SOUTHERN CALIFORNIA AIR QUALITY STUDY:

TOXIC AIR CONTAMINANTS, TASK I

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Disclaimer

The statements and conclusions in this report are those of Daniel Grosjean and Associates, Inc. (DGA) and not necessarily those of the State of California Air Resources Board. The mention of commercial products, their sources and their use in connection with material reported here is not be be construed as actual or implied endorsement of such products.

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Ralph Propper (ARB Research Division) provided advice throughout the course of this study. Edwin Williams and Sucha Parmar (DGA) contributed to field calibrations. Eric Grosjean (California State U. Northridge) and Fabrice Grosjean (Ventura College) assisted in data reduction. Rei A. Rasmussen (Oregon Graduate Center) kindly provided a standard mixture prepared and calibrated in his laboratory. Michael Redgrave (ARB Technical Support Division) and Rei Rasmussen made available chlorinated hydrocarbon data relevant to this study. Jennifer Felix and Denise Yanez (DGA) typed the draft and final versions of this report, respectively.

This report is submitted in fulfillment of Agreement A832-152. Work was completed as of September 3, 1989.

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EXECUTIVE SUMMARY

As part of the Southern California Air Quality Study (SCAQS), Daniel Grosjean and Associates, Inc., (DGA) has carried out intensive measurements of peroxyacetyl nitrate (PAN) by electron capture gas chromatography (EC-GC). Under the conditions employed for PAN measurements, all chromatograms of ambient air recorded during SCAQS also contained information on ambient levels of toxic chlorinated hydrocarbons. The objective of this project was to retrieve this information, i.e. to identify these chlorinated hydrocarbons, to carry out EC-GC laboratory calibrations under conditions identical to those used during SCAQS, and to use the calibration data to calculate ambient levels of toxic chlorinated hydrocarbons during SCAQS (June to December 1987).

The three toxic compounds identified in the SCAQS chromatograms were carbon tetrachloride (CCl_4), methyl chloroform (CH_3CCl_3, 1,1,1-trichloroethane) and tetrachloroethylene ($Cl_2C=CCl_2$). The first two compounds coeluted under the conditions employed during SCAQS, and the concentrations of methyl chloroform were calculated assuming a constant value of 0.11 ppb for CCl_4. Although laboratory calibrations were carried out more than one year after SCAQS, the response of the EC-GC was shown to be stable over periods of 2 years and 1 year for PAN and chlorinated hydrocarbons, respectively. In addition, the agreement on standards prepared in two laboratories (Dr. Rasmussen's and DGA) was $\pm$ 1.5% for C_2Cl_4 and $\pm$ 16.8% for $CCl_4 + CH_3 CCl_3$. Thus, the 1988-89 calibration factors were used to calculate some 3800 sets of ambient concentrations for $CH_3 CCl_3$ and C_2Cl_4 during SCAQS.

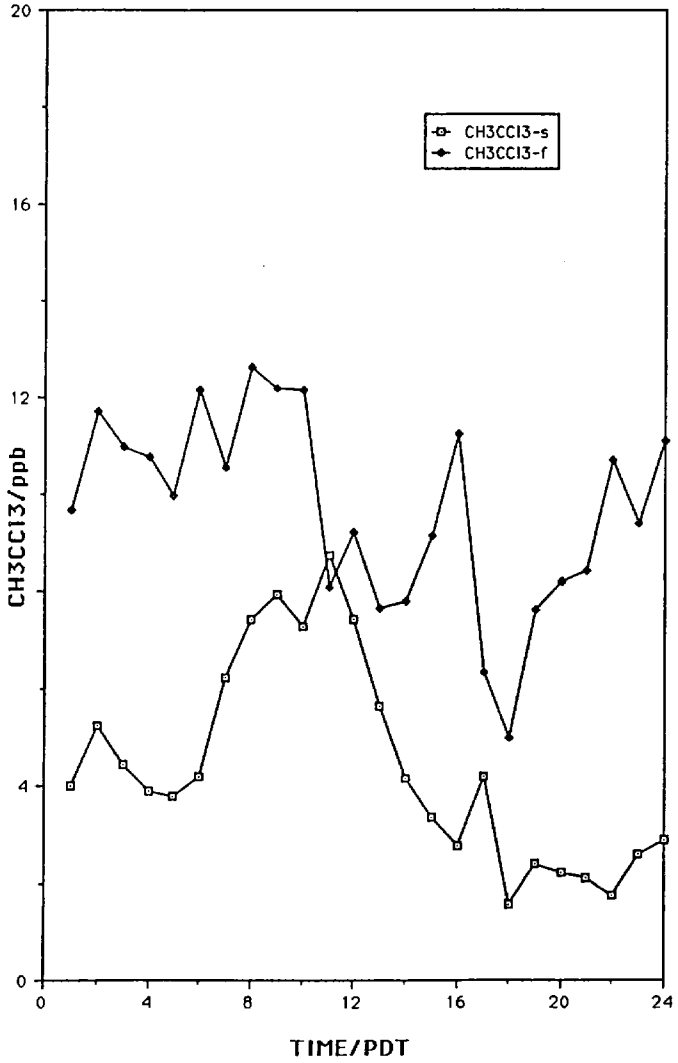
Ambient concentrations were lowest at the background site, San Nicolas Island (SNI). Site/SNI ratios for all other SCAQS sites were in the range 5.0 - 30.8 for CH_3CCl_3 and 1.3 - 6.2 for C_2Cl_4 (24-hr. averages), clearly reflecting urban emissions of chlorinated toxics. Diurnal variations were modest and were more pronounced during the summer (transport inland) than during the fall (stagnation at coastal and central locations). Ambient levels of chlorinated toxics were substantially higher during the fall than during the summer (Figure A) with 24-hr. averaged fall/summer ratios of up to 6.0 for $CH_3 CCl_3$ and 6.4 for C_2Cl_4.

Recommendations for study of the data base assembled in this report include quality **assurance** and **data interpretation**. Specific recommendations include:

• an interlaboratory study of chlorinated hydrocarbon calibration methods, involving DGA and another group with leadership capabilities in this type of work, e.g. Dr. Rasmussen and coworkers at the Oregon Graduate Center;

• interpretive analysis of the data base, i.e. the application of descriptive, co-variation and classification methods to the analysis of chlorinated toxics spatial and temporal variations, source contribution (mobile and stationary), atmospheric reactions (with focus on those leading to other toxics, e.g. phosgene production from tetrachlorethylene and from other chlorinated toxics), and basinwide "budgets" including emissions, removal and long-range transport out of the South Coast Air Basin;

• application of the same descriptive analysis techniques to SCAQS data for other air toxics, including chlorinated HC data from groups other than DGA, aromatic hydrocarbons (e.g. benzene) and aldehydes (e.g. formaldehyde).



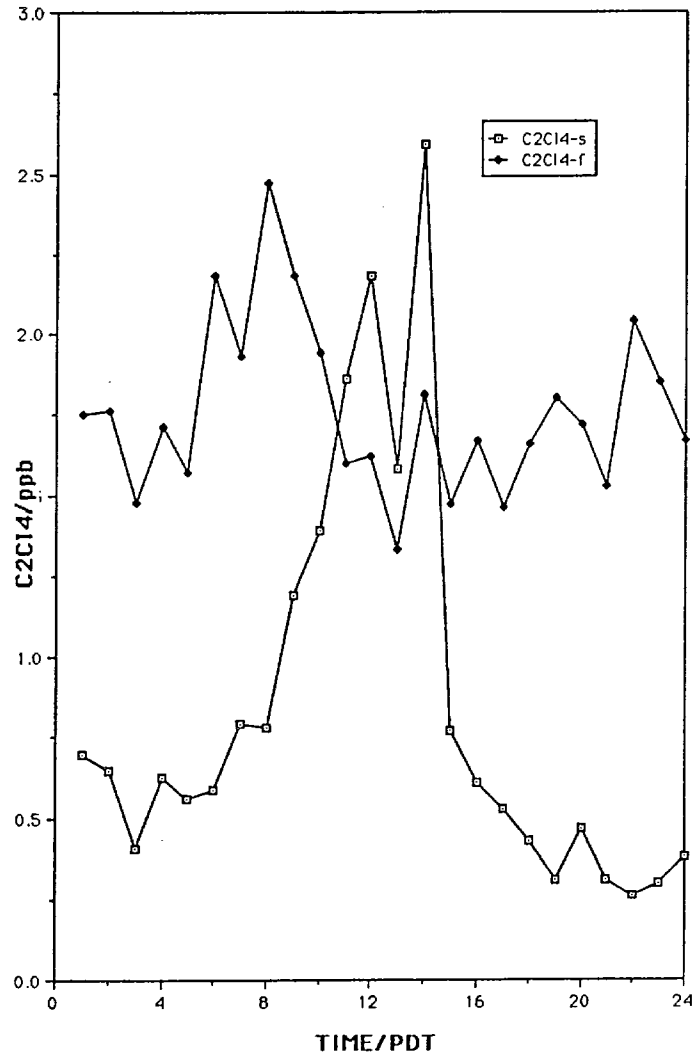


FIGURE A. COMPOSITE DIURNAL PROFILES FOR METHYL CHLOROFORM (LEFT) AND TETRACHLOROETHYLENE (RIGHT), LOS ANGELES, SUMMER (OPEN SYMBOLS) AND FALL (DARK SYMBOLS) PHASES OF SCAQS

1. INTRODUCTION

Chlorinated hydrocarbons are used extensively as solvents, synthetic feedstocks, refrigerants, household products, and in the production of textiles and plastics. Significant amounts of chlorinated hydrocarbons are released into urban atmospheres (1, 2). Many of these compounds are toxic and exhibit mutagenic and/or carcinogenic properties. Information on ambient levels of chlorinated hydrocarbons is of direct interest in the context of regulatory action concerning toxic air contaminants, and is the object of this report.

As part of the Southern California Air Quality Study (SCAQS), carried out during the summer and fall of 1987, DGA has carried out measurements of peroxyacetyl nitrate (PAN) using electron capture gas chromatography (3). The conditions employed to measure PAN were also suitable to record several chlorinated hydrocarbons. In this project, some 3,800 PAN chromatograms obtained by DGA during SCAQS at up to nine Southern California locations have been reanalyzed to yield, using appropriate laboratory calibrations, ambient concentrations of toxic chlorinated hydrocarbons during SCAQS. The three chlorinated hydrocarbons identified are carbon tetrachloride, methyl chloroform and tetrachlororethylene. The first two compounds coelute under the conditions employed.

The following sections of this report describe our field measurement and laboratory calibration protocols. They are followed by a brief discussion of the diurnal, spatial and seasonal variations in ambient levels of chlorinated hydrocarbons recorded during SCAQS. Individual data points are listed in Appendix I according to date and location.

2. EXPERIMENTAL METHODS

2.1. Field Measurements

Measurements of ambient levels of chlorinated hydrocarbons were carried out at up to nine Southern California locations during the summer and fall of 1987. In June and July, the study involved all nine SCAQS "A" and "B" sites, i.e. Anaheim, Azusa, Burbank, Claremont, Hawthorne, Long Beach, Los Angeles, Rubidoux and San Nicolas Island. In August and September seven sites were involved, i.e. those listed above except Hawthorne and San Nicolas Island. Five sites were included in November and December: Anaheim, Burbank, Hawthorne, Long Beach and Los Angeles.

All measurements were carried out using on-site electron capture gas chromatographs (EC-GC) as described by Williams and Grosjean (3). The GC columns used were 50-180 cm, 1/8 inch diameter Teflon packed with 10% Carbowax 400 on 60/80 mesh Chromosorb P. The GC oven and detector temperatures were 30 and 60°C, respectively. The carrier gas was ultra high purity nitrogen. The 3 mL sampling loop was housed in the GC oven. Ambient air was sampled at flow rates of 190-425 mL/min using 1/4 inch diameter, 4.0-12.2 m long Teflon sampling lines. The sample lines residence times were 0.19-0.88 min. We verified in the laboratory that no loss of chlorinated hydrocarbon occurred in the sampling line under these conditions. Additional information regarding sampling configurations at all sites are given in Ref. 3.

The automated EC-GC units were operated 'round-the-clock on scheduled SCAQS sampling days and yielded ambient air chromatograms at a frequency of about one sample every hour (one sample every 30 min. at the Azusa site). While the operating conditions were optimized for measuring PAN, two other peaks were nearly always present in the chromatograms, see Figure 1. These peaks were identified by matching their retention times to those of laboratory standards under conditions identical to those employed in the field. A list of the compounds tested and their retention times is given in Table 1. Carbon tetrachloride (CCl_4) and methyl chloroform (1,1,1-trichloroethane, CH_3CCl_3) coelute and account for the first peak seen in Figure 1, while the second peak eluting before PAN is due to tetrachloroethylene (C_2Cl_4). We note from Table 1 that, with the type of columns and operating conditions we employed to measure PAN during SCAQS, baseline resolution is obtained for CCl_4-CH_3CCl_3, methyl nitrate, C_2Cl_4 and PAN. While retention times varied from one gas chromatograph to the next as a function of column length and other operating conditions, we verified that the retention time ratios were essentially constant from one instrument to the next, i.e. CH_3CCl_3/PAN = 0.19 ± 0.02 and C_2Cl_4/PAN = 0.54 ± 0.05.

A standard mixture obtained from Dr. Rasmussen and prepared and calibrated in his laboratory was reanalyzed at DGA under conditions identical to those we employed for our field measurements. The mixture contained 18 compounds including chlorinated, brominated and aromatic hydrocarbons at concentrations of 0.5 - 1.1 ppb (Table 2). With the exception of CCl_4, CH_3CCl_3 and C_2Cl_4, which eluted at the expected retention times, none of the compounds listed in Table 2 was observed in the chromatograms. Thus, these compounds (a) co-elute with the large oxygen peak, see Figure 1, (b) are retained on the column and/or elute

FIGURE 1. TYPICAL FIELD CHROMATOGRAM (Claremont, CA, 9/3/87)

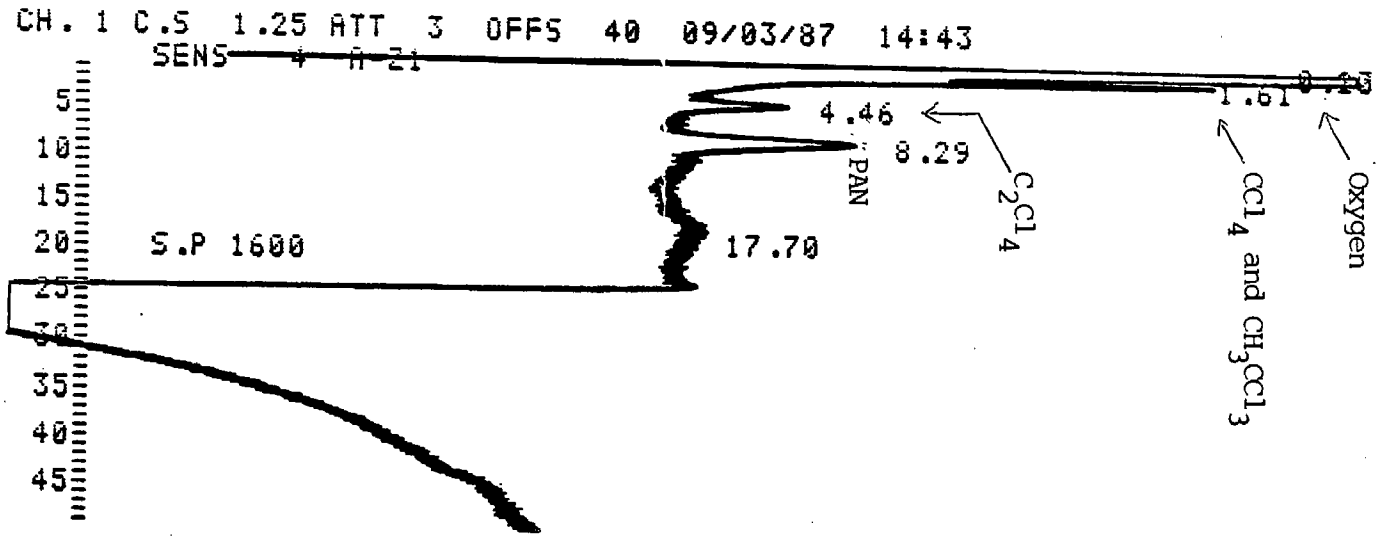


TABLE 1. RETENTION TIMES OF METHYL NITRATE, PAN AND CHLORINATED HYDROCARBONS

COMPOUND	RETENTION TIME, MINUTES (a)	RETENTION TIME, RATIO
Carbon tetrachloride	1.56	0.20
Methyl chloroform	1.58	0.20
Methyl nitrate	2.55	0.33
Trichloroethylene	3.68	0.45
Tetrachloroethylene	4.30	0.55
PAN	7.70	1.0 (reference)

(a) on DGA-51 electron capture gas chromatograph

TABLE 2. COMPOSITION OF STANDARD MIXTURE PREPARED BY DR. RASMUSSEN AND TESTED AT DGA

COMPOUND	NOMINAL CONCENTRATION, ppb
1, 3 butadiene	1.08
beuzene	0.93
toluene	0.53
chlorobenzene	0.55
ethylbenzene	0.52
o-xylene	0.55
vinyl chloride	1.02
methyl bromide	0.50
F11 ($CFCl_3$)	0.53
methylene chloride	1.09
chloroform	1.07
1, 2 dichloroethane	1.00
methyl chloroform	0.52
carbon tetrachloride	1.00
1, 2 dichloropropane	0.54
trichlorethylene	1.09
1, 2 dibromoethane	0.55
tetrachloroethylene	1.06

after more than 20 minutes, see Figure 1, or (c) are not detected by electron capture at the concentrations tested, i.e. 0.5 - 1.1 ppb.

2.2. Laboratory Calibrations

During SCAQS, extensive instrument calibrations were performed for PAN (3), but not for chlorinated hydrocarbons. Laboratory calibrations were carried out, some 12 months later, by injecting precisely metered microliter amounts of high purity chlorinated hydrocarbons in a known volume of purified air, using a 3.5 m^3 all-Teflon chamber. Calibration curves (peak height vs. concentration) were constructed from three independently prepared dilutions of chlorinated hydrocarbons in pure air. These calibrations curves were linear for the three chlorinated hydrocarbons, see Figure 2, with intercepts of O $\pm$ .O2, correlation coefficients of 0.999, and standard deviations on the slopes of 4.1 - 4.5%.

The calibration curves were obtained using one "reference" gas chromatograph, with conditions identical to those used to operate this instrument during SCAQS, both in the field and in the corresponding PAN calibrations in the laboratory. Along with the chlorinated hydrocarbons calibration curves, a calibration curve was constructed for PAN under the same conditions, with PAN prepared in-situ by sunlight irradiation, in the Teflon chamber, of 0.25 ppm nitric oxide and 1 ppm of the reactive olefin, 2-methyl-2 butene (3). In this way, calibration factors (the slopes of the calibration curves) for PAN, CCl_4, CH_3CCl_3 and C_2Cl_4 could be directly compared, see Table 3.

We verified that the ratios of these calibration factors was essentially the same (within experimental precision) from one instrument to the next, see Table 2. We then assumed that the constant relationship verified for three sets of GC conditions holds true for all GC units employed during SCAQS, and derived, from the actual PAN calibration factors determined during SCAQS (3), the corresponding calibration factors for the chlorinated hydrocarbons. These calibration factors, given in units of ppb/mm, are listed in Table 4.

We also compared the results of the calibrations obtained with our own standards (dilution of a single chlorinated hydrocarbon in purified air) to those obtained with a standard mixture independently prepared by Dr. R.A. Rasmussen. This standard mixture, whose composition is given in Table 2, was contained in an internally passivated stainless steel canister. To analyze this mixture, small aliquots of air from the canister were brought down to atmospheric pressure and injected directly on our "reference" EC-GC using a 3ml sampling loop (3 consecutive injections). The results, summarized in Table 5, indicate agreement within $\pm$ 1.5% for tetrachloroethylene and within $\pm$ 16.8 for carbon tetrachloride + methyl chloroform. The agreement obtained for tetrachloroethylene is within our stated precision of $\pm$ 4.5%. The agreement obtained for carbon tetrachloride and methyl chloroform is outside of our stated precision of $\pm$ 4.1% but is nevertheless reasonable. All ambient concentrations given in this report are based on the calibration data given in Figure 2.

2.3. Detection Limits

We conservatively assigned a peak height of 3 mm on attenuation setting = 3 as a minimum detectable peak height. Detection limits for each instrument can be

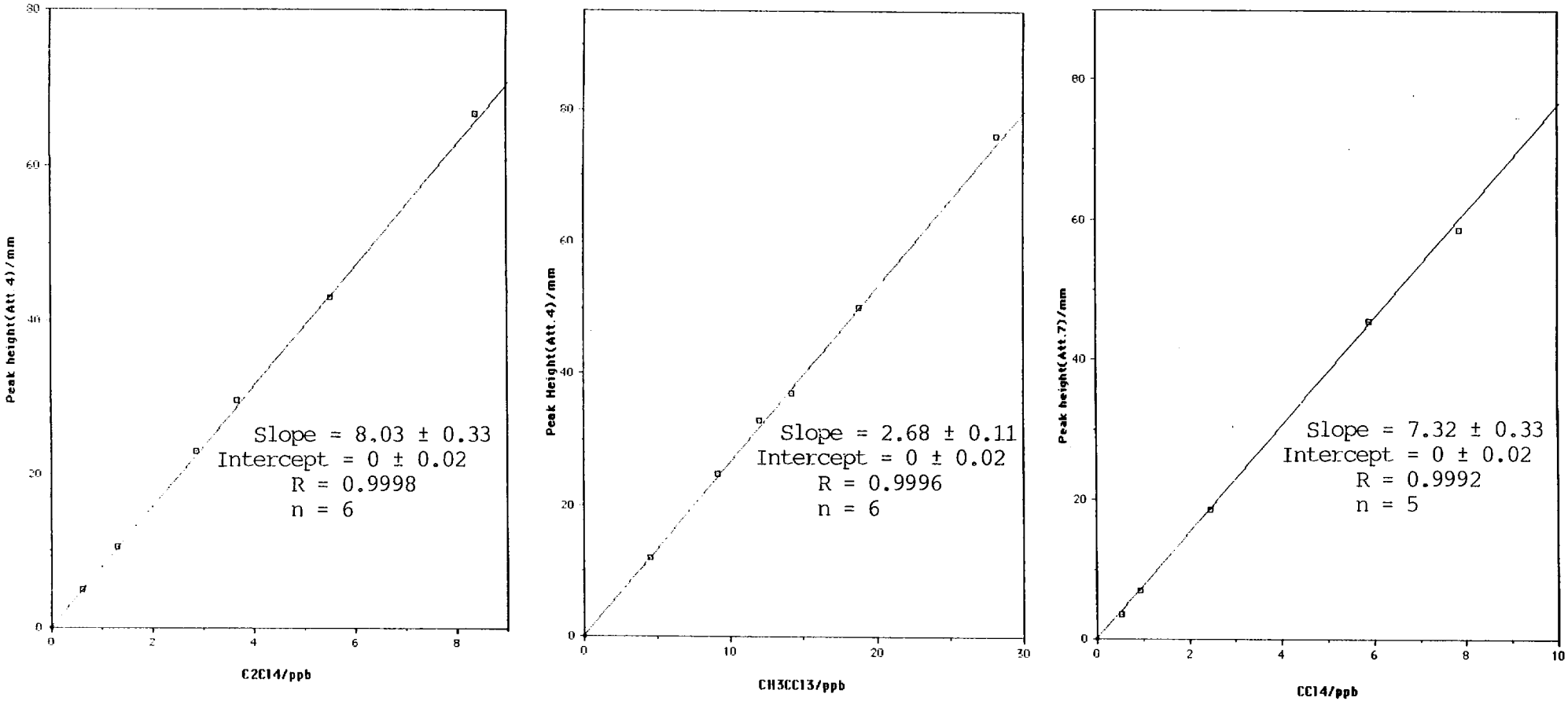


FIGURE 2. CALIBRATION CURVES FOR CCL_4, CH_3CCl_3 AND C_2Cl_4

TABLE 3. CALIBRATION FACTORS FOR CHLORINATED HYDROCARBONS AND FOR PAN

Gas Chromatograph	Calibration factor, ppb/mm (att 3)				Calibration factor ratios, chlorinated HC/PAN		
	PAN	CCl4	CH3CCl3	C2Cl4	CCl4	CH3CCl3	C2Cl4
DGA 51	0.258	0.082	0.189	0.064	0.0032	0.733	0.248
DGA 58-A	0.297	0.0098	0.211	0.078	0.0033	0.710	0.263
DGA 58-B	0.366	0.0099	0.234	0.098	0.0027	0.639	0.268
				Average:	0.00306	0.694	0.260

TABLE 4. CALIBRATION FACTORS USED FOR DATA REDUCTION OF SCAQS CHROMATOGRAMS

Location	Start		Stop		Calibration factor, ppb/mm (att.3)		
	Date (1987)	Time	Date	Time	$CCl_4/10^{-3}$	CH_3CCl_3	C_2Cl_4
Anaheim	6/19	0:56	6/26	1:24	22.8	0.518	0.194
Anaheim	7/12	20:33	7/15	23:33	2.23	0.051	0.019
Anaheim	8/26	21:06	9/4	0:03	6.83	0.155	0.058
Anaheim	11/11	0:39	12/11	23:34	13.62	0.309	0.116
Azusa	6/18	10:12	9/3	21:07	14.60	0.331	0.124
Burbank	6/19		6/26	1:16	23.57	0.534	0.200
Burbank	7/12	22:40	9/3	23:38	16.80	0.381	0.143
Burbank	11/11	0:31	12/11	23:26	13.84	0.314	0.118
Claremont	6/19		7/14	18:26	20.29	0.460	0.172
Claremont	7/14	18:56	7/15	23:57	18.83	0.427	0.160
Claremont	8/27	0:03	9/1	12:00	7.25	0.164	0.062
Claremont	9/1	19:40	9/10	15:42	6.80	0.154	0.058
Los Angeles	6/19		7/16	0:16	20.94	0.475	0.178
Los Angeles	8/27	1:02	12/11	21:31	8.94	0.203	0.076
Hawthorne	6/19		6/26	0:46	25.04	0.568	0.213
Hawthorne	7/13	0:49	7/13	18:49	11.11	0.252	0.094
Hawthorne	7/13	20:44	7/15	23:45	25.04	0.568	0.213
Hawthorne	11/11	0:03	11/14		14.60	0.331	0.124
Hawthorne	11/14		12/12	0:34	10.19	0.231	0.087
Long Beach	6/19		7/13	13:44	29.48	0.668	0.250
Long Beach	7/13	16:12	9/4	1:22	19.56	0.443	0.166
Long Beach	11/11	8:01	12/11	23:16	16.80	0.381	0.143
Rubidoux	6/19		7/16	1:42	53.60	1.215	0.455
Rubidoux	8/26	20:15	9/4	0:33	20.45	0.464	0.174
San Nicolas	7/13	0:44	7/16	0:45	16.41	0.372	0.139

readily obtained by multiplying by 3 the calibration factors listed in Table 4. For example, detection limits from 6/19 to 6/26 in Anaheim (first row in Table 4) were 69 ppt for CCl_4, 1.5 ppb for CH_3CCl_3, and 0.6 ppb for C_2Cl_4.

2.4. Limitations of Calibration Method

Our "after-the-fact" calibration protocol may be invalid if the response of the electron capture detector varies substantially with time, all other operating conditions being identical. We have verified in the course of several projects, that calibration factors of the "reference" instrument for PAN have not substantially changed during the two-year period, 1987-1989, see Table 6, even though this instrument has been extensively used in the field and in the laboratory. For chlorinated hydrocarbons, calibrations performed in 1988 and 1989 (12 months apart) agreed within 3% for tetrachloroethylene. These results indicate that the response of the electron capture detectors employed in this study did not vary substantially with time.

TABLE 5. ANALYSIS OF STANDARD MIXTURE PREPARED IN DR. RASMUSSEN'S LABORATORY (a)

	CCl_4 + CH_3CCl_3 (peak height, mm)	C_2Cl_4 (ppb)
Observed	73 ± 1 (b)	1.09 ± 0.04 (b)
Nominal	52 (c)	1.06
Average ± 1 sd deviation	62.5 ± 10.5	1.075 ± 0.015
Relative standard deviation, %	16.8	1.4

(a) canister CO 116, contains 1.00 ppb CCl_4, 0.52 ppb CH_3CCl_3, 1.06 ppb C_2Cl_4, and all compounds listed in Table 2.
(b) mean ± 1 sd deviation, 3 injections
(c) peak height calculated from nominal concentration and using DGA calibration factors given in Figure 2.

TABLE 6. PAN CALIBRATION FACTORS, 1987-1989

Date	Calibration method (a)	Calibration factor, ppb/mm, GC#51, attenuation 3	n	R
Dec. '87	NOx, acetate (b)	0.222 ± 0.009	10	0.983
July '88	NOx (b)	0.258 ± 0.010	16	0.996
Nov. '88	NOx (b)	0.287 ± 0.011	6	0.997
Sept. '89	NOx (c)	0.222 ± 0.003	11	0.993

(a) NOx = chemiluminescence method; acetate = alkaline hydrolysis method, both described in detail in Ref. 3.
(b) PAN prepared from sunlight irradiation of NO and 2-methyl-2-butene in pure air.
(c) using pure PAN synthesized at DGA and diluted to ppb levels in purified air.

3. RESULTS AND DISCUSSION

3.1. The Data Base

Application of the calibration factors determined in Section 2 to the ambient air chromatograms recorded during SCAQS yielded some 3,800 data points each for CCl_4-CH_3CCl_3 and C_2Cl_4. All concentrations are listed in Appendix I, Data Report, according to location and date. The data report is also available on a computer diskette (MacIntosh Plus, Microsoft Excel spreadsheet format). Data are included for all SCAQS "intensive" days, and are also included for several additional days during which DGA operated one or more field instruments to measure PAN during smog episodes.

Concentrations for each of the two coeluting compounds, carbon tetrachloride and methyl chloroform, cannot be calculated from our data alone. However, there are no known sources of CCl_4 in the South Coast air basin, and literature data for ambient levels of CCl_4 in Southern California indicate that these levels are essentially constant and correspond to the current background level of CCl_4 in the northern hemisphere (Table 7). Thus, we have calculated methylchloroform concentrations by simply substracting, from the height of the peak corresponding to the two co-eluting compounds, a constant height equivalent to 0.11 ppb of CCl_4.

3.2. Ambient Concentrations: spatial, seasonal and diurnal variations

Listed in Table 8 are 24-hour averaged concentrations according to date and location. These 24-hour averages are summarized in Table 9, along with the corresponding first and second maxima. Concentrations were lowest at San Nicolas Island (SNI), see Figure 3.

Summarized in Table 10 are seasonal (fall/summer) and spatial (using SNI as the "background" site) variations in ambient concentrations. Site/SNI ratios of 24 hour-averaged values were in the range 5.0 - 30.8 for methylchloroform and 1.3 - 6.2 for tetrachlorethylene, clearly reflecting urban area emissions for both compounds (16.1 and 33.2 metric tons per day for CH_3CCl_3 and C_2Cl_4, respectively). Fall to summer ratios were up to 6.0 for methylchloroform and up to 6.4 for tetrachlorethylene, reflecting either higher emissions or, more likely, less dispersion (increased air stagnation) during the fall.

Compared in Table 11 are our measurements and several sets of recent literature values for Southern California locations. There is general agreement among the data sets, and good agreement among the data obtained during SCAQS.

Diurnal variations were modest and were more pronounced during the summer. This is shown in Figure 4, where composite diurnal profiles (i.e. diurnal profiles constructed from averages of all hourly observations at one location) are contrasted for summertime concentrations of methyl chloroform in Los Angeles and in Claremont. Transport is clearly evidenced in Figure 4, with the smog front reaching Claremont in the mid-afternoon. Contrasted in Figure 5 are fall and summer diurnal variations for methyl chloroform and tetrachloroethylene, using Los Angeles as an example. Levels of toxic chlorinated hydrocarbons during the fall often peaked in the morning hours. Figure 5 also illustrates that, as indicated

TABLE 7. AMBIENT LEVELS OF CARBON TETRACHLORIDE IN SOUTHERN CALIFORNIA

DATE	LOCATION	CCl4, ppt		REFERENCE
		range	average (# of samples)	
1985	Anaheim		120 ± 40	4 (a)
	Azusa		120 ± 30	
	Burbank		100 ± 20	
	Lennox		110 ± 30	
	El Monte		100 ± 20	
	Long Beach		100 ± 10	
	Los Angeles		110 ± 20	
	Rubidoux		100 ± 10	
	Upland		120 ± 70	
1987	Claremont	102-129	110 (11)	5 (b)
	San Nicolas Island	100-140	130 (72)	this work (c)
	Cajun Summit	95-121	115 (500)	6 (d)
1988-89	Azusa	80-120	100 (9)	7 (e)
	Burbank	80-150	120 (5)	
	El Monte	80-150	130 (17)	
	Los Angeles	60-170	120 (26)	
	Long Beach	80-150	120 (30)	
	Rubidoux	70-140	110 (30)	
	Upland	60-150	120 (30)	

(a) annual averages
(b) 24 hour samples between 6/19 and 9/3
(c) hourly measurements, 7/12, 7/14 and 7/15, CH3CCl3 + CCl4 as CCl4
(d) 10-15 samples per day, 6/15 to 7/31.
(e) one sample collected every 6th day, 6/88 to 8/89.

TABLE 8. SUMMMARY OF 24 HOUR-AVERAGED CONCENTRATIONS, ppb

CC14 + CH3CC13, AS METHYL CHLOROFORM

DATE .(1987)	San Nicolas	Hawthorne	Long Beach	Anaheim	Los Angeles	Burbank	Azusa	Claremont	Rubidoux
6/18							10.87		
6/19		3.34	6.20	2.02		7.24	10.37	3.14	5.81
6/23							8.05		
6/24		3.34	4.75	1.78	8.03	4.54	12.9	7.15	10.75
6/25		4.28	4.68	3.32	8.77	6.50	14.25	7.94	10.43
6/26							15.56		
7/12	3.05	8.16	9.17		5.15	3.7	10.00	6.71	10.18
7/14	3.05	9.54	14.18		5.98	5.3	11.20	8.83	12.31
7/15	3.07	6.59	15.66		7.58	3.86	13.05	8.15	12.76
7/20									
7/28							5.75		
7/29							8.94		
8/26									
8/27			12.81	4.94	6.29	5.83	14.90	10.36	16.167
8/28			14.4	3.24	7.81	7.76	18.62	10.20	16.78
8/29			10.98	2.86	5.81	3.70	13.03	9.18	12.41
8/30							8.22	6.27	
8/31							14.48	7.77	
9/1			8.84			19.59	6.82		
9/2			17.19	7.08	8.57	8.63	13.03	5.79	17.55
9/13			10.93	4.90	5.7	5.42	12.00	3.12	13.4
11/4				10.61					
11/5				10.96					
11/11		15.35	4.79	17.05	10.95	21.35			
11/12		20.47	9.39	20.51	12.59	25.45			
11/13		12.28	4.74	15.74	10.79	16.51			
11/14						9.54			
11/15						14.38			
11/16						20.69			
12/3		3.14	11.08	18.85	11.41	23.5			
12/10		3.30	12.41	24.74	12.11	26.78			
12/11		3.98	11.99		16.45	30.93			

Table 8 (continued)

TETRA CHLOROETHYLENE

DATE .(1987)	San Nicolas	Hawthorne	Long Beach	Anaheim	Los Angeles	Burbank	Azusa	Claremont	Rubidoux
6/18							0.87		
6/19		0.85	0.98	0.1		1.8	0.81	1.28	6.98
6/23							1.53*		
6/24			0.35	0.14	1.54		1.27	0.71	1.09
6/25				0.33	0.97	1.16	1.30	0.84	1.05
6/26							1.03*		
7/12							0.2*		
7/13	0.42	0.94	0.43	0.15	0.47	1.01	1.25	0.78	1.12
7/14	0.7	2.47	0.85	0.14	0.47	0.90	0.85	0.95	1.32
7/15	0.68	1.03	0.34	0.23	0.65	0.70	1.42	0.44	1.37
7/20									
7/28							0.68*		
7/19							0.43*		
8/26									
8/27			2.2	0.76	0.75	1.09	1.19	1.16	1.36
8/28			0.98	0.46	1.11	1.28	1.81	1.25	1.36
1/9			0.5	0.35	0.74	0.95	1.16	1.11	1.11
8/30							0.69	0.54	
8/31							1.55	1.07	
9/1				0.78*			2.77	0.62	
9/2			3.35	1.31	1.33	2.10	1.79	0.51	0.99
9/3			0.27	0.35	0.67	1.08	1.20	0.53	1.12
11/4				1.3					
11/5				0.89					
11/11		2.00	0.9	3.56	1.35	5.88			
11/12		3.60	1.48	3.57	1.59	4.60			
11/13		1.20	0.45	1.17	1.2	2.66			
11/14						1.76			
11/15						2.86			
11/16						3.83			
12/3		3.14	2.00	3.91	1.72	4.98			
12/10		3.3	2.74	6.09	2.13	6.43			
12/11		3.98	1.93	5.05	2.58	7.53			

* Not an 24-hr average

Table 8 (continued)

Methyl Chloroform (a)									
DATE (1987)	San Nicolas	Hawthorne	Long Beach	Anaheim	Los Angeles	Burbank	Azusa	Claremont	Rubidoux
6/18							8.37		
6/19		0.84	3.7	0.0		4.74	7.87	0.64	3.31
6/23							5.55		
6/24		0.84	2.25	0.0	5.53	2.04	10.4	4.65	8.25
6/25		1.78	2.18	0.82	6.27	4.0	11.75	5.44	7.93
6/26							13.06		
7/12	0.55	5.66	6.67		2.65	1.2	7.5	4.21	7.68
7/14	0.55	7.04	11.68		3.48	2.8	8.7	6.33	9.81
7/15	0.57	4.09	13.16		5.08	1.36	10.55	5.65	10.26
7/20									
7/28							3.25		
7/29							6.44		
8/26									
8/27			10.31	2.44	3.79	3.33	12.40	7.86	13.70
8/28			11.9	0.74	5.31	5.26	16.12	7.70	14.28
8/29			8.48	0.36	3.31	1.20	10.53	6.68	9.91
8/30							5.72	3.77	
8/31							11.98	5.27	
9/1			6.34			17.09	4.32		
9/2			14.69	4.58	6.07	6.13	10.53	3.29	15.05
9/13			8.43	2.40	3.2	2.92	9.5	0.62	10.9
11/4				8.11					
11/5				8.46					
11/11		12.85	2.29	14.55	8.45	18.85			
11/12		17.97	6.89	18.01	10.09	22.95			
11/13		9.78	2.24	13.24	8.29	14.01			
11/14						7.04			
11/15						11.88			
11/16						18.19			
12/3		0.64	8.58	16.35	8.91	21.0			
12/10		0.80	9.91	22.24	9.61	24.28			
12/11		1.48	9.49		13.95	28.48			

(a) calculated assuming CCl_4 = 0.11 ppb

TABLE 9. SUMMARY OF MAXIMUM AND 24-HOUR-AVERAGED CONCENTRATIONS

SITE	CCl4 and CH3CCl3, ppb as CH3CCl3				CH3CCl3, ppb (b)				C2Cl4, ppb			
	Summer (June-Sept.		Fall (Nov.-Dec.)		Summer (June-Sept)		Fall (Nov-Dec)		Summer (June-Sept.)		Fall (Nov.-Dec.)	
	Aver.	Max. (a)	Aver.	Max. (a)	Aver.	Max. (a)	Aver.	Max. (a)	Aver.	Max. (a)	Aver.	Max. (a)
San Nicholas	3.05-3.07	3.7 (3.6)	-	-	0.55-0.57	1.2 (1.1)	-	-	0.42-0.70	1.2 (1.1)	-	-
Hawthorne	3.34-9.54	20.4 (17.6)	3.30-20.5	39.4 (37.4)	0.84-7.04	17.9 (15.1)	0.8-18.0	36.9 (34.9)	0.85-2.47	2.3 (5.31)	1.20-3.98	11.2 (10.7)
Long Beach	4.68-17.19	63.5 (39.0)	4.74-12.41	24.8 (20.6)	2.18-14.69	61.0 (36.5)	2.24-9.91	22.3 (18.1)	0.27-3.35	8.3 (15.8)	0.45-2.74	14.6 (5.1)
Anaheim	1.78-10.96	13.5 (10.4)	15.74-24.72	26.3 (24.6)	0-8.46	11.0 (7.9)	13.24-22.22	23.8 (22.1)	0.1-1.31	4.8 (13.5)	1.17-6.09	11.9 (11.1)
Los Angeles	5.15-8.77	32.3 (31.3)	10.79-16.45	21.7 (19.9)	2.65-6.27	29.8 (28.8)	8.29-13.95	19.2 (17.4)	0.47-1.54	4.0 (13.5)	1.2-2.58	5.5 (13.7)
Burbank	3.70-8.63	30.5 (16.6)	9.54-30.93	34.5 (33.9)	1.2-6.13	28.0 (14.1)	7.04-28.43	32.0 (31.4)	0.70-2.10	5.7 (13.4)	1.76-7.53	14.4 (13.7)
Azusa	5.75-19.59	39.1 (24.0)	-	-	3.25-17.09	36.6 (21.5)	-	-	0.43-2.77	36.6 (26)	-	-
Claremont	3.12-10.36	17.5 (17.0)	-	-	0.62-7.86	15.0 (14.5)	-	-	0.44-1.28	13.6 (12)	-	-
Rubidoux	5.81-17.55	53.8 (41.0)	-	-	3.31-15.01	51.3 (38.5)			0.99-6.98	51.3 (47)	-	-

(a) second highest values are given in parentheses.
(b) calculated assuming CCl4 = 0.11 ppb

FIGURE 3. SUMMER SCAQS-AVERAGED CONCENTRATIONS OF TETRACHLOROETHYLENE

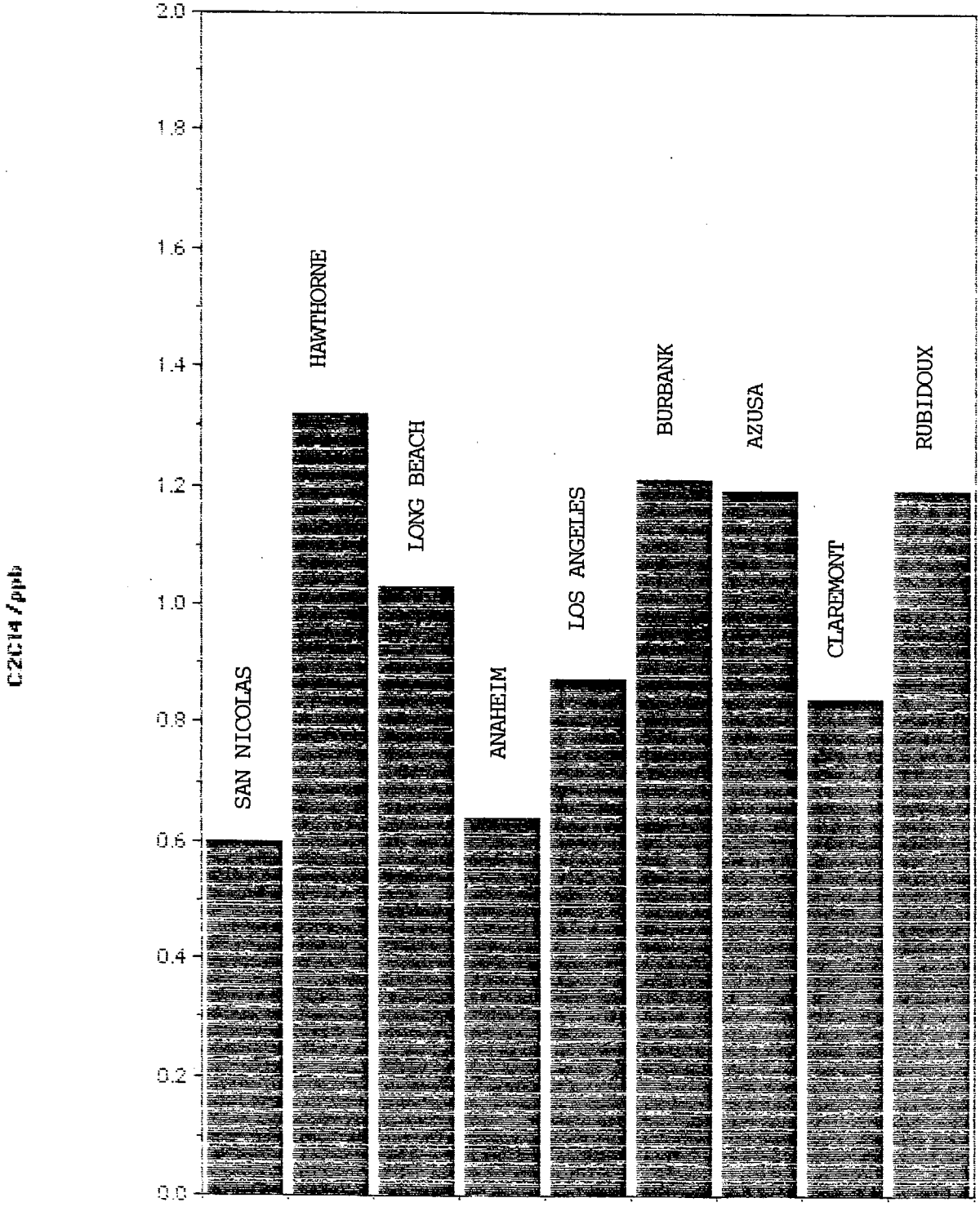


TABLE 10. SUMMARY OF SPATIAL AND SEASONAL VARIATIONS

SITE	CH3CCl3 (a)					C2Cl4				
	Sum., ppb	Fall, ppb	Fall/ summer	Site/SNI		Sum., ppb	Fall, ppb	Fall/ summer	Site/SNI	
				Sum.	Fall				Sum.	Fall
San Nicolas Island (SNI)	0.6	-	-	1.0	-	0.6	-	-	1.0	-
Hawthorne	3.4	12.9	3.8	5.7	21.5	1.3	2.9	2.2	2.2	4.8
Long Beach	8.5	6.3	0.7	14.1	10.5	1.0	1.7	1.7	1.7	2.8
Anaheim	.3.0	16.9	5.6	.5.0	28.1	0.5	3.2	6.4	0.8	5.3
Los Angeles	4.5	9.9	2.2	7.5	16.5	0.9	1.8	2.0	1.5	3.0
Burbank	3.1	18.5	6	5.2	30.8	1.2	3.7	3.1	2.0	6.2
Azusa	9.7	-	-	16.2	-	1.2	-	-	2.0	-
Claremont	4.7	-	-	7.8	-	0.8	-	-	1.3	-
Rubidoux	10.1	-	-	16.8	-	1.2	-	-	2.0	-

(a) calculated assuming CCl4 = 0.11 ppb

TABLE 11. COMPARISON WITH LITERATURE DATA

DATE	Location	Methyl chloroform, ppb	Tetrachloroethylene, ppb	Reference
1985	Anaheim	2.3 ± 1.4	3.1 ± 2.4	4 (a)
	Azusa	2.6 ± 1.7	2.0 ± 1.8	
	Burbank	3.3 ± 1.7	2.7 ± 1.6	
	Lennox	2.5 ± 1.5	2.3 ± 2.3	
	El Monte	7.1 ± 4.7	1.6 ± 0.9	
	Long Beach	3.0 ± 3.1	1.0 ± 0.6	
	Los Angeles	2.4 ± 2.6	1.2 ± 0.9	
	Rubidoux	1.1 ± 0.7	0.5 ± 0.3	
	Upland	1.8 ± 1.1	0.7 ± 0.4	
1987	Claremont	1.3 - 3.0	0.53 - 0.99	5 (b)
	Anaheim	0 - 8.5 (summer)	0.1 - 1.3 (s)	this work
		13 - 22 (fall)	1.2 - 6.1 (f)	
	Azusa	3.3 - 17 (s)	0.4 - 2.8 (s)	this work
	Burbank	1.2 - 6.1 (s)	0.7 - 2.1 (s)	this work
		7.0 - 28 (f)	1.8 - 7.5 (f)	
	Claremont	0.6 - 7.9 (s)	0.4 - 1.3 (s)	this work
	Hawthorne	-	0.9 - 2.5 (s)	this work
		-	1.2 - 4.0 (f)	
	Long Beach	2.2 - 14.7 (s)	0.3 - 3.4 (s)	this work
		2.2 - 9.9 (f)	0.5 - 2.7 (f)	
	Los Angeles	2.7 - 6.3 (s)	0.5 - 1.5 (s)	this work
		8.3 - 14.0 (f)	1.2 - 2.6 (f)	
	Rubidoux	3.3 - 15.1 (s)	1.0 - 7.0 (s)	this work
	San Nicholas Is	0.6 (s)	0.4 - 0.7 (s)	this work
	Cajon Summit	1.0 - 4.0	0.25 - 0.75	6 (c)
	Claremont	1.0 - 4.0	0.25 - 0.75	6 (d)
1988	Ventura	2.9 - 5.2	-	8 (e)
	Malibu	3.0 - 4.1	0.2 - 0.5	
	Pasadena	0.1 - 1.3	0.1 - 0.6	
	W. Los Angeles	0.1 - 0.9	0.1 - 0.5	
	Los Angeles (downtown)	3.2 - 8.0	0.4 - 1.5	
	Los Angeles (Wilshire)	4.1 - 4.7	0.6 - 1.1	
	Los Angeles (South-central)	0.1 - 1.1	0.3 - 1.6	

(a) annual averages
(b) eleven 24 hour samples between 6/19 and 9/3
(c) 10-15 samples per day,. 6/15 to 7/31
(d) 7/12 to 7/19
(e) Survey of outdoor and indoor concentrations at 9 museums in Southern California, 24 samples per day for 1-2 weeks at each location, June-October 1988. Only 24-hr-averaged outdoor values are listed here.

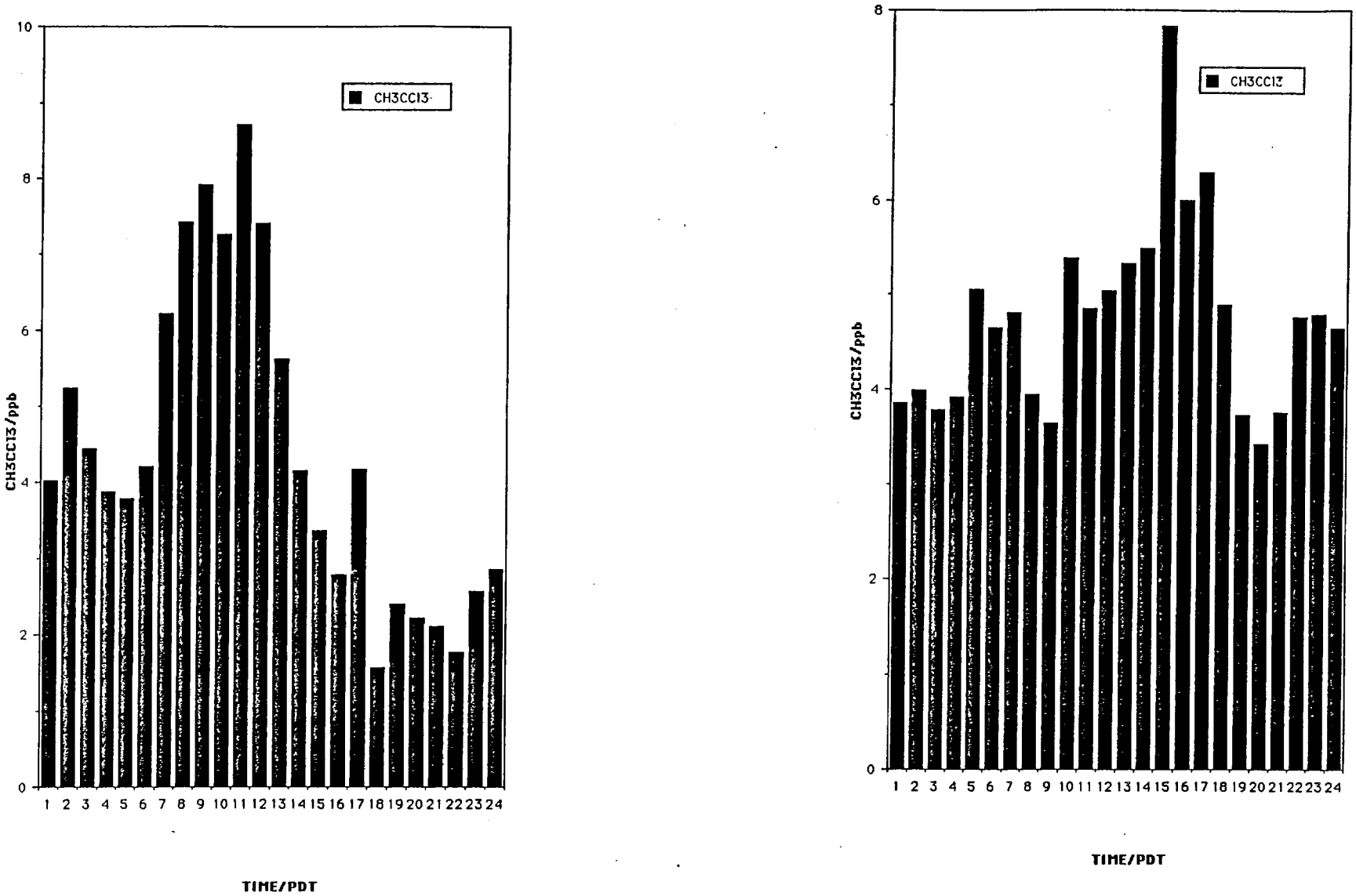
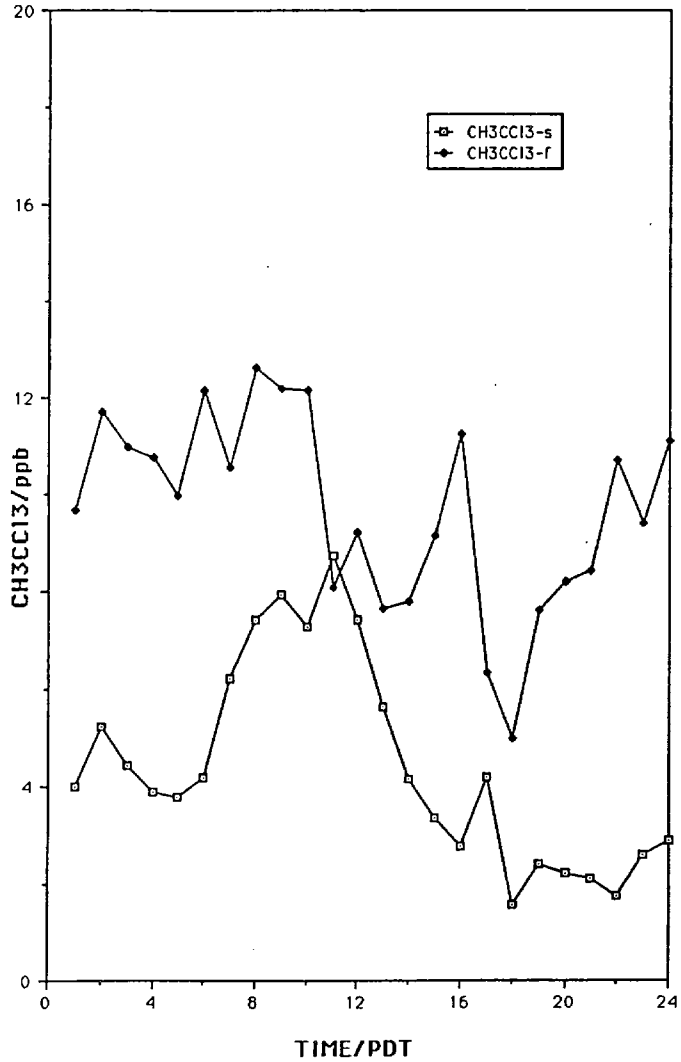


FIGURE 4. COMPOSITE DIURNAL PROFILES FOR METHYL CHLOROFORM, LOS ANGELES (LEFT) AND CLAREMONT (RIGHT), SUMMER PHASE OF SCAQS



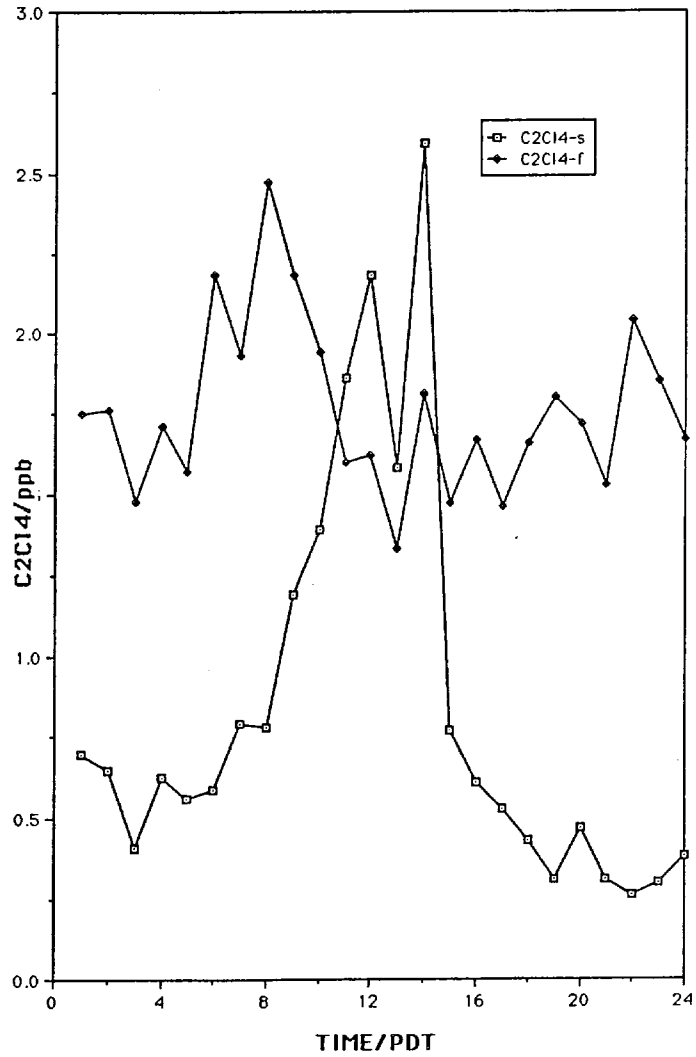


FIGURE 5. COMPOSITE DIURNAL PROFILES FOR METHYL CHLOROFORM (LEFT) AND TETRACHLOROETHYLENE (RIGHT), LOS ANGELES, SUMMER (OPEN SYMBOLS) AND FALL (DARK SYMBOLS) PHASES OF SCAQS

earlier, ambient levels during the fall phase of SCAQS were substantially higher than summertime levels.

3.3. Conclusions and Recommendations

Our conclusions and recommendations for interpretive analysis of the data base are given in the EXECUTIVE SUMMARY section of this report.

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APPENDIX 1. DATA REPORT

Ambient concentrations in ppb are listed according to location (in alphabetical order) and, for each location, in chronological order. Concentration are given for (a) CCl4 + CH3CCl3, as CH3CCl3, (b) CH3CCl3, calculated assuming CCl4 = 0.11 ppb, and (c) C2Cl4. Measurements were carried out at 9 locations, the so-called SCAQS A and B sites, i.e. Anaheim, Azusa, Burbank, Claremont, Hawthorne, Long Beach, Los Angeles, Rubidoux and San Nicholas Island

	ANAHEIM			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3,ppb	CH3CCl3,ppb	C2Cl4,ppb
6/18/87	23:56	3.6	1.1	0.4
6/19/87	0:56	4.1	1.6	0.0
6/19/87	1:56	10.4	7.9	0.0
6/19/87	2:56	5.2	2.7	0.0
6/19/87	3:56	2.1	0.0	0.0
6/19/87	4:56	1.6	0.0	0.0
6/19/87	5:56	5.2	2.7	0.0
6/19/87	6:56	3.6	1.1	0.0
6/19/87	7:56	5.2	2.7	0.0
6/19/87	8:56	6.7	4.2	0.0
6/19/87	9:56	2.6	0.1	0.0
6/19/87	10:56	3.1	0.6	0.0
6/19/87	11:56	3.1	0.6	0.0
6/19/87	13:26	5.2	2.7	0.0
6/19/87	13:56	4.7	2.2	0.0
6/19/87	14:56	2.6	0.1	0.0
6/19/87	16:56	3.6	1.1	0.0
6/19/87	17:56	3.6	1.1	0.8
6/19/87	18:56	3.1	0.6	1.2
6/19/87	19:56	5.2	2.7	0.8
6/19/87	20:56	4.1	1.6	1.9
6/19/87	21:56	3.1	0.6	0.0
6/19/87	22:56	4.1	1.6	0.0
6/19/87	23:56	2.6	0.1	0.0
6/23/87	23:58	2.6	0.1	0.0
6/24/87	0:58	4.1	1.6	1.6
6/24/87	1:58	2.6	0.1	0.0
6/24/87	2:58	3.1	0.6	1.0
6/24/87	3:58	4.1	1.6	1.9
6/24/87	4:58	3.1	0.6	0.0
6/24/87	5:58	3.1	0.6	0.0
6/24/87	6:58	5.2	2.7	0.0
6/24/87	7:58	5.2	2.7	0.0
6/24/87	8:58	3.6	1.1	0.0
6/24/87	9:58	3.1	0.6	0.0
6/24/87	10:58	3.1	0.6	0.0
6/24/87	11:58	2.1	0.0	0.0
6/24/87	12:58	3.1	0.6	0.0
6/24/87	13:58	3.1	0.6	0.0
6/24/87	17:23	2.6	0.1	0.6
6/24/87	18:23	2.1	0.0	0.0
6/24/87	19:23	4.1	1.6	0.0
6/24/87	20:23	2.1	0.0	0.0

6/24/87	21:23	2.6	0.1	0.0
6/24/87	22:23	0.5	0.0	0.0
6/24/87	23:23	1.6	0.0	0.0
6/25/87	0:23	1.6	0.0	0.0
6/25/87	1:23	4.1	1.6	0.0
6/25/87	2:23	3.1	0.6	0.0
6/25/87	3:23	4.7	2.2	0.0
6/25/87	4:23	5.2	2.7	0.0
6/25/87	5:23	2.6	0.1	0.0
6/25/87	6:23	1.6	0.0	0.0
6/25/87	7:23	5.2	2.7	0.8
6/25/87	8:23	2.6	0.1	0.0
6/25/87	9:23	3.6	1.1	1.0
6/25/87	10:23	5.2	2.7	1.9
6/25/87	11:24	5.7	3.2	0.8
6/25/87	12:24	3.6	1.1	0.0
6/25/87	13:24	5.7	3.2	1.0
6/25/87	14:24	3.6	1.1	0.6
6/25/87	15:24	2.6	0.1	0.8
6/25/87	16:24	2.1	0.0	1.2
6/25/87	17:24	2.1	0.0	0.0
6/25/87	18:24	1.6	0.0	0.0
6/25/87	19:24	3.6	1.1	0.0
6/25/87	20:24	3.6	1.1	0.0
6/25/87	21:24	2.6	0.1	0.0
6/25/87	22:24	0.0	0.0	0.0
6/25/87	23:24	3.6	1.1	0.0
6/26/87	0:24	4.1	1.6	0.0
7/12/87	19:33	-	-	0.51
7/12/87	20:33	-	-	0.00
7/12/87	21:33	-	-	0.46
7/12/87	22:33	-	-	0.06
7/12/87	23:33	-	-	0.06
7/13/87	0:33	-	-	0.36
7/13/87	1:33	-	-	0.55
7/13/87	2:33	-	-	0.44
7/13/87	3:33	-	-	0.11
7/13/87	4:33	-	-	0.13
7/13/87	5:33	-	-	0.08
7/13/87	6:33	-	-	0.53
7/13/87	7:33	-	-	0.06
7/13/87	8:33	-	-	0.13
7/13/87	9:33	-	-	0.11
7/13/87	10:33	-	-	0.10
7/13/87	11:36	-	-	0.11
7/13/87	12:39	-	-	0.00
7/13/87	13:26	-	-	0.13
7/13/87	14:26	-	-	0.32
7/13/87	15:26	-	-	0.06

7/13/87	16:26	-	-	0.06
7/13/87	17:26	-	-	0.08
7/13/87	18:26	-	-	0.04
7/13/87	19:26	-	-	0.04
7/13/87	20:26	-	-	0.04
7/13/87	21:26	-	-	0.02
7/13/87	22:26	-	-	0.04
7/13/87	23:26	-	-	0.04
7/14/87	0:26	-	-	0.02
7/14/87	1:26	-	-	0.02
7/14/87	2:26	-	-	0.06
7/14/87	3:26	-	-	0.10
7/14/87	4:26	-	-	0.10
7/14/87	5:26	-	-	0.08
7/14/87	6:26	-	-	0.06
7/14/87	7:26	-	-	-
7/14/87	8:26	-	-	0.02
7/14/87	9:26	-	-	0.06
7/14/87	10:26	-	-	0.06
7/14/87	11:26	-	-	0.23
7/14/87	12:26	-	-	0.10
7/14/87	13:26	-	-	0.13
7/14/87	12:26	-	-	0.11
7/14/87	15:26	-	-	0.11
7/14/87	16:26	-	-	0.04
7/14/87	17:27	-	-	0.04
7/14/87	18:27	-	-	0.04
7/14/87	19:27	-	-	0.25
7/14/87	20:27	-	-	0.08
7/14/87	21:27	-	-	0.46
7/14/87	22:27	-	-	0.34
7/14/87	23:27	-	-	0.74
7/15/87	0:33	-	-	0.08
7/15/87	1:33	-	-	0.08
7/15/87	2:33	-	-	0.04
7/15/87	3:33	-	-	0.38
7/15/87	4:33	-	-	0.06
7/15/87	5:33	-	-	0.06
7/15/87	6:33	-	-	0.04
7/15/87	7:33	-	-	0.04
7/15/87	8:33	-	-	1.08
7/15/87	9:33	-	-	0.49
7/15/87	10:33	-	-	0.57
7/15/87	11:33	-	-	0.08
7/15/87	12:33	-	-	0.06
7/15/87	13:33	-	-	0.06
7/15/87	14:33	-	-	0.06
7/15/87	15:33	-	-	0.08
7/15/87	16:33	-	-	0.08

7/15/87	17:33	-	-	0.08
7/15/87	18:33	-	-	0.04
7/15/87	19:33	-	-	0.29
7/15/87	20:33	-	-	0.38
7/15/87	21:33	-	-	0.59
7/15/87	22:33	-	-	0.57
8/26/87	20:06	-	-	-
8/26/87	21:06	-	-	-
8/26/87	22:06	-	-	-
8/26/87	23:06	2.17	0.0	0.12
8/27/87	0:06	2.64	0.1	0.17
8/27/87	1:06	2.64	0.1	0.23
8/27/87	2:06	3.26	0.8	0.23
8/27/87	3:06	4.34	1.8	0.41
8/27/87	4:06	4.81	2.3	0.41
8/27/87	5:06	5.12	2.6	0.52
8/27/87	6:06	4.19	1.7	0.81
8/27/87	7:06	4.19	1.7	0.64
8/27/87	8:06	3.57	1.1	0.58
8/27/87	9:06	6.82	4.3	0.64
8/27/87	10:06	9.61	7.1	3.48
8/27/87	11:06	6.98	4.5	1.10
8/27/87	12:06	10.39	7.9	1.57
8/27/87	13:06	5.58	3.1	0.93
8/27/87	14:06	5.27	2.8	1.22
8/27/87	15:06	6.05	3.5	1.28
8/27/87	16:06	5.43	2.9	0.81
8/27/87	17:06	4.34	1.8	0.81
8/27/87	18:06	3.88	1.4	0.52
8/27/87	19:06	4.96	2.5	0.75
8/27/87	20:06	3.57	1.1	0.46
8/27/87	21:06	4.65	2.2	0.35
8/27/87	22:06	2.79	0.3	0.29
8/27/87	23:06	3.57	1.1	0.12
8/28/87	0:07	2.95	0.4	0.12
8/28/87	1:07	1.71	0.0	0.12
8/28/87	2:07	2.02	0.0	0.17
8/28/87	3:07	2.17	0.0	0.23
8/28/87	4:07	2.33	0.0	0.17
8/28/87	5:07	2.95	0.4	0.23
8/28/87	6:07	2.64	0.1	0.17
8/28/87	7:07	2.48	0.0	0.17
8/28/87	8:07	1.71	0.0	0.23
8/28/87	9:07	2.79	0.3	0.23
8/28/87	10:07	2.48	0.0	0.29
8/28/87	11:07	3.88	1.4	0.58
8/28/87	12:07	3.41	0.9	0.41
8/28/87	13:07	4.34	1.8	1.16
8/28/87	14:07	3.88	1.4	0.81

8/28/87	15:07	7.60	5.1	1.28
8/28/87	16:07	5.27	2.8	1.62
8/28/87	17:07	6.67	4.2	0.93
8/28/87	18:07	3.41	0.9	0.58
8/28/87	19:07	2.79	0.3	0.46
8/28/87	20:07	2.17	0.0	0.29
8/28/87	21:07	2.33	0.0	0.23
8/28/87	22:07	2.48	0.0	0.17
8/28/87	23:07	3.41	0.9	0.29
8/29/87	0:07	2.64	0.1	0.29
8/29/87	1:07	3.41	0.9	0.70
8/29/87	2:07	3.41	0.9	0.29
8/29/87	3:07	2.48	0.0	0.17
8/29/87	4:07	2.79	0.3	0.29
8/29/87	5:07	2.79	0.3	0.35
8/29/87	6:07	4.19	1.7	0.41
8/29/87	7:07	4.19	1.7	0.46
8/29/87	8:07	4.34	1.8	0.52
8/29/87	9:07	3.88	1.4	0.41
8/29/87	10:07	3.41	0.9	0.41
8/29/87	11:07	2.64	0.1	0.29
8/29/87	12:07	2.79	0.3	0.46
8/29/87	13:07	3.10	0.6	0.46
8/29/87	14:07	2.79	0.3	0.58
8/29/87	15:07	2.48	0.0	0.41
8/29/87	16:07	2.02	0.0	0.23
8/29/87	17:07	2.02	0.0	0.23
8/29/87	18:07	2.33	0.0	0.35
8/29/87	19:07	2.17	0.0	0.23
8/29/87	20:07	2.17	0.0	0.23
8/29/87	21:07	2.17	0.0	0.29
8/29/87	22:07	2.17	0.0	0.17
8/29/87	23:07	2.33	0.0	0.17
8/30/87	0:07	1.71	0.0	0.17
9/1/87	20:41	9.92	7.4	1.16
9/1/87	21:41	7.29	4.8	1.10
9/1/87	22:41	8.37	5.9	0.46
9/1/87	23:41	9.77	7.3	0.41
9/2/87	0:41	12.09	9.6	0.64
9/2/87	1:41	8.68	6.2	0.87
9/2/87	2:41	-	-	1.51
9/2/87	3:41	-	-	2.26
9/2/87	4:41	-	-	4.76
9/2/87	5:41	13.49	11.0	4.06
9/2/87	6:41	-	-	3.89
9/2/87	7:41	-	-	0.35
9/2/87	8:41	-	-	2.61
9/2/87	9:41	-	-	2.84
9/2/87	11:10	9.30	6.8	1.51

9/2/87	12:10	6.98	4.5	0.81
9/2/87	13:02	6.36	3.9	0.52
9/2/87	14:02	5.43	2.9	0.70
9/2/87	15:02	7.60	5.1	0.81
9/2/87	16:02	8.06	5.6	0.93
9/2/87	17:02	7.91	5.4	0.41
9/2/87	18:02	6.05	3.5	0.23
9/2/87	19:02	4.03	1.5	0.23
9/2/87	20:02	4.19	1.7	0.00
9/2/87	21:02	4.03	1.5	0.00
9/2/87	22:02	3.41	0.9	0.00
9/2/87	23:02	5.74	3.2	0.29
9/3/87	0:02	3.57	1.1	0.00
9/3/87	1:02	5.74	3.2	0.17
9/3/87	2:02	3.88	1.4	0.17
9/3/87	3:02	4.96	2.5	0.12
9/3/87	4:02	5.89	3.4	0.29
9/3/87	5:02	5.74	3.2	0.41
9/3/87	6:02	6.20	3.7	0.41
9/3/87	7:02	6.82	4.3	0.99
9/3/87	8:02	8.53	6.0	0.93
9/3/87	9:02	7.13	4.6	0.87
9/3/87	10:02	6.51	4.0	0.70
9/3/87	11:02	6.82	4.3	0.99
9/3/87	12:02	4.03	1.5	0.46
9/3/87	13:02	3.88	1.4	0.35
9/3/87	14:02	4.34	1.8	0.29
9/3/87	15:03	3.26	0.8	0.23
9/3/87	16:03	3.41	0.9	0.12
9/3/87	17:03	4.03	1.5	0.23
9/3/87	18:03	4.03	1.5	0.23
9/3/87	19:03	3.72	1.2	0.17
9/3/87	20:03	3.41	0.9	0.12
9/3/87	21:03	3.72	1.2	0.00
9/3/87	22:03	3.57	1.1	0.00
9/3/87	23:03	4.34	1.8	0.23
11/4/87	12:52	14.5	12.0	2.6
11/4/87	13:52	14.5	12.0	1.4
11/4/87	14:52	11.1	8.6	1.4
11/4/87	15:52	21.3	18.8	1.2
11/4/87	16:52	10.5	8.0	0.8
11/4/87	17:52	9.3	6.8	0.6
11/4/87	18:52	8.0	5.5	0.3
11/4/87	19:52	7.4	4.9	4.9
11/4/87	20:52	7.1	4.6	0.6
11/4/87	21:52	8.3	5.8	-
11/4/87	22:52	7.4	4.9	0.0
11/4/87	23:52	7.7	5.2	0.6
11/5/87	0:52	9.0	6.5	0.7

11/5/87	1:52	7.1	4.6	0.3
11/5/87	2:52	11.1	8.6	0.6
11/5/87	3:52	14.8	12.3	1.6
11/5/87	4:52	9.9	7.4	0.5
11/5/87	5:52	9.9	7.4	-
11/5/87	6:52	16.4	13.9	0.9
11/5/87	7:52	10.5	8.0	0.3
11/5/87	8:52	10.2	7.7	2.7
11/5/87	9:52	-	-	0.5
11/5/87	10:52	15.5	13.0	-
11/5/87	11:52	10.2	7.7	1.3
11/5/87	12:52	9.0	6.5	0.5
11/5/87	13:52	9.0	6.5	0.8
11/11/87	0:39	-	-	1.3
11/11/87	1:39	14.2	11.7	1.0
11/11/87	2:39	14.2	11.7	7.5
11/11/87	3:39	15.5	13.0	5.3
11/11/87	4:39	18.5	16.0	7.3
11/11/87	5:39	19.2	16.7	8.8
11/11/87	6:39	-	-	2.4
11/11/87	7:39	-	-	1.5
11/11/87	8:39	-	-	1.2
11/11/87	9:39	23.2	20.7	1.2
11/11/87	10:39	16.7	14.2	0.6
11/11/87	11:39	10.5	8.0	0.5
11/11/87	12:39	16.1	13.6	1.5
11/11/87	13:39	14.2	11.7	1.6
11/11/87	14:39	20.1	17.6	3.6
11/11/87	15:39	22.2	19.7	3.0
11/11/87	16:39	-	-	3.5
11/11/87	17:39	-	-	3.0
11/11/87	18:39	-	-	2.9
11/11/87	19:39	-	-	3.0
11/11/87	20:39	-	-	7.0
11/11/87	21:39	-	-	-
11/11/87	22:39	-	-	-
11/11/87	23:39	-	-	8.4
11/12/87	0:39	-	-	-
11/12/87	1:39	-	-	3.6
11/12/87	2:39	-	-	2.6
11/12/87	3:39	-	-	2.0
11/12/87	4:39	24.4	21.9	1.9
11/12/87	5:39	-	-	1.7
11/12/87	6:39	-	-	3.0
11/12/87	7:39	-	-	6.4
11/12/87	8:39	-	-	11.1
11/12/87	9:39	-	-	4.6
11/12/87	10:39	26.3	23.8	4.5
11/12/87	11:39	22.9	20.4	3.2

11/12/87	12:39	17.9	15.4	5.7
11/12/87	13:39	14.5	12.0	2.0
11/12/87	14:39	14.8	12.3	1.3
11/12/87	15:48	15.1	12.6	1.5
11/12/87	16:34	14.5	12.0	1.9
11/12/87	17:34	21.9	19.4	2.0
11/12/87	18:34	23.5	21.0	2.7
11/12/87	19:34	24.1	21.6	2.0
11/12/87	20:34	-	-	2.0
11/12/87	21:34	-	-	-
11/12/87	22:34	21.3	18.8	3.4
11/12/87	23:34	25.3	22.8	9.6
11/13/87	0:34	19.5	17.0	1.7
11/13/87	1:34	18.2	15.7	1.6
11/13/87	2:34	-	-	1.9
11/13/87	3:34	16.4	13.9	1.3
11/13/87	4:34	15.1	12.6	1.7
11/13/87	5:34	17.0	14.5	2.1
11/13/87	6:34	17.6	15.1	1.2
11/13/87	7:34	-	-	1.5
11/13/87	8:34	16.7	14.2	1.4
11/13/87	9:34	20.4	17.9	1.7
11/13/87	10:34	-	-	1.9
11/13/87	11:34	0.0	0.0	0.0
11/13/87	12:34	19.5	17.0	2.0
11/13/87	13:34	13.3	10.8	1.3
11/13/87	14:34	16.4	13.9	1.3
11/13/87	15:34	13.0	10.5	0.6
11/13/87	16:34	16.1	13.6	0.6
11/13/87	17:34	16.4	13.9	0.6
11/13/87	18:34	14.2	11.7	0.3
11/13/87	19:34	23.8	21.3	0.6
11/13/87	20:34	13.9	11.4	0.7
11/13/87	21:34	12.7	10.2	0.5
11/13/87	22:34	14.8	12.3	0.6
12/3/87	1:10	-	-	6.3
12/3/87	2:10	-	-	0.2
12/3/87	3:10	-	-	3.8
12/3/87	4:10	-	-	4.2
12/3/87	5:10	-	-	3.8
12/3/87	6:10	-	-	4.2
12/3/87	7:10	-	-	3.6
12/3/87	8:10	-	-	4.8
12/3/87	9:10	-	-	3.5
12/3/87	10:10	-	-	3.9
12/3/87	11:10	-	-	3.1
12/3/87	12:10	-	-	4.4
12/3/87	13:10	-	-	5.8
12/3/87	14:10	-	-	5.6

12/3/87	15:10	-	-	4.5
12/3/87	16:10	-	-	3.9
12/3/87	17:10	-	-	4.4
12/3/87	18:10	-	-	3.2
12/3/87	19:10	18.8	16.3	3.4
12/3/87	20:10	-	-	2.3
12/3/87	21:10	-	-	3.1
12/3/87	22:10	-	-	3.8
12/3/87	23:10	-	-	3.9
12/10/87	0:33	-	-	3.4
12/10/87	1:33	-	-	-
12/10/87	2:33	-	-	10.8
12/10/87	3:33	-	-	9.6
12/10/87	4:33	-	-	-
12/10/87	5:33	-	-	7.3
12/10/87	6:33	-	-	7.4
12/10/87	7:33	-	-	-
12/10/87	8:33	-	-	0.2
12/10/87	9:33	-	-	3.9
12/10/87	10:33	24.7	-	3.0
12/10/87	11:33	-	-	5.7
12/10/87	12:33	-	-	5.3
12/10/87	13:33	-	-	4.4
12/10/87	14:33	-	-	5.0
12/10/87	15:33	-	-	7.7
12/10/87	16:33	-	-	3.6
12/10/87	17:33	-	-	5.5
12/10/87	18:33	-	-	6.3
12/10/87	19:33	-	-	5.0
12/10/87	20:33	-	-	7.7
12/10/87	21:33	-	-	10.3
12/10/87	22:33	-	-	11.9
12/10/87	23:33	-	-	-
12/11/87	0:33	-	-	-
12/11/87	1:33	-	-	-
12/11/87	2:33	-	-	-
12/11/87	3:33	-	-	7.8
12/11/87	4:33	-	-	4.3
12/11/87	5:33	-	-	-
12/11/87	6:33	-	-	3.7
12/11/87	7:33	-	-	4.8
12/11/87	8:33	-	-	4.4
12/11/87	9:34	-	-	8.0
12/11/87	10:34	-	-	-
12/11/87	11:34	-	-	11.0
12/11/87	12:34	-	-	-
12/11/87	13:34	-	-	6.3
12/11/87	14:34	-	-	5.5
12/11/87	15:34	-	-	5.3

12/11/87	16:34	-	-	3.5
12/11/87	17:34	-	-	3.5
12/11/87	18:34	-	-	3.6
12/11/87	19:34	-	-	3.1
12/11/87	20:34	-	-	3.4
12/11/87	21:34	-	-	3.7
12/11/87	22:34	-	-	4.4
12/11/87	23:34	-	-	4.8
(-) datum not available				

	AZUSA			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3, ppb	CH3CCl3, ppb	C2Cl4, ppb
6/18/87	9:12	10.9	8.4	1.1
6/18/87	9:42	12.9	10.4	1.7
6/18/87	10:12	13.9	11.4	1.2
6/18/87	10:42	18.5	16.1	1.4
6/18/87	11:12	12.2	9.8	1.2
6/18/87	11:42	9.3	6.8	0.9
6/18/87	12:12	9.6	7.1	0.9
6/18/87	12:42	27.8	25.3	1.2
6/18/87	13:12	13.6	11.1	0.7
6/18/87	13:42	11.9	9.4	1.0
6/18/87	14:12	14.6	12.1	0.7
6/18/87	14:42	8.9	6.5	0.9
6/18/87	15:12	10.9	8.4	0.6
6/18/87	15:42	7.9	5.5	1.0
6/18/87	16:12	8.6	6.1	0.9
6/18/87	16:42	9.9	7.4	1.0
6/18/87	17:12	9.3	6.8	1.1
6/18/87	17:42	9.3	6.8	0.6
6/18/87	18:12	9.3	6.8	0.7
6/18/87	18:42	9.3	6.8	0.9
6/18/87	19:12	8.3	5.8	0.4
6/18/87	19:42	7.6	5.1	0.5
6/18/87	20:12	7.0	4.5	0.9
6/18/87	20:42	7.3	4.8	-
6/18/87	21:12	7.9	5.5	1.0
6/18/87	21:42	8.9	6.5	0.7
6/18/87	22:12	9.9	7.4	0.9
6/18/87	22:42	10.3	7.8	0.5
6/18/87	23:12	10.3	7.8	0.0
6/18/87	23:42	9.9	7.4	0.6
6/19/87	0:12	10.6	8.1	0.4
6/19/87	0:42	9.6	7.1	1.0
6/19/87	1:12	11.6	9.1	0.9
6/19/87	1:42	10.6	8.1	0.9
6/19/87	2:12	11.9	9.4	1.0
6/19/87	2:42	9.6	7.1	0.6
6/19/87	3:12	10.6	8.1	0.6
6/19/87	3:42	9.3	6.8	0.5
6/19/87	4:12	10.6	8.1	0.7
6/19/87	4:42	8.6	6.1	0.7
6/19/87	5:12	9.9	7.4	0.7
6/19/87	5:42	7.6	5.1	0.7
6/19/87	6:12	11.6	9.1	0.6

6/19/87	6:42	7.6	5.1	0.0
6/19/87	7:12	7.6	5.1	0.5
6/19/87	7:42	7.9	5.5	0.7
6/19/87	8:12	8.9	6.5	0.9
6/19/87	8:42	13.2	10.8	0.9
6/19/87	9:12	28.8	26.3	0.6
6/19/87	9:42	13.9	11.4	0.7
6/19/87	10:12	10.6	8.1	0.7
6/19/87	10:42	10.3	7.8	0.7
6/19/87	11:12	15.6	13.1	1.2
6/19/87	11:42	9.9	7.4	0.9
6/19/87	12:12	9.6	7.1	1.0
6/19/87	13:34	12.2	9.8	1.0
6/19/87	14:04	10.6	8.1	1.1
6/19/87	14:34	10.9	8.4	1.2
6/19/87	15:04	10.6	8.1	1.0
6/19/87	15:34	13.2	10.8	0.7
6/19/87	16:04	11.3	8.8	1.4
6/19/87	16:34	10.6	8.1	1.0
6/19/87	17:04	8.9	6.5	1.1
6/19/87	17:34	8.3	5.8	0.9
6/19/87	18:04	8.6	6.1	0.9
6/19/87	18:34	9.3	6.8	1.0
6/19/87	19:04	7.9	5.5	1.2
6/19/87	19:34	8.3	5.8	0.6
6/19/87	20:04	7.6	5.1	0.6
6/19/87	20:34	8.3	5.8	0.9
6/19/87	21:04	8.3	5.8	0.9
6/19/87	21:34	8.3	5.8	0.6
6/19/87	22:04	8.3	5.8	0.6
6/19/87	22:34	9.3	6.8	0.7
6/19/87	23:04	10.6	8.1	0.7
6/19/87	23:34	9.6	7.1	0.9
6/20/87	0:04	10.3	7.8	0.7
6/20/87	0:34	10.3	7.8	0.5
6/23/87	20:45	8.3	5.8	0.9
6/23/87	21:14	7.6	5.1	0.7
6/23/87	21:45	7.9	5.5	0.5
6/23/87	22:14	9.3	6.8	0.6
6/23/87	22:45	7.6	5.1	0.6
6/23/87	23:14	7.6	5.1	5.8
6/23/87	23:45	9.6	7.1	0.6
6/24/87	0:14	9.3	6.8	0.6
6/24/87	0:45	8.3	5.8	0.9
6/24/87	1:14	8.3	5.8	0.7
6/24/87	1:45	8.6	6.1	0.7
6/24/87	2:14	7.9	5.5	0.6
6/24/87	2:45	8.3	5.8	0.9
6/24/87	3:14	8.9	6.5	0.9

6/24/87	3:45	8.3	5.8	0.6
6/24/87	4:14	7.9	5.5	0.6
6/24/87	4:45	8.6	6.1	0.7
6/24/87	5:14	8.6	6.1	0.7
6/24/87	5:45	8.9	6.5	0.5
6/24/87	6:14	9.3	6.8	0.9
6/24/87	6:45	9.9	7.4	0.9
6/24/87	7:14	10.3	7.8	1.1
6/24/87	7:45	10.6	8.1	1.1
6/24/87	8:14	10.6	8.1	1.2
6/24/87	8:45	12.6	10.1	1.5
6/24/87	9:14	17.9	15.4	1.7
6/24/87	9:45	22.2	19.7	1.7
6/24/87	10:14	14.6	12.1	1.7
6/24/87	10:45	15.2	12.7	1.9
6/24/87	11:14	17.9	15.4	2.0
6/24/87	11:45	18.5	16.1	2.2
6/24/87	12:14	19.2	16.7	2.2
6/24/87	12:45	20.5	18.0	2.2
6/24/87	13:14	22.5	20.0	2.1
6/24/87	13:45	21.8	19.4	2.2
6/24/87	14:14	21.8	19.4	1.7
6/24/87	14:45	19.9	17.4	2.1
6/24/87	15:14	17.5	15.1	1.9
6/24/87	15:45	17.5	15.1	2.0
6/24/87	16:14	17.2	14.7	1.7
6/24/87	16:45	14.6	12.1	1.5
6/24/87	17:14	17.2	14.7	1.9
6/24/87	17:45	11.6	9.1	1.4
6/24/87	18:14	13.2	10.8	1.4
6/24/87	18:45	11.3	8.8	1.5
6/24/87	19:14	10.6	8.1	1.1
6/24/87	19:45	9.9	7.4	0.9
6/24/87	20:14	9.6	7.1	0.7
6/24/87	20:45	8.9	6.5	1.4
6/24/87	21:15	9.9	7.4	0.5
6/24/87	21:45	8.9	6.5	0.6
6/24/87	22:15	9.6	7.1	0.7
6/24/87	22:45	9.9	7.4	0.9
6/24/87	23:15	12.9	10.4	0.9
6/24/87	23:45	11.6	9.1	1.0
6/25/87	0:15	13.2	10.8	0.9
6/25/87	0:45	11.9	9.4	1.0
6/25/87	1:15	12.9	10.4	0.9
6/25/87	1:45	11.3	8.8	0.9
6/25/87	2:15	13.6	11.1	0.9
6/25/87	2:45	12.9	10.4	1.0
6/25/87	3:15	10.3	7.8	0.9
6/25/87	3:45	11.3	8.8	0.9

6/25/87	4:15	13.6	11.1	1.0
6/25/87	4:45	11.9	9.4	1.0
6/25/87	5:15	11.3	8.8	1.0
6/25/87	5:45	10.9	8.4	0.9
6/25/87	6:15	12.9	10.4	1.0
6/25/87	6:45	16.6	14.1	1.1
6/25/87	7:15	16.6	14.1	1.4
6/25/87	7:45	28.1	25.7	1.4
6/25/87	8:15	17.5	15.1	1.4
6/25/87	8:45	13.6	11.1	1.0
6/25/87	9:15	12.2	9.8	1.1
6/25/87	9:45	15.2	12.7	1.5
6/25/87	10:15	16.2	13.7	1.7
6/25/87	10:45	20.2	17.7	1.7
6/25/87	11:15	17.5	15.1	1.9
6/25/87	11:45	18.9	16.4	2.0
6/25/87	12:15	17.2	14.7	2.2
6/25/87	12:45	-	-	1.9
6/25/87	2:36	-	-	1.6
6/25/87	13:45	23.8	21.3	1.7
6/25/87	14:15	15.2	12.7	1.7
6/25/87	14:45	16.6	14.1	1.7
6/25/87	15:15	18.5	16.1	1.7
6/25/87	15:45	12.6	10.1	1.4
6/25/87	16:15	14.2	11.8	1.6
6/25/87	16:45	14.2	11.8	1.7
6/25/87	17:15	15.6	13.1	1.6
6/25/87	9:48	15.2	12.7	1.6
6/25/87	18:15	12.9	10.4	1.2
6/25/87	18:45	10.6	8.1	1.2
6/25/87	19:15	12.2	9.8	1.1
6/25/87	19:45	9.9	7.4	1.2
6/25/87	20:15	9.9	7.4	1.0
6/25/87	20:45	10.3	7.8	1.1
6/25/87	21:15	10.3	7.8	1.0
6/25/87	21:45	11.3	8.8	1.0
6/25/87	22:15	13.2	10.8	1.2
6/25/87	22:45	12.2	9.8	1.4
6/25/87	23:15	12.9	10.4	1.2
6/25/87	23:45	16.2	13.7	1.1
6/26/87	0:15	17.2	14.7	1.1
6/26/87	0:45	14.9	12.4	1.1
6/26/87	1:15	14.6	12.1	0.9
7/12/87	20:18	6.0	3.5	0.5
7/12/87	20:48	6.6	4.1	0.5
7/12/87	21:18	9.9	7.4	0.0
7/12/87	21:48	7.6	5.1	0.0
7/12/87	22:18	12.6	10.1	0.0
7/12/87	22:48	0.0	0.0	0.0

7/12/87	23:18	0.0	0.0	0.0
7/12/87	23:48	0.0	0.0	0.0
7/13/87	0:18	0.0	0.0	0.0
7/13/87	0:48	0.0	0.0	0.0
7/13/87	12:16	15.9	13.4	1.7
7/13/87	12:47	17.9	15.4	1.9
7/13/87	13:16	17.9	15.4	2.6
7/13/87	13:47	18.2	15.7	2.6
7/13/87	14:16	16.2	13.7	3.1
7/13/87	14:47	12.6	10.1	2.2
7/13/87	15:16	13.6	11.1	1.7
7/13/87	15:47	13.9	11.4	1.4
7/13/87	16:16	9.9	7.4	1.0
7/13/87	16:47	7.9	5.5	1.2
7/13/87	17:16	7.0	4.5	1.0
7/13/87	17:47	6.6	4.1	1.0
7/13/87	18:17	6.3	3.8	0.6
7/13/87	18:47	6.6	4.1	0.9
7/13/87	19:17	8.9	6.5	1.0
7/13/87	19:47	6.0	3.5	0.7
7/13/87	20:17	6.6	4.1	0.5
7/13/87	20:47	6.6	4.1	0.7
7/13/87	21:17	7.0	4.5	0.7
7/13/87	21:47	7.3	4.8	0.6
7/13/87	22:17	6.6	4.1	0.5
7/13/87	22:47	6.0	3.5	0.5
7/13/87	23:17	7.3	4.8	0.4
7/13/87	23:47	7.3	4.8	1.2
7/14/87	0:17	11.9	9.4	0.5
7/14/87	0:47	13.2	10.8	0.5
7/14/87	1:17	12.9	10.4	0.5
7/14/87	1:47	7.3	4.8	0.4
7/14/87	2:17	7.3	4.8	0.7
7/14/87	2:47	8.6	6.1	0.7
7/14/87	3:17	9.3	6.8	0.7
7/14/87	3:47	8.9	6.5	0.9
7/14/87	4:17	10.6	8.1	0.9
7/14/87	4:47	9.9	7.4	0.9
7/14/87	5:17	9.3	6.8	0.9
7/14/87	5:47	10.6	8.1	0.9
7/14/87	6:17	10.6	8.1	1.1
7/14/87	6:47	10.3	7.8	1.0
7/14/87	7:17	11.6	9.1	1.0
7/14/87	7:47	14.9	12.4	1.0
7/14/87	8:17	15.6	13.1	0.9
7/14/87	8:47	19.5	17.0	1.1
7/14/87	9:17	25.2	22.7	1.0
7/14/87	9:47	10.3	7.8	1.0
7/14/87	10:17	10.3	7.8	0.9

7/14/87	10:47	10.3	7.8	0.9
7/14/87	11:17	-	-	0.7
7/14/87	17:47	0.0	0.0	0.0
7/14/87	18:17	9.9	7.4	1.0
7/14/87	18:47	11.6	9.1	1.2
7/14/87	19:17	11.3	8.8	1.2
7/14/87	19:47	9.9	7.4	1.0
7/14/87	20:17	10.9	8.4	1.0
7/14/87	20:47	9.3	6.8	0.9
7/14/87	21:17	8.9	6.5	0.9
7/14/87	21:47	10.6	8.1	0.9
7/14/87	22:17	17.2	14.7	0.9
7/14/87	22:47	10.6	8.1	0.9
7/14/87	23:17	10.6	8.1	1.0
7/14/87	23:47	12.9	10.4	0.9
7/15/87	0:17	9.3	6.8	0.9
7/15/87	0:47	9.6	7.1	0.7
7/15/87	1:17	6.6	4.1	0.7
7/15/87	1:47	10.6	8.1	1.0
7/15/87	2:17	13.9	11.4	1.0
7/15/87	2:48	10.9	8.4	1.0
7/15/87	3:17	10.6	8.1	0.9
7/15/87	3:48	20.9	18.4	0.7
7/15/87	4:17	8.3	5.8	0.6
7/15/87	4:48	13.6	11.1	0.9
7/15/87	5:17	22.2	19.7	0.9
7/15/87	5:48	10.3	7.8	0.9
7/15/87	6:17	-	-	0.9
7/15/87	6:48	9.3	6.8	0.9
7/15/87	7:17	9.6	7.1	0.9
7/15/87	7:48	11.9	9.4	1.0
7/15/87	8:17	-	-	1.2
7/15/87	8:48	33.4	30.9	0.6
7/15/87	9:17	12.2	9.8	1.2
7/15/87	9:48	15.6	13.1	2.5
7/15/87	10:17	19.9	17.4	1.6
7/15/87	10:48	20.5	18.0	3.1
7/15/87	11:17	14.6	12.1	1.7
7/15/87	11:48	16.9	14.4	2.0
7/15/87	12:17	15.9	13.4	1.9
7/15/87	12:48	13.9	11.4	2.0
7/15/87	13:17	15.6	13.1	5.2
7/15/87	13:48	13.6	11.1	2.0
7/15/87	14:17	14.9	12.4	2.2
7/15/87	14:48	13.6	11.1	1.6
7/15/87	15:17	13.2	10.8	1.6
7/15/87	15:48	13.9	11.4	1.9
7/15/87	16:17	12.2	9.8	1.5
7/15/87	16:48	11.6	9.1	1.4

7/15/87	17:17	12.2	9.8	1.4
7/15/87	17:48	12.2	9.8	1.4
7/15/87	18:17	12.6	10.1	2.2
7/15/87	18:48	12.2	9.8	1.6
7/15/87	19:17	11.6	9.1	1.7
7/15/87	19:48	10.3	7.8	1.1
7/15/87	20:17	9.9	7.4	1.0
7/15/87	20:48	10.9	8.4	1.2
7/15/87	21:17	10.6	8.1	1.2
7/15/87	21:48	9.3	6.8	1.1
7/15/87	22:17	9.3	6.8	1.1
7/15/87	22:48	10.6	8.1	1.9
7/15/87	23:17	9.6	7.1	1.0
7/15/87	23:48	9.9	7.4	1.0
7/16/87	0:17	9.3	6.8	0.9
7/16/87	0:48	10.3	7.8	1.0
7/20/87	12:07	0.0	0.0	0.0
7/20/87	12:37	0.0	0.0	0.0
7/20/87	13:07	0.0	0.0	0.0
7/28/87	16:10	8.6	6.1	0.9
7/28/87	17:10	5.0	2.5	0.5
7/28/87	18:05	4.3	1.8	0.5
7/28/87	19:05	4.0	1.5	0.2
7/28/87	20:05	4.6	2.2	0.6
7/28/87	21:05	5.3	2.8	0.5
7/28/87	22:05	6.6	4.1	0.4
7/28/87	23:05	7.6	5.1	1.9
7/29/87	0:05	7.9	5.5	0.5
7/29/87	1:05	7.9	5.5	0.5
7/29/87	2:05	6.3	3.8	0.0
7/29/87	3:05	6.0	3.5	0.4
7/29/87	4:05	7.9	5.5	0.5
7/29/87	5:05	7.3	4.8	0.5
7/29/87	6:05	8.9	6.5	0.4
7/29/87	7:05	8.9	6.5	0.5
7/29/87	8:05	10.9	8.4	0.6
7/29/87	9:05	17.2	14.7	0.5
8/27/87	0:04	10.9	8.4	0.6
8/27/87	0:35	9.9	7.4	0.7
8/27/87	1:04	9.6	7.1	0.6
8/27/87	1:35	14.6	12.1	0.6
8/27/87	2:04	11.3	8.8	0.6
8/27/87	2:35	10.3	7.8	0.6
8/27/87	3:04	10.3	7.8	0.6
8/27/87	3:35	12.2	9.8	0.7
8/27/87	4:04	11.6	9.1	0.9
8/27/87	4:35	12.6	10.1	0.9
8/27/87	5:05	12.2	9.8	0.7
8/27/87	5:35	10.9	8.4	0.9

8/27/87	6:05	17.2	14.7	0.9
8/27/87	6:35	18.5	16.1	0.7
8/27/87	7:05	14.6	12.1	1.2
8/27/87	7:35	29.8	27.3	1.0
8/27/87	8:05	18.2	15.7	1.0
8/27/87	8:35	25.2	22.7	1.4
8/27/87	9:05	20.5	18.0	1.0
8/27/87	9:35	12.2	9.8	0.9
8/27/87	10:05	12.9	10.4	1.2
8/27/87	10:35	13.6	11.1	1.4
8/27/87	11:05	14.9	12.4	1.7
8/27/87	11:35	20.9	18.4	2.2
8/27/87	12:05	19.9	17.4	1.9
8/27/87	12:35	27.1	24.7	2.5
8/27/87	13:05	28.1	25.7	3.1
8/27/87	13:35	26.8	24.3	3.5
8/27/87	14:05	22.5	20.0	3.0
8/27/87	14:35	18.5	16.1	2.5
8/27/87	15:05	19.2	16.7	2.1
8/27/87	15:35	16.9	14.4	1.7
8/27/87	16:05	12.6	10.1	1.4
8/27/87	16:35	11.3	8.8	1.4
8/27/87	17:05	9.6	7.1	1.1
8/27/87	17:35	10.3	7.8	1.0
8/27/87	18:05	9.9	7.4	0.9
8/27/87	18:35	9.6	7.1	0.9
8/27/87	19:05	10.6	8.1	0.6
8/27/87	19:35	10.3	7.8	0.6
8/27/87	20:05	11.3	8.8	0.9
8/27/87	20:35	11.9	9.4	0.6
8/27/87	21:05	9.9	7.4	0.7
8/27/87	21:35	10.9	8.4	0.6
8/27/87	22:05	11.3	8.8	0.6
8/27/87	22:35	13.9	11.4	0.7
8/27/87	23:05	14.9	12.4	0.7
8/27/87	23:35	12.9	10.4	0.7
8/28/87	0:05	15.6	13.1	1.0
8/28/87	0:35	14.6	12.1	1.1
8/28/87	1:05	15.6	13.1	1.1
8/28/87	1:35	15.6	13.1	1.4
8/28/87	2:05	15.9	13.4	1.4
8/28/87	2:35	17.9	15.4	1.4
8/28/87	3:05	17.2	14.7	3.2
8/28/87	3:35	18.5	16.1	1.2
8/28/87	4:05	19.2	16.7	1.2
8/28/87	4:35	16.6	14.1	4.6
8/28/87	5:05	18.9	16.4	1.4
8/28/87	5:35	27.1	24.7	1.2
8/28/87	6:05	18.9	16.4	6.1

8/28/87	6:35	-	-	1.7
8/28/87	7:05	28.5	26.0	1.5
8/28/87	7:35	-	-	1.9
8/28/87	8:05	21.5	19.0	1.4
8/28/87	8:35	25.8	23.3	1.5
8/28/87	9:05	17.9	15.4	1.4
8/28/87	9:35	24.2	21.7	1.7
8/28/87	10:05	17.9	15.4	2.0
8/28/87	10:35	25.8	23.3	2.7
8/28/87	11:05	27.1	24.7	2.7
8/28/87	11:35	28.8	26.3	2.6
8/28/87	12:05	23.5	21.0	2.4
8/28/87	12:35	23.8	21.3	3.0
8/28/87	13:05	25.2	22.7	2.6
8/28/87	13:35	25.5	23.0	2.7
8/28/87	14:05	29.8	27.3	3.7
8/28/87	14:35	27.8	25.3	3.6
8/28/87	15:05	24.5	22.0	2.7
8/28/87	15:35	18.5	16.1	1.9
8/28/87	16:05	17.2	14.7	1.7
8/28/87	16:35	14.6	12.1	2.0
8/28/87	17:05	15.2	12.7	1.6
8/28/87	17:35	12.2	9.8	1.2
8/28/87	18:05	11.3	8.8	1.0
8/28/87	18:35	12.2	9.8	1.1
8/28/87	19:05	12.9	10.4	1.1
8/28/87	19:35	12.9	10.4	1.1
8/28/87	20:05	16.9	14.4	1.4
8/28/87	20:35	11.3	8.8	0.7
8/28/87	21:05	8.9	6.5	0.5
8/28/87	21:35	12.2	9.8	0.5
8/28/87	22:05	14.6	12.1	0.6
8/28/87	22:35	9.9	7.4	0.7
8/28/87	23:05	12.6	10.1	0.9
8/28/87	23:35	13.9	11.4	0.7
8/29/87	0:05	9.9	7.4	0.7
8/29/87	0:35	9.9	7.4	0.7
8/29/87	1:05	9.9	7.4	1.0
8/29/87	1:35	11.3	8.8	0.6
8/29/87	2:05	12.9	10.4	0.7
8/29/87	2:35	12.6	10.1	0.9
8/29/87	3:05	11.9	9.4	1.9
8/29/87	3:35	11.9	9.4	0.9
8/29/87	4:05	13.2	10.8	0.9
8/29/87	4:35	14.2	11.8	1.0
8/29/87	5:05	16.6	14.1	1.0
8/29/87	5:35	12.9	10.4	0.7
8/29/87	6:05	13.9	11.4	1.1
8/29/87	6:35	20.5	18.0	2.0

8/29/87	7:05	21.5	19.0	1.9
8/29/87	7:35	18.5	16.1	1.6
8/29/87	8:05	16.2	13.7	1.9
8/29/87	8:35	18.2	15.7	2.6
8/29/87	9:05	17.9	15.4	1.7
8/29/87	9:35	17.9	15.4	1.9
8/29/87	10:05	17.2	14.7	1.9
8/29/87	10:35	16.2	13.7	1.9
8/29/87	11:05	17.2	14.7	1.9
8/29/87	11:35	16.9	14.4	1.9
8/29/87	12:05	15.9	13.4	1.6
8/29/87	12:35	15.9	13.4	1.7
8/29/87	13:05	15.9	13.4	1.6
8/29/87	13:35	15.2	12.7	1.7
8/29/87	14:05	13.2	10.8	1.4
8/29/87	15:05	11.6	9.1	1.1
8/29/87	15:35	10.9	8.4	0.9
8/29/87	16:05	10.6	8.1	0.9
8/29/87	16:35	10.6	8.1	0.9
8/29/87	17:05	9.9	7.4	0.7
8/29/87	17:35	10.6	8.1	0.9
8/29/87	18:05	9.9	7.4	0.9
8/29/87	18:35	11.3	8.8	1.0
8/29/87	19:05	11.3	8.8	1.1
8/29/87	19:35	8.9	6.5	0.6
8/29/87	20:05	8.9	6.5	0.5
8/29/87	20:35	8.6	6.1	0.5
8/29/87	21:05	9.6	7.1	0.7
8/29/87	21:35	8.3	5.8	0.6
8/29/87	22:05	9.3	6.8	0.6
8/29/87	22:35	8.9	6.5	0.6
8/29/87	23:05	9.3	6.8	0.5
8/29/87	23:35	8.3	5.8	0.5
8/30/87	0:05	8.6	6.1	0.5
8/30/87	0:35	9.3	6.8	0.6
8/30/87	1:05	8.6	6.1	0.6
8/30/87	1:36	9.6	7.1	0.5
8/30/87	2:05	9.9	7.4	0.9
8/30/87	2:36	9.9	7.4	0.7
8/30/87	3:05	10.3	7.8	0.7
8/30/87	3:36	10.3	7.8	0.6
8/30/87	4:06	10.3	7.8	0.6
8/30/87	4:36	10.6	8.1	0.6
8/30/87	5:05	9.9	7.4	0.7
8/30/87	5:36	10.3	7.8	0.6
8/30/87	6:06	10.9	8.4	0.7
8/30/87	6:36	10.3	7.8	0.7
8/30/87	7:06	9.9	7.4	0.7
8/30/87	7:36	10.6	8.1	0.7

8/30/87	8:06	8.9	6.5	0.5
8/30/87	8:36	8.9	6.5	0.5
8/30/87	9:06	8.9	6.5	0.6
8/30/87	9:36	9.6	7.1	0.6
8/30/87	10:06	8.6	6.1	0.7
8/30/87	10:36	8.6	6.1	0.6
8/30/87	11:06	7.3	4.8	0.6
8/30/87	11:36	7.3	4.8	0.6
8/30/87	12:06	8.3	5.8	0.7
8/30/87	12:36	8.9	6.5	0.9
8/30/87	13:06	8.6	6.1	0.9
8/30/87	13:36	8.9	6.5	0.9
8/30/87	14:06	8.3	5.8	0.6
8/30/87	14:36	7.0	4.5	0.7
8/30/87	15:06	7.0	4.5	0.6
8/30/87	15:36	6.0	3.5	0.4
8/30/87	16:06	6.0	3.5	0.5
8/30/87	16:36	6.6	4.1	0.5
8/30/87	17:06	7.0	4.5	0.6
8/30/87	17:36	6.6	4.1	0.0
8/30/87	18:06	7.0	4.5	0.4
8/30/87	18:36	6.0	3.5	0.4
8/30/87	19:06	6.6	4.1	0.4
8/30/87	19:36	7.0	4.5	0.2
8/30/87	20:06	6.0	3.5	0.4
8/30/87	20:36	7.3	4.8	0.4
8/30/87	21:06	6.6	4.1	0.4
8/30/87	21:36	6.3	3.8	0.2
8/30/87	22:06	6.6	4.1	3.0
8/30/87	22:36	6.0	3.5	4.1
8/30/87	23:06	6.3	3.8	0.2
8/30/87	23:36	6.6	4.1	0.4
8/31/87	0:06	7.0	4.5	0.4
8/31/87	0:36	7.0	4.5	1.6
8/31/87	1:06	6.3	3.8	0.2
8/31/87	1:36	6.6	4.1	0.4
8/31/87	2:06	7.6	5.1	0.4
8/31/87	2:36	7.0	4.5	0.5
8/31/87	3:06	7.6	5.1	0.4
8/31/87	3:36	9.3	6.8	0.9
8/31/87	4:06	9.3	6.8	0.6
8/31/87	4:36	8.9	6.5	2.1
8/31/87	5:06	12.9	10.4	0.9
8/31/87	5:36	11.9	9.4	0.7
8/31/87	6:06	7.6	5.1	0.5
8/31/87	6:36	11.6	9.1	1.4
8/31/87	7:06	19.2	16.7	9.4
8/31/87	7:36	-	-	4.3
8/31/87	8:06	17.9	15.4	0.9

8/31/87	8:36	9.3	6.8	0.9
8/31/87	9:06	14.9	12.4	1.1
8/31/87	9:36	29.1	26.6	0.9
8/31/87	10:06	15.2	12.7	1.4
8/31/87	10:36	11.6	9.1	1.1
8/31/87	11:06	19.2	16.7	2.0
8/31/87	11:36	23.8	21.3	2.0
8/31/87	12:06	23.2	20.7	2.0
8/31/87	12:36	22.8	20.4	2.6
8/31/87	13:06	23.2	20.7	3.8
8/31/87	13:36	17.5	15.1	3.1
8/31/87	14:06	12.9	10.4	2.2
8/31/87	14:36	12.9	10.4	1.7
8/31/87	15:06	13.9	11.4	1.9
8/31/87	15:36	16.9	14.4	1.5
8/31/87	16:06	18.9	16.4	1.5
8/31/87	16:36	15.6	13.1	1.4
8/31/87	17:06	11.9	9.4	1.2
8/31/87	17:36	12.2	9.8	1.5
8/31/87	18:06	11.9	9.4	1.5
8/31/87	18:36	8.6	6.1	1.4
8/31/87	19:06	8.3	5.8	1.0
8/31/87	19:36	11.6	9.1	0.9
8/31/87	20:06	13.2	10.8	1.0
8/31/87	20:36	38.4	35.9	1.5
8/31/87	21:06	16.6	14.1	1.4
8/31/87	21:36	20.5	18.0	1.2
8/31/87	22:06	19.9	17.4	1.5
8/31/87	22:36	15.6	13.1	1.2
8/31/87	23:06	15.9	13.4	1.2
8/31/87	23:36	17.5	15.1	1.5
9/1/87	0:06	18.5	16.1	1.5
9/1/87	0:36	18.9	16.4	1.6
9/1/87	1:06	17.2	14.7	1.6
9/1/87	1:36	18.2	15.7	1.5
9/1/87	2:06	18.9	16.4	1.5
9/1/87	2:36	21.2	18.7	1.5
9/1/87	3:06	22.2	19.7	3.3
9/1/87	3:36	24.8	22.3	1.6
9/1/87	4:06	22.5	20.0	1.5
9/1/87	4:36	30.1	27.6	3.1
9/1/87	5:06	39.1	36.6	3.7
9/1/87	5:36	29.5	27.0	2.4
9/1/87	6:06	21.2	18.7	6.7
9/1/87	6:36	-	-	-
9/1/87	7:06	33.4	30.9	4.5
9/1/87	7:36	13.2	10.8	1.6
9/1/87	8:06	25.2	22.7	2.0
9/1/87	8:36	9.3	6.8	3.1

9/1/87	9:06	12.6	10.1	7.2
9/1/87	9:36	14.2	11.8	3.8
9/1/87	10:06	22.5	20.0	2.2
9/1/87	10:36	17.5	15.1	2.1
9/1/87	11:06	15.6	13.1	1.7
9/1/87	11:36	21.8	19.4	2.2
9/1/87	12:06	27.1	24.7	3.1
9/1/87	12:36	35.1	32.6	4.5
9/1/87	13:06	6.6	4.1	4.0
9/1/87	13:36	29.5	27.0	4.3
9/1/87	14:06	21.2	18.7	3.1
9/1/87	14:36	19.9	17.4	2.1
9/1/87	15:06	17.5	15.1	2.4
9/1/87	15:36	7.0	4.5	0.6
9/1/87	16:06	6.3	3.8	0.4
9/1/87	16:36	6.0	3.5	0.0
9/1/87	17:06	6.6	4.1	0.2
9/1/87	17:36	6.3	3.8	0.2
9/1/87	18:06	13.9	11.4	1.5
9/1/87	18:36	15.6	13.1	1.5
9/1/87	19:06	15.6	13.1	1.6
9/1/87	19:36	12.2	9.8	1.2
9/1/87	20:06	-	-	8.7
9/1/87	20:36	26.5	24.0	3.5
9/1/87	21:06	27.8	25.3	4.0
9/1/87	21:36	23.8	21.3	2.5
9/1/87	22:06	23.8	21.3	8.3
9/1/87	22:36	23.5	21.0	6.1
9/1/87	23:06	23.5	21.0	2.1
9/1/87	23:36	18.5	16.1	2.4
9/2/87	0:06	-	-	2.4
9/2/87	0:36	-	-	3.6
9/2/87	1:06	26.5	24.0	8.8
9/2/87	1:36	28.5	26.0	3.5
9/2/87	2:06	12.6	10.1	1.0
9/2/87	2:36	6.3	3.8	0.2
9/2/87	3:06	6.6	4.1	0.0
9/2/87	3:37	6.3	3.8	0.0
9/2/87	4:06	6.0	3.5	0.0
9/2/87	4:37	6.6	4.1	0.0
9/2/87	5:07	6.3	3.8	0.0
9/2/87	5:37	6.0	3.5	0.0
9/2/87	6:07	14.9	12.4	1.4
9/2/87	6:37	11.6	9.1	0.6
9/2/87	7:07	-	-	6.4
9/2/87	7:37	8.6	6.1	0.4
9/2/87	8:07	5.6	3.1	0.0
9/2/87	8:37	14.6	12.1	1.0
9/2/87	9:07	6.6	4.1	0.0

9/2/87	9:37	5.6	3.1	0.0
9/2/87	10:07	23.8	21.3	1.6
9/2/87	10:37	10.9	8.4	1.7
9/2/87	11:07	8.3	5.8	0.9
9/2/87	11:37	7.3	4.8	0.5
9/2/87	12:07	18.9	16.4	11.8
9/2/87	7:52	6.6	4.1	1.9
9/2/87	13:07	12.6	10.1	2.6
9/2/87	13:37	2.4	0.0	3.3
9/2/87	14:07	24.5	22.0	3.8
9/2/87	14:37	24.5	22.0	2.9
9/2/87	15:07	23.5	21.0	2.4
9/2/87	15:37	19.2	16.7	2.1
9/2/87	16:07	16.9	14.4	2.1
9/2/87	16:37	22.2	19.7	2.1
9/2/87	17:07	17.9	15.4	1.1
9/2/87	17:37	21.2	18.7	1.6
9/2/87	18:07	15.6	13.1	1.0
9/2/87	18:37	12.6	10.1	1.4
9/2/87	19:07	13.9	11.4	1.2
9/2/87	19:37	13.9	11.4	1.5
9/2/87	20:07	9.9	7.4	0.9
9/2/87	20:37	10.6	8.1	0.9
9/2/87	21:07	13.6	11.1	1.6
9/2/87	21:37	12.2	9.8	1.4
9/2/87	22:07	10.9	8.4	1.2
9/2/87	22:37	11.6	9.1	1.0
9/2/87	23:07	11.3	8.8	1.1
9/2/87	23:37	10.6	8.1	0.9
9/3/87	0:07	12.2	9.8	0.9
9/3/87	0:37	9.3	6.8	0.4
9/3/87	1:07	10.3	7.8	0.9
9/3/87	1:37	7.9	5.5	0.6
9/3/87	2:07	8.6	6.1	0.6
9/3/87	2:37	7.9	5.5	0.6
9/3/87	3:07	8.3	5.8	0.7
9/3/87	3:37	9.9	7.4	0.9
9/3/87	4:07	10.6	8.1	1.0
9/3/87	4:37	11.3	8.8	1.0
9/3/87	5:07	11.6	9.1	1.0
9/3/87	5:37	12.2	9.8	1.4
9/3/87	6:07	20.5	18.0	3.0
9/3/87	6:37	11.6	9.1	0.9
9/3/87	7:07	17.2	14.7	4.0
9/3/87	7:37	19.2	16.7	2.2
9/3/87	8:07	15.6	13.1	1.5
9/3/87	8:37	17.5	15.1	1.6
9/3/87	9:07	15.6	13.1	1.7
9/3/87	9:37	14.9	12.4	1.1

9/3/87	10:07	22.5	20.0	1.5
9/3/87	10:37	14.9	12.4	1.4
9/3/87	11:07	14.2	11.8	1.2
9/3/87	11:37	12.2	9.8	1.2
9/3/87	12:07	14.9	12.4	1.2
9/3/87	12:37	12.6	10.1	1.4
9/3/87	13:07	10.9	8.4	1.7
9/3/87	13:37	12.6	10.1	1.4
9/3/87	14:07	11.6	9.1	0.9
9/3/87	14:37	9.3	6.8	0.9
9/3/87	15:07	7.9	5.5	0.5
9/3/87	15:37	7.6	5.1	0.6
9/3/87	16:07	9.3	6.8	0.9
9/3/87	17:07	10.3	7.8	0.9
9/3/87	17:37	9.9	7.4	0.6
9/3/87	18:07	10.9	8.4	0.9
9/3/87	18:37	10.3	7.8	1.0
9/3/87	19:07	8.9	6.5	1.0
9/3/87	19:37	9.3	6.8	2.1
9/3/87	20:07	7.6	5.1	1.0
(-) datum not available				

	BURBANK			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3, ppb	CH3CCl3, ppb	C2Cl4,ppb
6/19/87	0:20	16.6	14.1	1.6
6/19/87	0:50	6.9	4.4	-
6/19/87	1:20	6.9	4.4	-
6/19/87	1:50	6.9	4.4	-
6/19/87	2:20	5.3	2.8	-
6/19/87	2:50	5.9	3.4	-
6/19/87	3:20	5.9	3.4	-
6/19/87	3:50	5.9	3.4	-
6/19/87	4:20	6.9	4.4	-
6/19/87	4:50	8.0	5.5	3.0
6/19/87	5:20	6.9	4.4	1.4
6/19/87	5:50	9.1	6.6	-
6/19/87	6:20	7.5	5.0	-
6/19/87	6:50	9.6	7.1	-
6/19/87	7:20	6.9	4.4	-
6/19/87	7:50	9.1	6.6	-
6/19/87	8:20	7.5	5.0	-
6/19/87	8:50	9.6	7.1	-
6/19/87	9:20	7.5	5.0	-
6/19/87	9:50	7.5	5.0	-
6/19/87	10:20	8.0	5.5	-
6/19/87	10:50	8.0	5.5	-
6/19/87	11:20	8.0	5.5	-
6/19/87	11:50	7.5	5.0	-
6/19/87	12:29	6.4	3.9	-
6/19/87	13:29	7.5	5.0	-
6/19/87	14:29	6.9	4.4	-
6/19/87	15:29	6.9	4.4	-
6/19/87	16:29	4.8	2.3	-
6/19/87	17:29	5.3	2.8	1.6
6/19/87	18:29	4.3	1.8	-
6/19/87	19:29	4.8	2.3	-
6/19/87	20:29	4.8	2.3	-
6/19/87	21:29	6.4	3.9	1.4
6/19/87	22:29	6.4	3.9	-
6/19/87	23:29	8.0	5.5	-
6/20/87	0:29	5.3	2.8	-
6/23/87	23:19	4.8	2.3	-
6/24/87	0:19	5.3	2.8	-
6/24/87	1:19	4.3	1.8	-
6/24/87	2:19	4.3	1.8	-
6/24/87	3:19	4.3	1.8	-
6/24/87	4:00	-	-	-

6/24/87	4:00	-	-	-
6/24/87	6:00	-	-	-
6/24/87	7:19	-	-	-
6/24/87	8:19	-	-	-
6/24/87	9:19	-	-	-
6/24/87	10:19	-	-	-
6/24/87	11:19	-	-	-
6/24/87	12:19	-	-	-
6/24/87	13:19	-	-	-
6/24/87	16:17	-	-	-
6/24/87	17:17	-	-	-
6/24/87	18:17	-	-	-
6/24/87	19:17	-	-	-
6/24/87	20:17	-	-	-
6/24/87	21:17	-	-	-
6/24/87	22:17	-	-	-
6/24/87	23:17	-	-	-
6/25/87	0:17	4.8	2.3	-
6/25/87	1:17	5.3	2.8	-
6/25/87	2:17	5.3	2.8	-
6/25/87	3:17	4.8	2.3	-
6/25/87	4:17	4.8	2.3	-
6/25/87	5:17	4.8	2.3	-
6/25/87	6:17	4.8	2.3	-
6/25/87	7:17	5.3	2.8	-
6/25/87	8:17	9.1	6.6	2.6
6/25/87	9:17	9.6	7.1	1.2
6/25/87	10:17	9.6	7.1	1.0
6/25/87	11:17	8.5	6.0	0.8
6/25/87	12:17	7.5	5.0	1.8
6/25/87	13:17	7.5	5.0	1.4
6/25/87	14:17	9.6	7.1	1.4
6/25/87	15:17	8.0	5.5	1.6
6/25/87	16:17	6.4	3.9	1.2
6/25/87	17:17	9.1	6.6	0.8
6/25/87	18:17	5.9	3.4	0.6
6/25/87	19:17	6.4	3.9	1.2
6/25/87	20:16	0.0	0.0	-
6/25/87	21:16	5.3	2.8	0.6
6/25/87	22:16	5.9	3.4	0.6
6/25/87	23:16	7.5	5.0	0.6
6/26/87	0:16	9.6	7.1	0.4
7/12/87	21:40	3.8	1.3	0.3
7/12/87	22:40	1.5	0.0	0.3
7/12/87	23:40	1.9	0.0	0.1
7/13/87	0:40	0.8	0.0	0.4
7/13/87	1:40	1.5	0.0	0.3
7/13/87	2:40	1.5	0.0	-
7/13/87	3:40	2.7	0.2	-

7/13/87	4:40	2.3	0.0	0.3
7/13/87	5:40	3.8	1.3	0.1
7/13/87	6:40	3.8	1.3	0.6
7/13/87	7:40	3.4	0.9	0.9
7/13/87	8:40	5.3	2.8	0.9
7/13/87	9:36	7.2	4.7	1.0
7/13/87	10:36	5.7	3.2	1.3
7/13/87	11:36	4.6	2.1	1.0
7/13/87	12:36	4.6	2.1	1.0
7/13/87	13:36	6.5	4.0	1.1
7/13/87	14:36	5.3	2.8	1.4
7/13/87	15:36	1.5	0.0	1.0
7/13/87	16:36	3.8	1.3	1.0
7/13/87	17:36	3.8	1.3	0.9
7/13/87	18:36	3.0	0.5	1.0
7/13/87	19:36	3.8	1.3	2.7
7/13/87	20:36	3.4	0.9	1.1
7/13/87	21:36	3.8	1.3	1.9
7/13/87	22:36	3.0	0.5	1.4
7/13/87	23:36	3.4	0.9	0.9
7/14/87	0:36	3.8	1.3	0.4
7/14/87	1:36	4.6	2.1	0.7
7/14/87	2:36	4.6	2.1	0.3
7/14/87	3:36	5.0	2.5	1.0
7/14/87	4:36	4.2	1.7	0.9
7/14/87	5:36	3.4	0.9	0.3
7/14/87	6:36	3.8	1.3	0.3
7/14/87	7:36	4.2	1.7	0.3
7/14/87	8:36	3.4	0.9	0.4
7/14/87	9:36	7.2	4.7	0.7
7/14/87	11:39	-	-	-
7/14/87	13:01	-	-	-
7/14/87	14:01	5.7	3.2	1.6
7/14/87	15:01	5.3	2.8	1.7
7/14/87	16:01	5.7	3.2	2.0
7/14/87	17:01	5.7	3.2	1.3
7/14/87	18:01	4.2	1.7	1.0
7/14/87	19:01	4.6	2.1	3.4
7/14/87	20:01	3.4	0.9	1.0
7/14/87	21:01	5.7	3.2	0.1
7/14/87	22:01	3.4	0.9	0.1
7/14/87	23:01	2.3	0.0	0.4
7/15/87	0:01	2.7	0.2	0.1
7/15/87	1:01	1.1	0.0	0.1
7/15/87	2:01	4.2	1.7	0.1
7/15/87	3:01	3.0	0.5	0.3
7/15/87	4:01	2.7	0.2	0.4
7/15/87	5:01	2.3	0.0	0.3
7/15/87	6:01	3.0	0.5	0.4

7/15/87	7:01	3.4	0.9	0.6
7/15/87	8:01	5.7	3.2	0.6
7/15/87	9:01	4.2	1.7	0.6
7/15/87	10:01	4.6	2.1	0.7
7/15/87	11:01	5.0	2.5	1.0
7/15/87	12:01	5.3	2.8	1.3
7/15/87	13:01	5.0	2.5	1.3
7/15/87	14:01	5.3	2.8	1.1
7/15/87	15:01	4.6	2.1	1.3
7/15/87	16:01	5.0	2.5	1.1
7/15/87	17:01	4.2	1.7	-
7/15/87	18:01	3.8	1.3	0.7
7/15/87	19:01	3.0	0.5	0.9
7/15/87	20:01	5.0	2.5	0.7
7/15/87	21:01	2.7	0.2	0.9
7/15/87	22:01	3.8	1.3	0.7
7/15/87	23:01	3.0	0.5	0.7
7/16/87	0:01	7.2	4.7	0.7
8/26/87	1:01	2.3	0.0	0.3
8/27/87	0:01	1.9	0.0	-
8/27/87	1:01	1.9	0.0	-
8/27/87	2:01	1.1	0.0	0.3
8/27/87	3:01	3.0	0.5	0.3
8/27/87	4:01	3.8	1.3	0.6
8/27/87	5:01	3.0	0.5	0.6
8/27/87	6:01	2.7	0.2	0.6
8/27/87	7:01	8.0	5.5	1.0
8/27/87	8:01	12.6	10.1	2.1
8/27/87	9:01	12.6	10.1	0.7
8/27/87	10:01	13.7	11.2	1.4
8/27/87	11:01	9.5	7.0	1.4
8/27/87	12:01	8.8	6.3	1.9
8/27/87	13:01	9.9	7.4	1.7
8/27/87	14:01	8.0	5.5	2.1
8/27/87	15:01	8.4	5.9	1.9
8/27/87	16:01	5.3	2.8	1.6
8/27/87	17:01	5.3	2.8	1.4
8/27/87	18:01	3.8	1.3	1.1
8/27/87	19:01	3.8	1.3	1.0
8/27/87	20:01	3.0	0.5	0.4
8/27/87	21:01	5.0	2.5	1.1
8/27/87	22:01	1.5	0.0	0.1
8/27/87	23:01	3.0	0.5	0.6
8/28/87	0:01	5.0	2.5	0.7
8/28/87	1:01	5.0	2.5	0.6
8/28/87	2:01	5.7	3.2	0.7
8/28/87	3:01	6.1	3.6	0.6
8/28/87	4:01	6.1	3.6	0.7
8/28/87	5:01	4.6	2.1	0.7

8/28/87	6:01	4.2	1.7	0.9
8/28/87	7:01	6.1	3.6	1.0
8/28/87	8:01	12.6	10.1	2.1
8/28/87	9:01	11.0	8.5	1.6
8/28/87	10:01	8.4	5.9	1.9
8/28/87	11:01	9.5	7.0	1.6
8/28/87	12:01	9.9	7.4	1.7
8/28/87	13:01	7.2	4.7	1.9
8/28/87	14:01	9.1	6.6	2.3
8/28/87	15:01	8.8	6.3	1.9
8/28/87	16:01	5.7	3.2	2.4
8/28/87	17:01	5.7	3.2	1.9
8/28/87	18:01	3.0	0.5	0.7
8/28/87	19:01	2.7	0.2	0.4
8/28/87	21:01	-	-	-
8/28/87	22:02	30.5	28.0	1.6
8/28/87	23:02	3.8	1.3	0.4
8/29/87	0:02	2.7	0.2	0.9
8/29/87	1:02	1.9	0.0	0.6
8/29/87	2:02	3.0	0.5	2.7
8/29/87	3:02	3.8	1.3	0.6
8/29/87	4:02	5.3	2.8	0.7
8/29/87	5:02	3.4	0.9	0.7
8/29/87	6:02	4.2	1.7	0.9
8/29/87	7:02	6.1	3.6	2.0
8/29/87	8:02	4.6	2.1	0.7
8/29/87	9:02	4.2	1.7	0.9
8/29/87	10:02	4.2	1.7	1.4
8/29/87	11:02	5.3	2.8	1.1
8/29/87	12:02	6.1	3.6	1.3
8/29/87	13:02	5.7	3.2	1.4
8/29/87	14:02	4.6	2.1	1.1
8/29/87	15:02	6.1	3.6	1.0
8/29/87	16:02	4.2	1.7	0.9
8/29/87	17:02	2.7	0.2	0.7
8/29/87	18:02	1.9	0.0	0.7
8/29/87	19:02	1.5	0.0	0.9
8/29/87	20:02	2.3	0.0	0.4
8/29/87	21:02	1.9	0.0	0.4
8/29/87	22:02	1.9	0.0	0.4
8/29/87	23:02	1.1	0.0	0.3
8/30/87	0:02	1.9	0.0	0.6
9/2/87	0:38	-	-	-
9/2/87	1:38	12.2	9.7	1.4
9/2/87	2:38	14.5	12.0	1.6
9/2/87	3:38	14.1	11.6	2.1
9/2/87	4:38	15.6	13.1	5.7
9/2/87	5:38	14.9	12.4	3.3
9/2/87	6:38	9.1	6.6	1.9

9/2/87	7:38	9.1	6.6	1.7
9/2/87	8:38	7.6	5.1	4.4
9/2/87	9:38	11.4	8.9	4.7
9/2/87	10:38	9.5	7.0	2.0
9/2/87	11:38	2.7	0.2	0.6
9/2/87	12:38	9.5	7.0	2.6
9/2/87	13:38	8.8	6.3	2.0
9/2/87	14:38	6.1	3.6	1.6
9/2/87	15:38	7.2	4.7	1.1
9/2/87	16:38	4.2	1.7	1.1
9/2/87	17:38	3.8	1.3	0.7
9/2/87	18:38	8.0	5.5	2.1
9/2/87	19:38	8.8	6.3	1.3
9/2/87	20:38	5.3	2.8	2.7
9/2/87	21:38	4.6	2.1	1.4
9/2/87	22:38	5.3	2.8	1.1
9/2/87	23:38	6.1	3.6	1.0
9/3/87	0:38	5.7	3.2	1.0
9/3/87	1:38	6.1	3.6	1.3
9/3/87	2:38	4.6	2.1	0.9
9/3/87	3:38	4.6	2.1	0.9
9/3/87	4:38	5.0	2.5	0.4
9/3/87	5:38	5.3	2.8	1.4
9/3/87	6:38	7.2	4.7	1.0
9/3/87	7:38	8.8	6.3	1.3
9/3/87	8:38	9.5	7.0	1.3
9/3/87	9:38	8.0	5.5	1.7
9/3/87	10:38	7.6	5.1	1.3
9/3/87	11:38	6.1	3.6	1.6
9/3/87	12:38	9.5	7.0	1.9
9/3/87	13:38	4.6	2.1	1.6
9/3/87	14:38	5.7	3.2	1.1
9/3/87	15:38	3.8	1.3	1.0
9/3/87	16:38	4.6	2.1	1.0
9/3/87	17:38	4.6	2.1	1.0
9/3/87	18:38	3.4	0.9	0.9
9/3/87	19:38	3.4	0.9	0.9
9/3/87	20:38	1.9	0.0	0.6
9/3/87	21:38	2.7	0.2	0.6
9/3/87	22:38	1.9	0.0	0.3
11/10/87	23:31	0.0	0.0	-
11/11/87	0:31	34.5	32.0	9.8
11/11/87	1:31	-	-	-
11/11/87	2:31	-	-	13.3
11/11/87	3:31	-	-	-
11/11/87	4:31	-	-	13.1
11/11/87	5:31	31.7	29.2	7.7
11/11/87	6:31	26.7	24.2	6.4
11/11/87	7:31	25.1	22.6	12.6

11/11/87	8:31	-	-	7.3
11/11/87	9:31	26.1	23.6	4.6
11/11/87	10:31	23.6	21.1	2.6
11/11/87	11:31	13.2	10.7	2.5
11/11/87	12:31	16.6	14.1	2.2
11/11/87	13:31	6.9	4.4	1.1
11/11/87	14:27	-	-	-
11/11/87	15:21	10.4	7.9	1.5
11/11/87	16:17	9.1	6.6	0.6
11/11/87	17:17	11.3	8.8	0.7
11/11/87	18:17	-	-	6.4
11/11/87	19:17	33.3	30.8	3.3
11/11/87	20:17	32.0	29.5	4.8
11/11/87	21:18	-	-	14.4
11/11/87	22:18	-	-	3.9
11/11/87	23:18	19.8	17.3	4.7
11/12/87	0:18	25.1	22.6	3.5
11/12/87	1:18	26.1	23.6	3.5
11/12/87	2:18	19.2	16.7	3.2
11/12/87	3:18	26.7	24.2	4.0
11/12/87	4:18	34.5	32.0	-
11/12/87	5:18	-	-	13.7
11/12/87	6:18	34.5	32.0	6.7
11/12/87	7:18	29.5	27.0	4.2
11/12/87	8:18	34.5	32.0	8.3
11/12/87	9:18	-	-	3.5
11/12/87	10:18	15.7	13.2	2.5
11/12/87	11:18	24.2	21.7	2.4
11/12/87	12:18	11.6	9.1	1.2
11/12/87	13:18	17.6	15.1	3.8
11/12/87	14:18	22.6	20.1	6.1
11/12/87	15:18	27.6	25.1	5.0
11/12/87	16:18	21.4	18.9	4.2
11/12/87	17:18	28.3	25.8	5.5
11/12/87	18:18	25.7	23.2	4.0
11/12/87	19:18	25.7	23.2	5.1
11/12/87	20:18	26.7	24.2	3.4
11/12/87	21:18	27.3	24.8	2.7
11/12/87	22:18	-	-	5.9
11/12/87	23:18	29.8	27.3	3.3
11/13/87	0:18	20.4	17.9	3.9
11/13/87	1:18	19.8	17.3	6.4
11/13/87	2:18	17.3	14.8	3.0
11/13/87	3:18	16.3	13.8	3.5
11/13/87	4:18	17.3	14.8	3.2
11/13/87	5:18	18.5	16.0	3.0
11/13/87	6:18	17.9	15.4	2.7
11/13/87	7:18	20.1	17.6	2.5
11/13/87	8:18	17.6	15.1	2.2

11/13/87	9:18	16.6	14.1	2.1
11/13/87	10:18	27.0	24.5	3.9
11/13/87	11:18	20.4	17.9	3.2
11/13/87	12:18	18.8	16.3	3.5
11/13/87	13:18	21.7	19.2	4.0
11/13/87	14:18	21.4	18.9	4.1
11/13/87	15:18	14.1	11.6	3.2
11/13/87	16:18	10.0	7.5	1.7
11/13/87	17:18	8.8	6.3	1.5
11/13/87	18:18	8.5	6.0	0.9
11/13/87	19:18	9.1	6.6	0.9
11/13/87	20:18	10.0	7.5	0.6
11/13/87	21:18	23.6	21.1	2.6
11/13/87	22:18	11.0	8.5	0.6
11/13/87	23:18	10.0	7.5	0.7
11/14/87	0:18	9.4	6.9	0.6
11/14/87	1:48	8.5	6.0	-
11/14/87	2:18	9.7	7.2	0.8
11/14/87	3:18	15.1	12.6	2.5
11/14/87	4:18	7.2	4.7	0.8
11/14/87	5:18	7.9	5.4	0.7
11/14/87	6:18	10.0	7.5	0.8
11/14/87	7:18	19.2	16.7	6.1
11/14/87	8:18	12.6	10.1	1.2
11/14/87	9:18	12.2	9.7	0.9
11/14/87	10:18	8.2	5.7	0.5
11/14/87	11:18	7.5	5.0	0.6
11/14/87	12:18	7.9	5.4	-
11/14/87	13:18	7.9	5.4	0.6
11/14/87	14:18	7.2	4.7	-
11/14/87	15:18	7.5	5.0	-
11/14/87	16:18	6.9	4.4	-
11/14/87	17:18	7.5	5.0	0.4
11/14/87	18:18	7.5	5.0	0.9
11/14/87	19:18	7.2	4.7	1.3
11/14/87	20:18	8.8	6.3	2.7
11/14/87	21:18	8.5	6.0	2.1
11/14/87	22:18	12.2	9.7	5.9
11/14/87	23:18	12.2	9.7	3.9
11/15/87	0:18	11.0	8.5	2.7
11/15/87	1:18	14.1	11.6	4.0
11/15/87	2:18	28.3	25.8	4.4
11/15/87	3:18	27.3	24.8	4.6
11/15/87	4:18	14.8	12.3	7.3
11/15/87	5:18	31.7	29.2	8.4
11/15/87	6:18	23.9	21.4	4.0
11/15/87	7:18	23.2	20.7	5.8
11/15/87	8:19	10.4	7.9	2.1
11/15/87	9:19	8.5	6.0	0.9

11/15/87	10:19	8.8	6.3	0.6
11/15/87	11:19	9.1	6.6	0.4
11/15/87	12:19	7.5	5.0	0.5
11/15/87	13:19	7.2	4.7	0.5
11/15/87	14:19	7.2	4.7	0.4
11/15/87	15:19	6.6	4.1	0.4
11/15/87	16:19	6.9	4.4	-
11/15/87	17:19	9.4	6.9	0.5
11/15/87	18:19	10.4	7.9	1.1
11/15/87	19:19	10.0	7.5	1.3
11/15/87	20:19	21.4	18.9	2.0
11/15/87	21:19	12.9	10.4	1.7
11/15/87	22:19	14.8	12.3	2.7
11/15/87	23:19	19.8	17.3	9.8
11/16/87	0:19	20.1	17.6	6.1
11/16/87	2:19	19.5	17.0	3.7
11/16/87	3:19	21.4	18.9	5.4
11/16/87	4:19	25.1	22.6	4.7
11/16/87	5:19	21.0	18.5	2.4
11/16/87	6:19	16.0	13.5	2.1
11/16/87	7:19	19.2	16.7	5.4
11/16/87	8:19	27.3	24.8	-
11/16/87	9:19	-	-	7.9
11/16/87	11:50	16.0	13.5	1.5
11/16/87	12:50	12.9	10.4	1.1
11/16/87	13:50	11.0	8.5	1.5
11/16/87	14:50	16.6	14.1	1.7
11/16/87	15:50	14.4	11.9	3.0
11/16/87	16:50	21.0	18.5	2.6
11/16/87	17:50	21.0	18.5	3.7
11/16/87	18:50	14.4	11.9	2.6
11/16/87	19:50	31.1	28.6	3.5
11/16/87	20:50	34.5	32.0	4.1
11/16/87	21:50	-	-	5.2
11/16/87	22:50	-	-	5.8
11/16/87	23:50	30.5	28.0	6.4
11/17/87	0:50	-	-	-
12/3/87	0:29	31.7	29.2	4.8
12/3/87	1:29	22.0	19.5	3.8
12/3/87	2:29	30.8	28.3	5.0
12/3/87	3:29	-	-	12.3
12/3/87	4:29	-	-	5.5
12/3/87	5:29	-	-	3.8
12/3/87	6:29	-	-	4.6
12/3/87	7:29	32.0	29.5	4.0
12/3/87	8:29	-	-	14.2
12/3/87	9:29	-	-	6.8
12/3/87	10:29	29.5	27.0	5.2

12/3/87	11:29	18.8	16.3	3.2
12/3/87	12:29	12.9	10.4	1.7
12/3/87	13:29	9.4	6.9	1.4
12/3/87	14:29	14.4	11.9	0.4
12/3/87	15:29	26.1	23.6	5.4
12/3/87	16:29	22.0	19.5	5.4
12/3/87	17:29	20.4	17.9	6.5
12/3/87	18:29	17.9	15.4	3.3
12/3/87	19:29	18.5	16.0	2.8
12/3/87	20:29	34.5	32.0	4.8
12/3/87	21:29	30.1	27.6	5.3
12/3/87	22:29	25.7	23.2	4.4
12/3/87	23:29	26.1	23.6	5.0
12/10/87	0:35	-	-	-
12/10/87	1:35	-	-	-
12/10/87	2:35	-	-	-
12/10/87	3:35	-	-	-
12/10/87	4:35	-	-	-
12/10/87	5:35	-	-	11.9
12/10/87	6:35	-	-	10.0
12/10/87	7:35	30.8	28.3	7.0
12/10/87	8:35	30.5	28.0	5.4
12/10/87	9:35	25.1	22.6	4.8
12/10/87	10:35	22.0	19.5	3.2
12/10/87	11:35	18.8	16.3	3.0
12/10/87	12:35	29.8	27.3	6.5
12/10/87	13:35	25.7	23.2	0.4
12/10/87	14:35	30.5	28.0	7.0
12/10/87	15:35	-	-	7.0
12/10/87	16:35	26.1	23.6	5.9
12/10/87	17:35	-	-	6.5
12/10/87	18:35	-	-	7.6
12/10/87	19:35	-	-	11.2
12/10/87	20:35	28.6	26.1	5.7
12/10/87	21:26	26.7	24.2	-
12/10/87	22:26	-	-	-
12/10/87	23:26	-	-	-
12/11/87	0:26	-	-	12.6
12/11/87	1:26	-	-	-
12/11/87	2:26	-	-	4.7
12/11/87	3:26	33.9	31.4	5.5
12/11/87	4:26	32.0	29.5	7.2
12/11/87	5:26	29.8	27.3	7.9
12/11/87	6:26	-	-	11.2
12/11/87	7:26	-	-	-
12/11/87	8:26	-	-	-
12/11/87	9:26	-	-	9.2
12/11/87	10:26	-	-	6.0
12/11/87	11:26	-	-	5.9

12/11/87	12:26	27.9	25.4	4.5
12/11/87	13:26	-	-	8.5
12/11/87	14:26	-	-	6.4
12/11/87	15:26	-	-	0.4
12/11/87	16:26	-	-	9.3
12/11/87	17:26	-	-	8.9
12/11/87	18:26	-	-	11.2
12/11/87	19:26	-	-	8.6
12/11/87	20:26	-	-	-
12/11/87	21:26	-	-	-
12/11/87	22:26	-	-	-
12/11/87	23:26	-	-	-
(-) datum not available				

	CLAREMONT			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3, ppb	CH3CCl3, ppb	C2Cl4,ppb
6/19/87	0:00	1.8	0.0	0.0
6/19/87	0:30	1.8	0.0	0.0
6/19/87	1:00	1.8	0.0	0.0
6/19/87	1:30	1.8	0.0	0.0
6/19/87	2:00	1.8	0.0	0.0
6/19/87	2:30	1.8	0.0	0.0
6/19/87	3:00	2.3	0.0	0.0
6/19/87	3:30	2.3	0.0	0.0
6/19/87	4:01	2.3	0.0	0.0
6/19/87	4:30	2.8	0.3	0.0
6/19/87	5:01	4.6	2.1	0.0
6/19/87	5:30	3.7	1.2	0.0
6/19/87	6:01	2.8	0.3	0.3
6/19/87	6:30	2.8	0.3	11.0
6/19/87	7:01	2.8	0.3	0.0
6/19/87	7:30	2.3	0.0	0.0
6/19/87	8:01	2.3	0.0	0.0
6/19/87	8:30	2.3	0.0	0.0
6/19/87	9:01	2.3	0.0	0.0
6/19/87	9:30	2.3	0.0	0.0
6/19/87	10:01	1.8	0.0	0.0
6/19/87	19:48	3.7	1.2	9.3
6/19/87	20:18	4.1	1.7	0.0
6/19/87	20:48	4.6	2.1	0.0
6/19/87	21:18	5.5	3.0	1.7
6/19/87	21:48	5.5	3.0	0.0
6/19/87	22:18	5.5	3.0	0.0
6/19/87	22:48	5.1	2.6	-
6/19/87	23:18	5.1	2.6	13.6
6/19/87	23:48	4.6	2.1	-
6.20/87	0:18	4.1	1.7	0.0
6/23/87	22:11	4.6	2.1	5.8
6/24/87	23:11	5.1	2.6	0.9
6/24/87	0:11	5.5	3.0	0.3
6/24/87	1:11	5.1	2.6	0.3
6/24/87	2:11	6.4	4.0	0.3
6/24/87	3:11	6.4	4.0	1.7
6/24/87	4:11	6.0	3.5	0.0
6/24/87	5:11	6.0	3.5	0.0
6/24/87	6:11	6.0	3.5	0.0
6/24/87	7:11	6.4	4.0	0.0
6/24/87	8:11	6.9	4.4	0.7
6/24/87	9:11	6.9	4.4	0.5
6/24/87	10:11	6.9	4.4	1.0
6/24/87	11:11	9.7	7.2	0.9

6/24/87	12:11	9.7	7.2	1.0
6/24/87	13:11	9.7	7.2	1.5
6/24/87	14:11	11.0	8.6	1.2
6/24/87	15:11	11.0	8.6	1.4
6/24/87	16:11	9.2	6.7	1.0
6/24/87	17:11	7.4	4.9	0.9
6/24/87	18:11	6.9	4.4	0.7
6/24/87	19:11	6.0	3.5	0.3
6/24/87	20:11	5.1	2.6	-
6/24/87	21:11	5.1	2.6	0.5
6/24/87	22:11	6.4	4.0	0.9
6/24/87	23:11	6.0	3.5	1.0
6/25/87	0:11	6.4	4.0	0.7
6/25/87	1:11	6.9	4.4	0.7
6/25/87	2:11	6.9	4.4	0.7
6/25/87	3:11	6.4	4.0	0.9
6/25/87	4:11	6.4	4.0	0.9
6/25/87	5:11	7.4	4.9	0.7
6/25/87	6:11	7.8	5.3	0.5
6/25/87	7:11	6.9	4.4	2.2
6/25/87	8:11	7.8	5.3	1.4
6/25/87	9:11	8.3	5.8	1.4
6/25/87	10:11	8.3	5.8	0.9
6/25/87	11:11	8.3	5.8	0.9
6/25/87	12:11	0.9	0.0	1.2
6/25/87	13:12	8.7	6.3	1.0
6/25/87	14:12	7.8	5.3	0.9
6/25/87	15:12	8.3	5.8	1.3
6/25/87	16:12	7.8	5.3	0.9
6/25/87	17:12	6.9	4.4	0.9
6/25/87	18:12	5.5	3.0	-
6/25/87	19:12	5.5	3.0	0.0
6/25/87	20:12	5.1	2.6	0.0
6/25/87	21:12	21.2	18.7	0.3
6/25/87	22:12	12.9	10.4	0.3
6/25/87	23:12	12.0	9.5	0.7
6/26/87	0:12	7.8	5.3	0.7
7/13/87	0:12	5.5	3.0	0.0
7/13/87	1:12	5.1	2.6	1.9
7/13/87	2:12	4.1	1.7	-
7/13/87	3:12	4.1	1.7	0.0
7/13/87	4:13	5.1	2.6	0.0
7/13/87	5:13	4.1	1.7	0.0
7/13/87	6:13	6.4	4.0	3.1
7/13/87	7:13	4.6	2.1	-
7/13/87	8:13	6.0	3.5	0.7
7/13/87	9:13	6.4	4.0	1.0
7/13/87	10:13	5.5	3.0	0.9
7/13/87	11:13	6.0	3.5	0.5
7/13/87	12:13	8.7	6.3	-
7/13/87	13:13	1.4	-1.1	1.2

7/13/87	14:13	11.0	8.6	1.4
7/13/87	15:13	10.6	8.1	1.5
7/13/87	16:13	9.2	6.7	1.2
7/13/87	17:13	7.8	5.3	0.9
7/13/87	18:13	6.9	4.4	0.7
7/13/87	19:13	8.3	5.8	0.5
7/13/87	20:13	8.3	5.8	0.3
7/13/87	21:13	8.7	6.3	0.5
7/13/87	22:13	9.2	6.7	0.0
7/13/87	23:13	7.8	5.3	0.0
7/14/87	0:13	6.9	4.4	0.0
7/14/87	1:13	7.8	5.3	0.3
7/14/87	2:13	6.4	4.0	-
7/14/87	3:13	8.7	6.3	0.0
7/14/87	4:13	8.3	5.8	0.0
7/14/87	5:13	6.4	4.0	0.0
7/14/87	6:13	7.8	5.3	-
7/14/87	7:13	9.2	6.7	1.0
7/14/87	8:13	8.7	6.3	0.0
7/14/87	9:13	8.3	5.8	1.4
7/14/87	10:13	7.8	5.3	1.0
7/14/87	11:13	7.8	5.3	1.2
7/14/87	12:13	10.6	8.1	1.0
7/14/87	13:13	12.0	9.5	1.2
7/14/87	14:13	13.8	11.3	1.5
7/14/87	15:13	14.3	11.8	1.9
7/14/87	16:13	11.0	8.6	1.5
7/14/87	17:13	10.1	7.6	1.2
7/14/87	18:13	8.7	6.3	0.7
7/14/87	19:56	7.3	4.8	0.8
7/14/87	20:56	7.3	4.8	0.8
7/14/87	21:56	7.7	5.2	2.1
7/14/87	22:56	8.1	5.6	3.0
7/14/87	23:56	6.8	4.4	0.0
7/15/87	0:56	7.3	4.8	0.0
7/15/87	1:56	6.8	4.4	1.3
7/15/87	2:57	7.3	4.8	-
7/15/87	3:57	8.1	5.6	0.6
7/15/87	4:57	6.8	4.4	0.0
7/15/87	5:57	6.8	4.4	0.5
7/15/87	6:57	7.3	4.8	0.8
7/15/87	7:57	7.3	4.8	0.6
7/15/87	8:57	8.1	5.6	0.5
7/15/87	9:57	8.5	6.1	0.0
7/15/87	10:57	9.0	6.5	0.5
7/15/87	11:57	9.0	6.5	0.6
7/15/87	12:57	9.8	7.3	0.8
7/15/87	13:57	11.5	9.1	1.3
7/15/87	14:57	10.2	7.8	0.0
7/15/87	15:57	10.7	8.2	1.1
7/15/87	16:57	10.7	8.2	0.0

7/15/87	17:57	10.2	7.8	0.0
7/15/87	18:57	8.5	6.1	0.0
7/15/87	19:57	2.1	0.0	0.8
7/15/87	20:57	7.7	5.2	0.3
7/15/87	21:57	6.8	4.4	0.0
7/15/87	22:57	6.8	4.4	0.0
8/26/87	23:03	7.7	17.6	0.6
8/27/87	1:30	7.7	5.2	0.7
8/27/87	2:30	8.2	5.7	0.8
8/27/87	3:30	8.2	5.7	0.8
8/27/87	4:30	9.2	6.7	0.9
8/27/87	5:30	8.9	6.4	0.9
8/27/87	6:30	9.2	6.7	0.7
8/27/87	7:30	8.5	6.0	2.2
8/27/87	8:30	0.9	0.0	2.4
8/27/87	9:30	11.6	9.2	1.6
8/27/87	11:01	10.0	7.5	1.2
8/27/87	12:37	9.5	7.0	1.0
8/27/87	13:37	16.1	13.6	1.9
8/27/87	14:24	14.6	12.1	2.2
8/27/87	15:08	13.1	10.6	1.8
8/27/87	16:06	12.8	10.3	1.6
8/27/87	16:46	12.8	10.3	1.2
8/27/87	19:16	9.0	6.5	0.6
8/27/87	20:05	9.7	7.2	0.6
8/27/87	20:49	9.0	6.5	0.5
8/27/87	21:49	7.5	5.1	0.5
8/27/87	22:49	15.4	12.9	0.7
8/27/87	23:49	16.1	13.6	0.7
8/28/87	0:49	10.0	7.5	0.8
8/28/87	1:49	9.0	6.5	0.8
8/28/87	2:49	10.2	7.7	1.0
8/28/87	3:49	9.5	7.0	0.9
8/28/87	4:49	12.3	9.8	0.9
8/28/87	5:49	13.4	11.0	1.1
8/28/87	9:36	10.5	8.0	1.1
8/28/87	10:36	9.8	7.4	1.1
8/28/87	11:36	10.3	7.8	1.6
8/28/87	12:21	15.4	12.9	1.6
8/28/87	13:07	1.6	0.0	1.8
8/28/87	14:07	15.9	13.4	2.7
8/28/87	15:07	-	-	2.6
8/28/87	16:07	13.4	11.0	2.0
8/28/87	16:54	11.8	9.3	1.5
8/28/87	17:45	10.8	8.3	1.2
8/28/87	20:05	6.2	3.7	0.5
8/28/87	21:05	6.7	4.2	0.4
8/28/87	22:05	8.5	6.0	0.6
8/28/87	23:05	8.2	5.7	0.7
8/29/87	0:05	8.4	5.9	0.6
8/29/87	1:05	8.5	6.0	1.0

8/29/87	2:05	8.5	6.0	1.1
8/29/87	3:05	9.2	6.7	1.0
8/29/87	4:05	10.0	7.5	1.7
8/29/87	5:05	10.8	8.3	2.1
8/29/87	6:05	11.2	8.7	1.6
8/29/87	7:05	9.0	6.5	1.2
8/29/87	8:05	10.2	7.7	1.2
8/29/87	9:05	11.2	8.7	1.3
8/29/87	10:05	12.3	9.8	1.7
8/29/87	11:05	12.8	10.3	1.7
8/29/87	12:05	11.5	9.0	1.4
8/29/87	13:05	10.3	7.8	1.4
8/29/87	14:05	11.0	8.5	1.2
8/29/87	15:06	9.0	6.5	1.0
8/29/87	16:06	8.9	6.4	0.9
8/29/87	17:06	8.2	5.7	0.9
8/29/87	18:06	6.7	4.2	0.6
8/29/87	19:06	6.6	4.1	0.6
8/29/87	20:06	6.1	3.6	0.7
8/29/87	21:06	7.1	4.6	0.6
8/29/87	22:06	5.9	3.4	0.4
8/29/87	23:06	7.1	4.6	0.7
8/30/87	0:06	6.9	4.4	0.7
8/30/87	1:06	7.2	4.7	0.8
8/30/87	2:06	6.7	4.2	0.7
8/30/87	3:06	6.4	3.9	0.6
8/30/87	4:06	6.6	4.1	0.6
8/30/87	5:06	6.2	3.7	0.6
8/30/87	6:06	6.2	3.7	0.6
8/30/87	7:06	6.7	4.2	0.8
8/30/87	8:06	6.7	4.2	0.7
8/30/87	9:06	6.6	4.1	0.7
8/30/87	10:06	6.9	4.4	0.6
8/30/87	11:06	6.4	3.9	0.6
8/30/87	12:06	6.6	4.1	0.5
8/30/87	13:06	6.9	4.4	0.4
8/30/87	14:06	6.6	4.1	0.4
8/30/87	15:06	5.9	3.4	0.4
8/30/87	16:06	5.4	2.9	0.3
8/30/87	17:06	5.4	2.9	0.6
8/30/87	18:06	5.9	3.4	0.4
8/30/87	19:06	5.4	2.9	0.4
8/30/87	20:06	5.9	3.4	0.4
8/30/87	21:06	5.9	3.4	0.4
8/30/87	22:06	5.6	3.1	0.4
8/30/87	23:06	5.4	2.9	0.4
8/31/87	0:06	5.4	2.9	0.6
8/31/87	1:06	6.1	3.6	0.4
8/31/87	2:06	6.2	3.7	0.5
8/31/87	3:06	6.1	3.6	0.6
8/31/87	4:06	5.4	2.9	0.4

8/31/87	5:06	5.4	2.9	0.3
8/31/87	6:06	6.7	4.2	0.3
8/31/87	7:06	5.9	3.4	0.7
8/31/87	8:06	6.9	4.4	2.5
8/31/87	9:06	7.9	5.4	0.9
8/31/87	10:06	7.2	4.7	0.8
8/31/87	11:06	5.9	3.4	0.7
8/31/87	12:06	7.4	4.9	0.8
8/31/87	13:06	13.0	10.5	1.4
8/31/87	14:06	14.3	11.6	2.0
8/31/87	15:06	1.3	0.0	2.0
8/31/87	16:06	1.0	0.0	1.6
8/31/87	17:06	11.3	8.8	1.1
8/31/87	18:06	10.2	7.7	1.0
8/31/87	19:06	11.0	8.5	1.4
8/31/87	20:06	9.5	7.0	1.4
8/31/87	21:06	10.0	7.5	1.4
8/31/87	22:06	11.2	8.7	1.5
8/31/87	23:06	11.3	8.8	1.4
9/1/87	0:06	10.2	7.7	1.1
9/1/87	1:06	10.3	7.8	1.1
9/1/87	2:06	10.2	7.7	1.4
9/1/87	3:06	10.2	7.7	1.2
9/1/87	4:06	8.9	6.4	0.9
9/1/87	5:06	7.5	5.1	0.7
9/1/87	6:06	7.1	4.6	0.7
9/1/87	7:06	5.7	3.3	0.5
9/1/87	8:06	10.0	7.5	-
9/1/87	9:06	10.0	7.5	1.2
9/1/87	10:06	5.7	3.3	1.0
9/1/87	17:02	3.4	1.1	0.2
9/1/87	18:02	4.3	2.1	0.2
9/1/87	18:47	4.0	1.8	0.2
9/1/87	19:47	4.5	2.0	0.2
9/1/87	20:47	4.3	1.8	0.2
9/1/87	21:47	4.0	1.5	0.2
9/1/87	22:47	4.8	2.3	0.1
9/1/87	23:47	4.5	2.0	0.2
9/2/87	0:47	3.7	1.2	0.3
9/2/87	1:47	4.3	1.8	0.3
9/2/87	2:47	4.2	1.7	0.2
9/2/87	3:47	4.0	1.5	0.1
9/2/87	4:48	3.7	1.2	0.2
9/2/87	5:48	4.5	2.0	0.2
9/2/87	6:48	4.9	2.4	0.3
9/2/87	7:48	5.7	3.2	1.0
9/2/87	8:48	3.5	1.1	0.0
9/2/87	9:48	9.2	6.7	0.9
9/2/87	10:48	6.0	3.5	0.6
9/2/87	11:48	4.3	1.8	0.3
9/2/87	12:48	3.9	1.4	0.0

9/2/87	13:48	4.8	2.3	0.2
9/2/87	14:43	7.5	5.1	0.8
9/2/87	15:43	9.4	6.9	1.0
9/2/87	16:43	-	-	1.2
9/2/87	17:43	7.1	4.6	0.6
9/2/87	18:43	7.1	4.6	0.7
9/2/87	19:43	7.7	5.2	0.9
9/2/87	20:43	7.4	4.9	0.5
9/2/87	21:43	7.1	4.6	0.5
9/2/87	22:43	6.6	4.1	0.6
9/2/87	23:43	6.6	4.1	0.6
9/3/87	0:43	7.2	4.7	0.8
9/3/87	1:43	7.1	4.6	0.8
9/3/87	2:43	8.5	6.0	0.7
9/3/87	3:43	7.2	4.7	0.6
9/3/87	4:43	6.6	4.1	0.6
9/3/87	5:43	8.0	5.5	0.8
9/3/87	6:43	-	-	1.8
9/3/87	7:43	7.7	5.2	1.3
9/3/87	8:43	-	-	2.1
9/3/87	9:43	8.2	5.7	1.6
9/3/87	10:43	8.2	5.7	0.8
9/3/87	11:43	-	-	0.9
9/3/87	12:43	-	-	-
9/3/87	13:43	-	-	-
9/3/87	14:43	-	-	-
9/3/87	15:43	-	-	-
9/3/87	16:43	-	-	-
9/3/87	17:43	-	-	-
9/3/87	18:43	-	-	-
9/3/87	19:43	-	-	-
9/3/87	20:43	-	-	-
9/3/87	21:43	-	-	-
9/3/87	22:43	-	-	-
9/3/87	23:43	-	-	-
(-) datum not available				

	HAWTHORNE			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3, ppb	CH3CCl3, ppb	C2Cl4,ppb
6/19/87	0:06	2.3	0.0	-
6/19/87	0:36	1.7	0.0	-
6/19/87	1:06	2.8	0.3	-
6/19/87	1:36	2.3	0.0	-
6/19/87	2:06	2.8	0.3	-
6/19/87	2:36	1.7	0.0	-
6/19/87	3:06	2.8	0.3	-
6/19/87	3:36	3.4	0.9	-
6/19/87	4:06	2.8	0.3	-
6/19/87	4:36	4.0	1.5	-
6/19/87	5:06	2.8	0.3	-
6/19/87	5:36	3.4	0.9	-
6/19/87	6:06	4.0	1.5	-
6/19/87	6:36	20.4	17.9	-
6/19/87	7:06	6.8	4.3	-
6/19/87	7:36	2.8	0.3	-
6/19/87	8:06	2.8	0.3	-
6/19/87	8:36	3.4	0.9	1.1
6/19/87	9:06	4.5	2.0	-
6/19/87	9:36	4.0	1.5	-
6/19/87	10:06	4.0	1.5	-
6/19/87	11:06	4.0	1.5	-
6/19/87	11:36	4.0	1.5	-
6/19/87	12:06	2.3	0.0	-
6/19/87	12:36	2.8	0.3	-
6/19/87	13:06	1.7	0.0	-
6/19/87	13:36	2.3	0.0	-
6/19/87	14:06	1.7	0.0	-
6/19/87	14:36	2.3	0.0	-
6/19/87	15:06	2.8	0.3	-
6/19/87	15:36	2.3	0.0	-
6/19/87	16:06	1.7	0.0	-
6/19/87	16:36	2.3	0.0	-
6/19/87	17:06	2.3	0.0	-
6/19/87	17:36	2.3	0.0	-
6/19/87	18:06	2.8	0.3	-
6/19/87	18:36	4.0	1.5	-
6/19/87	19:06	1.7	0.0	-
6/19/87	19:36	1.1	0.0	-
6/19/87	20:06	4.0	1.5	-
6/19/87	20:36	2.8	0.3	-
6/19/87	21:06	4.0	1.5	-
6/19/87	21:36	3.4	0.9	-

6/19/87	22:06	2.8	0.3	-
6/19/87	22:36	5.1	2.6	0.6
6/19/87	23:06	3.4	0.9	-
6/19/87	23:36	1.1	0.0	-
6/20/87	0:06	2.8	0.3	-
6/24/87	12:52	3.4	0.9	-
6/24/87	13:52	2.3	0.0	-
6/24/87	14:52	3.4	0.9	-
6/24/87	15:52	2.3	0.0	-
6/24/87	16:52	2.8	0.3	-
6/24/87	17:52	3.4	0.9	-
6/24/87	18:52	3.4	0.9	-
6/24/87	20:46	3.4	0.9	-
6/24/87	21:46	3.4	0.9	-
6/24/87	22:46	3.4	0.9	-
6/24/87	23:46	6.2	3.7	-
6/25/87	0:46	5.1	2.6	-
6/25/87	1:46	5.1	2.6	-
6/25/87	2:46	6.2	3.7	-
6/25/87	3:46	5.7	3.2	-
6/25/87	4:46	5.7	3.2	-
6/25/87	5:46	4.5	2.0	-
6/25/87	6:46	4.0	1.5	-
6/25/87	7:46	6.8	4.3	-
6/25/87	8:46	5.7	3.2	-
6/25/87	9:46	6.2	3.7	-
6/25/87	10:46	5.7	3.2	-
6/25/87	11:46	2.8	0.3	-
6/25/87	12:46	3.4	0.9	-
6/25/87	13:46	2.8	0.3	-
6/25/87	14:46	4.0	1.5	-
6/25/87	15:46	3.4	0.9	-
6/25/87	16:46	3.4	0.9	-
6/25/87	17:46	2.8	0.3	-
6/25/87	18:46	3.4	0.9	-
6/25/87	19:46	4.0	1.5	-
6/25/87	20:46	2.8	0.3	-
6/25/87	21:46	2.8	0.3	-
6/25/87	22:46	2.8	0.3	-
6/25/87	23:46	3.4	0.9	-
7/12/87	23:49	5.8	3.3	-
7/13/87	0:49	6.0	3.5	-
7/13/87	1:49	6.0	3.5	-
7/13/87	2:49	5.8	3.3	-
7/13/87	3:49	5.8	3.3	-
7/13/87	4:49	11.3	8.8	-
7/13/87	5:49	5.5	3.0	-
7/13/87	6:49	8.1	5.6	1.5

7/13/87	7:49	11.8	9.3	1.5
7/13/87	8:49	11.8	9.3	0.9
7/13/87	9:49	20.4	17.9	1.5
7/13/87	10:49	7.3	4.8	-
7/13/87	11:49	7.6	5.1	0.5
7/13/87	12:49	6.6	4.1	0.4
7/13/87	13:49	8.6	6.1	0.9
7/13/87	14:49	6.6	4.1	-
7/13/87	15:49	5.8	3.3	0.3
7/13/87	16:49	5.5	3.0	-
7/13/87	17:49	5.5	3.0	-
7/13/87	19:44	2.3	0.0	-
7/13/87	20:44	8.5	6.0	-
7/13/87	21:44	9.1	6.6	-
7/13/87	22:44	8.5	6.0	-
7/13/87	23:44	13.1	10.6	-
7/14/87	0:44	10.2	7.7	-
7/14/87	1:44	10.2	7.7	-
7/14/87	2:44	10.8	8.3	-
7/14/87	3:44	10.8	8.3	-
7/14/87	4:44	11.4	8.9	-
7/14/87	5:44	10.8	8.3	-
7/14/87	6:44	11.4	8.9	-
7/14/87	7:44	17.6	15.1	-
7/14/87	8:44	10.8	8.3	-
7/14/87	9:44	17.6	15.1	5.3
7/14/87	10:44	15.9	13.4	3.0
7/14/87	11:44	13.1	10.6	-
7/14/87	12:44	8.0	5.5	-
7/14/87	13:44	11.4	8.9	1.3
7/14/87	14:44	7.4	4.9	-
7/14/87	15:44	1.7	0.0	1.5
7/14/87	16:44	10.2	7.7	-
7/14/87	17:44	5.1	2.6	-
7/14/87	18:44	5.1	2.6	-
7/14/87	19:45	5.1	2.6	-
7/14/87	20:45	6.2	3.7	-
7/14/87	21:45	5.7	3.2	-
7/14/87	22:45	5.7	3.2	1.3
7/14/87	23:45	6.8	4.3	-
7/15/87	0:45	7.4	4.9	-
7/15/87	1:45	5.7	3.2	-
7/15/87	2:45	5.7	3.2	-
7/15/87	3:45	6.2	3.7	-
7/15/87	4:45	6.8	4.3	-
7/15/87	5:45	6.8	4.3	-
7/15/87	6:45	6.2	3.7	-
7/15/87	7:45	6.8	4.3	-
7/15/87	8:45	6.8	4.3	0.6

7/15/87	9:45	6.2	3.7	0.9
7/15/87	10:45	7.4	4.9	0.6
7/15/87	11:45	6.8	4.3	0.9
7/15/87	12:45	6.2	3.7	2.3
7/15/87	13:45	6.8	4.3	-
7/15/87	14:45	6.8	4.3	-
7/15/87	15:45	6.2	3.7	-
7/15/87	16:45	6.2	3.7	0.9
7/15/87	17:45	5.7	3.2	-
7/15/87	18:45	6.2	3.7	-
7/15/87	19:45	6.2	3.7	-
7/15/87	20:45	6.8	4.3	-
7/15/87	21:45	8.0	5.5	-
7/15/87	22:45	7.4	4.9	-
11/11/87	0:03	21.5	19.0	3.3
11/11/87	0:33	16.2	13.7	2.2
11/11/87	1:03	15.6	13.1	2.2
11/11/87	1:33	13.6	11.1	2.4
11/11/87	2:03	13.6	11.1	2.0
11/11/87	2:33	12.6	10.1	1.5
11/11/87	3:03	13.9	11.4	1.4
11/11/87	3:33	13.6	11.1	1.5
11/11/87	4:03	14.6	12.1	2.7
11/11/87	4:33	14.9	12.4	2.1
11/11/87	5:03	16.6	14.1	2.4
11/11/87	5:33	35.7	33.2	5.7
11/11/87	6:03	37.4	34.9	5.3
11/11/87	6:33	18.5	16.0	2.1
11/11/87	7:03	21.5	19.0	3.2
11/11/87	7:33	18.2	15.7	3.1
11/11/87	8:03	17.9	15.4	4.2
11/11/87	8:33	12.6	10.1	3.1
11/11/87	9:03	11.9	9.4	2.1
11/11/87	9:33	9.6	7.1	2.0
11/11/87	10:03	10.6	8.1	2.7
11/11/87	10:33	9.3	6.8	3.3
11/11/87	11:03	11.6	9.1	3.2
11/11/87	11:33	13.9	11.4	3.2
11/11/87	12:03	10.3	7.8	2.1
11/11/87	12:33	17.5	15.0	2.5
11/11/87	13:03	16.6	14.1	2.5
11/11/87	13:33	13.6	11.1	2.6
11/11/87	14:03	12.9	10.4	1.6
11/11/87	14:33	10.6	8.1	0.6
11/11/87	15:03	11.3	8.8	0.5
11/11/87	15:33	18.9	16.4	0.1
11/11/87	16:03	12.6	10.1	0.2
11/11/87	16:33	13.2	10.7	0.2
11/11/87	17:03	10.9	8.4	0.4

11/11/87	17:33	10.6	8.1	0.6
11/11/87	18:03	11.9	9.4	0.5
11/11/87	18:33	9.6	7.1	0.6
11/11/87	19:03	10.9	8.4	1.5
11/11/87	19:33	10.9	8.4	1.4
11/11/87	20:03	11.3	8.8	0.5
11/11/87	20:33	10.9	8.4	0.6
11/11/87	21:03	21.8	19.3	1.9
11/11/87	21:33	19.5	17.0	0.6
11/11/87	22:03	20.9	18.4	0.6
11/11/87	22:33	16.9	14.4	1.1
11/11/87	23:03	17.5	15.0	1.5
11/11/87	23:33	20.5	18.0	4.0
11/12/87	0:03	26.1	23.6	5.6
11/12/87	0:33	27.5	25.0	4.8
11/12/87	1:03	25.8	23.3	5.5
11/12/87	1:33	34.1	31.6	6.6
11/12/87	2:03	33.4	30.9	7.9
11/12/87	2:33	23.2	20.7	4.6
11/12/87	3:03	23.2	20.7	4.5
11/12/87	3:33	25.5	23.0	4.8
11/12/87	4:03	39.1	36.6	9.3
11/12/87	4:33	34.8	32.3	8.4
11/12/87	5:03	-	-	9.5
11/12/87	5:33	39.4	36.9	8.8
11/12/87	6:03	34.1	31.6	7.1
11/12/87	6:33	24.2	21.7	4.7
11/12/87	7:03	22.8	20.3	4.6
11/12/87	7:33	20.9	18.4	7.9
11/12/87	8:03	21.2	18.7	10.5
11/12/87	8:33	31.4	28.9	4.7
11/12/87	9:03	27.5	25.0	3.6
11/12/87	9:33	-	-	4.6
11/12/87	10:03	-	-	5.2
11/12/87	10:33	31.1	28.6	5.6
11/12/87	12:01	-	-	3.3
11/12/87	13:01	20.5	18.0	1.5
11/12/87	13:30	18.9	16.4	1.7
11/12/87	14:01	16.6	14.1	2.0
11/12/87	14:30	17.9	15.4	1.2
11/12/87	15:01	15.9	13.4	1.1
11/12/87	15:30	20.9	18.4	2.1
11/12/87	16:01	14.6	12.1	2.2
11/12/87	16:36	15.2	12.7	1.7
11/12/87	17:30	15.2	12.7	1.9
11/12/87	17:30	10.9	8.4	0.5
11/12/87	18:01	9.6	7.1	0.2
11/12/87	18:30	8.3	5.8	1.0
11/12/87	19:01	7.9	5.4	0.9

11/12/87	19:30	7.6	5.1	0.0
11/12/87	20:01	22.5	20.0	0.0
11/12/87	20:30	11.6	9.1	0.2
11/12/87	21:01	17.2	14.7	0.2
11/12/87	21:30	10.3	7.8	0.2
11/12/87	22:01	7.0	4.5	0.1
11/12/87	22:30	7.6	5.1	0.1
11/12/87	23:01	6.6	4.1	0.1
11/12/87	23:30	11.3	8.8	0.5
11/13/87	0:01	8.3	5.8	0.4
11/13/87	0:30	7.3	4.8	0.2
11/13/87	1:01	6.3	3.8	-
11/13/87	1:30	9.3	6.8	0.5
11/13/87	2:01	8.3	5.8	0.6
11/13/87	2:30	21.5	19.0	1.1
11/13/87	3:01	24.2	21.7	2.0
11/13/87	3:30	20.5	18.0	1.4
11/13/87	4:01	21.8	19.3	3.1
11/13/87	4:30	14.9	12.4	1.6
11/13/87	5:01	14.6	12.1	1.6
11/13/87	5:30	19.2	16.7	2.0
11/13/87	6:01	24.2	21.7	2.1
11/13/87	6:30	13.9	11.4	1.4
11/13/87	7:01	12.2	9.7	1.1
11/13/87	7:30	12.6	10.1	1.4
11/13/87	8:01	13.2	10.7	1.4
11/13/87	8:30	11.9	9.4	1.0
11/13/87	9:01	9.9	7.4	0.9
11/13/87	9:30	13.2	10.7	2.1
11/13/87	10:01	13.6	11.1	1.7
11/13/87	10:30	15.2	12.7	2.1
11/13/87	11:01	17.5	15.0	2.2
11/13/87	11:30	21.5	19.0	2.7
11/13/87	12:01	20.9	18.4	2.4
11/13/87	12:30	19.9	17.4	2.4
11/13/87	13:01	20.9	18.4	2.2
11/13/87	13:30	12.9	10.4	1.1
11/13/87	14:01	9.6	7.1	0.5
11/13/87	13:25	8.6	6.1	0.2
11/13/87	13:55	11.3	8.8	0.1
11/13/87	14:25	11.6	9.1	0.5
11/13/87	14:55	17.5	15.0	0.5
11/13/87	15:25	7.6	5.1	-
11/13/87	15:55	7.6	5.1	-
11/13/87	16:25	8.6	6.1	0.1
11/13/87	16:55	8.6	6.1	-
11/13/87	17:25	7.6	5.1	-
11/13/87	17:55	8.6	6.1	0.2
11/13/87	18:25	8.6	6.1	0.4

11/13/87	18:55	9.6	7.1	0.1
11/13/87	19:25	7.0	4.5	0.1
11/13/87	19:55	7.3	4.8	-
11/13/87	20:25	6.3	3.8	0.1
11/13/87	20:55	7.0	4.5	-
11/13/87	21:25	8.9	6.4	1.1
11/13/87	21:55	7.3	4.8	-
11/13/87	22:25	7.3	4.8	-
11/13/87	22:55	7.6	5.1	-
11/13/87	23:25	6.0	3.5	-
11/13/87	23:33	6.6	4.1	-
11/14/87	0:25	7.0	4.5	-
12/3/87	0:47	9.0	6.5	1.3
12/3/87	1:47	22.9	20.4	4.8
12/3/87	2:47	-	-	7.1
12/3/87	3:47	-	-	6.4
12/3/87	4:47	-	-	4.8
12/3/87	5:47	-	-	5.0
12/3/87	6:47	-	-	4.2
12/3/87	7:47	-	-	7.8
12/3/87	8:47	-	-	-
12/3/87	9:47	23.8	21.3	5.7
12/3/87	10:47	-	-	0.2
12/3/87	11:47	-	-	4.4
12/3/87	12:47	18.2	15.7	2.4
12/3/87	13:47	20.6	18.1	2.8
12/3/87	14:47	16.2	13.7	2.7
12/3/87	15:47	12.5	10.0	1.0
12/3/87	16:47	9.0	6.5	0.5
12/3/87	17:47	8.8	6.3	2.4
12/3/87	18:47	9.2	6.7	1.9
12/3/87	19:47	11.1	8.6	1.0
12/3/87	20:47	13.6	11.1	1.1
12/3/87	21:47	15.9	13.4	0.9
12/3/87	22:47	15.5	13.0	0.7
12/4/87	0:14	0.0	0.0	-
12/9/87	18:01	9.2	6.7	0.6
12/9/87	19:01	11.1	8.6	1.7
12/9/87	20:01	19.9	17.4	1.1
12/9/87	21:01	17.1	14.6	4.1
12/9/87	22:01	17.6	15.1	3.0
12/9/87	23:01	17.8	15.3	3.0
12/10/87	0:01	-	-	3.7
12/10/87	1:01	-	-	5.0
12/10/87	2:01	-	-	6.8
12/10/87	3:01	-	-	4.1
12/10/87	4:01	-	-	4.7
12/10/87	5:01	-	-	4.9
12/10/87	6:01	-	-	3.9

12/10/87	7:01	-	-	3.1
12/10/87	8:01	-	-	7.0
12/10/87	9:01	-	-	-
12/10/87	10:01	14.3	11.8	5.6
12/10/87	11:01	14.3	11.8	3.7
12/10/87	12:01	15.2	12.7	1.1
12/10/87	13:01	17.8	15.3	2.3
12/10/87	14:34	13.4	10.9	1.7
12/10/87	15:34	6.9	4.4	0.3
12/10/87	16:34	7.4	4.9	0.2
12/10/87	17:34	11.6	9.1	0.3
12/10/87	18:34	12.0	9.5	0.3
12/10/87	19:34	20.1	17.6	0.5
12/10/87	20:34	8.1	5.6	0.3
12/10/87	21:31	11.6	9.1	0.6
12/10/87	22:34	15.0	12.5	4.6
12/10/87	23:34	-	-	11.2
12/11/87	0:34	-	-	10.7
12/11/87	1:34	-	-	10.4
12/11/87	2:34	-	-	-
12/11/87	3:34	-	-	7.7
12/11/87	4:34	21.9	19.4	2.6
12/11/87	5:34	17.3	14.8	1.7
12/11/87	6:34	-	-	-
12/11/87	7:34	-	-	6.4
12/11/87	8:34	-	-	7.0
12/11/87	9:34	-	-	7.6
12/11/87	10:34	-	-	4.9
12/11/87	11:34	21.5	19.0	2.5
12/11/87	12:34	16.6	14.1	3.0
12/11/87	13:34	18.9	16.4	2.5
12/11/87	14:34	-	-	1.5
12/11/87	15:34	12.9	10.4	1.0
12/11/87	16:34	15.7	13.2	0.7
12/11/87	17:34	19.9	17.4	0.9
12/11/87	18:34	15.2	12.7	1.5
12/11/87	19:34	15.7	13.2	1.5
12/11/87	20:34	-	-	-
12/11/87	21:34	-	-	-
12/11/87	22:34	15.7	13.2	4.5
12/11/87	23:34	9.9	7.4	1.0
12/12/87	0:34	15.7	13.2	1.6
(-) datum not available				

	LONG BEACH			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3, ppb	CH3CCl3, ppb	C2Cl4,ppb
6/19/87	0:18	3.3	0.8	-
6/19/87	0:48	5.3	2.8	-
6/19/87	1:18	6.7	4.2	-
6/19/87	1:48	4.0	1.5	-
6/19/87	2:18	3.3	0.8	-
6/19/87	2:48	5.3	2.8	-
6/19/87	3:18	3.3	0.8	-
6/19/87	3:48	4.0	1.5	1.0
6/19/87	4:18	4.0	1.5	1.8
6/19/87	4:48	3.3	0.8	-
6/19/87	5:18	2.7	0.2	-
6/19/87	5:48	3.3	0.8	2.8
6/19/87	6:18	4.0	1.5	-
6/19/87	6:48	4.0	1.5	-
6/19/87	7:18	4.0	1.5	-
6/19/87	7:48	4.0	1.5	-
6/19/87	8:18	4.7	2.2	-
6/19/87	8:48	-	-	0.0
6/19/87	9:18	3.3	0.8	-
6/19/87	9:48	12.0	9.5	-
6/19/87	10:18	11.4	8.9	-
6/19/87	10:48	6.7	4.2	-
6/19/87	11:18	8.7	6.2	-
6/19/87	11:48	28.1	25.6	-
6/19/87	12:18	8.0	5.5	-
6/19/87	12:48	6.0	3.5	-
6/19/87	13:18	6.0	3.5	-
6/19/87	13:48	7.3	4.8	0.0
6/19/87	14:18	5.3	2.8	-
6/19/87	14:48	6.0	3.5	0.0
6/19/87	15:18	10.0	7.5	0.0
6/19/87	15:48	7.3	4.8	0.0
6/19/87	16:18	6.0	3.5	0.0
6/19/87	16:48	2.7	0.2	-
6/19/87	17:18	4.7	2.2	0.0
6/19/87	17:48	4.7	2.2	-
6/19/87	18:18	5.3	2.8	-
6/19/87	18:48	21.4	16.9	4.8
6/19/87	19:18	2.0	0.0	-
6/19/87	19:48	3.3	0.8	-
6/19/87	20:18	5.3	2.8	-
6/19/87	20:48	5.3	2.8	-
6/19/87	21:18	-	-	0.0

6/19/87	21:48	-	-	0.0
6/19/87	22:16	4.7	2.2	3.0
6/19/87	22:48	15.4	12.9	-
6/19/87	23:16	4.0	1.5	2.5
6/19/87	23:48	4.7	2.2	-
6/20/87	0:18	4.7	2.2	-
6/24/87	14:00	0.0	0.0	0.0
6/24/87	15:05	0.0	0.0	0.0
6/24/87	16:05	4.7	2.2	0.0
6/24/87	17:05	8.7	6.2	0.0
6/24/87	18:05	4.0	1.5	0.0
6/24/87	19:05	-	-	3.5
6/24/87	20:05	6.7	4.2	0.0
6/24/87	21:05	6.7	4.2	0.0
6/24/87	22:05	7.3	4.8	0.0
6/24/87	23:05	4.7	2.2	0.0
6/25/87	0:05	2.7	0.2	0.0
6/25/87	1:05	3.3	0.8	0.0
6/25/87	2:05	4.0	1.5	0.0
6/25/87	3:05	2.7	0.2	0.0
6/25/87	4:05	3.3	0.8	0.0
6/25/87	5:05	3.3	0.8	0.0
6/25/87	6:05	2.7	0.2	0.0
6/25/87	7:05	2.7	0.2	0.0
6/25/87	8:05	2.7	0.2	0.0
6/25/87	9:05	3.3	0.8	0.0
6/25/87	10:05	4.7	2.2	0.0
6/25/87	11:13	0.0	0.0	0.0
6/25/87	12:20	0.0	0.0	0.0
6/25/87	13:20	17.4	14.9	0.0
6/25/87	14:20	19.4	16.9	0.0
6/25/87	17:36	-	-	0.0
6/25/87	18:36	2.7	0.2	0.0
6/25/87	19:36	4.7	2.2	0.0
6/25/87	20:36	4.0	1.5	0.0
6/25/87	21:36	7.3	4.8	0.0
6/25/87	22:36	4.0	1.5	0.0
6/25/87	23:36	3.3	0.8	0.0
6/26/87	0:36	4.0	1.5	0.0
7/12/87	22:44	0.0	0.0	0.0
7/12/87	23:44	4.0	1.5	0.0
7/13/87	0:44	4.0	1.5	0.0
7/13/87	1:44	2.7	0.2	0.0
7/13/87	2:44	2.7	0.2	0.0
7/13/87	3:44	4.0	1.5	0.0
7/13/87	4:44	3.3	0.8	0.0
7/13/87	5:44	4.0	1.5	0.0
7/13/87	6:44	4.0	1.5	0.0
7/13/87	7:44	4.7	2.2	0.0

7/13/87	8:44	5.3	2.8	1.0
7/13/87	9:44	63.5	61.0	1.0
7/13/87	10:44	13.4	10.9	1.0
7/13/87	11:44	28.1	25.6	0.8
7/13/87	12:44	6.7	4.2	0.5
7/13/87	15:12	0.0	0.0	0.0
7/13/87	15:54	0.0	0.0	0.0
7/13/87	16:54	10.6	8.1	0.8
7/13/87	17:54	10.6	8.1	1.2
7/13/87	18:54	9.7	7.2	1.3
7/13/87	19:54	10.2	7.7	0.5
7/13/87	20:54	8.9	6.4	0.7
7/13/87	21:55	9.3	6.8	0.3
7/13/87	22:55	8.9	6.4	0.3
7/13/87	23:55	8.9	6.4	-
7/14/87	0:55	10.2	7.7	0.0
7/14/87	1:55	9.7	7.2	0.5
7/14/87	2:55	8.9	6.4	1.2
7/14/87	3:55	9.3	6.8	0.0
7/14/87	4:55	9.7	7.2	0.0
7/14/87	5:55	12.4	9.9	0.3
7/14/87	6:55	12.0	9.5	1.0
7/14/87	7:55	18.6	16.1	0.8
7/14/87	8:55	18.2	15.7	0.5
7/14/87	9:55	19.9	17.4	0.0
7/14/87	10:55	19.0	16.5	0.8
7/14/87	11:55	14.6	12.1	1.5
7/14/87	12:55	16.8	14.3	1.8
7/14/87	13:55	16.4	13.9	0.8
7/14/87	14:55	14.6	12.1	2.2
7/14/87	15:55	17.7	15.2	1.3
7/14/87	16:55	20.8	18.3	1.5
7/14/87	17:55	10.2	7.7	1.5
7/14/87	18:55	10.2	7.7	0.8
7/14/87	19:55	17.7	15.2	2.2
7/14/87	20:55	10.2	7.7	0.3
7/14/87	21:55	12.0	9.5	0.5
7/14/87	22:55	10.6	8.1	0.5
7/14/87	23:55	20.4	17.9	0.3
7/15/87	0:55	9.7	7.2	-
7/15/87	1:55	23.9	21.4	-
7/15/87	2:55	12.8	10.3	0.3
7/15/87	3:55	-	-	0.5
7/15/87	4:55	0.0	0.0	0.0
7/15/87	5:55	10.6	8.1	-
7/15/87	6:55	17.7	15.2	0.0
7/15/87	7:55	11.1	8.6	0.7
7/15/87	8:55	16.8	14.3	0.8
7/15/87	9:55	18.2	15.7	0.5

7/15/87	10:55	32.3	29.8	0.5
7/15/87	11:55	11.1	8.6	0.0
7/15/87	12:55	19.9	17.4	0.3
7/15/87	13:55	19.0	16.5	0.3
7/15/87	14:55	16.4	13.9	0.7
7/15/87	15:55	12.8	10.3	0.5
7/15/87	16:55	13.3	10.8	0.5
7/15/87	17:55	24.4	21.9	-
7/15/87	18:55	21.3	18.8	0.3
7/15/87	19:55	17.3	14.8	-
7/15/87	20:55	16.4	13.9	0.3
7/15/87	21:55	1.0	0.0	0.0
7/15/87	22:55	20.4	17.9	0.0
7/15/87	23:55	13.7	11.2	0.2
8/27/87	0:03	0.0	0.0	0.0
8/27/87	1:03	14.2	11.7	1.0
8/27/87	2:03	10.2	7.7	0.5
8/27/87	3:03	7.5	5.0	-
8/27/87	4:03	10.2	7.7	0.5
8/27/87	5:03	11.5	9.0	0.8
8/27/87	6:03	12.4	9.9	0.8
8/27/87	7:03	12.4	9.9	0.7
8/27/87	8:03	13.3	10.8	0.8
8/27/87	9:03	19.9	17.4	5.8
8/27/87	10:30	39.0	36.5	2.0
8/27/87	11:03	12.4	9.9	1.5
8/27/87	12:03	20.4	17.9	1.7
8/27/87	13:03	13.3	10.8	17.8
8/27/87	14:03	12.0	9.5	1.7
8/27/87	15:03	17.3	14.8	-
8/27/87	16:03	11.1	8.6	1.2
8/27/87	17:03	10.2	7.7	2.0
8/27/87	18:03	11.5	9.0	5.1
8/27/87	19:03	8.4	5.9	0.5
8/27/87	20:03	9.3	6.8	1.0
8/27/87	21:03	12.8	10.3	0.7
8/27/87	22:03	9.7	7.2	0.5
8/27/87	23:03	8.4	5.9	2.0
8/28/87	0:03	8.9	6.4	0.5
8/28/87	1:03	7.5	5.0	0.3
8/28/87	2:03	8.4	5.9	0.2
8/28/87	3:03	7.5	5.0	0.0
8/28/87	4:03	6.6	4.1	-
8/28/87	5:03	8.9	6.4	0.5
8/28/87	6:04	0.0	0.0	0.0
8/28/87	7:04	31.0	28.5	2.8
8/28/87	8:04	29.7	27.2	1.5
8/28/87	9:04	19.9	17.4	1.3
8/28/87	10:04	21.7	19.2	1.7

8/28/87	11:04	15.5	13.0	1.7
8/28/87	12:04	17.3	14.8	3.5
8/28/87	13:04	19.0	16.5	1.2
8/28/87	14:04	23.5	21.0	1.0
8/28/87	15:04	23.5	21.0	0.7
8/28/87	16:04	13.7	11.2	1.2
8/28/87	17:04	9.7	7.2	0.8
8/28/87	18:04	10.2	7.7	0.8
8/28/87	19:04	13.3	10.8	0.6
8/28/87	20:04	13.7	11.2	0.5
8/28/87	21:04	21.3	18.8	-
8/28/87	22:04	7.5	5.0	0.3
8/28/87	23:04	7.1	4.6	0.3
8/29/87	0:04	15.9	13.4	0.3
8/29/87	1:04	12.4	9.9	0.5
8/29/87	2:04	7.5	5.0	0.3
8/29/87	3:04	8.4	5.9	0.3
8/29/87	4:04	8.9	6.4	0.7
8/29/87	5:04	11.1	8.6	0.7
8/29/87	6:04	8.9	6.4	0.5
8/29/87	7:04	22.6	20.1	0.5
8/29/87	8:04	16.8	14.3	0.5
8/29/87	9:04	20.8	18.3	0.5
8/29/87	10:04	10.2	7.7	0.7
8/29/87	11:04	15.5	13.0	0.7
8/29/87	12:04	11.5	9.0	0.7
8/29/87	13:04	12.0	9.5	0.5
8/29/87	14:04	12.0	9.5	0.5
8/29/87	15:04	8.9	6.4	0.5
8/29/87	16:04	8.9	6.4	0.5
8/29/87	17:04	8.4	5.9	0.5
8/29/87	18:04	6.6	4.1	0.3
8/29/87	19:04	8.0	5.5	-
8/29/87	20:04	6.6	4.1	0.3
8/29/87	21:04	8.0	5.5	0.5
8/29/87	22:04	7.1	4.6	-
8/29/87	23:04	6.6	4.1	-
8/30/87	0:04	8.4	5.9	0.7
9/2/87	0:21	0.0	0.0	0.0
9/2/87	1:21	12.0	9.5	0.7
9/2/87	2:21	12.8	10.3	0.8
9/2/87	3:21	22.2	19.7	2.5
9/2/87	4:21	-	-	2.0
9/2/87	5:21	24.4	21.9	1.8
9/2/87	6:21	27.0	24.5	1.8
9/2/87	7:21	19.9	17.4	1.8
9/2/87	8:21	39.0	36.5	4.5
9/2/87	9:21	-	-	5.6
9/2/87	10:21	-	-	6.0

9/2/87	11:21	-	-	4.0
9/2/87	12:21	23.5	21.0	2.5
9/2/87	13:21	21.7	19.2	3.3
9/2/87	14:21	18.2	15.7	1.7
9/2/87	15:21	30.1	27.6	18.9
9/2/87	16:21	17.7	15.2	0.8
9/2/87	17:22	0.0	0.0	0.0
9/2/87	18:22	16.8	14.3	6.6
9/2/87	19:22	16.8	14.3	8.3
9/2/87	20:22	16.8	14.3	-
9/2/87	21:22	7.1	4.6	0.0
9/2/87	22:22	7.1	4.6	0.0
9/2/87	23:22	10.6	8.1	-
9/3/87	0:22	10.2	7.7	0.5
9/3/87	1:22	0.9	0.0	-
9/3/87	2:22	7.1	4.6	0.0
9/3/87	3:22	6.6	4.1	0.0
9/3/87	4:22	7.1	4.6	0.0
9/3/87	5:22	7.5	5.0	0.2
9/3/87	6:22	7.5	5.0	0.2
9/3/87	7:22	7.5	5.0	0.3
9/3/87	8:22	7.5	5.0	0.5
9/3/87	9:22	8.4	5.9	0.7
9/3/87	10:22	12.0	9.5	0.8
9/3/87	11:22	12.0	9.5	0.7
9/3/87	12:22	10.2	7.7	0.7
9/3/87	13:22	9.3	6.8	0.3
9/3/87	14:22	16.8	14.3	0.7
9/3/87	15:22	9.7	7.2	0.5
9/3/87	16:22	21.7	19.2	-
9/3/87	17:22	31.0	28.5	0.0
9/3/87	18:22	15.5	13.0	0.0
9/3/87	19:22	13.7	11.2	0.0
9/3/87	20:22	11.5	9.0	0.0
9/3/87	21:22	12.8	10.3	0.0
9/3/87	22:22	7.5	5.0	0.0
9/3/87	23:22	8.0	5.5	0.0
9/4/87	0:22	7.1	4.6	0.0
11/11/87	8:01	5.7	3.2	0.7
11/11/87	8:56	5.7	3.2	2.1
11/11/87	9:52	5.0	2.5	1.3
11/11/87	10:49	3.4	0.9	1.3
11/11/87	11:49	4.2	1.7	0.9
11/11/87	12:49	0.7	0.0	0.7
11/11/87	13:49	4.6	2.1	0.6
11/11/87	14:49	5.0	2.5	1.0
11/11/87	15:49	6.9	4.4	1.7
11/11/87	16:49	5.7	3.2	0.6
11/11/87	17:49	6.1	3.6	0.7

11/11/87	18:49	5.0	2.5	-
11/11/87	19:49	3.8	1.3	0.6
11/11/87	20:49	3.8	1.3	0.4
11/11/87	21:49	5.3	2.8	0.7
11/11/87	22:49	5.0	2.5	0.6
11/11/87	23:49	5.7	3.2	0.6
11/12/87	0:49	11.8	9.3	2.4
11/12/87	1:49	11.8	9.3	2.3
11/12/87	2:49	0.7	0.0	0.7
11/12/87	3:49	11.8	9.3	2.1
11/12/87	4:49	15.2	12.7	2.3
11/12/87	5:50	15.6	13.1	2.3
11/12/87	6:50	17.9	15.4	4.1
11/12/87	7:50	12.2	9.7	3.0
11/12/87	8:50	9.9	7.4	2.1
11/12/87	9:50	7.6	5.1	1.9
11/12/87	10:50	7.2	4.7	-
11/12/87	11:50	16.8	14.3	1.3
11/12/87	12:50	11.8	9.3	1.3
11/12/87	13:50	16.4	13.9	0.9
11/12/87	14:50	9.5	7.0	0.7
11/12/87	15:50	8.0	5.5	0.7
11/12/87	16:50	8.0	5.5	1.0
11/12/87	17:50	7.6	5.1	0.9
11/12/87	18:50	5.7	3.2	0.7
11/12/87	19:50	3.4	0.9	-
11/12/87	20:50	4.2	1.7	0.4
11/12/87	21:50	3.8	1.3	0.3
11/12/87	22:50	4.2	1.7	0.4
11/12/87	23:50	4.2	1.7	0.6
11/13/87	0:50	6.9	4.4	0.9
11/13/87	1:50	7.2	4.7	0.9
11/13/87	2:50	5.3	2.8	0.7
11/13/87	3:50	5.7	3.2	0.6
11/13/87	4:50	6.5	4.0	1.7
11/13/87	5:50	4.6	2.1	0.7
11/13/87	6:50	3.4	0.9	0.4
11/13/87	7:50	3.4	0.9	0.4
11/13/87	8:50	4.6	2.1	1.1
11/13/87	9:50	-	-	0.6
11/13/87	10:50	-	-	0.4
11/13/87	11:50	4.6	2.1	0.4
11/13/87	12:50	3.0	0.5	0.4
11/13/87	13:50	3.4	0.9	0.4
11/13/87	14:50	3.0	0.5	0.3
11/13/87	15:50	2.3	0.0	0.3
11/13/87	16:50	3.4	0.9	0.0
11/13/87	17:50	5.0	2.5	0.0
11/13/87	18:50	4.2	1.7	0.0

11/13/87	19:50	1.9	-0.6	0.0
11/13/87	20:50	-	-	0.0
11/13/87	21:50	3.4	0.9	0.0
11/13/87	22:50	2.3	-0.2	0.0
11/13/87	23:50	15.2	12.7	0.6
12/3/87	0:32	7.6	5.1	1.0
12/3/87	1:33	7.6	5.1	1.4
12/3/87	2:33	13.0	10.5	3.0
12/3/87	3:33	17.9	15.4	3.1
12/3/87	4:33	16.0	13.5	2.6
12/3/87	5:33	16.0	13.5	2.9
12/3/87	6:33	16.0	13.5	2.6
12/3/87	7:33	14.5	12.0	5.1
12/3/87	8:33	16.4	13.9	3.3
12/3/87	9:33	9.9	7.4	2.0
12/3/87	10:33	10.7	8.2	2.1
12/3/87	11:33	16.0	13.5	2.7
12/3/87	12:33	11.4	8.9	2.3
12/3/87	13:33	16.0	13.5	1.6
12/3/87	14:33	11.0	8.5	2.3
12/3/87	15:33	13.7	11.2	1.6
12/3/87	16:33	9.9	7.4	2.0
12/3/87	17:33	8.0	5.5	1.1
12/3/87	18:33	6.1	3.6	1.0
12/3/87	19:33	3.8	1.3	0.7
12/3/87	20:33	5.0	2.5	1.0
12/3/87	21:33	5.7	3.2	0.7
12/3/87	22:33	7.2	4.7	0.9
12/3/87	23:33	6.5	4.0	1.0
12/10/87	0:15	14.9	12.4	2.9
12/10/87	1:15	18.3	15.8	2.9
12/10/87	2:15	19.4	16.9	3.9
12/10/87	3:15	18.3	15.8	3.9
12/10/87	4:15	19.1	16.6	4.3
12/10/87	5:15	19.1	16.6	4.6
12/10/87	6:15	19.8	17.3	4.6
12/10/87	7:15	15.2	12.7	3.1
12/10/87	8:15	11.4	8.9	2.3
12/10/87	9:15	9.9	7.4	1.7
12/10/87	10:15	9.1	6.6	2.0
12/10/87	11:15	8.4	5.9	1.7
12/10/87	12:15	8.4	5.9	1.4
12/10/87	13:15	-	-	2.3
12/10/87	14:15	12.2	9.7	2.3
12/10/87	15:15	20.6	18.1	14.6
12/10/87	16:15	7.6	5.1	1.1
12/10/87	17:15	4.2	1.7	0.9
12/10/87	18:15	5.0	2.5	0.6
12/10/87	19:16	8.4	5.9	0.7

12/10/87	20:16	7.6	5.1	0.7
12/10/87	21:16	11.0	8.5	1.0
12/10/87	22:16	9.5	7.0	1.6
12/10/87	23:16	8.0	5.5	0.9
12/11/87	0:16	8.4	5.9	1.4
12/11/87	1:16	12.2	9.7	2.9
12/11/87	2:16	7.6	5.1	1.9
12/11/87	3:16	11.4	8.9	2.3
12/11/87	4:16	-	-	3.6
12/11/87	5:16	18.3	15.8	2.6
12/11/87	6:16	16.8	14.3	2.6
12/11/87	7:16	14.5	12.0	2.4
12/11/87	8:16	17.1	14.6	2.3
12/11/87	9:16	5.3	2.8	1.6
12/11/87	10:16	6.9	4.4	1.4
12/11/87	11:16	5.0	2.5	1.4
12/11/87	12:16	5.7	3.2	1.1
12/11/87	13:16	8.4	5.9	1.6
12/11/87	14:16	8.8	6.3	1.4
12/11/87	15:16	6.5	4.0	0.9
12/11/87	16:16	14.5	12.0	1.9
12/11/87	17:16	8.4	5.9	2.0
12/11/87	18:16	8.8	6.3	1.3
12/11/87	19:16	10.3	7.8	1.6
12/11/87	20:16	11.8	9.3	1.4
12/11/87	21:16	24.8	22.3	1.6
12/11/87	22:16	21.7	19.2	2.4
12/11/87	23:16	22.9	20.4	2.9
(-) datum not available				

	LOS ANGELES			
Date	Time, PST	CCl4 +CH3CCl3 as CH3CCl3, ppb	CH3CCl3, ppb	C2Cl4,ppb
6/24/87		9.0	6.5	0.0
6/24/87	1:53	7.6	5.1	1.2
6/24/87	2:53	8.1	5.6	0.0
6/24/87	3:53	7.6	5.1	1.2
6/24/87	4:53	7.6	5.1	1.1
6/24/87	5:53	8.1	5.6	0.0
6/24/87	6:53	9.5	7.0	0.0
6/24/87	7:53	9.5	7.0	2.0
6/24/87	8:53	12.4	9.9	2.1
6/24/87	9:53	10.5	8.0	1.8
6/24/87	10:53	11.9	9.4	2.1
6/24/87	11:53	14.3	11.8	2.5
6/24/87	11:43	8.1	5.6	1.6
6/24/87	13:53	5.7	3.2	16.0
6/24/87	14:53	5.2	2.7	0.0
6/24/87	15:53	7.6	5.1	0.0
6/24/87	17:07	5.2	2.7	0.7
6/24/87	18:07	9.0	6.5	0.0
6/24/87	20:30	6.2	3.7	0.0
6/24/87	21:30	4.8	2.3	0.0
6/24/87	22:30	4.8	2.3	0.0
6/24/87	23:30	4.3	1.8	-
6/25/87	0:30	5.7	3.2	-
6/25/87	1:30	7.1	4.6	-
6/25/87	2:30	9.5	7.0	-
6/25/87	3:30	10.0	7.5	1.6
6/25/87	4:30	7.6	5.1	0.5
6/25/87	5:30	7.6	5.1	1.4
6/25/87	6:30	7.6	5.1	0.9
6/25/87	7:30	32.3	29.8	0.0
6/25/87	8:30	10.5	8.0	0.9
6/25/87	9:30	17.6	15.1	1.8
6/25/87	10:30	13.3	10.8	3.2
6/25/87	11:30	8.6	6.1	2.5
6/25/87	12:30	9.0	6.5	1.8
6/25/87	13:30	6.2	3.7	0.9
6/25/87	14:30	5.7	3.2	0.9
6/25/87	15:30	5.2	2.7	1.1
6/25/87	16:30	4.8	2.3	1.1
6/25/87	17:30	6.2	3.7	0.0
6/25/87	18:30	4.3	1.8	0.0
6/25/87	19:30	5.7	3.2	0.9
6/25/87	20:30	5.2	2.7	0.9

6/25/87	21:30	4.3	1.8	0.0
6/25/87	22:30	10.0	7.5	0.0
6/25/87	23:30	6.7	4.2	0.0
6/26/87	0:30	7.6	5.1	0.0
7/12/87	23:16	3.3	0.8	0.0
7/13/87	0:16	4.8	2.3	0.7
7/13/87	1:16	4.3	1.8	0.7
7/13/87	2:16	4.8	2.3	0.0
7/13/87	3:16	4.3	1.8	0.0
7/13/87	4:16	3.8	1.3	0.5
7/13/87	5:16	4.8	2.3	0.0
7/13/87	6:16	7.6	5.1	-
7/13/87	7:16	5.7	3.2	0.9
7/13/87	8:16	7.6	5.1	1.1
7/13/87	9:16	5.7	3.2	0.9
7/13/87	10:16	7.6	5.1	1.1
7/13/87	11:16	5.2	2.7	1.1
7/13/87	12:16	6.2	3.7	0.9
7/13/87	13:16	6.2	3.7	0.5
7/13/87	14:16	7.1	4.6	0.5
7/13/87	15:16	4.3	1.8	0.0
7/13/87	16:16	4.3	1.8	0.4
7/13/87	17:16	3.8	1.3	0.4
7/13/87	18:16	2.9	0.4	0.0
7/13/87	19:16	3.3	0.8	0.0
7/13/87	20:16	3.8	1.3	0.0
7/13/87	21:16	4.8	2.3	0.0
7/13/87	22:16	3.8	1.3	0.0
7/13/87	23:16	7.1	4.6	1.2
7/14/87	0:16	6.2	3.7	0.0
7/14/87	1:16	6.2	3.7	0.0
7/14/87	2:16	3.8	1.3	0.0
7/14/87	3:16	4.3	1.8	0.0
7/14/87	4:16	4.3	1.8	0.0
7/14/87	5:16	3.3	0.8	0.7
7/14/87	6:16	4.8	2.3	0.4
7/14/87	7:16	6.2	3.7	0.0
7/14/87	8:16	12.4	9.9	0.5
7/14/87	9:16	12.8	10.3	1.1
7/14/87	10:16	14.3	11.8	1.2
7/14/87	11:16	9.5	7.0	2.0
7/14/87	12:16	6.7	4.2	1.4
7/14/87	13:16	6.2	3.7	1.1
7/14/87	14:16	5.7	3.2	0.9
7/14/87	15:16	5.2	2.7	0.7
7/14/87	16:16	3.3	0.8	0.7
7/14/87	17:16	3.3	0.8	0.5
7/14/87	18:16	3.8	1.3	0.0
7/14/87	19:16	4.8	2.3	0.0

7/14/87	20:16	4.3	1.8	0.0
7/14/87	21:16	3.6	1.3	0.0
7/14/87	22:16	4.3	1.8	0.0
7/14/87	23:16	4.3	1.8	0.0
7/15/87	0:16	5.7	3.2	0.4
7/15/87	1:16	5.2	2.7	0.0
7/15/87	2:16	4.8	2.3	0.0
7/15/87	3:16	4.8	2.3	0.4
7/15/87	4:16	5.7	3.2	0.0
7/15/87	5:16	5.7	3.2	0.0
7/15/87	6:16	10.0	7.5	0.7
7/15/87	7:16	10.9	8.4	0.0
7/15/87	8:16	11.4	8.9	1.1
7/15/87	9:16	11.9	9.4	1.1
7/15/87	10:16	13.3	10.8	1.2
7/15/87	11:16	10.9	8.4	1.4
7/15/87	12:16	12.8	10.3	1.8
7/15/87	13:16	15.7	13.2	1.8
7/15/87	14:16	7.6	5.1	1.8
7/15/87	15:16	7.1	4.6	1.2
7/15/87	16:16	5.7	3.2	0.0
7/15/87	17:16	3.8	1.3	0.5
7/15/87	18:16	5.7	3.2	0.0
7/15/87	19:16	4.8	2.3	0.0
7/15/87	20:16	4.8	2.3	0.0
7/15/87	21:16	4.8	2.3	0.9
7/15/87	22:16	4.8	2.3	0.7
7/15/87	23:16	4.3	1.8	0.5
8/27/87	0:02	4.7	2.2	0.2
8/27/87	1:02	6.7	4.2	0.2
8/27/87	2:02	4.1	1.6	0.3
8/27/87	3:02	4.7	2.2	0.4
8/27/87	4:02	4.5	2.0	0.6
8/27/87	5:02	7.7	5.2	1.1
8/27/87	6:02	10.8	8.3	0.8
8/27/87	7:02	6.5	4.0	0.9
8/27/87	8:02	14.8	12.3	1.7
8/27/87	9:02	9.1	6.6	2.7
8/27/87	10:02	7.5	5.0	1.4
8/27/87	11:02	5.7	3.2	1.1
8/27/87	12:02	6.9	4.4	1.4
8/27/87	13:02	5.3	2.8	0.9
8/27/87	14:02	4.5	2.0	0.6
8/27/87	15:02	5.9	3.4	0.5
8/27/87	16:02	4.5	2.0	0.5
8/27/87	17:02	3.7	1.2	0.4
8/27/87	18:02	5.5	3.0	0.4
8/27/87	19:02	5.5	3.0	0.8
8/27/87	20:02	4.5	2.0	0.2

8/27/87	21:02	5.7	3.2	0.3
8/27/87	22:02	5.3	2.8	0.3
8/27/87	23:02	7.3	4.8	0.3
8/28/87	0:02	-	-	2.4
8/28/87	1:02	14.0	11.5	1.4
8/28/87	2:02	12.0	9.5	1.3
8/28/87	3:02	11.4	8.9	1.1
8/28/87	4:02	11.6	9.1	1.1
8/28/87	5:02	10.8	8.3	1.1
8/28/87	6:02	10.2	7.7	0.9
8/28/87	7:02	6.1	3.6	1.1
8/28/87	8:02	8.3	5.8	0.8
8/28/87	9:02	7.3	4.8	0.8
8/28/87	10:02	12.2	9.7	2.7
8/28/87	11:02	11.6	9.1	3.5
8/28/87	12:02	6.7	4.2	1.5
8/28/87	13:02	6.3	3.8	1.6
8/28/87	14:02	4.9	2.4	1.1
8/28/87	15:02	4.3	1.8	0.8
8/28/87	16:02	7.1	4.6	0.5
8/28/87	17:02	4.1	1.6	0.5
8/28/87	18:02	4.9	2.4	0.3
8/28/87	19:02	5.7	3.2	0.3
8/28/87	20:02	5.1	2.6	0.2
8/28/87	21:02	4.5	2.0	0.6
8/28/87	22:02	5.5	3.0	0.4
8/28/87	23:02	5.5	3.0	0.5
8/29/87	0:02	13.2	10.7	0.9
8/29/87	1:02	8.1	5.6	0.5
8/29/87	2:02	6.1	3.6	0.5
8/29/87	3:02	4.5	2.0	0.5
8/29/87	4:02	4.7	2.2	0.4
8/29/87	5:02	4.9	2.4	0.4
8/29/87	6:02	6.3	3.8	0.6
8/29/87	7:02	7.1	4.6	0.7
8/29/87	8:02	6.5	4.0	1.2
8/29/87	9:02	8.5	6.0	1.4
8/29/87	10:02	9.1	6.6	2.1
8/29/87	11:02	8.1	5.6	2.1
8/29/87	12:02	6.5	4.0	1.5
8/29/87	13:02	5.1	2.6	0.9
8/29/87	14:02	4.5	2.0	0.6
8/29/87	15:02	4.9	2.4	0.7
8/29/87	16:02	4.1	1.6	0.6
8/29/87	17:02	3.7	1.2	0.5
8/29/87	18:02	4.1	1.6	0.4
8/29/87	19:02	4.5	2.0	0.3
8/29/87	20:02	3.5	1.0	0.2
8/29/87	21:02	3.7	1.2	0.3

8/29/87	22:02	4.3	1.8	0.2
8/29/87	23:02	3.9	1.4	0.3
8/30/87	0:02	3.7	1.2	0.3
9/2/87	0:02	10.2	7.7	2.9
9/2/87	1:02	11.8	9.3	1.4
9/2/87	2:02	9.9	7.4	1.4
9/2/87	3:02	8.9	6.4	0.9
9/2/87	4:02	8.7	6.2	1.0
9/2/87	5:02	8.7	6.2	0.8
9/2/87	6:02	14.0	11.5	2.5
9/2/87	7:02	8.5	6.0	1.4
9/2/87	8:03	12.0	9.5	1.3
9/2/87	9:03	4.9	2.4	0.8
9/2/87	10:03	8.7	6.2	2.2
9/2/87	11:03	14.8	12.3	4.0
9/2/87	12:03	12.2	9.7	2.4
9/2/87	13:03	4.5	2.0	0.8
9/2/87	14:03	8.5	6.0	0.5
9/2/87	15:03	3.9	1.4	0.6
9/2/87	16:03	21.5	19.0	0.4
9/2/87	17:03	3.0	0.5	0.4
9/2/87	18:03	5.5	3.0	1.5
9/2/87	19:03	4.9	2.4	1.1
9/2/87	20:03	4.1	1.6	1.2
9/2/87	21:03	3.7	1.2	0.5
9/2/87	22:03	4.9	2.4	1.3
9/2/87	23:03	7.9	5.4	0.7
9/3/87	0:03	3.7	1.2	0.5
9/3/87	1:03	6.3	3.8	0.3
9/3/87	2:03	6.5	4.0	0.3
9/3/87	3:03	3.5	1.0	0.2
9/3/87	4:03	4.5	2.0	0.3
9/3/87	5:03	5.5	3.0	0.4
9/3/87	6:03	6.5	4.0	0.4
9/3/87	7:03	6.3	3.8	0.8
9/3/87	8:03	8.3	5.8	1.1
9/3/87	9:03	9.3	6.8	1.5
9/3/87	10:03	14.2	11.7	1.3
9/3/87	11:03	10.4	7.9	1.7
9/3/87	12:03	6.1	3.6	1.6
9/3/87	13:03	5.5	3.0	1.4
9/3/87	14:03	4.9	2.4	0.8
9/3/87	15:03	4.5	2.0	0.5
9/3/87	16:03	4.9	2.4	0.6
9/3/87	17:03	3.9	1.4	0.5
9/3/87	18:03	3.5	1.0	0.5
9/3/87	19:03	3.5	1.0	0.8
9/3/87	20:03	4.9	2.4	0.3
9/3/87	21:03	2.8	0.3	0.0

9/3/87	22:03	3.2	0.7	0.2
9/3/87	23:03	4.5	2.0	0.2
9/4/87	0:03	3.9	1.4	0.2
11/11/87	23:14	9.3	6.8	0.8
11/11/87	1:14	11.4	8.9	1.1
11/11/87	2:14	11.0	8.5	1.0
11/11/87	3:14	9.3	6.8	0.9
11/11/87	4:14	6.1	3.6	0.4
11/11/87	5:14	10.4	7.9	2.1
11/11/87	6:14	14.6	12.1	2.1
11/11/87	7:14	10.6	8.1	0.6
11/11/87	8:14	15.8	13.3	3.3
11/11/87	9:14	18.3	15.8	1.8
11/11/87	10:14	13.2	10.7	2.7
11/11/87	11:14	9.5	7.0	0.8
11/11/87	12:14	5.3	2.8	0.7
11/11/87	13:14	5.1	2.6	1.6
11/11/87	14:14	5.1	2.6	0.8
11/11/87	15:14	21.7	19.2	0.8
11/11/87	16:14	7.9	5.4	1.1
11/11/87	17:14	8.5	6.0	1.3
11/11/87	18:14	13.4	10.9	1.0
11/11/87	19:14	14.4	11.9	1.7
11/11/87	20:14	9.7	7.2	1.5
11/11/87	21:14	11.8	9.3	1.8
11/11/87	22:14	10.8	8.3	1.2
11/11/87	23:15	9.5	7.0	1.4
11/12/87	0:15	13.0	10.5	2.3
11/12/87	1:15	19.9	17.4	1.4
11/12/87	2:15	10.6	8.1	1.4
11/12/87	3:15	9.7	7.2	1.4
11/12/87	4:15	11.4	8.9	1.5
11/12/87	5:15	17.5	15.0	2.1
11/12/87	6:15	10.4	7.9	1.3
11/12/87	7:15	13.4	10.9	2.7
11/12/87	8:15	17.7	15.2	2.1
11/12/87	9:15	17.1	14.6	1.7
11/12/87	10:15	6.3	3.8	1.7
11/12/87	11:15	8.5	6.0	1.7
11/12/87	12:15	9.5	7.0	0.8
11/12/87	13:15	16.6	14.1	2.1
11/12/87	14:15	14.2	11.7	2.7
11/12/87	15:15	17.7	15.2	1.7
11/12/87	16:15	9.9	7.4	1.2
11/12/87	17:15	7.7	5.2	0.6
11/12/87	18:15	6.1	3.6	0.5
11/12/87	19:15	7.3	4.8	0.8
11/12/87	20:15	11.6	9.1	0.6
11/12/87	21:15	15.0	12.5	1.6

11/12/87	22:15	17.3	14.8	2.5
11/12/87	23:15	14.0	11.5	2.0
11/13/87	0:15	13.0	10.5	1.7
11/13/87	2:15	14.8	12.3	1.0
11/13/87	3:15	13.4	10.9	1.1
11/13/87	4:15	10.8	8.3	1.1
11/13/87	5:15	11.4	8.9	1.1
11/13/87	6:15	14.0	11.5	1.1
11/13/87	7:15	16.2	13.7	3.3
11/13/87	8:15	9.9	7.4	1.0
11/13/87	9:15	10.8	8.3	1.0
11/13/87	10:15	12.0	9.5	1.7
11/13/87	11:15	19.9	17.4	2.1
11/13/87	12:15	15.6	13.1	1.6
11/13/87	13:15	13.2	10.7	2.3
11/13/87	14:15	11.6	9.1	1.9
11/13/87	15:15	9.1	6.6	1.5
11/13/87	16:15	6.9	4.4	0.5
11/13/87	17:15	4.7	2.2	0.8
11/13/87	18:15	6.9	4.4	0.3
11/13/87	19:15	6.3	3.8	0.7
11/13/87	20:15	4.5	2.0	0.8
11/13/87	21:15	13.0	10.5	0.4
11/13/87	22:15	5.3	2.8	0.2
11/13/87	23:15	5.1	2.6	0.5
11/14/87	0:15	5.1	2.6	0.4
12/3/87	0:12	13.2	10.7	2.1
12/3/87	1:12	12.2	9.7	1.9
12/3/87	2:12	12.4	9.9	1.9
12/3/87	3:12	11.2	8.7	1.9
12/3/87	4:12	13.4	10.9	2.2
12/3/87	5:12	15.6	13.1	2.4
12/3/87	6:12	14.6	12.1	3.6
12/3/87	7:12	15.0	12.5	2.4
12/3/87	8:12	13.6	11.1	2.2
12/3/87	9:12	7.7	5.2	1.5
12/3/87	10:12	9.1	6.6	1.4
12/3/87	11:12	9.3	6.8	1.3
12/3/87	12:12	6.1	3.6	1.0
12/3/87	13:12	5.1	2.6	0.9
12/3/87	14:12	11.2	8.7	2.1
12/3/87	15:12	10.2	7.7	1.9
12/3/87	16:12	8.1	5.6	1.7
12/3/87	17:12	6.9	4.4	0.9
12/3/87	18:12	12.6	10.1	1.7
12/3/87	19:12	6.3	3.8	0.8
12/3/87	20:12	11.8	9.3	1.2
12/3/87	21:12	15.0	12.5	1.7
12/3/87	22:12	13.4	10.9	1.3

12/3/87	23:12	19.9	17.4	1.4
12/4/87	0:12	15.2	12.7	2.1
12/10/87	0:30	-	-	2.4
12/10/87	1:30	14.6	12.1	2.1
12/10/87	2:30	-	-	1.7
12/10/87	3:30	16.6	14.1	2.6
12/10/87	4:30	16.6	14.1	2.4
12/10/87	5:30	14.4	11.9	3.0
12/10/87	6:30	8.3	5.8	1.4
12/10/87	7:30	18.7	16.2	3.5
12/10/87	8:30	12.2	9.7	2.2
12/10/87	9:30	19.5	17.0	2.2
12/10/87	10:30	9.5	7.0	1.0
12/10/87	11:30	9.7	7.2	2.1
12/10/87	12:30	8.3	5.8	1.9
12/10/87	13:30	11.4	8.9	3.7
12/10/87	14:30	9.9	7.4	1.1
12/10/87	15:30	8.9	6.4	1.0
12/10/87	16:31	6.5	4.0	1.8
12/10/87	17:31	9.5	7.0	1.7
12/10/87	18:31	11.6	9.1	1.7
12/10/87	19:31	-	-	2.2
12/10/87	20:31	11.8	9.3	1.9
12/10/87	21:31	11.2	8.7	2.4
12/10/87	22:31	12.8	10.3	2.4
12/10/87	23:31	-	-	2.6
12/11/87	0:31	16.4	13.9	2.3
12/11/87	1:31	13.0	10.5	2.4
12/11/87	2:31	18.7	16.2	1.9
12/11/87	3:31	19.3	16.8	2.4
12/11/87	4:31	16.4	13.9	1.9
12/11/87	5:31	18.7	16.2	2.4
12/11/87	6:31	16.4	13.9	2.1
12/11/87	7:31	16.8	14.3	2.2
12/11/87	8:31	18.9	16.4	2.3
12/11/87	9:31	14.6	12.1	3.4
12/11/87	10:31	13.4	10.9	1.2
12/11/87	11:31	13.2	10.7	1.8
12/11/87	12:31	15.8	13.3	2.0
12/11/87	13:31	-	-	0.2
12/11/87	14:31	17.9	15.4	0.2
12/11/87	15:31	14.8	12.3	3.1
12/11/87	16:31	13.6	11.1	2.4
12/11/87	17:31	-	-	4.7
12/11/87	18:31	-	-	5.5
12/11/87	19:31	19.1	16.6	4.3
12/11/87	20:31	16.0	13.5	3.2
12/11/87	21:31	-	-	4.3
12/11/87	22:31	-	-	3.4

12/11/87	23:31	19.5	17.0	2.3
(-) datum not available				

	RUBIDOUX			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3, ppb	CH3CCl3, ppb	C2Cl4,ppb
6/19/87	0:21	6.1	3.5	-
6/19/87	0:50	6.1	3.5	-
6/19/87	1:21	6.1	3.5	-
6/19/87	1:50	6.1	3.5	-
6/19/87	2:21	4.9	2.3	-
6/19/87	2:50	4.9	2.3	-
6/19/87	3:21	6.1	3.5	-
6/19/87	3:50	6.1	3.5	-
6/19/87	4:21	6.1	3.5	-
6/19/87	4:50	6.1	3.5	-
6/19/87	5:21	4.9	2.3	-
6/19/87	5:50	6.1	3.5	-
6/19/87	6:21	6.1	3.5	-
6/19/87	6:50	6.1	3.5	-
6/19/87	7:21	6.1	3.5	-
6/19/87	7:50	6.1	3.5	-
6/19/87	8:21	7.3	4.7	-
6/19/87	8:50	6.1	3.5	-
6/19/87	9:21	7.3	4.7	-
6/19/87	9:50	7.3	4.7	-
6/19/87	10:21	7.3	4.7	-
6/19/87	10:50	8.5	6.0	-
6/19/87	11:21	7.3	4.7	1.4
6/19/87	11:50	4.9	2.3	-
6/19/87	12:21	6.1	3.5	-
6/19/87	12:50	6.1	3.5	-
6/19/87	13:22	4.9	2.3	-
6/19/87	13:50	6.1	3.5	-
6/19/87	14:22	7.3	4.7	-
6/19/87	14:50	6.1	3.5	-
6/19/87	15:22	6.1	3.5	-
6/19/87	15:51	6.1	3.5	-
6/19/87	16:22	6.1	3.5	-
6/19/87	16:51	4.9	2.3	-
6/19/87	17:22	6.1	3.5	-
6/19/87	17:51	6.1	3.5	-
6/19/87	18:22	4.9	2.3	-
6/19/87	18:51	6.1	3.5	-
6/19/87	19:22	4.9	2.3	-
6/19/87	19:51	6.1	3.5	-
6/19/87	20:22	4.9	2.3	7.7
6/19/87	20:51	4.9	2.3	11.8
6/19/87	21:22	3.6	1.1	-

6/19/87	21:49	-	-	-
6/19/87	22:22	4.9	2.3	-
6/19/87	ND	0.0	-2.6	-
6/24/87	6:28	10.9	8.4	0.9
6/24/87	7:28	9.7	7.2	-
6/24/87	8:28	10.9	8.4	-
6/24/87	9:28	12.2	9.6	0.9
6/24/87	10:28	12.2	9.6	0.9
6/24/87	11:28	12.2	9.6	0.9
6/24/87	12:29	14.6	12.0	1.8
6/24/87	13:29	12.2	9.6	1.4
6/24/87	14:29	10.9	8.4	1.4
6/24/87	5:57	9.7	7.2	0.9
6/24/87	16:29	12.2	9.6	0.9
6/24/87	17:29	10.9	8.4	0.9
6/24/87	18:29	10.9	8.4	1.4
6/24/87	19:29	8.5	6.0	-
6/24/87	20:29	9.7	7.2	0.9
6/24/87	21:29	8.5	6.0	0.9
6/24/87	22:29	8.5	6.0	-
6/24/87	23:29	8.5	6.0	-
6/25/87	0:29	9.7	7.2	-
6/25/87	1:29	10.9	8.4	-
6/25/87	2:29	7.3	4.7	-
6/25/87	3:29	8.5	6.0	-
6/25/87	4:29	10.9	8.4	-
6/25/87	5:29	8.5	6.0	0.9
6/25/87	6:29	9.7	7.2	-
6/25/87	7:29	12.2	9.6	-
6/25/87	8:29	9.7	7.2	-
6/25/87	9:29	12.2	9.6	-
6/25/87	10:29	12.2	9.6	1.4
6/25/87	11:29	13.4	10.8	0.9
6/25/87	12:29	14.6	12.0	1.4
6/25/87	13:29	12.2	9.6	1.4
6/25/87	14:29	9.7	7.2	0.9
6/25/87	15:29	10.9	8.4	0.9
6/25/87	16:29	9.7	7.2	0.9
6/25/87	17:29	9.7	7.2	-
6/25/87	18:29	9.7	7.2	0.9
6/25/87	19:29	9.7	7.2	0.9
6/25/87	20:29	9.7	7.2	-
6/25/87	21:29	8.5	6.0	-
6/25/87	22:29	12.2	9.6	-
6/25/87	23:29	8.5	6.0	-
6/26/87	0:29	12.2	9.6	0.9
7/12/87	23:57	7.3	4.7	-
7/13/87	0:57	7.3	4.7	-
7/13/87	1:57	8.5	6.0	-

7/13/87	2:57	8.5	6.0	-
7/13/87	3:57	7.3	4.7	-
7/13/87	4:57	7.3	4.7	-
7/13/87	5:58	8.5	6.0	-
7/13/87	6:58	8.5	6.0	-
7/13/87	7:58	15.8	13.2	-
7/13/87	8:58	10.9	8.4	-
7/13/87	9:58	7.3	4.7	-
7/13/87	10:58	8.5	6.0	-
7/13/87	11:58	10.9	8.4	0.9
7/13/87	12:58	10.9	8.4	0.9
7/13/87	13:58	12.2	9.6	1.4
7/13/87	14:58	12.2	9.6	1.4
7/13/87	15:58	13.4	10.8	1.4
7/13/87	16:58	12.2	9.6	1.4
7/13/87	17:58	12.2	9.6	0.9
7/13/87	18:58	8.5	6.0	-
7/13/87	19:58	9.7	7.2	-
7/13/87	20:58	8.5	6.0	0.9
7/13/87	21:58	10.9	8.4	1.4
7/13/87	22:58	13.4	10.8	0.9
7/13/87	23:58	10.9	8.4	0.9
7/14/87	0:58	10.9	8.4	-
7/14/87	1:58	10.9	8.4	-
7/14/87	2:58	12.2	9.6	-
7/14/87	3:58	12.2	9.6	-
7/14/87	4:58	12.2	9.6	0.9
7/14/87	5:58	13.4	10.8	0.9
7/14/87	6:58	12.2	9.6	-
7/14/87	7:58	10.9	8.4	-
7/14/87	8:58	14.6	12.0	-
7/14/87	9:58	12.2	9.6	-
7/14/87	10:58	9.7	7.2	0.9
7/14/87	11:58	8.5	6.0	0.9
7/14/87	12:58	12.2	9.6	1.8
7/14/87	13:58	12.2	9.6	1.4
7/14/87	14:58	12.2	9.6	1.8
7/14/87	16:48	17.0	14.5	1.8
7/14/87	17:42	17.0	14.5	1.4
7/14/87	18:42	14.6	12.0	1.4
7/14/87	19:42	14.6	12.0	1.4
7/14/87	20:42	10.9	8.4	-
7/14/87	21:42	10.9	8.4	-
7/14/87	22:42	10.9	8.4	-
7/14/87	23:42	10.9	8.4	-
7/15/87	0:42	12.2	9.6	-
7/15/87	1:42	10.9	8.4	-
7/15/87	2:42	12.2	9.6	-
7/15/87	3:42	10.9	8.4	-

7/15/87	4:42	10.9	8.4	-
7/15/87	5:42	12.2	9.6	-
7/15/87	6:42	12.2	9.6	-
7/15/87	7:42	12.2	9.6	-
7/15/87	8:42	12.2	9.6	-
7/15/87	9:42	13.4	10.8	-
7/15/87	10:42	13.4	10.8	-
7/15/87	11:42	15.8	13.2	1.8
7/15/87	12:42	14.6	12.0	1.4
7/15/87	13:42	13.4	10.8	1.4
7/15/87	14:42	13.4	10.8	1.4
7/15/87	15:42	13.4	10.8	1.4
7/15/87	16:42	14.6	12.0	1.4
7/15/87	17:42	13.4	10.8	0.9
7/15/87	18:42	13.4	10.8	1.4
7/15/87	19:42	13.4	10.8	-
7/15/87	20:42	13.4	10.8	-
7/15/87	21:42	10.9	8.4	-
7/15/87	22:42	12.2	9.6	-
7/15/87	23:42	12.2	9.6	-
7/16/87	0:42	24.3	21.7	0.9
8/26/87	19:15	12.5	10.0	1.0
8/26/87	20:15	12.5	10.0	1.2
8/26/87	21:15	12.5	10.0	0.9
8/26/87	22:15	12.5	10.0	0.9
8/26/87	23:15	12.5	10.0	1.0
8/27/86	0:15	12.5	10.0	1.0
8/27/86	1:15	12.5	10.0	1.0
8/27/86	2:15	12.5	10.0	0.9
8/27/86	3:15	12.5	10.0	0.9
8/27/86	4:15	13.9	11.4	0.9
8/27/86	5:15	15.8	13.3	1.0
8/27/86	6:15	17.6	15.1	1.2
8/27/86	7:15	23.7	21.2	1.2
8/27/86	8:15	25.1	22.6	1.2
8/27/86	9:15	17.6	15.1	1.2
8/27/86	10:15	21.8	19.3	1.4
8/27/86	11:15	16.2	13.7	1.4
8/27/86	12:15	13.9	11.4	1.2
8/27/86	13:15	18.1	15.6	1.7
8/27/86	14:15	24.1	21.6	2.1
8/27/86	15:15	18.6	16.1	2.3
8/27/86	16:15	18.1	15.6	2.1
8/27/86	17:15	17.2	14.7	1.7
8/27/86	18:15	17.6	15.1	1.9
8/27/86	19:15	14.8	12.3	1.6
8/27/86	20:15	15.3	12.8	1.4
8/27/86	21:15	13.5	11.0	1.0
8/27/86	22:15	13.0	10.5	1.0

8/27/86	23:15	13.9	11.4	1.2
8/28/87	0:15	13.9	11.4	0.9
8/28/87	1:15	13.5	11.0	1.0
8/28/87	2:16	13.0	10.5	0.9
8/28/87	3:16	26.4	23.9	1.0
8/28/87	4:16	26.4	23.9	1.0
8/28/87	5:16	18.6	16.1	1.0
8/28/87	6:16	18.1	15.6	1.4
8/28/87	7:16	23.7	21.2	1.0
8/28/87	8:16	18.6	16.1	1.2
8/28/87	9:56	16.7	14.2	1.2
8/28/87	10:57	14.4	11.9	1.4
8/28/87	11:57	14.4	11.9	1.2
8/28/87	12:57	13.0	10.5	1.4
8/28/87	13:57	19.5	17.0	2.1
8/28/87	14:57	19.5	17.0	2.6
8/28/87	15:57	20.0	17.4	2.3
8/28/87	16:57	17.6	15.1	2.3
8/28/87	17:57	14.8	12.3	1.7
8/28/87	18:57	13.9	11.4	1.2
8/28/87	19:57	14.4	11.9	1.2
8/28/87	20:57	13.5	11.0	1.2
8/28/87	21:57	12.5	10.0	1.0
8/28/87	22:57	13.0	10.5	1.0
8/28/87	23:57	13.5	11.0	1.0
8/29/87	0:57	13.0	10.5	1.2
8/29/87	1:57	13.9	11.4	1.0
8/29/87	2:57	13.0	10.5	1.0
8/29/87	3:57	13.9	11.4	1.2
8/29/87	4:57	13.0	10.5	1.0
8/29/87	5:57	13.5	11.0	1.2
8/29/87	6:57	15.3	12.8	1.2
8/29/87	7:57	13.0	10.5	1.2
8/29/87	8:57	15.3	12.8	1.4
8/29/87	9:57	14.8	12.3	1.4
8/29/87	10:57	16.2	13.7	1.7
8/29/87	11:57	13.9	11.4	1.6
8/29/87	12:57	13.0	10.5	1.4
8/29/87	13:57	11.6	9.1	1.4
8/29/87	14:57	12.1	9.6	1.0
8/29/87	15:57	9.3	6.8	0.9
8/29/87	16:57	9.7	7.2	0.9
8/29/87	17:57	10.7	8.2	0.9
8/29/87	18:57	11.1	8.6	0.9
8/29/87	19:57	9.7	7.2	0.7
8/29/87	20:57	10.2	7.7	0.7
8/29/87	21:57	10.2	7.7	0.7
8/29/87	22:57	10.2	7.7	0.9
8/29/87	23:57	11.1	8.6	1.0

8/30/87	0:57	10.7	8.2	0.7
9/1/87	19:14	13.5	11.0	1.7
9/1/87	20:14	13.0	10.5	1.4
9/1/87	21:14	12.5	10.0	1.4
9/1/87	22:14	18.1	15.6	1.6
9/1/87	23:14	21.8	19.3	1.7
9/2/87	0:14	23.2	20.7	1.4
9/2/87	1:14	21.3	18.8	1.2
9/2/87	2:14	19.5	17.0	1.4
9/2/87	3:14	20.0	17.4	1.6
9/2/87	4:14	18.6	16.1	1.2
9/2/87	5:14	20.9	18.4	0.3
9/2/87	6:14	20.0	17.4	1.0
9/2/87	7:14	20.4	17.9	1.2
9/2/87	8:14	53.8	51.3	1.2
9/2/87	9:14	14.8	12.3	0.3
9/2/87	10:14	10.7	8.2	0.5
9/2/87	11:14	9.7	7.2	0.5
9/2/87	12:14	9.7	7.2	0.3
9/2/87	13:14	16.7	14.2	0.7
9/2/87	14:14	11.1	8.6	0.3
9/2/87	15:14	8.4	5.8	0.0
9/2/87	16:14	8.8	6.3	0.0
9/2/87	17:14	18.1	15.6	0.3
9/2/87	18:14	20.0	17.4	2.3
9/2/87	19:14	17.2	14.7	1.9
9/2/87	20:14	17.2	14.7	1.9
9/2/87	21:14	14.8	12.3	1.6
9/2/87	22:14	13.5	11.0	1.4
9/2/87	23:14	13.0	10.5	1.0
9/3/87	0:14	13.0	10.5	1.0
9/3/87	1:14	12.5	10.0	1.0
9/3/87	2:14	12.1	9.6	1.0
9/3/87	3:14	13.0	10.5	1.0
9/3/87	4:14	13.0	10.5	1.2
9/3/87	5:14	13.9	11.4	1.4
9/3/87	6:14	14.4	11.9	1.2
9/3/87	7:14	26.4	23.9	1.4
9/3/87	8:14	20.9	18.4	1.7
9/3/87	9:14	15.3	12.8	1.4
9/3/87	10:15	18.1	15.6	1.2
9/3/87	11:15	11.1	8.6	0.9
9/3/87	12:15	14.4	11.9	1.0
9/3/87	13:15	13.5	11.0	1.2
9/3/87	15:32	11.1	8.6	1.0
9/3/87	16:32	10.7	8.2	1.0
9/3/87	17:32	11.1	8.6	0.9
9/3/87	18:32	10.2	7.7	0.9
9/3/87	19:32	12.1	9.6	0.9

9/3/87	20:32	11.1	8.6	1.2
9/3/87	21:32	10.7	8.2	1.2
9/3/87	22:32	10.7	8.2	1.0
9/3/87	23:33	8.6	6.3	0.7
(-) datum not available				

	SAN NICOLAS ISLAND			
Date	Time, PST	CCl4+CH3CCl3 as CH3CCl3,ppb	CH3CCl3, ppb	C2Cl4,ppb
7/12/87	23:44	2.6	0.1	0.3
7/13/87	0:44	2.6	0.1	-
7/13/87	1:44	3.0	0.5	-
7/13/87	2:44	2.6	0.1	-
7/13/87	3:44	3.0	0.5	-
7/13/87	4:44	3.0	0.5	-
7/13/87	5:44	3.7	1.2	-
7/13/87	6:44	3.0	0.5	-
7/13/87	7:44	2.6	0.1	-
7/13/87	8:44	3.0	0.5	-
7/13/87	9:44	3.0	0.5	-
7/13/87	10:44	3.0	0.5	-
7/13/87	11:44	3.0	0.5	-
7/13/87	12:44	3.0	0.5	-
7/13/87	13:44	3.0	0.5	0.1
7/13/87	14:44	3.3	0.9	-
7/13/87	15:44	3.0	0.5	-
7/13/87	16:44	3.0	0.5	-
7/13/87	17:44	3.3	0.9	-
7/13/87	18:44	3.3	0.9	-
7/13/87	19:44	3.3	0.9	-
7/13/87	20:44	3.0	0.5	-
7/13/87	21:44	3.0	0.5	0.3
7/13/87	22:44	3.3	0.9	1.0
7/13/87	23:44	3.3	0.9	0.3
7/14/87	0:45	3.7	1.2	-
7/14/87	1:45	3.0	0.5	-
7/14/87	2:45	3.0	0.5	-
7/14/87	3:45	3.3	0.9	-
7/14/87	4:45	3.0	0.5	-
7/14/87	5:45	3.0	0.5	-
7/14/87	6:45	3.3	0.9	1.3
7/14/87	7:45	2.2	0.0	-
7/14/87	8:45	3.3	0.9	-
7/14/87	9:45	3.0	0.5	-
7/14/87	10:45	3.0	0.5	-
7/14/87	11:45	3.3	0.9	-
7/14/87	12:45	3.0	0.5	-
7/14/87	13:45	3.3	0.9	-
7/14/87	14:45	3.0	0.5	-
7/14/87	15:45	3.0	0.5	-
7/14/87	16:45	3.0	0.5	0.3
7/14/87	17:45	3.0	0.5	-

7/14/87	18:45	3.0	0.5	-
7/14/87	19:45	2.6	0.1	-
7/14/87	20:45	3.0	0.5	-
7/14/87	21:45	3.0	0.5	-
7/14/87	22:45	3.3	0.9	0.6
7/14/87	23:45	3.0	0.5	-
7/15/87	0:45	3.3	0.9	-
7/15/87	1:45	3.0	0.5	-
7/15/87	2:45	3.0	0.5	-
7/15/87	3:45	3.0	0.5	-
7/15/87	4:45	3.0	0.5	-
7/15/87	5:45	3.0	0.5	0.7
7/15/87	6:45	3.3	0.9	-
7/15/87	7:45	3.0	0.5	0.3
7/15/87	8:45	3.3	0.9	-
7/15/87	9:45	3.7	1.2	-
7/15/87	10:45	3.0	0.5	-
7/15/87	11:45	3.0	0.5	0.3
7/15/87	12:45	2.6	0.1	-
7/15/87	13:45	3.0	0.5	-
7/15/87	14:45	3.0	0.5	-
7/15/87	15:45	2.6	0.1	1.9
7/15/87	16:45	3.3	0.9	-
7/15/87	17:45	3.0	0.5	-
7/15/87	18:45	3.0	0.5	-
7/15/87	19:45	3.0	0.5	0.3
7/15/87	20:45	2.6	0.1	-
7/15/87	21:45	3.3	0.9	-
7/15/87	22:45	3.3	0.9	-
7/15/87	23:45	3.3	0.9	-
(-) datum not available				