2/20/99	2/20/99	2/20/99	2/20/99
FILE NAME	Q8LU017	O9AG036	O9BS018	VOID	O9BS035	O9BS036	O9BS038	O9BS039
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.36	2.13	2.02	VOID	1.08	1.11	1.11	1.13
Acetaldehyde	0.62	1.47	1.29	VOID	0.80	0.80	0.80	0.81
Acrolein	0.01	0.07	0.06	VOID	0.01	0.01	0.01	0.01
Acetone	0.99	1.35	1.08	VOID	0.96	0.95	0.94	0.96
Propionaldehyde	0.07	0.17	0.13	VOID	0.09	0.08	0.09	0.09
Crotonaldehyde	ND	0.02	0.02	VOID	0.01	0.01	0.01	0.01
Butyr/Isobutyraldehyde	0.12	0.19	0.14	VOID	0.08	0.08	0.08	0.09
Benzaldehyde	0.03	0.09	0.08	VOID	0.05	0.05	0.05	0.05
Isovaleraldehyde	ND	0.02	0.01	VOID	0.01	0.01	0.01	0.01
Valeraldehyde	0.02	0.03	0.03	VOID	0.02	0.02	0.02	0.02
Tolualdehydes	0.03	0.08	0.07	VOID	0.04	0.04	0.04	0.04
Hexaldehyde	0.02	0.04	0.03	VOID	0.05	0.05	0.04	0.04
2,5-Dimethylbenzaldehyde	0.01	ND	ND	VOID	ND	0.00	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15410	15446	15480	15551	15567	15629 D1	15629 R1	15631 D2
SAMPLE DATE	2/5/99	2/17/99	3/1/99	3/13/99	3/19/99	3/25/99	3/25/99	3/25/99
ANALYSIS DATE	3/16/99	3/16/99	VOID	4/1/99	4/14/99	5/12/99	5/12/99	5/12/99
FILE NAME	09CO027	09CO038	VOID	O9C%025	O9DM024	O9EK042	O9EK043	O9EK044
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.10	1.91	VOID	1.32	1.44	1.46	1.48	1.55
Acetaldehyde	0.59	0.98	VOID	0.66	0.68	0.58	0.58	0.58
Acrolein	ND	ND	VOID	ND	ND	0.02	0.02	0.02
Acetone	0.72	1.25	VOID	0.76	0.65	0.81	0.81	0.82
Propionaldehyde	0.10	0.16	VOID	0.11	0.10	0.09	0.09	0.09
Crotonaldehyde	0.04	0.10	VOID	0.04	ND	0.02	0.02	0.02
Butyr/Isobutyraldehyde	0.04	0.06	VOID	0.04	0.04	0.04	0.04	0.04
Benzaldehyde	0.02	0.05	VOID	0.02	0.01	0.01	0.01	0.02
Isovaleraldehyde	ND	ND	VOID	ND	ND	ND	ND	ND
Valeraldehyde	0.03	0.03	VOID	0.02	0.01	0.01	0.01	0.01
Tolualdehydes	0.02	0.04	VOID	0.01	0.01	ND	ND	0.00
Hexaldehyde	0.01	0.04	VOID	0.005	0.01	0.01	0.01	0.01
2,5-Dimethylbenzaldehyde	ND	ND	VOID	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15631 R2	15633	15679	15732	15823	15825	15785	15905
SAMPLE DATE	3/25/99	4/6/99	4/18/99	4/30/99	5/12/99	5/12/99	5/24/99	6/5/99
ANALYSIS DATE	5/12/99	5/19/99	5/19/99	6/5/99	VOID	VOID	6/10/99	7/6/99
FILE NAME	O9EK045	O9ES013	O9ES018	Q9FD020	VOID	VOID	Q9FH025	O9GF014
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.59	2.19	0.64	3.20	VOID	VOID	2.25	3.56
Acetaldehyde	0.59	1.11	0.30	1.65	VOID	VOID	0.85	1.50
Acrolein	0.02	ND	ND	0.02	VOID	VOID	0.03	ND
Acetone	0.82	1.41	0.46	2.23	VOID	VOID	1.22	2.31
Propionaldehyde	0.09	0.17	0.05	0.19	VOID	VOID	0.11	0.23
Crotonaldehyde	0.02	0.07	0.02	ND	VOID	VOID	ND	ND
Butyr/Isobutyraldehyde	0.04	0.09	0.02	0.48	VOID	VOID	0.34	0.33
Benzaldehyde	0.02	0.05	0.01	0.08	VOID	VOID	0.06	0.15
Isovaleraldehyde	ND	ND	ND	0.013	VOID	VOID	ND	0.03
Valeraldehyde	0.01	0.03	0.01	0.07	VOID	VOID	0.04	0.06
Tolualdehydes	ND	0.01	ND	0.06	VOID	VOID	0.04	0.05
Hexaldehyde	0.01	0.03	0.01	0.11	VOID	VOID	0.03	0.08
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	VOID	VOID	ND	0.01

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Rutland, VT

Derivatized Conc. (ug/mL)	15926	16027	16259	16251	16276	16488	16610	16808
SAMPLE DATE	6/17/99	6/29/99	7/17/99	7/23/99	8/4/99	8/16/99	8/28/99	9/9/99
ANALYSIS DATE	VOID	8/6/99	8/19/99	8/19/99	8/25/99	9/11/99	VOID	10/1/99
FILE NAME	VOID	O9HE011	O9HQ028	O9HQ032	O9HX024	O9IJ018	VOID	O9I$035
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	3.35	5.11	4.44	2.67	2.35	VOID	2.63
Acetaldehyde	VOID	1.10	1.52	1.57	0.96	1.04	VOID	1.06
Acrolein	VOID	ND	0.02	0.02	ND	ND	VOID	ND
Acetone	VOID	0.20	0.49	1.49	1.00	1.31	VOID	1.57
Propionaldehyde	VOID	0.20	0.32	0.26	0.17	0.15	VOID	0.15
Crotonaldehyde	VOID	ND	0.01	ND	ND	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	0.21	0.24	0.24	0.24	0.17	VOID	0.15
Benzaldehyde	VOID	0.09	0.09	ND	0.07	0.05	VOID	0.11
Isovaleraldehyde	VOID	0.02	0.03	0.03	0.03	0.02	VOID	0.03
Valeraldehyde	VOID	0.07	0.10	0.08	0.06	0.05	VOID	0.05
Tolualdehydes	VOID	0.05	0.04	0.05	0.05	0.05	VOID	0.05
Hexaldehyde	VOID	0.09	0.10	0.07	0.05	0.06	VOID	0.09
2,5-Dimethylbenzaldehyde	VOID	0.01	ND	ND	0.01	0.01	VOID	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Rutland, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J#009	O9C%011
FB ID	14823 FB	15552 FB
Sample date	9/14/98	3/13/99
Date Analyzed	10/29/98	3/30/99
Formaldehyde	0.03	0.05
Acetaldehyde	0.05	0.08
Acrolein	0.00	0.00
Acetone	0.35	0.16
Propionaldehyde	0.00	0.00
Crotonaldehyde	0.00	0.00
Butyr/Isobutyraldehyde	0.37	0.00
Benzaldehyde	0.00	0.00
Isovaleraldehyde	0.00	0.00
Valeraldehyde	0.00	0.00
Tolualdehydes	0.00	0.02
Hexaldehyde	0.00	0.00
2,5-Dimethylbenzaldehyde	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J#009	O9C%011
FB ID	14823 FB	15552 FB
Date Analyzed	10/29/98	3/30/99
Formaldehyde	0.02	0.03
Acetaldehyde	0.04	0.06
Acrolein	ND	ND
Acetone	0.34	0.16
Propionaldehyde	ND	ND
Crotonaldehyde	ND	ND
Butyraldehyde	0.43	ND
Benzaldehyde	ND	ND
Isovaleraldehyde	ND	ND
Valeraldehyde	ND	ND
Tolualdehydes	ND	0.04
Hexaldehyde	ND	ND
2,5-Dimethylbenzaldehyde	ND	ND

1998 UATMP CARBONYLS

Sample Site: Texarkana, AK **GREY**

Derivatized Conc. (ug/mL)	14557	14696	14887	15119	15142	15174	15220	15240
SAMPLE DATE	9/1/98	9/5/98	9/17/98	10/14/98	10/25/98	11/7/98	11/13/98	12/3/98
ANALYSIS DATE	VOID	10/28/98	10/30/98	11/17/98	11/25/98	12/22/98	VOID	12/22/98
FILE NAME	VOID	Q8J~027	Q8J#028	Q8KP021	Q8KW013	Q8LU023	VOID	Q8LU038
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	VOID	VOID	VOID	4.18	VOID	1.49	VOID	1.93
Acetaldehyde	VOID	VOID	VOID	1.21	VOID	0.82	VOID	0.39
Acrolein	VOID	VOID	VOID	0.03	VOID	0.01	VOID	0.03
Acetone	VOID	VOID	VOID	1.16	VOID	0.89	VOID	1.35
Propionaldehyde	VOID	VOID	VOID	0.10	VOID	0.08	VOID	0.04
Crotonaldehyde	VOID	VOID	VOID	ND	VOID	ND	VOID	ND
Butyr/Isobutyraldehyde	VOID	VOID	VOID	0.41	VOID	0.14	VOID	0.21
Benzaldehyde	VOID	VOID	VOID	0.06	VOID	0.03	VOID	0.04
Isovaleraldehyde	VOID	VOID	VOID	0.01	VOID	0.02	VOID	0.03
Valeraldehyde	VOID	VOID	VOID	0.07	VOID	0.02	VOID	0.01
Tolualdehydes	VOID	VOID	VOID	0.04	VOID	0.03	VOID	0.05
Hexaldehyde	VOID	VOID	VOID	0.15	VOID	0.02	VOID	0.03
2,5-Dimethylbenzaldehyde	VOID	VOID	VOID	ND	VOID	ND	VOID	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: Texarkana, AK

Derivatized Conc. (ug/mL)	15259	15287	15313	15365	15371	15420	15440	15488
SAMPLE DATE	12/13/98	12/25/98	1/6/99	1/18/99	1/30/99	2/11/99	2/23/99	3/7/99
ANALYSIS DATE	1/8/99	VOID	VOID	VOID	VOID	3/16/99	3/16/99	3/17/99
FILE NAME	O9AG031	VOID	VOID	VOID	VOID	09CO031	09CO044	O9CQ012
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.50	VOID	VOID	VOID	VOID	2.24	1.11	2.04
Acetaldehyde	0.31	VOID	VOID	VOID	VOID	0.99	0.63	0.91
Acrolein	0.002u	VOID	VOID	VOID	VOID	ND	ND	ND
Acetone	0.86	VOID	VOID	VOID	VOID	0.55	1.26	1.38
Propionaldehyde	0.03	VOID	VOID	VOID	VOID	ND	0.09	0.14
Crotonaldehyde	ND	VOID	VOID	VOID	VOID	0.07	0.04	0.05
Butyr/Isobutyraldehyde	0.11	VOID	VOID	VOID	VOID	0.05	0.03	0.05
Benzaldehyde	0.05	VOID	VOID	VOID	VOID	0.05	0.02	0.03
Isovaleraldehyde	ND	VOID	VOID	VOID	VOID	ND	ND	ND
Valeraldehyde	0.02	VOID	VOID	VOID	VOID	0.05	0.03	ND
Tolualdehydes	0.03	VOID	VOID	VOID	VOID	0.03	0.02	0.03
Hexaldehyde	0.07	VOID	VOID	VOID	VOID	0.04	0.03	0.03
2,5-Dimethylbenzaldehyde	ND	VOID	VOID	VOID	VOID	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

1998 UATMP CARBONYLS

Sample Site: Texarkana, AK

Derivatized Conc. (ug/mL)	15508	15531	15565	15623
SAMPLE DATE	3/13/99	3/19/99	3/25/99	3/31/99
ANALYSIS DATE	3/17/99	4/1/99	5/12/99	5/12/99
FILE NAME	O9CQ013	O9C%029	O9EK018	O9EK022
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.37	2.02	0.38	0.76
Acetaldehyde	0.65	0.92	0.35	0.49
Acrolein	ND	ND	0.01	ND
Acetone	0.65	1.23	0.41	0.74
Propionaldehyde	0.10	0.22	0.03	0.05
Crotonaldehyde	0.05	0.04	0.01	0.02
Butyr/Isobutyraldehyde	0.04	0.05	0.02	0.03
Benzaldehyde	0.03	0.03	0.01	0.01
Isovaleraldehyde	ND	ND	ND	ND
Valeraldehyde	0.03	0.05	0.004	0.01
Tolualdehydes	0.02	0.02	ND	ND
Hexaldehyde	0.03	0.03	0.01	0.02
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND

u - Concentration is below the detection limit

d - Concentration determined using a dilution factor

FIELD BLANK DATA

Sample site: GREY
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J~007	Q8J#011	Q8KP007
FB ID	14558 FB	14888 FB	15097 FB
Sample date	9/1/98	9/17/98	10/6/98
Date Analyzed	10/27/98	10/29/98	11/16/98
Formaldehyde	VOID	VOID	15.46
Acetaldehyde	VOID	VOID	2.32
Acrolein	VOID	VOID	0.13
Acetone	VOID	VOID	2.36
Propionaldehyde	VOID	VOID	0.19
Crotonaldehyde	VOID	VOID	0.00
Butyr/Isobutyraldehyde	VOID	VOID	0.96
Benzaldehyde	VOID	VOID	0.25
Isovaleraldehyde	VOID	VOID	0.05
Valeraldehyde	VOID	VOID	0.39
Tolualdehydes	VOID	VOID	0.00
Hexaldehyde	VOID	VOID	1.58
2,5-Dimethylbenzaldehyde	VOID	VOID	0.12

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J~007	Q8J#011	Q8KP007
FB ID	14558 FB	14888 FB	15097 FB
Date Analyzed	10/27/98	10/29/98	11/16/98
Formaldehyde	VOID	VOID	8.84
Acetaldehyde	VOID	VOID	1.82
Acrolein	VOID	VOID	0.12
Acetone	VOID	VOID	2.30
Propionaldehyde	VOID	VOID	0.18
Crotonaldehyde	VOID	VOID	ND
Butyraldehyde	VOID	VOID	1.10
Benzaldehyde	VOID	VOID	0.37
Isovaleraldehyde	VOID	VOID	0.07
Valeraldehyde	VOID	VOID	0.51
Tolualdehydes	VOID	VOID	ND
Hexaldehyde	VOID	VOID	2.25
2,5-Dimethylbenzaldehyde	VOID	VOID	0.21

1998 UATMP CARBONYLS

Sample Site: Underhill, VT **UNVT**

Derivatized Conc. (ug/mL)	14681	14816	15053	15110	15140	15160	15200	15226
SAMPLE DATE	9/2/98	9/14/98	9/26/98	10/8/98	10/20/98	11/1/98	11/13/98	11/25/98
ANALYSIS DATE	10/28/98	10/30/98	11/12/98	11/17/98	11/17/98	11/25/98	11/25/98	12/21/98
FILE NAME	Q8J~021	Q8J#024	Q8KK043	Q8KP027	Q8KP028	Q8KW024	Q8KW029	Q8LU013
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.84	0.57	1.06	0.70	0.70	0.52	0.45	0.46
Acetaldehyde	0.32	0.33	0.71	0.50	0.39	0.28	0.30	0.29
Acrolein	0.03	0.07	0.11	ND	ND	0.01	0.01	0.01
Acetone	0.56	0.55	1.07	0.84	1.14	0.72	0.80	0.69
Propionaldehyde	0.04	0.03	0.08	0.06	0.05	0.04	0.03	0.03
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	0.01
Butyr/Isobutyraldehyde	0.04	0.04	0.09	0.48	0.31	0.29	0.15	0.08
Benzaldehyde	0.01	0.02	0.04	0.02	0.02	0.03	0.02	0.02
Isovaleraldehyde	0.01	ND	0.01	ND	ND	0.01	ND	0.01
Valeraldehyde	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01
Tolualdehydes	ND	ND	ND	ND	ND	0.02	ND	0.01
Hexaldehyde	0.01	0.01	0.02	0.02	0.01	0.02	ND	0.01
2,5-Dimethylbenzaldehyde	0.01	ND	0.02	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	15248	15289	15309	15323	15359 D1	15359 R1	15361 D2	15361 R2
SAMPLE DATE	12/7/98	12/19/98	12/31/98	1/12/99	1/24/99	1/24/99	1/24/99	1/24/99
ANALYSIS DATE	12/22/98	1/8/99	2/20/99	2/20/99	2/20/99	2/20/99	2/20/99	2/20/99
FILE NAME	Q8LU018	O9AG038	O9BS019	O9BS023	O9BS040	O9BS041	O9BS042	O9BS043
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.65	0.63	0.58	0.87	0.51	0.52	0.54	0.56
Acetaldehyde	0.33	0.46	0.39	0.72	0.29	0.29	0.34	0.34
Acrolein	0.01	0.01	0.01	0.01	0.0007u	0.0003u	0.0006u	0.0008u
Acetone	0.80	0.70	0.55	0.90	0.55	0.54	0.61	0.61
Propionaldehyde	0.04	0.06	0.04	0.08	0.04	0.04	0.04	0.04
Crotonaldehyde	ND	0.003	ND	0.004	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.08	0.08	0.04	0.08	0.03	0.03	0.05	0.04
Benzaldehyde	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Isovaleraldehyde	0.01	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Tolualdehydes	0.02	0.01	0.01	0.01	ND	ND	ND	ND
Hexaldehyde	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
2,5-Dimethylbenzaldehyde	0.01	0.01	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	15418	15448	15486	15545	15569	15581 D1	15581 R1
SAMPLE DATE	2/5/99	2/17/99	3/1/99	3/13/99	3/19/99	3/25/99	3/25/99
ANALYSIS DATE	3/16/99	3/16/99	3/16/99	4/1/99	4/14/99	4/14/99	4/14/99
FILE NAME	09CO029	09CO040	09CO053	O9C%027	O9DM026	O9DM053	O9DM054
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.50	1.20	0.87	0.85	0.55	0.45	0.46
Acetaldehyde	0.30	0.63	0.36	0.44	0.24	0.23	0.23
Acrolein	ND	ND	ND	ND	ND	ND	ND
Acetone	0.59	0.97	0.79	0.67	0.49	0.60	0.59
Propionaldehyde	0.05	0.10	0.07	0.07	0.04	0.04	0.04
Crotonaldehyde	0.02	0.04	0.02	0.03	ND	ND	ND
Butyr/Isobutyraldehyde	0.02	0.04	0.02	0.02	0.01	0.01	0.01
Benzaldehyde	0.01	0.02	0.01	0.01	0.003	0.004	0.004
Isovaleraldehyde	ND	ND	ND	ND	ND	ND	ND
Valeraldehyde	ND	0.02	ND	0.01	0.003	0.002	ND
Tolualdehydes	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Hexaldehyde	0.01	0.01	ND	0.01	0.01	0.01	0.01
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	15583 D2	15583 R2	15643	15667	15736	15800 D1	15800 R1	15802 D2
SAMPLE DATE	3/25/99	3/25/99	4/6/99	4/12/99	4/30/99	5/12/99	5/12/99	5/12/99
ANALYSIS DATE	4/14/99	4/14/99	5/19/99	5/19/99	6/5/99	6/10/99	6/10/99	6/11/99
FILE NAME	O9DM055	O9DM056	O9ES015	O9ES019	Q9FD021	Q9FH044	Q9FH045	Q9FK002
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	0.52	0.51	1.11	0.78	1.42	1.10	1.07	1.25
Acetaldehyde	0.26	0.26	0.52	0.33	0.63	0.49	0.52	0.50
Acrolein	ND	ND	0.02	ND	0.01	ND	ND	ND
Acetone	0.69	0.69	0.97	0.80	1.34	1.36	1.35	1.39
Propionaldehyde	0.04	0.04	0.07	0.04	0.06	0.07	0.06	0.06
Crotonaldehyde	ND	ND	0.03	0.02	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.01	0.01	0.03	0.02	0.26	0.26	0.25	0.21
Benzaldehyde	0.003	0.005	0.01	0.01	0.03	0.03	0.03	0.07
Isovaleraldehyde	ND	ND	ND	ND	ND	0.03	0.03	ND
Valeraldehyde	0.001	0.001	0.01	0.01	0.03	0.02	0.02	0.02
Tolualdehydes	0.01	0.01	ND	ND	0.04	0.04	0.05	0.03
Hexaldehyde	0.01	0.01	0.01	0.01	0.04	0.05	0.02	0.03
2,5-Dimethylbenzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	15802 R2	15792	15831	15924	16029	16266	16256	16274
SAMPLE DATE	5/12/99	5/24/99	6/5/99	6/17/99	6/29/99	7/17/99	7/23/99	8/4/99
ANALYSIS DATE	6/11/99	6/10/99	6/18/99	7/7/99	8/6/99	8/19/99	8/19/99	8/25/99
FILE NAME	Q9FK003	Q9FH026	O9FR017	O9GF019	O9HE012	O9HQ029	O9HQ033	O9HX025
UNITS	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.21	1.26	2.15	1.69	1.57	3.18	2.96	1.08
Acetaldehyde	0.49	0.42	0.62	0.50	0.57	0.80	0.81	0.45
Acrolein	ND	0.01	ND	0.02	ND	0.02	ND	ND
Acetone	1.33	1.02	1.90	1.56	0.26	1.39	1.04	0.92
Propionaldehyde	0.06	0.06	0.08	0.08	0.08	0.12	0.11	0.05
Crotonaldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Butyr/Isobutyraldehyde	0.27	0.34	0.12	0.08	0.12	0.12	0.11	0.08
Benzaldehyde	0.03	0.02	0.05	0.04	0.05	0.12	ND	0.05
Isovaleraldehyde	ND	ND	ND	0.01	0.01	0.01	0.02	0.01
Valeraldehyde	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.02
Tolualdehydes	0.05	0.04	0.04	0.03	0.03	0.04	0.04	0.04
Hexaldehyde	0.04	0.03	0.02	0.03	0.04	0.04	0.06	0.02
2,5-Dimethylbenzaldehyde	ND	ND	0.00	ND	ND	ND	ND	ND

u - Concentration is below the detection limit

1998 UATMP CARBONYLS

Sample Site: Underhill, VT

Derivatized Conc. (ug/mL)	16492	16621	16802	16891
SAMPLE DATE	8/16/99	8/28/99	9/9/99	9/21/99
ANALYSIS DATE	9/11/99	VOID	10/1/99	10/13/99
FILE NAME	O9IJ019	VOID	O9I$033	O9JM013
UNITS	ppbv	ppbv	ppbv	ppbv
Formaldehyde	1.61	VOID	1.41	0.60
Acetaldehyde	0.42	VOID	0.47	0.29
Acrolein	0.01	VOID	ND	ND
Acetone	0.86	VOID	1.18	0.47
Propionaldehyde	0.06	VOID	0.06	0.04
Crotonaldehyde	ND	VOID	ND	0.004
Butyr/Isobutyraldehyde	0.07	VOID	0.06	0.05
Benzaldehyde	0.04	VOID	0.05	0.02
Isovaleraldehyde	0.01	VOID	0.01	ND
Valeraldehyde	0.02	VOID	0.02	0.02
Tolualdehydes	0.03	VOID	0.02	0.02
Hexaldehyde	0.03	VOID	0.04	0.02
2,5-Dimethylbenzaldehyde	ND	VOID	ND	ND

u - Concentration is below the detection limit

FIELD BLANK DATA

Sample site: Underhill, VT
RAW AMOUNT
Derivatized Conc. (ug/mL)

Data File ID	Q8J#010	O9C$012	O9HQ009
FB ID	14817 FB	15546 FB	16267 FB
Sample date	9/14/98	3/13/99	7/17/99
Date Analyzed	10/29/98	3/30/99	8/18/99
Formaldehyde	0.08	0.06	0.10
Acetaldehyde	0.21	0.09	0.08
Acrolein	0.00	0.00	0.00
Acetone	0.37	0.18	0.12
Propionaldehyde	0.00	0.00	0.01
Crotonaldehyde	0.00	0.00	0.01
Butyr/Isobutyraldehyde	0.50	0.00	0.10
Benzaldehyde	0.03	0.00	0.03
Isovaleraldehyde	0.00	0.00	0.00
Valeraldehyde	0.00	0.00	0.02
Tolualdehydes	0.00	0.03	0.00
Hexaldehyde	0.00	0.01	0.02
2,5-Dimethylbenzaldehyde	0.00	0.00	0.00

Field Blanks
Underivatized Conc.(total ug)

Data File ID	Q8J#010	O9C$012	O9HQ009
FB ID	14817 FB	15546 FB	16267 FB
Date Analyzed	10/29/98	3/30/99	8/18/99
Formaldehyde	0.04	0.03	0.07
Acetaldehyde	0.16	0.07	0.08
Acrolein	ND	ND	ND
Acetone	0.36	0.17	0.14
Propionaldehyde	ND	ND	0.01
Crotonaldehyde	ND	ND	0.01
Butyraldehyde	0.57	ND	0.15
Benzaldehyde	0.05	ND	0.05
Isovaleraldehyde	ND	ND	ND
Valeraldehyde	ND	ND	0.03
Tolualdehydes	ND	0.04	ND
Hexaldehyde	ND	0.01	0.04
2,5-Dimethylbenzaldehyde	ND	ND	ND

United States
Environmental Protection
Agency

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