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Monitoring and Data Analysis for the Vadose Zone Monitoring System (VZMS), McClellan AFB

Quarterly Status Report

8/15/97–11/15/97

P.T. Zawislanski, H.S. Mountford, R. Dahlquist,
S.J. Rodriguez, and R. Salve

Earth Sciences Division

December 1997

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Monitoring and Data Analysis for the Vadose Zone Monitoring System (VZMS), McClellan AFB

Quarterly Status Report (8/15/97-11/15/97)

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1.0 INTRODUCTION

This report contains information on field and laboratory work performed between August 15th and November 15th, 1997 at site S-7 in IC 34, at McClellan AFB. At this location, a Vadose Zone Monitoring System (VZMS) (LBNL, 1996) is currently being used to collect subsurface data including hydraulic potential, soil gas pressure, moisture content, water chemistry, gas chemistry, and temperature.

This report describes:

- moisture content changes, based on neutron logging
- gas-phase VOC concentrations
- time-series gas phase VOC measurements (to test reproducibility)
- aqueous-phase VOC concentrations
- temperature profiles
- pressure readings

2.0 RESULTS

2.1 Moisture Content--Neutron Probe Readings

Neutron logging provides a one-dimensional distribution of moisture content in the formation. Due to the presence of casing and backfill material, as well as the spatial variability of geologic properties of the medium, this information is largely qualitative, although relative percentage change in moisture content at any one point can be quantified. Therefore, this tool is best used to measure changes in the moisture distribution, whether due to evaporation or rainfall infiltration. In conjunction with moisture content data from cores, a calibration of neutron counts to moisture content is possible.

Neutron logging was performed at the site on 10/17/97 using a CPN 503DR Hydroprobe consisting of a 50 mCi Am-Be neutron source and a He detector of thermal neutrons. An obstruction in Well NP-A at 25 ft continues to prevent the logging of this hole below that depth. It has been concluded that the inability to lower the neutron logging tool beyond this depth is probably due to a slight bend in the casing at that point in conjunction with the fact that the casing is not nominal-2-inch ID well-casing, but rather 2-inch PVC pipe, the ID of which is less than 2 inches. The pipe can probably be reamed to increase its inside diameter, an operation which will be undertaken in the next few weeks.

Well NP-B was logged to a depth of 98 ft. Results of measurements in Well NP-B are shown in Fig. 1, where a comparison with data from previous measurements is made. The data are presented as ratios of readings taken in the borehole to readings taken in a standard shielded casing. As seen from these results, the relative moisture content in the formation did not change significantly between 7/97 and 10/97, although the depth-integrated mean relative change in moisture content showed a decrease of 2%.

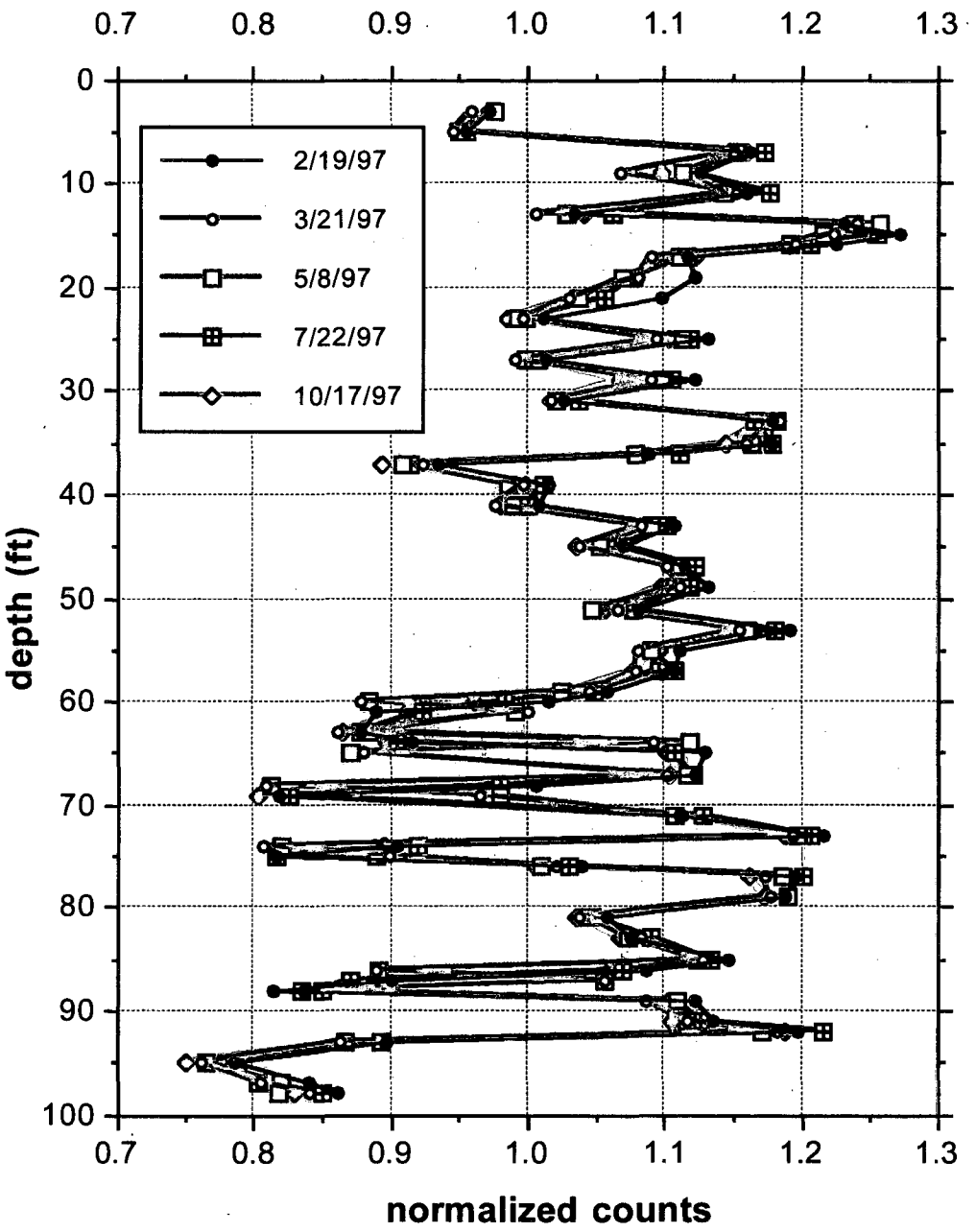

Figure 1. Normalized neutron counts measured in Well NP-B over the period 12/95 to 7/97.

2.2 Gas-Phase VOC Concentrations

The gas phase is being sampled via in-situ gas samplers consisting of a 7.62 cm long, 100 μm porous metal cylinder with welded top and bottom flanges. A 1/4 in diameter stainless steel tube extends out from the top flange and is connected using Swagelok™ compression fittings to a 1/4 in Teflon tube that goes up to the ground surface. In order to purge the gas collected in the gas probe, a photo-ionization detector (PID-580) is used. The sampler is purged until the PID reading is stable. The PID is then disconnected and a gas sample is collected by applying a vacuum through

an absorbent tube. A calibrated volumetric pump is used for this purpose and the exact time and volume collected are recorded. The absorbent tube is sealed with brass Swagelok™ compression fittings lined with Teflon gaskets. This sampling method does not require refrigeration and the sample holding time is 25 days. EPA TO14 analyses are performed by the Environmental Measurements Laboratory of LBNL.

To date, five complete sets of gas samples have been collected at the site, on 4/4/97, 5/8/97, 7/22/97, 8/26/97, and 10/23/97. The analysis of the 4/4/97 samples from Well A was out of control due to problems with sample dilution. Because of the relatively high concentrations of certain compounds, the sampling time, i.e. the sample volume, was greatly reduced after the first sampling event, thereby preventing the full saturation of the charcoal tubes and reducing the need to split the sample. Unfortunately, this resulted in higher quantification limits, thereby bringing the concentrations of minor compounds below a reportable concentration. For the last sampling event, (10/23/97) an intermediate volume of soil gas (0.1 L) was sampled from every sampling port and the samples taken from those ports which registered 10 ppm or more on the PID were split 10X before being analyzed. This approach has been most adequate because it allows for the analysis of compounds over a wide range of concentrations while relying on a more representative and spatially consistent sample size. The representativeness of a 0.1 L soil gas sample was tested and the results are presented in Section 2.3.

TCE, cis-1,2-DCE, and Freon have been identified as the major contaminants in the system. In a previous progress report (LBNL, 1997a), acetone was identified as a major contaminant, based on its very high (> 9,000 ppbv) concentration at a depth of 6 ft on 4/4/97. At all other depths acetone was either not detected or was at concentrations below 500 ppbv. Acetone has not been detected in any of the subsequent samples. In the same progress report, the Freon was identified as Freon-113. Further analysis of those and newer results suggest that it is not Freon-113, but rather a more exotic Freon, recently identified as Freon 123a and confirmed in the liquid phase as well. Data from previously analyzed samples will be re-processed in an attempt to back-calculate Freon 123a concentrations in those samples. Therefore, Freon 123a data are not presented at this time, but will be presented in a future report.

Time-trends in TCE and cis-1,2-DCE concentrations in the gas phase are shown in Figs. 2–5. In order to show trends at both high and low concentrations, enlarged views of the lower concentration regions are shown in Fig. 2b–5b. As consistently observed, TCE concentrations are highest in the upper part of the profile, between depths of 6 and 11 ft, and also immediately above the water table, at 110 ft, indicating that there are either two sources of TCE, or that TCE from a near-surface source has migrated through the vadose zone towards the water table (Figs. 2 and 3). However, cis-1,2-DCE data show a somewhat different trend (Figs. 4 and 5), in that there is only one major peak in concentration, at depth of 6 and 11 ft. This suggests that the TCE peak at the water table may not be the result of TCE migration from the surface but rather a distinct source. This explanation is further supported by the distribution of Freon (not shown in this report; see LBNL 1997b). Freon is found only within 25 ft of the water table, with the highest concentrations found at the deepest monitoring points.

Large increases in both TCE and DCE, mainly at depths of 6–11 ft, have been observed on 8/26/97 and 10/17/97, in both Wells A and B. Such increases may be due to the vertical displacement of the contaminated gas plume or the contaminant in the liquid phase as well. On the other hand, because of the vertically limited extent of the primary contamination, and the resultant steep concentration gradient, very slight vertical movement in the gas phase could result in large changes in measured gas-phase VOC concentrations. Whether these changes are consistent or seasonal, or perhaps even diurnal, remains to be seen. The possibility of diurnal changes due to pressure and temperature fluctuations will be investigated by the sampling of soil gas from selected sample ports on a bi-hourly basis over a period of 24 to 48 hours in the near future.

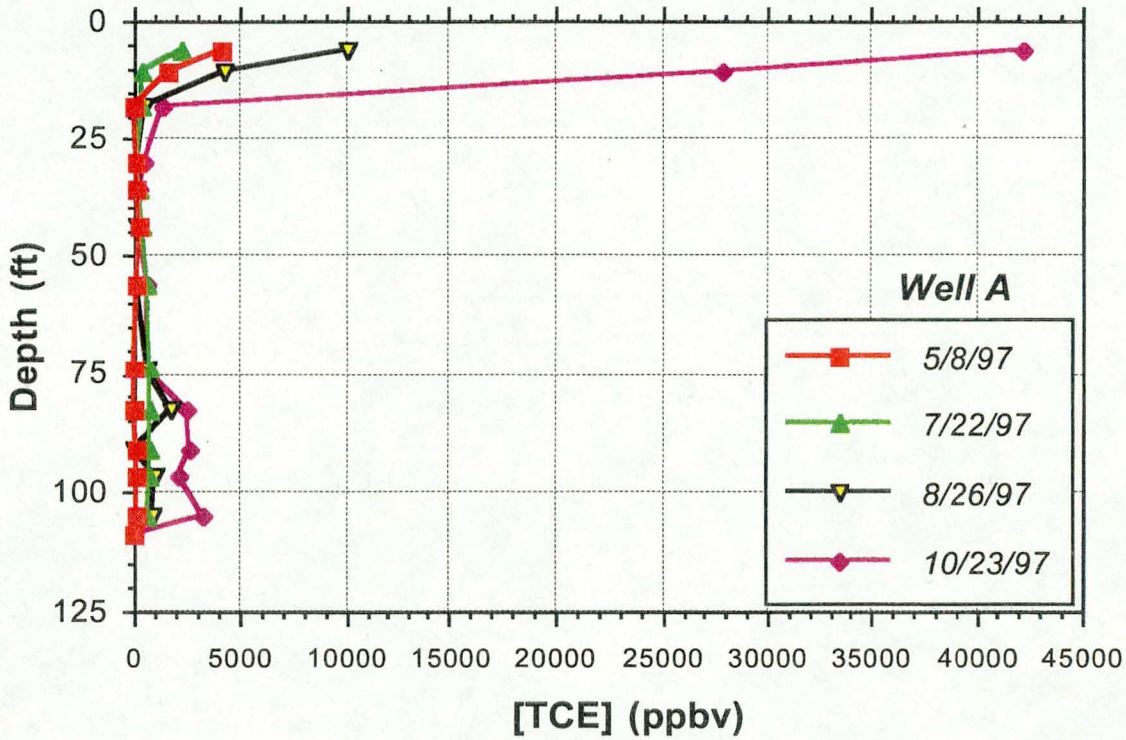

Figure 2a. TCE concentrations in the gas-phase, as measured in Well A on 5/8/97, 7/22/97, 8/26/97, and 10/23/97.

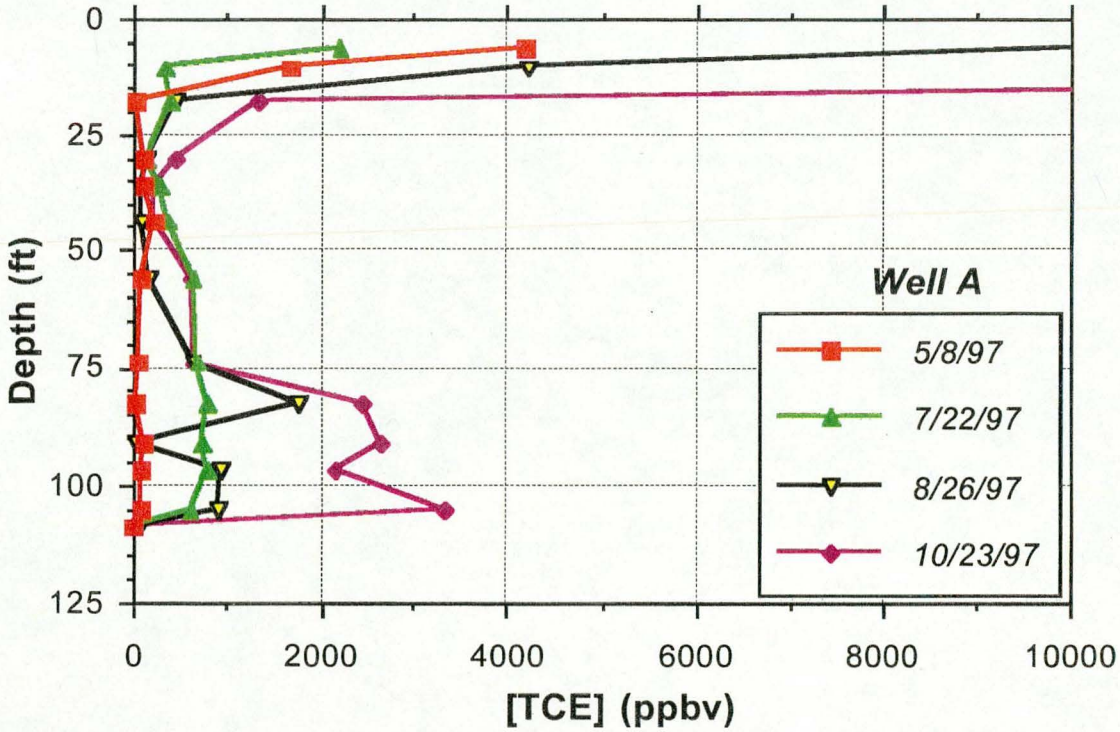

Figure 2b. TCE concentrations in the gas-phase, as measured in Well A on 5/8/97, 7/22/97, 8/26/97, and 10/23/97,with expanded concentration scale.

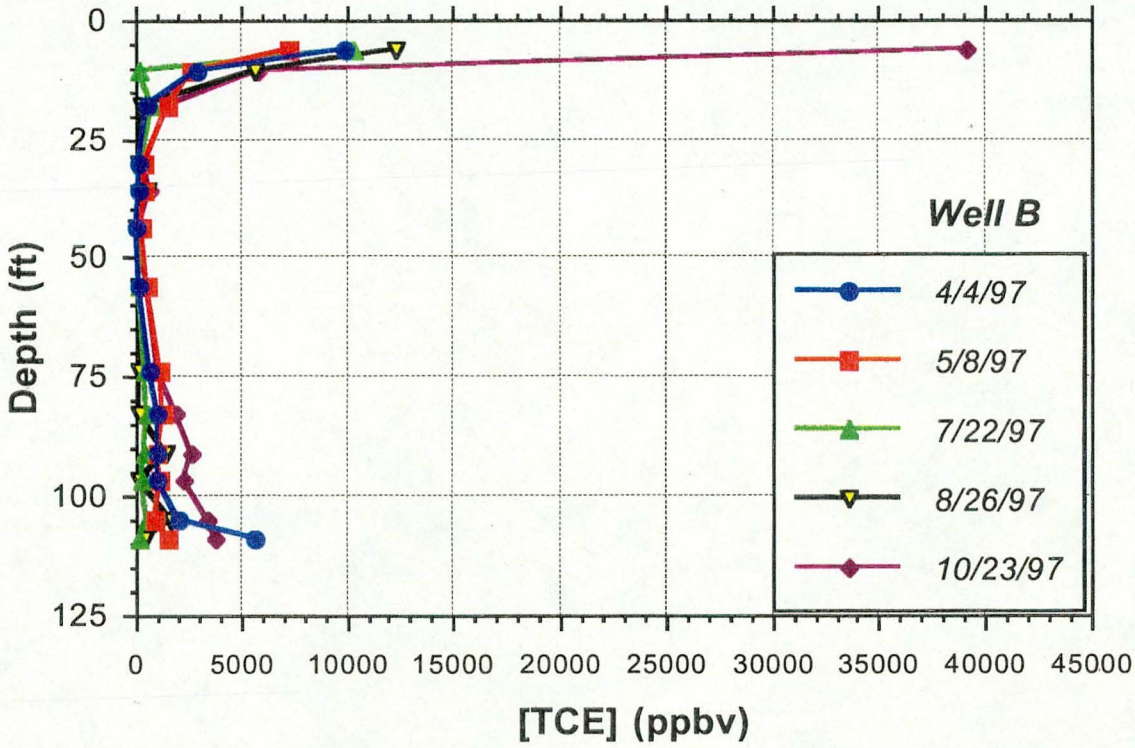

Figure 3a. TCE concentrations in the gas-phase, as measured in Well B on 4/4/97, 5/8/97, 7/22/97, 8/26/97, and 10/23/97.

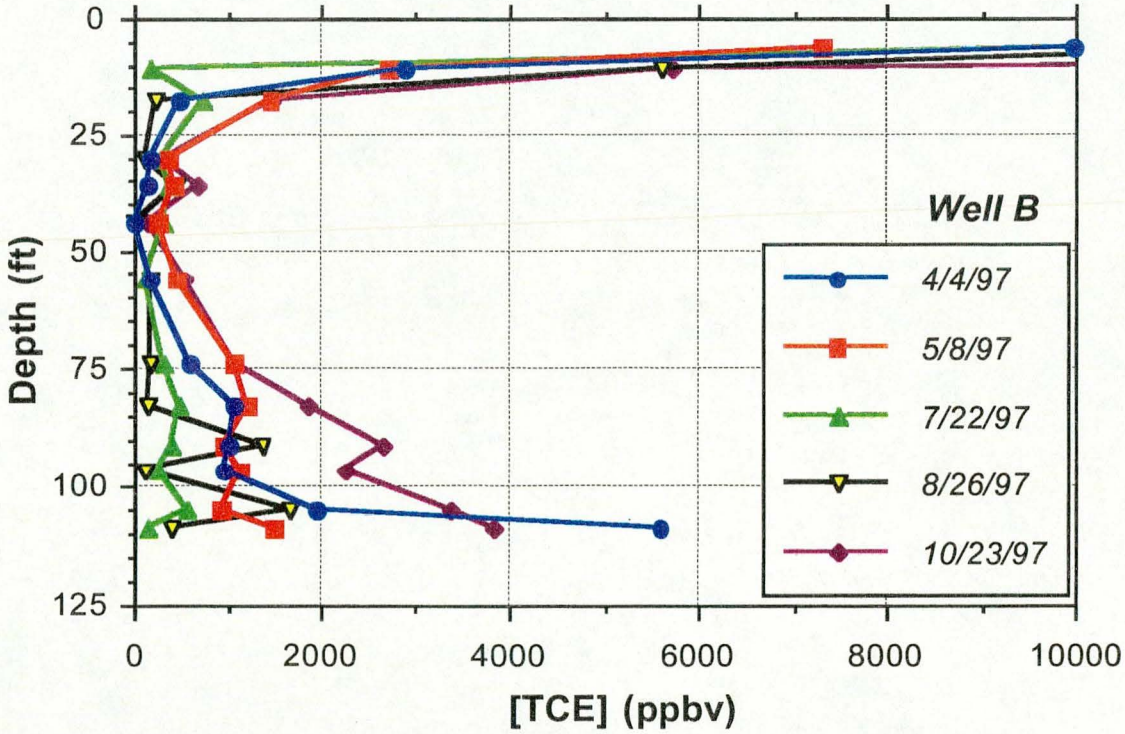

Figure 3b. TCE concentrations in the gas-phase, as measured in Well B on 4/4/97, 5/8/97, 7/22/97, 8/26/97, and 10/23/97, with expanded concentration scale.

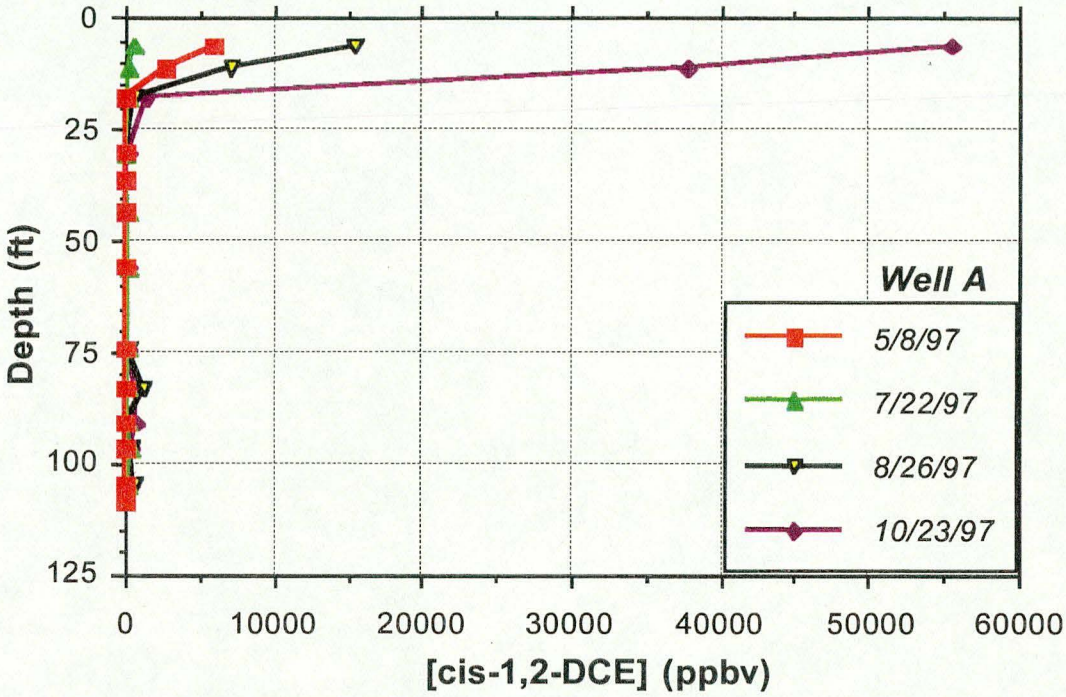

Figure 4a. Cis-1,2-DCE concentrations in the gas-phase, as measured in Well A on 5/8/97, 7/22/97, 8/26/97, and 10/23/97.

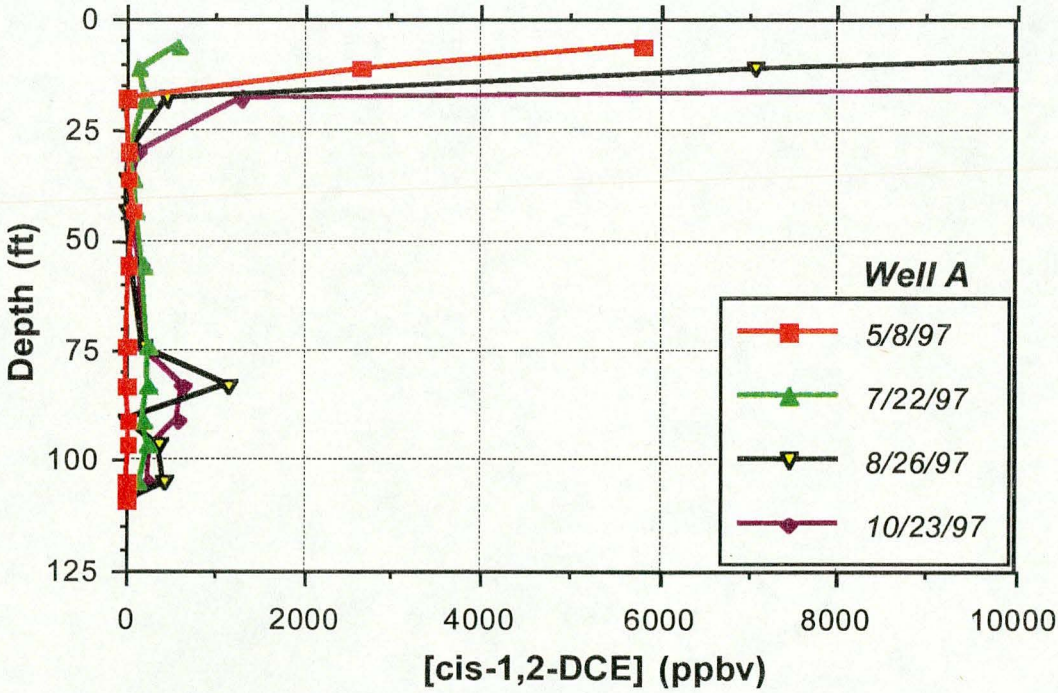

Figure 4b. Cis-1,2-DCE concentrations in the gas-phase, as measured in Well A on 5/8/97, 7/22/97, 8/26/97, and 10/23/97, with expanded concentration scale.

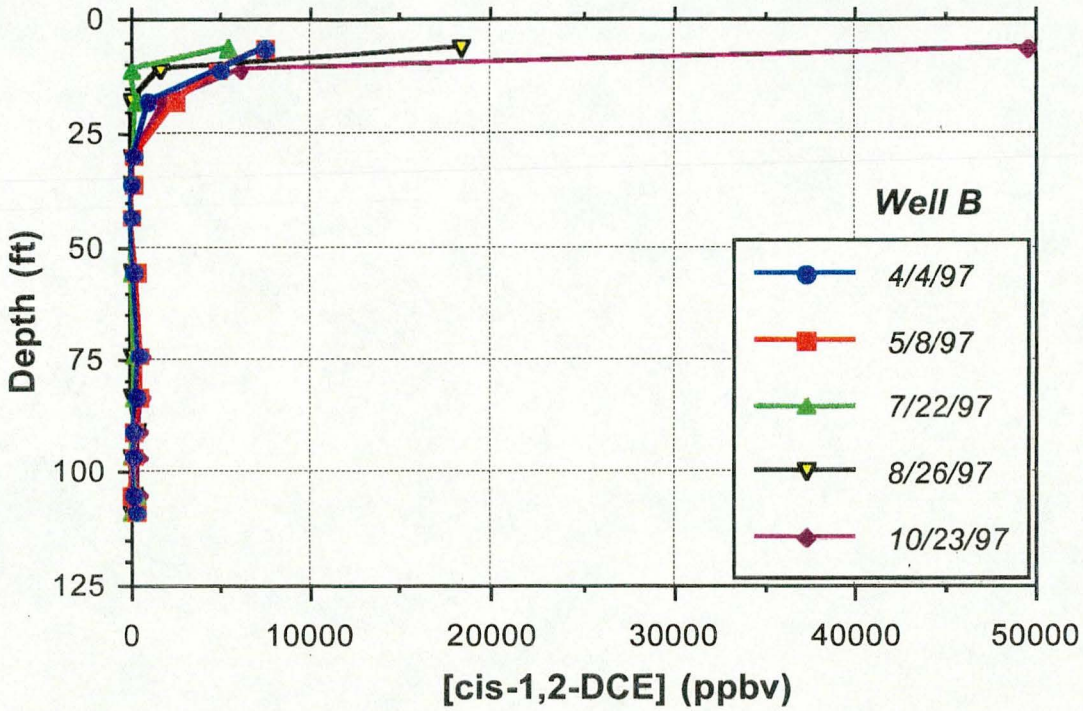

Figure 5a. Cis-1,2-DCE concentrations in the gas-phase, as measured in Well B on 4/4/97, 5/8/97, 7/22/97, 8/26/97, and 10/23/97.

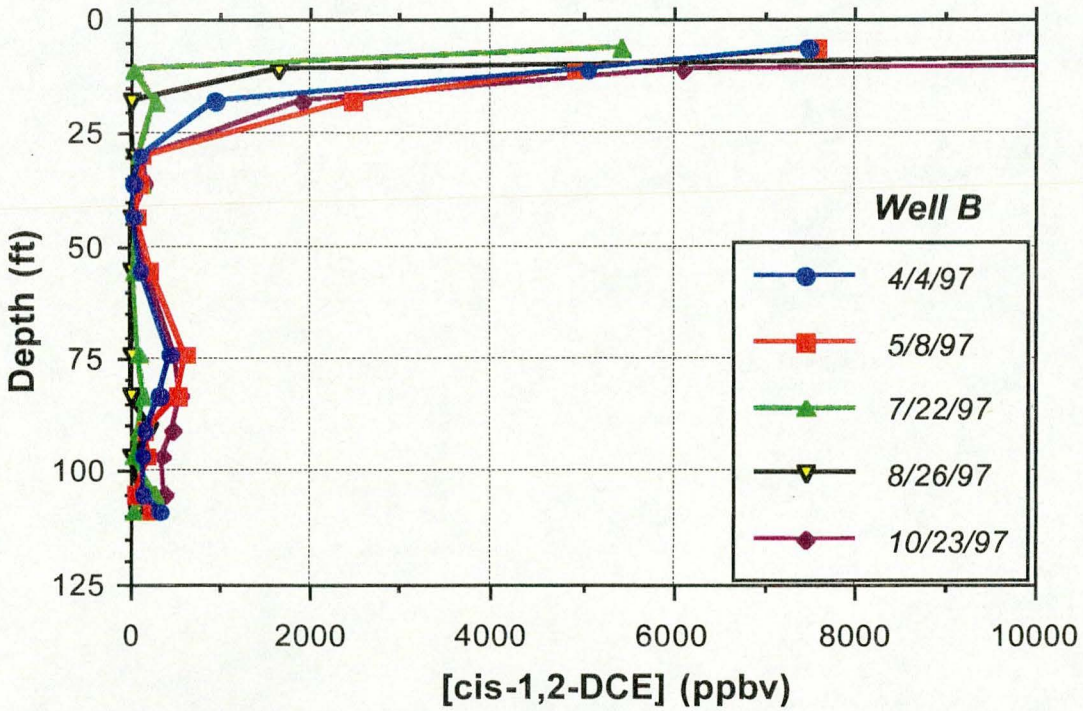

Figure 5b. Cis-1,2-DCE concentrations in the gas-phase, as measured in Well B on 4/4/97, 5/8/97, 7/22/97, 8/26/97, and 10/23/97, with expanded concentration scale.

2.3 Test of Soil Gas Sample Volume Representativeness

Due to the relatively high VOC concentrations present at several levels within the monitored profile, it is necessary to limit the volume of soil gas passed through charcoal sampling tubes in order to prevent the saturation of adsorption sites on the charcoal, as well as to minimize the need for many-fold dilutions prior to analysis. Unfortunately, this means that a rather small volume of soil gas is actually sampled. Although approximately 0.5 L of soil gas is withdrawn prior to sampling (as part of the PID measurement), and samples are not collected until a plateau in PID-measured concentrations is observed, the representativeness of a 0.1 L sample may be questioned, especially when the lateral variability of VOC concentrations is not known. Therefore, a test was conducted in order to establish the degree of VOC concentration variability, and therefore uncertainty, one should expect when sampling such a small volume of soil gas. The test consisted of the following steps:

a) sample at least 0.5 L of soil gas from a high-VOC soil (level A-13, at a depth of 6 ft) through the PID until a plateau is reached, much as is done for routine sampling;

b) sample 0.1 L of soil gas through a charcoal trap (1 minute sampling time);

c) repeat step (b) consecutively nine more times, for a total of ten 0.1 L samples;

d) perform steps a) through c) from a low-VOC soil (level A-5, at a depth of 83 ft).

The results of this test are shown in Tables 1 and 2 for levels A-13 and A-5, respectively. As is clear from these data, the 0.1 L soil gas sample volume is a representative subsample of a larger volume of soil gas. The coefficient of variance (CV) for each major compound in both the low and high concentration sample is below 20%. In samples from level A-13, the TCE and cis-1,2-DCE reproducibility from sample to sample was better than 90%. No time trends in VOC concentrations were observed. It is therefore concluded that the currently practiced procedure for soil gas sampling results in a representative sample, and that the spatial variability in VOC concentrations in the soil gas is not distinguishable on the scale of a 1 L volume, over approximately 30 minutes.

Table 1. VOC concentrations in 0.1 L samples of soil gas, collected consecutively, 1 minute at a time, from sample port AG13 (Well A, depth of 6 ft). BFB% = recovery of bromofluorobenzene surrogate.

Sample ID	Cis-1,2-DCE	Trans-1,2-DCE	TCE	BFB %
SAG13-1	52200	341	41400	94%
SAG13-2	44600	279	36300	93%
SAG13-3	45600	298	36400	94%
SAG13-4	43900	267	35000	90%
SAG13-5	50500	426	37200	91%
SAG13-6	44400	286	35400	92%
SAG13-7	41600	266	33400	91%
SAG13-8	47800	319	37300	90%
SAG13-9	47600	336	36500	87%
SAG13-10	48600	326	37800	91%
Mean	**46680**	**314**	**36670**	91%
STDEV	3250	47.9	2099	2.1%
CV (%)	7%	15%	6%	2%

Table 2. VOC concentrations in 0.1 L samples of soil gas, collected consecutively, 1 minute at a time, from sample port AG5 (Well A, depth of 83 ft).

Sample ID	Cis-1,2-DCE	1,1-DCA	TCE
SAG5-1	429	40	1666
SAG5-2	474	39	1827
SAG5-3	378	31	1457
SAG5-4	468	34	1581
SAG5-5	400	41	1554
SAG5-6	443	59	1729
SAG5-7	313	32	1224
SAG5-8	381	46	1456
SAG5-9	404	55	1587
SAG5-10	288	33	1125
Mean	**398**	**41**	**1521**
STDEV	61	9.6	216
CV (%)	15%	23%	14%

2.4 Liquid-Phase VOC Concentrations

Liquid-phase VOCs are sampled using two-chamber suction lysimeters designed for use at depths greater than 7-8 m. One 1/4-in and one 1/8-in tube connect the lysimeter to the surface. A miniature check valve separates the lower chamber from the upper chamber. A 0.5 μm porous stainless steel cylinder permits the collection of the sample which is drawn by vacuum through the check valve into the upper chamber. To withdraw a water sample from the soils into the suction lysimeter, a vacuum is applied to the tube connected to the top of the upper chamber. In order to bring the water sample to the surface, dry, purified gas, either N_2 or Ar, is used to pressurize the upper chamber, forcing the water sample up through the second tube that connects the bottom of the upper chamber to ground surface. The check valve closes, preventing liquid from being forced back into the lower chamber.

Lysimeter samples were extracted on 3/21, 3/25, 4/2, 4/11, 5/7, 7/17, and 10/23/97. Some of these samples were removed as part of the instrument testing process and were not analyzed. Due to the relative dryness of the formation, extracting water continues to be difficult. Generally, small, less than 20 mL samples, are collected over a period of a week. In many cases, samples are no greater than 5 mL. Therefore, 4- and 6-mL vials have been used to collect the samples in order to prevent or minimize headspace. Unfortunately, some samples are smaller than 4 mL and a headspace cannot be prevented. Samples smaller than 2 mL are analyzed, but results are not reported. Overall, samples have been extracted from 11 out of 26 suction lysimeters. It is assumed that more of the lysimeters will provide samples under wetter conditions present after winter rain events. It appears that several of the lysimeters are in a part of the formation where the pressure is lower than the air-entry value for the stainless-steel porous cups (approximately -600 mbar), preventing the collection of measureable quantities of sample. As discussed in a previous progress report (LBNL, 1997a), the vacuum extraction method inherently causes some partitioning of VOCs from the sampled water into the headspace. In order to perturb the system in a consistent manner during each sampling event, a one-week time period is used for vacuum extraction.

Although several compounds have been found to occur in the aqueous phase (LBNL, 1997a,b), TCE and cis-1,2-DCE are by far the dominant contaminants and only their distributions

are presented in this report. As mentioned in Section 2.2, Freon 123a was detected near the water table but its concentrations could not be calculated until very recently because the exact Freon was not known. The re-calculation of those values will be performed and the results will be presented in a subsequent report. Temporal changes in TCE concentrations in Well A and Well B are shown in Figs. 6 and 7, respectively, while cis-1,2-DCE values are shown in Figs. 8 and 9. These data exhibit trends similar to those seen in the gas phase: there are two peaks of TCE, one near the surface and one at the water table, but only one peak in cis-1,2-DCE, near the surface.

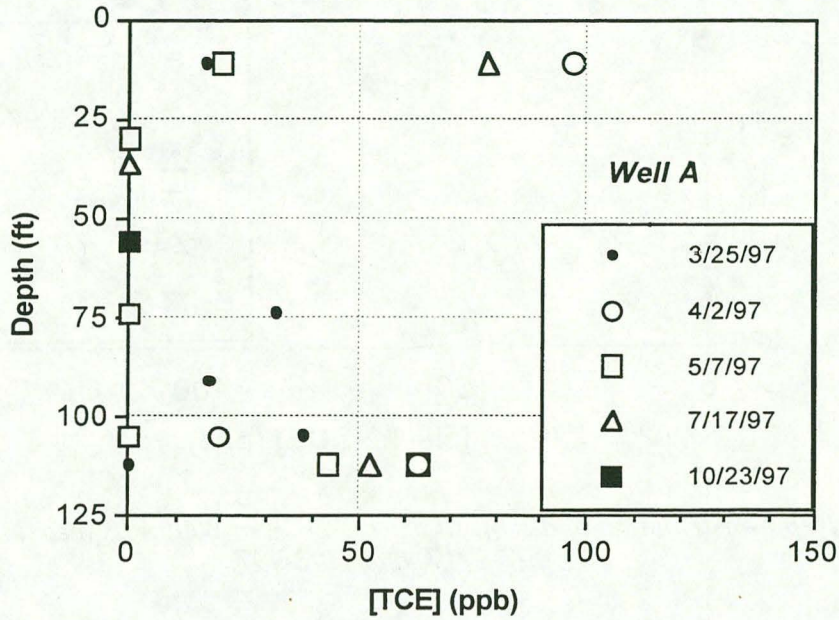

Figure 6. Depth-distribution of dissolved TCE in Well A as measured on 3/25, 4/2, 5/7, 7/17, and 10/23/97.

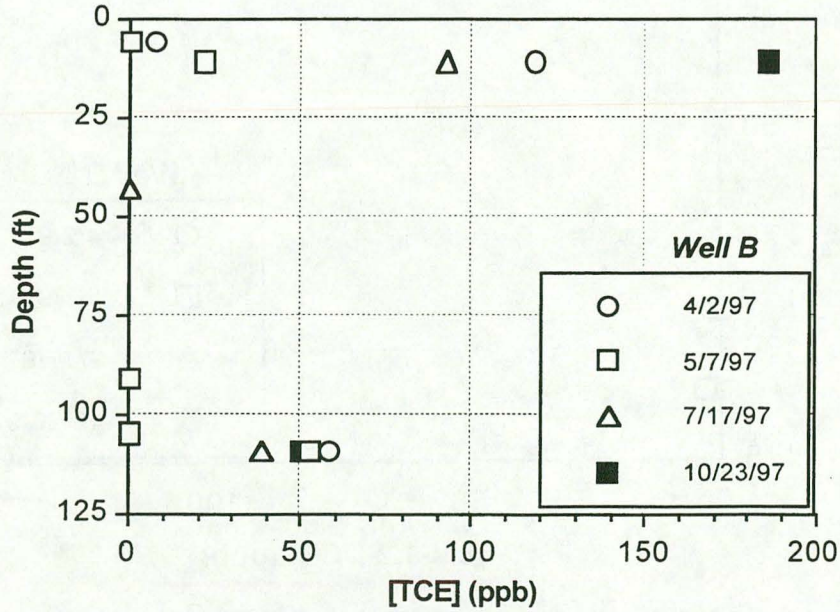

Figure 7. Depth-distribution of dissolved TCE in Well B as measured on 4/2, 5/7, 7/17, and 10/23/97.

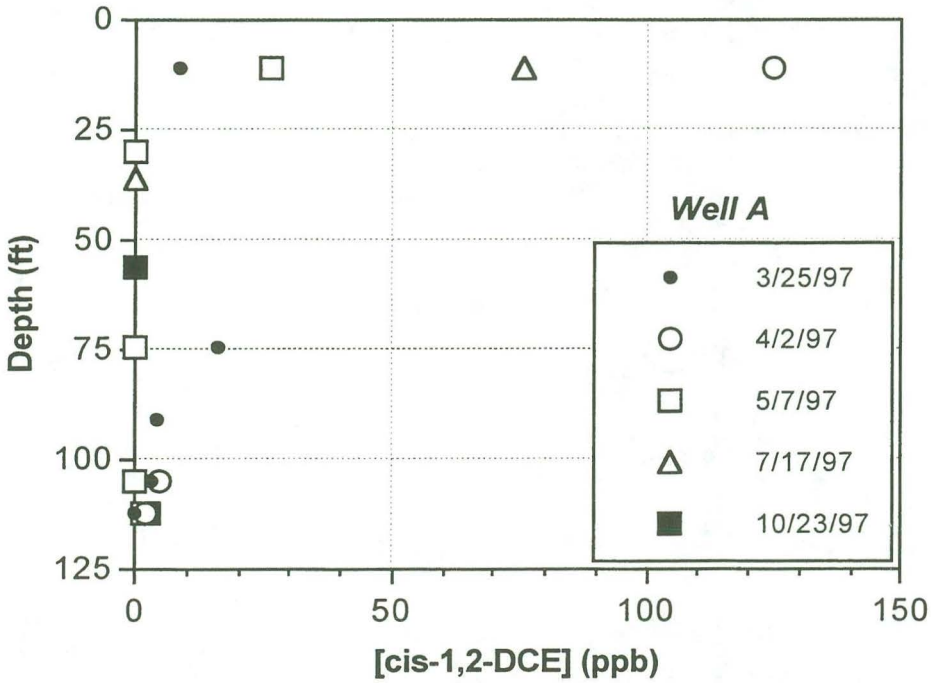

Figure 8. Depth-distribution of dissolved cis-1,2-DCE in Well A as measured on 3/25, 4/2, 5/7, 7/17, and 10/23/97.

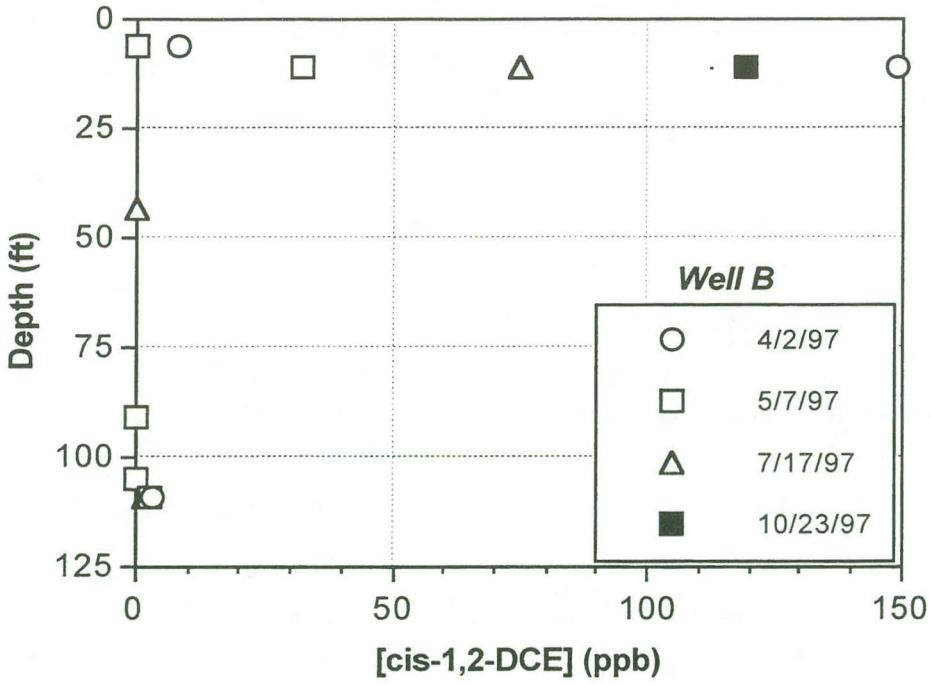

Figure 9. Depth-distribution of dissolved cis-1,2-DCE in Well B as measured on 4/2, 5/7, 7/17, and 10/23/97.

2.5 Temperature Distribution

Formation temperature is being measured using in-situ thermistors. The data are collected electronically in real time and the measured resistance is converted to temperature in °C using calibrations generated in the laboratory prior to installation. A sample of the results from 3/97, through 11/97 is shown in Fig. 10 for Well A (the distribution is very similar in Well B). Temperature did not fluctuate significantly below a depth of 25 ft in either well. However, seasonal fluctuations of as much as 12°C are observed at shallower depths. A gradual increase of temperature at a depth of 6 ft is observed from 3/97 to 8/97, followed by a gradual decrease through 11/97. At the 11-ft depth, temperature fluctuations are diminished in magnitude and lag behind the trends at the 6-ft depth, resulting in a reversal of the temperature gradient between those two depths in October and November. It is possible that such a reversal could cause the downward movement of the gas phase due to density gradients, potentially explaining increases in gas-phase VOCs at 6 and 11 ft. Diurnal temperature effects were not observed at any depth.

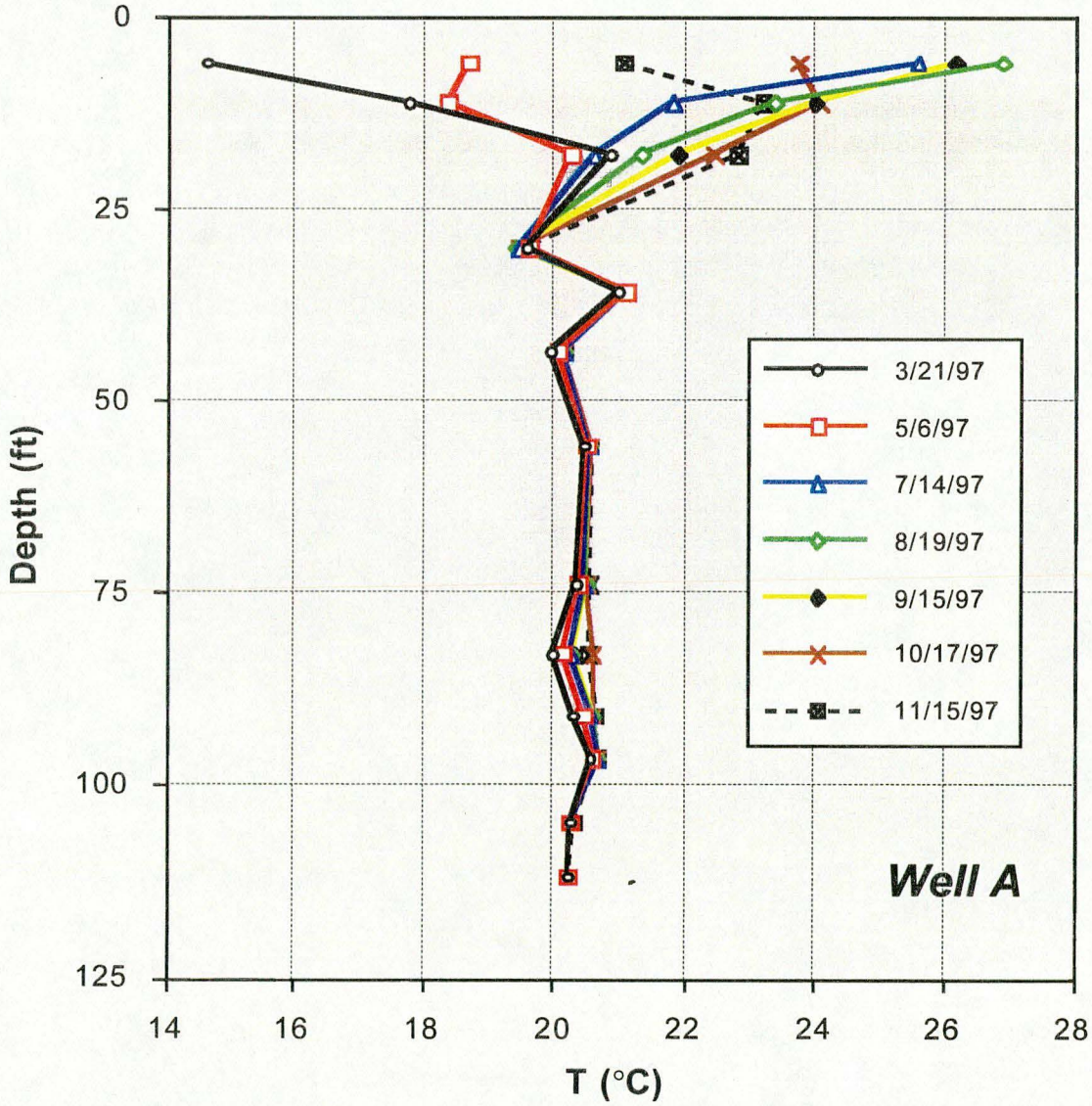

Figure 10. Temperature profile in Well A.

2.6 Gas-Phase and Liquid-Phase Pressure Distribution

Gas-phase pressure is being measured using the same probes as used for gas sampling. These are allowed to equilibrate with the subsurface environment and the pressure is measured using dedicated pressure transducers. In a previous progress report (LBNL, 1997), gas phase pressures were presented and compared with atmospheric pressure. Unfortunately, those results were based on erroneous transducer calibrations, and were, therefore, inaccurate, giving the impression of small vertical gradients in gas-phase pressure. Subsequent to transducer re-calibration, it became apparent that there are in fact no such gradients present. An example of corrected results for the period 7/24/97-8/4/97 is shown in Figs. 11 and 12 for Well A and B, respectively. Overall, gas-phase pressures are very close to atmospheric pressure, but display a slight lag and dampening relative to diurnal atmospheric pressure fluctuations. Both effects are to be expected given that the gas samplers are measuring pressure at depth, and serve to confirm that none of the samplers are leaking at the ground surface. Gas-phase pressure measured at the depth of 112 ft (SG-A-1) in Well A deviates from the common trend, though remains within 10 cm of water head of atmospheric pressure. This can be explained by the fact that this sampler is very near the water table and likely in the capillary fringe, which would impair pressure communication via the gas-phase. Gas-phase pressures at a depth of 109 ft (SG-B-1) also deviate from atmospheric, especially from mid-October to mid-November, when pressure there increases to approximately 15 cm above atmospheric. The explanation for this trend is not apparent.

Liquid-phase pressure measurements are being performed using a new design of an air-pocket tensiometer in which a porous tip is connected to a two-cell transducer with a constant water level above the porous tip. The tensiometer consists of three parts: (1) a porous tip of cylindrical shape, (2) a two-cell stainless steel transducer, and (3) a module consisting of three air-filled tubes that provide a means for measurements and maintenance. The porous tip was fabricated from a stainless steel porous tube and is filled with water and connected through a coupling to the two-cell transducer. Polyethylene tubing is used to connect the body of the tensiometer with pressure transducers at land surface.

The cumulative tensiometer data collected to date suggests that, with the exception of the deepest sample points (at 112 ft and 109 ft in Wells A and B, respectively), and possibly two other points in Well A, the matric potential in the formation is more negative than the air-entry pressure of the porous cups of the tensiometers (-500 to -600 mbar, equivalent to approximately -5 to -6 m water column). These observations are corroborated by the small number of lysimeters which yield water and the very small volume of water which they yield. Over the past 3 months, the number of lysimeters from which samples were collected and the volumes of those samples have both decreased, suggesting a drying out of the formation. It is possible that changes in moisture content due to seasonal rains may raise the matric potential above -500 mbar, thereby permitting the quantification of hydraulic head. However, under the present dry conditions, the majority of the tensiometers are out of range due to the large negative matric potential of the formation.

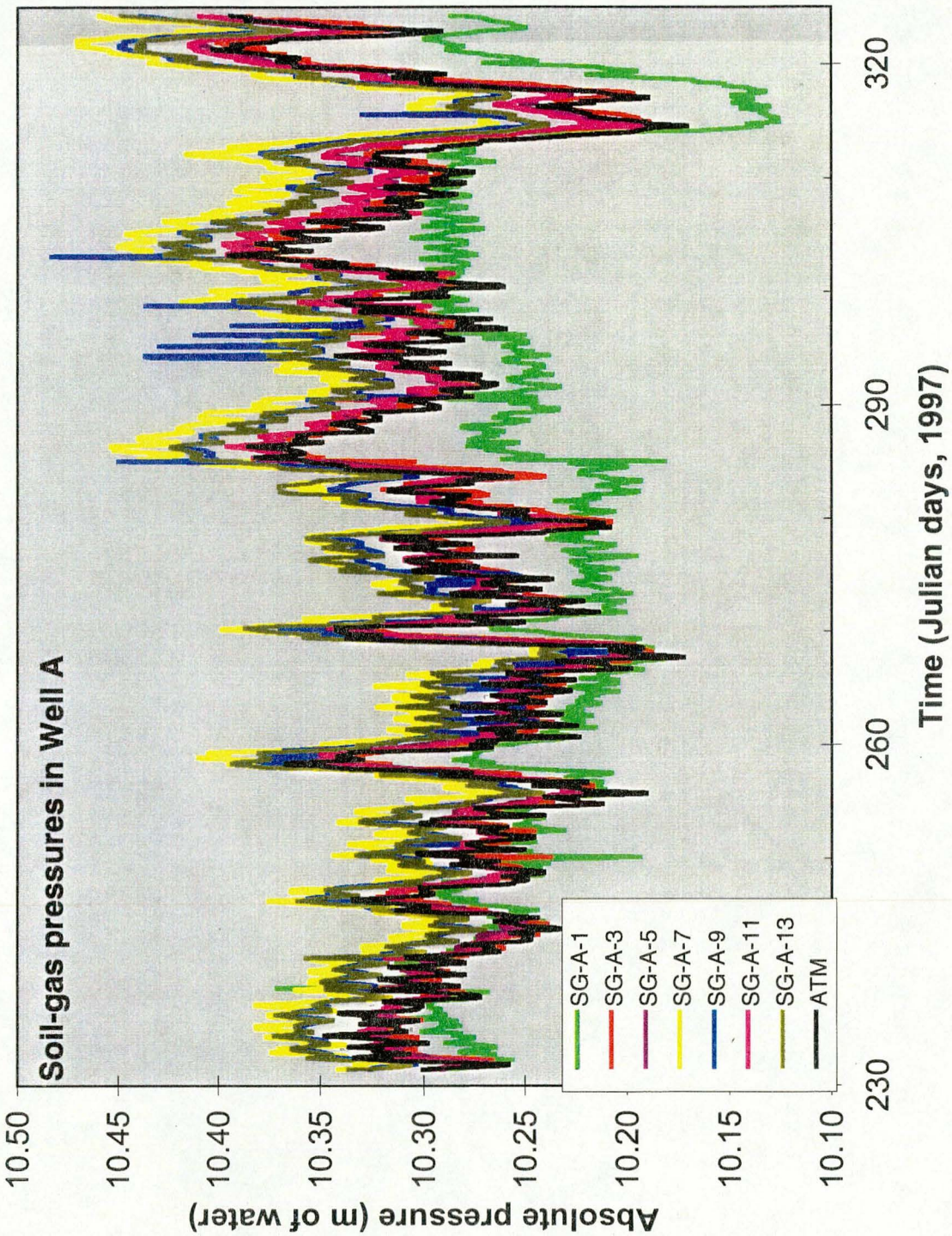

Figure 11. Gas-phase pressures (absolute) at levels 1, 3, 5, 7, 9, 11, and 13 in Well A and atmospheric pressure (ATM), expressed in terms of an equivalent water column.

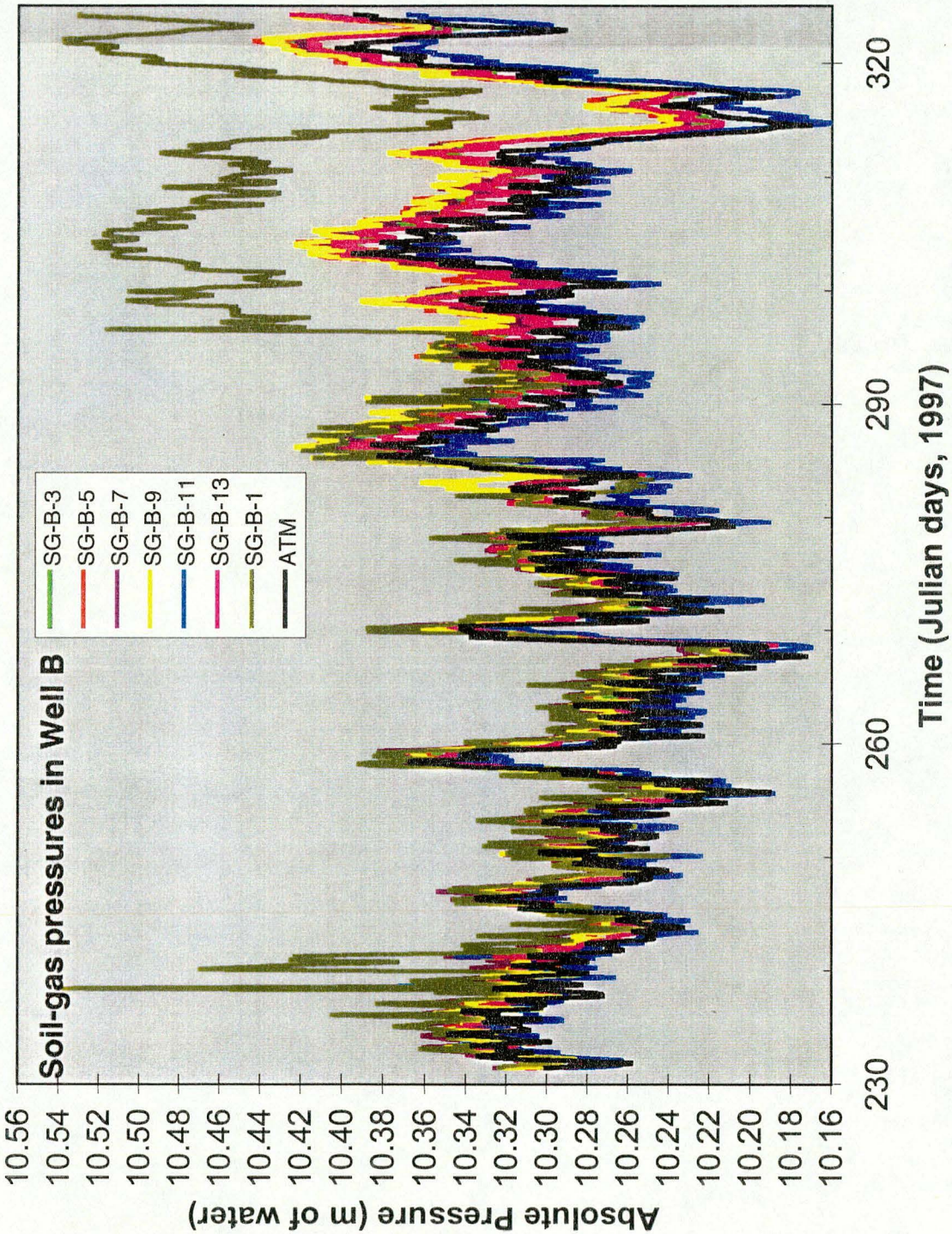

Figure 12. Gas-phase pressures (absolute) at levels 3, 5, 7, 9, 11, and 13 in Well B and atmospheric pressure (ATM), expressed in terms of an equivalent water column.

3.0 SUMMARY

Data collected over the last quarter have helped identify the contaminants present and clarify their distribution, further confirming the existence of two distinct contaminant sources. Specifically, the identification of the exotic Freon 123a will allow for its quantification in both gas and liquid samples. Apparent vertical migration of gas-phase VOCs was observed at depths of 6 and 11 ft in both wells. Unfortunately, too few liquid-phase samples were available to observe a potential similar pattern in the pore waters. The reversal in the temperature gradient may be responsible for the concomitant downward movement of the gas-phase.

Pressure gradients are being measured in both phases. Gas-phase pressures generally follow atmospheric pressure, though their response to diurnal fluctuations is dampened. Liquid-phase pressures (matric potentials) appear to be beyond the range of the tensiometers in most parts of the profile.

REFERENCES

LBNL, 1996. *Vadose Zone Monitoring System Installation Report for McClellan AFB.* Prepared by Zawislanski, P.T., B. Faybishenko, A. James, B. Freifeld, and R. Salve, for Department of the Air Force, McClellan AFB, October, 1996.

LBNL, 1997a. Monitoring and Data Analysis for the Vadose Zone Monitoring System (VZMS), McClellan AFB. Prepared by Zawislanski, P.T., R. Salve, B. Freifeld, H.S. Mountford, R. Dahlquist, A. James, S. Rodriguez, and B. Faybishenko, Quarterly Status Report to the Department of the Air Force, McClellan AFB, May 28, 1997.

LBNL, 1997b. Monitoring and Data Analysis for the Vadose Zone Monitoring System (VZMS), McClellan AFB. Prepared by Zawislanski, P.T., R. Salve, B. Freifeld, H.S. Mountford, R. Dahlquist, S. Rodriguez, and B. Faybishenko, Quarterly Status Report to the Department of the Air Force, McClellan AFB, August 22, 1997.

APPENDIX - ANALYTICAL REPORTS

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-1	Laboratory ID:	OA970815
Matrix:	Gas Cartridge	Sample Vol.(L):	0.100
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	41.32
2	Benzene	71-43-2	LT	30.77
3	Carbon Tetrachloride	56-23-5	LT	15.65
4	Chloroform	67-66-3	LT	20.16
5	1,2-Dichlorobenzene	95-50-1	LT	16.37
6	1,3-Dichlorobenzene	541-73-1	LT	16.37
7	1,4-Dichlorobenzene	106-46-7	LT	16.37
8	1,1-Dichloroethane	75-34-3	LT	24.27
9	1,2-Dichloroethane	107-06-2	LT	24.81
10	1,1-Dichloroethene	75-35-4	LT	24.81
11	cis-1,2-Dichloroethene	156-69-9	50.1	24.81
12	trans-1,2-Dichloroethene	156-60-5	LT	24.81
13	Ethylbenzene	100-41-4	LT	22.68
14	Methylene Chloride	75-09-2	LT	28.33
15	Tetrachloroethene	127-18-4	LT	14.51
16	Toluene	108-88-3	LT	26.11
17	1,1,1-Trichloroethane	71-55-6	LT	18.02
18	1,1,2-Trichloroethane	71-55-6	LT	18.02
19	Trichloroethene	79-01-6	399	18.32
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.95
21	1,2,4-Trimethylbenzene	95-63-6	LT	26.11
22	Vinyl Chloride	75-01-4	LT	38.46
23	Total-Xylene	1330-20-7	LT	22.68
24	Total VOC		449	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-2	Laboratory ID:	OA970816
Matrix:	Gas Cartridge	Sample Vol.(L):	0.100
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	41.32
2	Benzene	71-43-2	LT	30.77
3	Carbon Tetrachloride	56-23-5	LT	15.65
4	Chloroform	67-66-3	LT	20.16
5	1,2-Dichlorobenzene	95-50-1	LT	16.37
6	1,3-Dichlorobenzene	541-73-1	LT	16.37
7	1,4-Dichlorobenzene	106-46-7	LT	16.37
8	1,1-Dichloroethane	75-34-3	LT	24.27
9	1,2-Dichloroethane	107-06-2	LT	24.81
10	1,1-Dichloroethene	75-35-4	LT	24.81
11	cis-1,2-Dichloroethene	156-69-9	119	24.81
12	trans-1,2-Dichloroethene	156-60-5	LT	24.81
13	Ethylbenzene	100-41-4	LT	22.68
14	Methylene Chloride	75-09-2	LT	28.33
15	Tetrachloroethene	127-18-4	LT	14.51
16	Toluene	108-88-3	LT	26.11
17	1,1,1-Trichloroethane	71-55-6	LT	18.02
18	1,1,2-Trichloroethane	79-00-5	LT	18.02
19	Trichloroethene	79-01-6	1690	18.32
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.95
21	1,2,4-Trimethylbenzene	95-63-6	LT	26.11
22	Vinyl Chloride	75-01-4	LT	38.46
23	Total-Xylene	1330-20-7	LT	22.68
24	Total VOC		1809	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-3	Laboratory ID:	OA970817
Matrix:	Gas Cartridge	Sample Vol.(L):	0.100
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	41.32
2	Benzene	71-43-2	LT	30.77
3	Carbon Tetrachloride	56-23-5	LT	15.65
4	Chloroform	67-66-3	LT	20.16
5	1,2-Dichlorobenzene	95-50-1	LT	16.37
6	1,3-Dichlorobenzene	541-73-1	LT	16.37
7	1,4-Dichlorobenzene	106-46-7	LT	16.37
8	1,1-Dichloroethane	75-34-3	LT	24.27
9	1,2-Dichloroethane	107-06-2	LT	24.81
10	1,1-Dichloroethene	75-35-4	LT	24.81
11	cis-1,2-Dichloroethene	156-69-9	LT	24.81
12	trans-1,2-Dichloroethene	156-60-5	LT	24.81
13	Ethylbenzene	100-41-4	LT	22.68
14	Methylene Chloride	75-09-2	LT	28.33
15	Tetrachloroethene	127-18-4	LT	14.51
16	Toluene	108-88-3	LT	26.11
17	1,1,1-Trichloroethane	71-55-6	LT	18.02
18	1,1,2-Trichloroethane	79-00-5	LT	18.02
19	Trichloroethene	79-01-6	118	18.32
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.95
21	1,2,4-Trimethylbenzene	95-63-6	LT	26.11
22	Vinyl Chloride	75-01-4	LT	38.46
23	Total-Xylene	1330-20-7	LT	22.68
24	Total VOC		118	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dalabunt Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-4	Laboratory ID:	OA970818
Matrix:	Gas Cartridge	Sample Vol.(L):	0.100
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	41.32
2	Benzene	71-43-2	LT	30.77
3	Carbon Tetrachloride	56-23-5	LT	15.65
4	Chloroform	67-66-3	LT	20.16
5	1,2-Dichlorobenzene	95-50-1	LT	16.37
6	1,3-Dichlorobenzene	541-73-1	LT	16.37
7	1,4-Dichlorobenzene	106-46-7	LT	16.37
8	1,1-Dichloroethane	75-34-3	LT	24.27
9	1,2-Dichloroethane	107-06-2	LT	24.81
10	1,1-Dichloroethene	75-35-4	LT	24.81
11	cis-1,2-Dichloroethene	156-69-9	214	24.81
12	trans-1,2-Dichloroethene	156-60-5	LT	24.81
13	Ethylbenzene	100-41-4	LT	22.68
14	Methylene Chloride	75-09-2	LT	28.33
15	Tetrachloroethene	127-18-4	LT	14.51
16	Toluene	108-88-3	LT	26.11
17	1,1,1-Trichloroethane	71-55-6	LT	18.02
18	1,1,2-Trichloroethane	79-00-5	LT	18.02
19	Trichloroethene	79-01-6	1360	18.32
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.95
21	1,2,4-Trimethylbenzene	95-63-6	LT	26.11
22	Vinyl Chloride	75-01-4	LT	38.46
23	Total-Xylene	1330-20-7	LT	22.68
24	Total VOC		1574	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rob Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-5	Laboratory ID:	OA970819
Matrix:	Gas Cartridge	Sample Vol.(L):	0.100
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	41.32
2	Benzene	71-43-2	LT	30.77
3	Carbon Tetrachloride	56-23-5	LT	15.65
4	Chloroform	67-66-3	LT	20.16
5	1,2-Dichlorobenzene	95-50-1	LT	16.37
6	1,3-Dichlorobenzene	541-73-1	LT	16.37
7	1,4-Dichlorobenzene	106-46-7	LT	16.37
8	1,1-Dichloroethane	75-34-3	LT	24.27
9	1,2-Dichloroethane	107-06-2	LT	24.81
10	1,1-Dichloroethene	75-35-4	LT	24.81
11	cis-1,2-Dichloroethene	156-69-9	LT	24.81
12	trans-1,2-Dichloroethene	156-60-5	LT	24.81
13	Ethylbenzene	100-41-4	LT	22.68
14	Methylene Chloride	75-09-2	LT	28.33
15	Tetrachloroethene	127-18-4	LT	14.51
16	Toluene	108-88-3	LT	26.11
17	1,1,1-Trichloroethane	71-55-6	LT	18.02
18	1,1,2-Trichloroethane	79-00-5	LT	18.02
19	Trichloroethene	79-01-6	145	18.32
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.95
21	1,2,4-Trimethylbenzene	95-63-6	LT	26.11
22	Vinyl Chloride	75-01-4	LT	38.46
23	Total-Xylene	1330-20-7	LT	22.68
24	Total VOC		145	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-6	Laboratory ID:	OA970820
Matrix:	Gas Cartridge	Sample Vol.(L):	0.089
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	LT	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	LT	27.27
9	1,2-Dichloroethane	107-06-2	LT	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	LT	27.88
12	trans-1,2-Dichloroethene	156-60-5	LT	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
15	Tetrachloroethene	127-18-4	LT	16.31
16	Toluene	108-88-3	LT	29.34
17	1,1,1-Trichloroethane	71-55-6	LT	20.24
18	1,1,2-Trichloroethane	79-00-5	LT	20.24
19	Trichloroethene	79-01-6	173	20.58
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.92
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
22	Vinyl Chloride	75-01-4	LT	43.22
23	Total-Xylene	1330-20-7	LT	25.48
24	Total VOC		173	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-7	Laboratory ID:	OA970821
Matrix:	Gas Cartridge	Sample Vol.(L):	0.089
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	LT	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	LT	27.27
9	1,2-Dichloroethane	107-06-2	LT	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	LT	27.88
12	trans-1,2-Dichloroethene	156-60-5	LT	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
15	Tetrachloroethene	127-18-4	LT	16.31
16	Toluene	108-88-3	LT	29.34
17	1,1,1-Trichloroethane	71-55-6	LT	20.24
18	1,1,2-Trichloroethane	79-00-5	LT	20.24
19	Trichloroethene	79-01-6	173	20.58
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.92
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
22	Vinyl Chloride	75-01-4	LT	43.22
23	Total-Xylene	1330-20-7	LT	25.48
24	Total VOC		173	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-8	Laboratory ID:	OA970822
Matrix:	Gas Cartridge	Sample Vol.(L):	0.089
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	LT	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	LT	27.27
9	1,2-Dichloroethane	107-06-2	LT	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	LT	27.88
12	trans-1,2-Dichloroethene	156-60-5	LT	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
14	Tetrachloroethene	127-18-4	LT	16.31
15	Toluene	108-88-3	LT	29.34
16	1,1,1-Trichloroethane	71-55-6	LT	20.24
16	1,1,2-Trichloroethane	79-00-5	LT	20.24
17	Trichloroethene	79-01-6	LT	20.58
18	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.92
17	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
18	Vinyl Chloride	75-01-4	LT	43.22
19	Total-Xylene	1330-20-7	LT	25.48
19	Total VOC		0	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-9	Laboratory ID:	OA970823
Matrix:	Gas Cartridge	Sample Vol.(L):	0.089
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	60.4	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	LT	27.27
9	1,2-Dichloroethane	107-06-2	LT	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	41.9	27.88
12	trans-1,2-Dichloroethene	156-60-5	LT	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
15	Tetrachloroethene	127-18-4	LT	16.31
16	Toluene	108-88-3	LT	29.34
17	1,1,1-Trichloroethane	71-55-6	LT	20.24
18	1,1,2-Trichloroethane	79-00-5	LT	20.24
19	Trichloroethene	79-01-6	452	20.58
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.92
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
22	Vinyl Chloride	75-01-4	LT	43.22
23	Total-Xylene	1330-20-7	LT	25.48
24	Total VOC		554	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-10	Laboratory ID:	OA970824
Matrix:	Gas Cartridge	Sample Vol.(L):	0.089
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	LT	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	LT	27.27
9	1,2-Dichloroethane	107-06-2	LT	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	LT	27.88
12	trans-1,2-Dichloroethene	156-60-5	LT	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
15	Tetrachloroethene	127-18-4	LT	16.31
16	Toluene	108-88-3	LT	29.34
17	1,1,1-Trichloroethane	71-55-6	LT	20.24
18	1,1,2-Trichloroethane	79-00-5	LT	20.24
19	Trichloroethene	79-01-6	102	20.58
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.92
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
22	Vinyl Chloride	75-01-4	LT	43.22
23	Total-Xylene	1330-20-7	LT	25.48
24	Total VOC		102	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL
* Compounds could not be determined because of interferent on detector.
California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-11	Laboratory ID:	OA970825
Matrix:	Gas Cartridge	Sample Vol.(L):	0.089
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	LT	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	LT	27.27
9	1,2-Dichloroethane	107-06-2	LT	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	LT	27.88
12	trans-1,2-Dichloroethene	156-60-5	LT	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
15	Tetrachloroethene	127-18-4	LT	16.31
16	Toluene	108-88-3	LT	29.34
17	1,1,1-Trichloroethane	71-55-6	LT	20.24
18	1,1,2-Trichloroethane	79-00-5	LT	20.24
19	Trichloroethene	79-01-6	235	20.58
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.92
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
22	Vinyl Chloride	75-01-4	LT	43.22
23	Total-Xylene	1330-20-7	LT	25.48
24	Total VOC		235	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-12	Laboratory ID:	OA970826
Matrix:	Gas Cartridge	Sample Vol.(L):	0.022
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	187.83
2	Benzene	71-43-2	LT	139.86
3	Carbon Tetrachloride	56-23-5	LT	71.13
4	Chloroform	67-66-3	LT	91.64
5	1,2-Dichlorobenzene	95-50-1	LT	74.39
6	1,3-Dichlorobenzene	541-73-1	467	74.39
7	1,4-Dichlorobenzene	106-46-7	LT	74.39
8	1,1-Dichloroethane	75-34-3	LT	110.33
9	1,2-Dichloroethane	107-06-2	122	112.79
10	1,1-Dichloroethene	75-35-4	LT	112.79
11	cis-1,2-Dichloroethene	156-69-9	1650	112.79
12	trans-1,2-Dichloroethene	156-60-5	LT	112.79
13	Ethylbenzene	100-41-4	LT	103.07
14	Methylene Chloride	75-09-2	LT	128.77
15	Tetrachloroethene	127-18-4	LT	65.97
16	Toluene	108-88-3	1110	118.68
17	1,1,1-Trichloroethane	71-55-6	LT	81.90
18	1,1,2-Trichloroethane	79-00-5	LT	81.90
19	Trichloroethene	79-01-6	5620	83.25
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	NR	72.50
21	1,2,4-Trimethylbenzene	95-63-6	991	118.68
22	Vinyl Chloride	75-01-4	NR	174.83
23	Total-Xylene	1330-20-7	LT	103.07
24	Total VOC		9960	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-13	Laboratory ID:	OA970827
Matrix:	Gas Cartridge	Sample Vol.(L):	0.022
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	187.83
2	Benzene	71-43-2	LT	139.86
3	Carbon Tetrachloride	56-23-5	LT	71.13
4	Chloroform	67-66-3	508	91.64
5	1,2-Dichlorobenzene	95-50-1	LT	74.39
6	1,3-Dichlorobenzene	541-73-1	LT	74.39
7	1,4-Dichlorobenzene	106-46-7	LT	74.39
8	1,1-Dichloroethane	75-34-3	LT	110.33
9	1,2-Dichloroethane	107-06-2	LT	112.79
10	1,1-Dichloroethene	75-35-4	LT	112.79
11	cis-1,2-Dichloroethene	156-69-9	18200	112.79
12	trans-1,2-Dichloroethene	156-60-5	202	112.79
13	Ethylbenzene	100-41-4	LT	103.07
14	Methylene Chloride	75-09-2	LT	128.77
15	Tetrachloroethene	127-18-4	LT	65.97
16	Toluene	108-88-3	LT	118.68
17	1,1,1-Trichloroethane	71-55-6	LT	81.90
18	1,1,2-Trichloroethane	79-00-5	LT	81.90
19	Trichloroethene	79-01-6	12300	83.25
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	72.50
21	1,2,4-Trimethylbenzene	95-63-6	LT	118.68
22	Vinyl Chloride	75-01-4	LT	174.83
23	Total-Xylene	1330-20-7	LT	103.07
24	Total VOC		31210	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-1	Laboratory ID:	OA970801
Matrix:	Gas Cartridge	Sample Vol.(L):	0.210
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	8/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	19.68
2	Benzene	71-43-2	LT	14.65
3	Carbon Tetrachloride	56-23-5	LT	7.45
4	Chloroform	67-66-3	LT	9.60
5	1,2-Dichlorobenzene	95-50-1	LT	7.79
6	1,3-Dichlorobenzene	541-73-1	LT	7.79
7	1,4-Dichlorobenzene	106-46-7	LT	7.79
8	1,1-Dichloroethane	75-34-3	LT	11.56
9	1,2-Dichloroethane	107-06-2	LT	11.82
10	1,1-Dichloroethene	75-35-4	LT	11.82
11	cis-1,2-Dichloroethene	156-69-9	13.9	11.82
12	trans-1,2-Dichloroethene	156-60-5	LT	11.82
13	Ethylbenzene	100-41-4	LT	10.80
14	Methylene Chloride	75-09-2	LT	13.49
15	Tetrachloroethene	127-18-4	LT	6.91
16	Toluene	108-88-3	LT	12.43
17	1,1,1-Trichloroethane	71-55-6	LT	8.58
18	1,1,2-Trichloroethane	79-00-5	LT	8.58
19	Trichloroethene	79-01-6	62.0	8.72
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	7.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	12.43
22	Vinyl Chloride	75-01-4	LT	18.32
23	Total-Xylene	1330-20-7	LT	10.80
24	Total VOC		76	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	**75-130**

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rob Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-2	Laboratory ID:	OA970802
Matrix:	Gas Cartridge	Sample Vol.(L):	0.210
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	19.68
2	Benzene	71-43-2	LT	14.65
3	Carbon Tetrachloride	56-23-5	LT	7.45
4	Chloroform	67-66-3	LT	9.60
5	1,2-Dichlorobenzene	95-50-1	LT	7.79
6	1,3-Dichlorobenzene	541-73-1	LT	7.79
7	1,4-Dichlorobenzene	106-46-7	LT	7.79
8	1,1-Dichloroethane	75-34-3	LT	11.56
9	1,2-Dichloroethane	107-06-2	LT	11.82
10	1,1-Dichloroethene	75-35-4	LT	11.82
11	cis-1,2-Dichloroethene	156-69-9	421	11.82
12	trans-1,2-Dichloroethene	156-60-5	LT	11.82
13	Ethylbenzene	100-41-4	LT	10.80
14	Methylene Chloride	75-09-2	LT	13.49
15	Tetrachloroethene	127-18-4	LT	6.91
16	Toluene	108-88-3	LT	12.43
17	1,1,1-Trichloroethane	71-55-6	LT	8.58
18	1,1,2-Trichloroethane	79-00-5	LT	8.58
19	Trichloroethene	79-01-6	911	8.72
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	7.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	12.43
22	Vinyl Chloride	75-01-4	LT	18.32
23	Total-Xylene	1330-20-7	LT	10.80
24	Total VOC		1332	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-3	Laboratory ID:	OA970803
Matrix:	Gas Cartridge	Sample Vol.(L):	0.210
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	19.68
2	Benzene	71-43-2	LT	14.65
3	Carbon Tetrachloride	56-23-5	LT	7.45
4	Chloroform	67-66-3	39.2	9.60
5	1,2-Dichlorobenzene	95-50-1	LT	7.79
6	1,3-Dichlorobenzene	541-73-1	LT	7.79
7	1,4-Dichlorobenzene	106-46-7	LT	7.79
8	1,1-Dichloroethane	75-34-3	53.4	11.56
9	1,2-Dichloroethane	107-06-2	LT	11.82
10	1,1-Dichloroethene	75-35-4	LT	11.82
11	cis-1,2-Dichloroethene	156-69-9	352	11.82
12	trans-1,2-Dichloroethene	156-60-5	LT	11.82
13	Ethylbenzene	100-41-4	LT	10.80
14	Methylene Chloride	75-09-2	LT	13.49
15	Tetrachloroethene	127-18-4	LT	6.91
16	Toluene	108-88-3	LT	12.43
17	1,1,1-Trichloroethane	71-55-6	LT	8.58
18	1,1,2-Trichloroethane	79-00-5	LT	8.58
19	Trichloroethene	79-01-6	954	8.72
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	7.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	12.43
22	Vinyl Chloride	75-01-4	LT	18.32
23	Total-Xylene	1330-20-7	LT	10.80
24	Total VOC		1399	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-4	Laboratory ID:	OA970804
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	LT	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	LT	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	LT	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	40.2	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		40	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rob Dalquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-5	Laboratory ID:	OA970805
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	56.8	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	81.9	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	1150	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	1770	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		3059	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-6	Laboratory ID:	OA970806
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	LT	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	LT	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	198	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	629	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		827	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-7	Laboratory ID:	OA970807
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	LT	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	51.2	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	180	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		231	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-8	Laboratory ID:	OA970808
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	LT	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	LT	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	85.1	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		85	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-9	Laboratory ID:	OA970809
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	LT	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	LT	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	87.4	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		87	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-10	Laboratory ID:	OA970810
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	LT	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	40.4	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	142	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		182	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-11	Laboratory ID:	OA970811
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	52.7	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	433	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	453	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		938	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : _____ Date: 12/3/97
Reviewer: _____ Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-12--1 min	Laboratory ID:	OA970812
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	96.7	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	4080	24.33
12	trans-1,2-Dichloroethene	156-60-5	87.4	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	34.7	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	2350	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		6648	

Bromodichloromethane

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-13	Laboratory ID:	OA970813
Matrix:	Gas Cartridge	Sample Vol.(L):	0.026
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	158.93
2	Benzene	71-43-2	LT	118.34
3	Carbon Tetrachloride	56-23-5	LT	60.19
4	Chloroform	67-66-3	LT	77.54
5	1,2-Dichlorobenzene	95-50-1	LT	62.95
6	1,3-Dichlorobenzene	541-73-1	LT	62.95
7	1,4-Dichlorobenzene	106-46-7	LT	62.95
8	1,1-Dichloroethane	75-34-3	LT	93.35
9	1,2-Dichloroethane	107-06-2	63.3	95.44
10	1,1-Dichloroethene	75-35-4	150	95.44
11	cis-1,2-Dichloroethene	156-69-9	15500	95.44
12	trans-1,2-Dichloroethene	156-60-5	262	95.44
13	Ethylbenzene	100-41-4	LT	87.21
14	Methylene Chloride	75-09-2	120	108.96
15	Tetrachloroethene	127-18-4	LT	55.82
16	Toluene	108-88-3	LT	100.42
17	1,1,1-Trichloroethane	71-55-6	LT	69.30
18	1,1,2-Trichloroethane	79-00-5	LT	69.30
19	Trichloroethene	79-01-6	10100	70.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	61.34
21	1,2,4-Trimethylbenzene	95-63-6	LT	100.42
22	Vinyl Chloride	75-01-4	LT	147.93
23	Total-Xylene	1330-20-7	LT	87.21
24	Total VOC		26195	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	FB	Laboratory ID:	OA970814
Matrix:	Gas Cartridge	Sample Vol.(L):	0.088
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/26/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.96
2	Benzene	71-43-2	LT	34.97
3	Carbon Tetrachloride	56-23-5	LT	17.78
4	Chloroform	67-66-3	LT	22.91
5	1,2-Dichlorobenzene	95-50-1	LT	18.60
6	1,3-Dichlorobenzene	541-73-1	LT	18.60
7	1,4-Dichlorobenzene	106-46-7	LT	18.60
8	1,1-Dichloroethane	75-34-3	LT	27.58
9	1,2-Dichloroethane	107-06-2	LT	28.20
10	1,1-Dichloroethene	75-35-4	LT	28.20
11	cis-1,2-Dichloroethene	156-69-9	LT	28.20
12	trans-1,2-Dichloroethene	156-60-5	LT	28.20
13	Ethylbenzene	100-41-4	LT	25.77
14	Methylene Chloride	75-09-2	LT	32.19
15	Tetrachloroethene	127-18-4	LT	16.49
16	Toluene	108-88-3	LT	29.67
17	1,1,1-Trichloroethane	71-55-6	LT	20.48
18	1,1,2-Trichloroethane	79-00-5	LT	20.48
19	Trichloroethene	79-01-6	LT	20.81
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	18.12
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.67
22	Vinyl Chloride	75-01-4	LT	43.71
23	Total-Xylene	1330-20-7	LT	25.77
24	Total VOC		0	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-1	Laboratory ID:	OA970801a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.050
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3.94
2	Benzene	71-43-2	LT	2.93
3	Carbon Tetrachloride	56-23-5	LT	1.49
4	Chloroform	67-66-3	LT	1.92
5	1,2-Dichlorobenzene	95-50-1	LT	1.56
6	1,3-Dichlorobenzene	541-73-1	LT	1.56
7	1,4-Dichlorobenzene	106-46-7	LT	1.56
8	1,1-Dichloroethane	75-34-3	LT	2.31
9	1,2-Dichloroethane	107-06-2	LT	2.36
10	1,1-Dichloroethene	75-35-4	LT	2.36
11	cis-1,2-Dichloroethene	156-69-9	LT	2.36
12	trans-1,2-Dichloroethene	156-60-5	LT	2.36
13	Ethylbenzene	100-41-4	LT	2.16
14	Methylene Chloride	75-09-2	LT	2.70
15	Tetrachloroethene	127-18-4	LT	1.38
16	Toluene	108-88-3	LT	2.49
17	1,1,1-Trichloroethane	71-55-6	LT	1.72
18	1,1,2-Trichloroethane	79-00-5	LT	1.72
19	Trichloroethene	79-01-6	7.2	1.74
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.52
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.49
22	Vinyl Chloride	75-01-4	LT	3.66
23	Total-Xylene	1330-20-7	LT	2.16
24	Total VOC		7	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	92%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-2	Laboratory ID:	OA970802a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.050
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3.94
2	Benzene	71-43-2	LT	2.93
3	Carbon Tetrachloride	56-23-5	LT	1.49
4	Chloroform	67-66-3	LT	1.92
5	1,2-Dichlorobenzene	95-50-1	LT	1.56
6	1,3-Dichlorobenzene	541-73-1	LT	1.56
7	1,4-Dichlorobenzene	106-46-7	2.8	1.56
8	1,1-Dichloroethane	75-34-3	LT	2.31
9	1,2-Dichloroethane	107-06-2	LT	2.36
10	1,1-Dichloroethene	75-35-4	LT	2.36
11	cis-1,2-Dichloroethene	156-69-9	133	2.36
12	trans-1,2-Dichloroethene	156-60-5	4.6	2.36
13	Ethylbenzene	100-41-4	LT	2.16
14	Methylene Chloride	75-09-2	LT	2.70
15	Tetrachloroethene	127-18-4	LT	1.38
16	Toluene	108-88-3	LT	2.49
17	1,1,1-Trichloroethane	71-55-6	LT	1.72
18	1,1,2-Trichloroethane	79-00-5	LT	1.72
19	Trichloroethene	79-01-6	725	1.74
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	1.52
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.49
22	Vinyl Chloride	75-01-4	LT	3.66
23	Total-Xylene	1330-20-7	LT	2.16
24	Total VOC		866	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: H. Powell Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-3	Laboratory ID:	OA970803a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.050
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3.94
2	Benzene	71-43-2	LT	2.93
3	Carbon Tetrachloride	56-23-5	LT	1.49
4	Chloroform	67-66-3	LT	1.92
5	1,2-Dichlorobenzene	95-50-1	LT	1.56
6	1,3-Dichlorobenzene	541-73-1	LT	1.56
7	1,4-Dichlorobenzene	106-46-7	LT	1.56
8	1,1-Dichloroethane	75-34-3	LT	2.31
9	1,2-Dichloroethane	107-06-2	LT	2.36
10	1,1-Dichloroethene	75-35-4	LT	2.36
11	cis-1,2-Dichloroethene	156-69-9	4.1	2.36
12	trans-1,2-Dichloroethene	156-60-5	LT	2.36
13	Ethylbenzene	100-41-4	LT	2.16
14	Methylene Chloride	75-09-2	LT	2.70
15	Tetrachloroethene	127-18-4	LT	1.38
16	Toluene	108-88-3	LT	2.49
17	1,1,1-Trichloroethane	71-55-6	LT	1.72
18	1,1,2-Trichloroethane	79-00-5	LT	1.72
19	Trichloroethene	79-01-6	33.1	1.74
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	1.52
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.49
22	Vinyl Chloride	75-01-4	LT	3.66
23	Total-Xylene	1330-20-7	LT	2.16
24	Total VOC		37	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-4	Laboratory ID:	OA970804a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.050
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3.94
2	Benzene	71-43-2	LT	2.93
3	Carbon Tetrachloride	56-23-5	LT	1.49
4	Chloroform	67-66-3	LT	1.92
5	1,2-Dichlorobenzene	95-50-1	16.5	1.56
6	1,3-Dichlorobenzene	541-73-1	LT	1.56
7	1,4-Dichlorobenzene	106-46-7	LT	1.56
8	1,1-Dichloroethane	75-34-3	LT	2.31
9	1,2-Dichloroethane	107-06-2	LT	2.36
10	1,1-Dichloroethene	75-35-4	LT	2.36
11	cis-1,2-Dichloroethene	156-69-9	356	2.36
12	trans-1,2-Dichloroethene	156-60-5	LT	2.36
13	Ethylbenzene	100-41-4	LT	2.16
14	Methylene Chloride	75-09-2	LT	2.70
15	Tetrachloroethene	127-18-4	LT	1.38
16	Toluene	108-88-3	LT	2.49
17	1,1,1-Trichloroethane	71-55-6	LT	1.72
18	1,1,2-Trichloroethane	79-00-5	LT	1.72
19	Trichloroethene	79-01-6	644	1.74
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	1.52
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.49
22	Vinyl Chloride	75-01-4	LT	3.66
23	Total-Xylene	1330-20-7	LT	2.16
24	Total VOC		1016	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	87%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-5	Laboratory ID:	OA970805a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.050
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3.94
2	Benzene	71-43-2	LT	2.93
3	Carbon Tetrachloride	56-23-5	LT	1.49
4	Chloroform	67-66-3	LT	1.92
5	1,2-Dichlorobenzene	95-50-1	2.6	1.56
6	1,3-Dichlorobenzene	541-73-1	LT	1.56
7	1,4-Dichlorobenzene	106-46-7	LT	1.56
8	1,1-Dichloroethane	75-34-3	LT	2.31
9	1,2-Dichloroethane	107-06-2	LT	2.36
10	1,1-Dichloroethene	75-35-4	LT	2.36
11	cis-1,2-Dichloroethene	156-69-9	325	2.36
12	trans-1,2-Dichloroethene	156-60-5	LT	2.36
13	Ethylbenzene	100-41-4	LT	2.16
14	Methylene Chloride	75-09-2	LT	2.70
15	Tetrachloroethene	127-18-4	LT	1.38
16	Toluene	108-88-3	LT	2.49
17	1,1,1-Trichloroethane	71-55-6	LT	1.72
18	1,1,2-Trichloroethane	79-00-5	LT	1.72
19	Trichloroethene	79-01-6	590	1.74
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	1.52
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.49
22	Vinyl Chloride	75-01-4	LT	3.66
23	Total-Xylene	1330-20-7	LT	2.16
24	Total VOC		917	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	86%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Lisa Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-6	Laboratory ID:	OA970806a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.050
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3.94
2	Benzene	71-43-2	3.3	2.93
3	Carbon Tetrachloride	56-23-5	LT	1.49
4	Chloroform	67-66-3	LT	1.92
5	1,2-Dichlorobenzene	95-50-1	LT	1.56
6	1,3-Dichlorobenzene	541-73-1	LT	1.56
7	1,4-Dichlorobenzene	106-46-7	LT	1.56
8	1,1-Dichloroethane	75-34-3	LT	2.31
9	1,2-Dichloroethane	107-06-2	LT	2.36
10	1,1-Dichloroethene	75-35-4	LT	2.36
11	cis-1,2-Dichloroethene	156-69-9	128	2.36
12	trans-1,2-Dichloroethene	156-60-5	LT	2.36
13	Ethylbenzene	100-41-4	LT	2.16
14	Methylene Chloride	75-09-2	LT	2.70
15	Tetrachloroethene	127-18-4	LT	1.38
16	Toluene	108-88-3	LT	2.49
17	1,1,1-Trichloroethane	71-55-6	LT	1.72
18	1,1,2-Trichloroethane	79-00-5	LT	1.72
19	Trichloroethene	79-01-6	411	1.74
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	1.52
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.49
22	Vinyl Chloride	75-01-4	LT	3.66
23	Total-Xylene	1330-20-7	LT	2.16
24	Total VOC		542	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	87%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-7	Laboratory ID:	OA970807a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.020
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.05
2	Benzene	71-43-2	5.6	3.02
3	Carbon Tetrachloride	56-23-5	LT	1.53
4	Chloroform	67-66-3	LT	1.98
5	1,2-Dichlorobenzene	95-50-1	LT	1.60
6	1,3-Dichlorobenzene	541-73-1	LT	1.60
7	1,4-Dichlorobenzene	106-46-7	LT	1.60
8	1,1-Dichloroethane	75-34-3	LT	2.38
9	1,2-Dichloroethane	107-06-2	LT	2.43
10	1,1-Dichloroethene	75-35-4	LT	2.43
11	cis-1,2-Dichloroethene	156-69-9	47.9	2.43
12	trans-1,2-Dichloroethene	156-60-5	LT	2.43
13	Ethylbenzene	100-41-4	LT	2.22
14	Methylene Chloride	75-09-2	LT	2.78
15	Tetrachloroethene	127-18-4	LT	1.42
16	Toluene	108-88-3	LT	2.56
17	1,1,1-Trichloroethane	71-55-6	LT	1.77
18	1,1,2-Trichloroethane	79-00-5	LT	1.77
19	Trichloroethene	79-01-6	193	1.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.56
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.56
22	Vinyl Chloride	75-01-4	LT	3.77
23	Total-Xylene	1330-20-7	LT	2.22
24	Total VOC		247	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-8	Laboratory ID:	OA970808a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.020
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/30/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.05
2	Benzene	71-43-2	4.3	3.02
3	Carbon Tetrachloride	56-23-5	LT	1.53
4	Chloroform	67-66-3	LT	1.98
5	1,2-Dichlorobenzene	95-50-1	LT	1.60
6	1,3-Dichlorobenzene	541-73-1	LT	1.60
7	1,4-Dichlorobenzene	106-46-7	LT	1.60
8	1,1-Dichloroethane	75-34-3	LT	2.38
9	1,2-Dichloroethane	107-06-2	LT	2.43
10	1,1-Dichloroethene	75-35-4	LT	2.43
11	cis-1,2-Dichloroethene	156-69-9	34.0	2.43
12	trans-1,2-Dichloroethene	156-60-5	LT	2.43
13	Ethylbenzene	100-41-4	LT	2.22
14	Methylene Chloride	75-09-2	LT	2.78
15	Tetrachloroethene	127-18-4	LT	1.42
16	Toluene	108-88-3	LT	2.56
17	1,1,1-Trichloroethane	71-55-6	LT	1.77
18	1,1,2-Trichloroethane	79-00-5	LT	1.77
19	Trichloroethene	79-01-6	166	1.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.56
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.56
22	Vinyl Chloride	75-01-4	LT	3.77
23	Total-Xylene	1330-20-7	LT	2.22
24	Total VOC		204	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	87%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-9	Laboratory ID:	OA970809a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.020
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	10/1/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.05
2	Benzene	71-43-2	LT	3.02
3	Carbon Tetrachloride	56-23-5	LT	1.53
4	Chloroform	67-66-3	LT	1.98
5	1,2-Dichlorobenzene	95-50-1	LT	1.60
6	1,3-Dichlorobenzene	541-73-1	LT	1.60
7	1,4-Dichlorobenzene	106-46-7	2.6	1.60
8	1,1-Dichloroethane	75-34-3	LT	2.38
9	1,2-Dichloroethane	107-06-2	LT	2.43
10	1,1-Dichloroethene	75-35-4	LT	2.43
11	cis-1,2-Dichloroethene	156-69-9	10.1	2.43
12	trans-1,2-Dichloroethene	156-60-5	LT	2.43
13	Ethylbenzene	100-41-4	LT	2.22
14	Methylene Chloride	75-09-2	LT	2.78
15	Tetrachloroethene	127-18-4	LT	1.42
16	Toluene	108-88-3	LT	2.56
17	1,1,1-Trichloroethane	71-55-6	LT	1.77
18	1,1,2-Trichloroethane	79-00-5	LT	1.77
19	Trichloroethene	79-01-6	66.2	1.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.56
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.56
22	Vinyl Chloride	75-01-4	LT	3.77
23	Total-Xylene	1330-20-7	LT	2.22
24	Total VOC		79	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	82%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-10	Laboratory ID:	OA970810a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.020
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	10/1/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.05
2	Benzene	71-43-2	3.3	3.02
3	Carbon Tetrachloride	56-23-5	LT	1.53
4	Chloroform	67-66-3	LT	1.98
5	1,2-Dichlorobenzene	95-50-1	LT	1.60
6	1,3-Dichlorobenzene	541-73-1	LT	1.60
7	1,4-Dichlorobenzene	106-46-7	LT	1.60
8	1,1-Dichloroethane	75-34-3	LT	2.38
9	1,2-Dichloroethane	107-06-2	LT	2.43
10	1,1-Dichloroethene	75-35-4	LT	2.43
11	cis-1,2-Dichloroethene	156-69-9	35.7	2.43
12	trans-1,2-Dichloroethene	156-60-5	LT	2.43
13	Ethylbenzene	100-41-4	LT	2.22
14	Methylene Chloride	75-09-2	LT	2.78
15	Tetrachloroethene	127-18-4	LT	1.42
16	Toluene	108-88-3	LT	2.56
17	1,1,1-Trichloroethane	71-55-6	LT	1.77
18	1,1,2-Trichloroethane	79-00-5	LT	1.77
19	Trichloroethene	79-01-6	142	1.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.56
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.56
22	Vinyl Chloride	75-01-4	LT	3.77
23	Total-Xylene	1330-20-7	LT	2.22
24	Total VOC		181	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	85%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-11	Laboratory ID:	OA970811a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.020
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	10/1/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.05
2	Benzene	71-43-2	LT	3.02
3	Carbon Tetrachloride	56-23-5	LT	1.53
4	Chloroform	67-66-3	LT	1.98
5	1,2-Dichlorobenzene	95-50-1	LT	1.60
6	1,3-Dichlorobenzene	541-73-1	LT	1.60
7	1,4-Dichlorobenzene	106-46-7	LT	1.60
8	1,1-Dichloroethane	75-34-3	LT	2.38
9	1,2-Dichloroethane	107-06-2	45.8	2.43
10	1,1-Dichloroethene	75-35-4	LT	2.43
11	cis-1,2-Dichloroethene	156-69-9	379	2.43
12	trans-1,2-Dichloroethene	156-60-5	LT	2.43
13	Ethylbenzene	100-41-4	LT	2.22
14	Methylene Chloride	75-09-2	LT	2.78
15	Tetrachloroethene	127-18-4	LT	1.42
16	Toluene	108-88-3	LT	2.56
17	1,1,1-Trichloroethane	71-55-6	LT	1.77
18	1,1,2-Trichloroethane	79-00-5	LT	1.77
19	Trichloroethene	79-01-6	411	1.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.56
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.56
22	Vinyl Chloride	75-01-4	LT	3.77
23	Total-Xylene	1330-20-7	LT	2.22
24	Total VOC		836	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	83%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-12	Laboratory ID:	OA970812a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.020
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	10/1/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	118	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	1790	24.33
12	trans-1,2-Dichloroethene	156-60-5	62.7	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	1140	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		3110	

Bromodichloromethane

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	85%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Lisa Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-13	Laboratory ID:	OA970813a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.714
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	10/1/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	57.9
2	Benzene	71-43-2	LT	43.1
3	Carbon Tetrachloride	56-23-5	LT	21.9
4	Chloroform	67-66-3	LT	28.2
5	1,2-Dichlorobenzene	95-50-1	LT	22.9
6	1,3-Dichlorobenzene	541-73-1	LT	22.9
7	1,4-Dichlorobenzene	106-46-7	LT	22.9
8	1,1-Dichloroethane	75-34-3	35.3	34.0
9	1,2-Dichloroethane	107-06-2	71.7	34.8
10	1,1-Dichloroethene	75-35-4	LT	34.8
11	cis-1,2-Dichloroethene	156-69-9	2800	34.8
12	trans-1,2-Dichloroethene	156-60-5	248	34.8
13	Ethylbenzene	100-41-4	LT	31.8
14	Methylene Chloride	75-09-2	LT	39.7
15	Tetrachloroethene	127-18-4	32.9	20.3
16	Toluene	108-88-3	LT	36.6
17	1,1,1-Trichloroethane	71-55-6	LT	25.2
18	1,1,2-Trichloroethane	79-00-5	LT	25.2
19	Trichloroethene	79-01-6	2560	25.7
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	22.3
21	1,2,4-Trimethylbenzene	95-63-6	LT	36.6
22	Vinyl Chloride	75-01-4	LT	53.9
23	Total-Xylene	1330-20-7	LT	31.8
24	Total VOC		5748	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	82%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-1	Laboratory ID:	OA970815a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.000
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.13
2	Benzene	71-43-2	LT	3.08
3	Carbon Tetrachloride	56-23-5	LT	1.56
4	Chloroform	67-66-3	LT	2.02
5	1,2-Dichlorobenzene	95-50-1	LT	1.64
6	1,3-Dichlorobenzene	541-73-1	LT	1.64
7	1,4-Dichlorobenzene	106-46-7	LT	1.64
8	1,1-Dichloroethane	75-34-3	LT	2.43
9	1,2-Dichloroethane	107-06-2	LT	2.48
10	1,1-Dichloroethene	75-35-4	LT	2.48
11	cis-1,2-Dichloroethene	156-69-9	90.8	2.48
12	trans-1,2-Dichloroethene	156-60-5	LT	2.48
13	Ethylbenzene	100-41-4	LT	2.27
14	Methylene Chloride	75-09-2	LT	2.83
15	Tetrachloroethene	127-18-4	LT	1.45
16	Toluene	108-88-3	LT	2.61
17	1,1,1-Trichloroethane	71-55-6	LT	1.80
18	1,1,2-Trichloroethane	71-55-6	LT	1.80
19	Trichloroethene	79-01-6	768	1.83
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.61
22	Vinyl Chloride	75-01-4	LT	3.85
23	Total-Xylene	1330-20-7	LT	2.27
24	Total VOC		858	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-2	Laboratory ID:	OA970816a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.000
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.13
2	Benzene	71-43-2	8.5	3.08
3	Carbon Tetrachloride	56-23-5	LT	1.56
4	Chloroform	67-66-3	LT	2.02
5	1,2-Dichlorobenzene	95-50-1	LT	1.64
6	1,3-Dichlorobenzene	541-73-1	LT	1.64
7	1,4-Dichlorobenzene	106-46-7	LT	1.64
8	1,1-Dichloroethane	75-34-3	LT	2.43
9	1,2-Dichloroethane	107-06-2	LT	2.48
10	1,1-Dichloroethene	75-35-4	LT	2.48
11	cis-1,2-Dichloroethene	156-69-9	84.3	2.48
12	trans-1,2-Dichloroethene	156-60-5	LT	2.48
13	Ethylbenzene	100-41-4	LT	2.27
14	Methylene Chloride	75-09-2	LT	2.83
15	Tetrachloroethene	127-18-4	LT	1.45
16	Toluene	108-88-3	LT	2.61
17	1,1,1-Trichloroethane	71-55-6	LT	1.80
18	1,1,2-Trichloroethane	79-00-5	LT	1.80
19	Trichloroethene	79-01-6	747	1.83
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.61
22	Vinyl Chloride	75-01-4	LT	3.85
23	Total-Xylene	1330-20-7	LT	2.27
24	Total VOC		840	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-3	Laboratory ID:	OA970817a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.000
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.13
2	Benzene	71-43-2	11.0	3.08
3	Carbon Tetrachloride	56-23-5	LT	1.56
4	Chloroform	67-66-3	16.2	2.02
5	1,2-Dichlorobenzene	95-50-1	LT	1.64
6	1,3-Dichlorobenzene	541-73-1	LT	1.64
7	1,4-Dichlorobenzene	106-46-7	2.4	1.64
8	1,1-Dichloroethane	75-34-3	17.2	2.43
9	1,2-Dichloroethane	107-06-2	LT	2.48
10	1,1-Dichloroethene	75-35-4	LT	2.48
11	cis-1,2-Dichloroethene	156-69-9	159	2.48
12	trans-1,2-Dichloroethene	156-60-5	LT	2.48
13	Ethylbenzene	100-41-4	LT	2.27
14	Methylene Chloride	75-09-2	LT	2.83
15	Tetrachloroethene	127-18-4	LT	1.45
16	Toluene	108-88-3	LT	2.61
17	1,1,1-Trichloroethane	71-55-6	LT	1.80
18	1,1,2-Trichloroethane	79-00-5	LT	1.80
19	Trichloroethene	79-01-6	688	1.83
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.61
22	Vinyl Chloride	75-01-4	LT	3.85
23	Total-Xylene	1330-20-7	LT	2.27
24	Total VOC		894	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	97%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-4	Laboratory ID:	OA970818a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.000
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.13
2	Benzene	71-43-2	LT	3.08
3	Carbon Tetrachloride	56-23-5	LT	1.56
4	Chloroform	67-66-3	23.9	2.02
5	1,2-Dichlorobenzene	95-50-1	LT	1.64
6	1,3-Dichlorobenzene	541-73-1	LT	1.64
7	1,4-Dichlorobenzene	106-46-7	LT	1.64
8	1,1-Dichloroethane	75-34-3	24.6	2.43
9	1,2-Dichloroethane	107-06-2	LT	2.48
10	1,1-Dichloroethene	75-35-4	LT	2.48
11	cis-1,2-Dichloroethene	156-69-9	236	2.48
12	trans-1,2-Dichloroethene	156-60-5	LT	2.48
13	Ethylbenzene	100-41-4	LT	2.27
14	Methylene Chloride	75-09-2	LT	2.83
15	Tetrachloroethene	127-18-4	LT	1.45
16	Toluene	108-88-3	LT	2.61
17	1,1,1-Trichloroethane	71-55-6	LT	1.80
18	1,1,2-Trichloroethane	79-00-5	LT	1.80
19	Trichloroethene	79-01-6	696	1.83
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.61
22	Vinyl Chloride	75-01-4	LT	3.85
23	Total-Xylene	1330-20-7	LT	2.27
24	Total VOC		981	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	94%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-5	Laboratory ID:	OA970819a
Matrix:	Gas Cartridge	Sample Vol.(L):	1.000
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.13
2	Benzene	71-43-2	29.9	3.08
3	Carbon Tetrachloride	56-23-5	LT	1.56
4	Chloroform	67-66-3	34.5	2.02
5	1,2-Dichlorobenzene	95-50-1	LT	1.64
6	1,3-Dichlorobenzene	541-73-1	3.2	1.64
7	1,4-Dichlorobenzene	106-46-7	4.3	1.64
8	1,1-Dichloroethane	75-34-3	23.2	2.43
9	1,2-Dichloroethane	107-06-2	LT	2.48
10	1,1-Dichloroethene	75-35-4	LT	2.48
11	cis-1,2-Dichloroethene	156-69-9	458	2.48
12	trans-1,2-Dichloroethene	156-60-5	LT	2.48
13	Ethylbenzene	100-41-4	LT	2.27
14	Methylene Chloride	75-09-2	LT	2.83
15	Tetrachloroethene	127-18-4	LT	1.45
16	Toluene	108-88-3	4.7	2.61
17	1,1,1-Trichloroethane	71-55-6	LT	1.80
18	1,1,2-Trichloroethane	79-00-5	LT	1.80
19	Trichloroethene	79-01-6	781	1.83
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.59
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.61
22	Vinyl Chloride	75-01-4	LT	3.85
23	Total-Xylene	1330-20-7	LT	2.27
24	Total VOC		1338	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-6	Laboratory ID:	OA970820a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.64
2	Benzene	71-43-2	16.8	3.46
3	Carbon Tetrachloride	56-23-5	LT	1.76
4	Chloroform	67-66-3	25.3	2.27
5	1,2-Dichlorobenzene	95-50-1	LT	1.84
6	1,3-Dichlorobenzene	541-73-1	7.3	1.84
7	1,4-Dichlorobenzene	106-46-7	5.1	1.84
8	1,1-Dichloroethane	75-34-3	9.7	2.73
9	1,2-Dichloroethane	107-06-2	7.9	2.79
10	1,1-Dichloroethene	75-35-4	LT	2.79
11	cis-1,2-Dichloroethene	156-69-9	368	2.79
12	trans-1,2-Dichloroethene	156-60-5	11.9	2.79
13	Ethylbenzene	100-41-4	LT	2.55
14	Methylene Chloride	75-09-2	LT	3.18
15	Tetrachloroethene	127-18-4	LT	1.63
16	Toluene	108-88-3	LT	2.93
17	1,1,1-Trichloroethane	71-55-6	LT	2.02
18	1,1,2-Trichloroethane	79-00-5	LT	2.02
19	Trichloroethene	79-01-6	644	2.06
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1.79
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.93
22	Vinyl Chloride	75-01-4	LT	4.32
23	Total-Xylene	1330-20-7	LT	2.55
24	Total VOC		1095	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-7	Laboratory ID:	OA970821a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.64
2	Benzene	71-43-2	6.7	3.46
3	Carbon Tetrachloride	56-23-5	LT	1.76
4	Chloroform	67-66-3	LT	2.27
5	1,2-Dichlorobenzene	95-50-1	LT	1.84
6	1,3-Dichlorobenzene	541-73-1	2.5	1.84
7	1,4-Dichlorobenzene	106-46-7	3.9	1.84
8	1,1-Dichloroethane	75-34-3	LT	2.73
9	1,2-Dichloroethane	107-06-2	7.1	2.79
10	1,1-Dichloroethene	75-35-4	LT	2.79
11	cis-1,2-Dichloroethene	156-69-9	95.0	2.79
12	trans-1,2-Dichloroethene	156-60-5	LT	2.79
13	Ethylbenzene	100-41-4	LT	2.55
14	Methylene Chloride	75-09-2	LT	3.18
15	Tetrachloroethene	127-18-4	LT	1.63
16	Toluene	108-88-3	LT	2.93
17	1,1,1-Trichloroethane	71-55-6	LT	2.02
18	1,1,2-Trichloroethane	79-00-5	LT	2.02
19	Trichloroethene	79-01-6	355	2.06
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1.79
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.93
22	Vinyl Chloride	75-01-4	LT	4.32
23	Total-Xylene	1330-20-7	LT	2.55
24	Total VOC		470	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	88%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Wahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-8	Laboratory ID:	OA970822a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.64
2	Benzene	71-43-2	20.5	3.46
3	Carbon Tetrachloride	56-23-5	LT	1.76
4	Chloroform	67-66-3	LT	2.27
5	1,2-Dichlorobenzene	95-50-1	LT	1.84
6	1,3-Dichlorobenzene	541-73-1	LT	1.84
7	1,4-Dichlorobenzene	106-46-7	LT	1.84
8	1,1-Dichloroethane	75-34-3	LT	2.73
9	1,2-Dichloroethane	107-06-2	LT	2.79
10	1,1-Dichloroethene	75-35-4	LT	2.79
11	cis-1,2-Dichloroethene	156-69-9	125	2.79
12	trans-1,2-Dichloroethene	156-60-5	LT	2.79
13	Ethylbenzene	100-41-4	LT	2.55
14	Methylene Chloride	75-09-2	LT	3.18
14	Tetrachloroethene	127-18-4	LT	1.63
15	Toluene	108-88-3	6.4	2.93
16	1,1,1-Trichloroethane	71-55-6	LT	2.02
16	1,1,2-Trichloroethane	79-00-5	LT	2.02
17	Trichloroethene	79-01-6	484	2.06
18	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1.79
17	1,2,4-Trimethylbenzene	95-63-6	LT	2.93
18	Vinyl Chloride	75-01-4	LT	4.32
19	Total-Xylene	1330-20-7	LT	2.55
19	Total VOC		636	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	83%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Bob Dalhurst Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-9	Laboratory ID:	OA970823a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.64
2	Benzene	71-43-2	21.5	3.46
3	Carbon Tetrachloride	56-23-5	LT	1.76
4	Chloroform	67-66-3	LT	2.27
5	1,2-Dichlorobenzene	95-50-1	LT	1.84
6	1,3-Dichlorobenzene	541-73-1	LT	1.84
7	1,4-Dichlorobenzene	106-46-7	LT	1.84
8	1,1-Dichloroethane	75-34-3	LT	2.73
9	1,2-Dichloroethane	107-06-2	LT	2.79
10	1,1-Dichloroethene	75-35-4	LT	2.79
11	cis-1,2-Dichloroethene	156-69-9	55.8	2.79
12	trans-1,2-Dichloroethene	156-60-5	LT	2.79
13	Ethylbenzene	100-41-4	LT	2.55
14	Methylene Chloride	75-09-2	LT	3.18
15	Tetrachloroethene	127-18-4	LT	1.63
16	Toluene	108-88-3	6.4	2.93
17	1,1,1-Trichloroethane	71-55-6	LT	2.02
18	1,1,2-Trichloroethane	79-00-5	LT	2.02
19	Trichloroethene	79-01-6	449	2.06
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1.79
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.93
22	Vinyl Chloride	75-01-4	LT	4.32
23	Total-Xylene	1330-20-7	LT	2.55
24	Total VOC		533	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	87%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dalgarno Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-10	Laboratory ID:	OA970824a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.64
2	Benzene	71-43-2	LT	3.46
3	Carbon Tetrachloride	56-23-5	LT	1.76
4	Chloroform	67-66-3	LT	2.27
5	1,2-Dichlorobenzene	95-50-1	LT	1.84
6	1,3-Dichlorobenzene	541-73-1	LT	1.84
7	1,4-Dichlorobenzene	106-46-7	LT	1.84
8	1,1-Dichloroethane	75-34-3	LT	2.73
9	1,2-Dichloroethane	107-06-2	LT	2.79
10	1,1-Dichloroethene	75-35-4	LT	2.79
11	cis-1,2-Dichloroethene	156-69-9	LT	2.79
12	trans-1,2-Dichloroethene	156-60-5	LT	2.79
13	Ethylbenzene	100-41-4	LT	2.55
14	Methylene Chloride	75-09-2	LT	3.18
15	Tetrachloroethene	127-18-4	LT	1.63
16	Toluene	108-88-3	LT	2.93
17	1,1,1-Trichloroethane	71-55-6	LT	2.02
18	1,1,2-Trichloroethane	79-00-5	LT	2.02
19	Trichloroethene	79-01-6	LT	2.06
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1.79
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.93
22	Vinyl Chloride	75-01-4	LT	4.32
23	Total-Xylene	1330-20-7	LT	2.55
24	Total VOC		0	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL
* Compounds could not be determined because of interferent on detector.
California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-11	Laboratory ID:	OA970825a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4.64
2	Benzene	71-43-2	LT	3.46
3	Carbon Tetrachloride	56-23-5	LT	1.76
4	Chloroform	67-66-3	31.7	2.27
5	1,2-Dichlorobenzene	95-50-1	LT	1.84
6	1,3-Dichlorobenzene	541-73-1	LT	1.84
7	1,4-Dichlorobenzene	106-46-7	LT	1.84
8	1,1-Dichloroethane	75-34-3	25.3	2.73
9	1,2-Dichloroethane	107-06-2	127	2.79
10	1,1-Dichloroethene	75-35-4	LT	2.79
11	cis-1,2-Dichloroethene	156-69-9	1020	2.79
12	trans-1,2-Dichloroethene	156-60-5	7.7	2.79
13	Ethylbenzene	100-41-4	LT	2.55
14	Methylene Chloride	75-09-2	LT	3.18
15	Tetrachloroethene	127-18-4	LT	1.63
16	Toluene	108-88-3	LT	2.93
17	1,1,1-Trichloroethane	71-55-6	LT	2.02
18	1,1,2-Trichloroethane	79-00-5	LT	2.02
19	Trichloroethene	79-01-6	655	2.06
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1.79
21	1,2,4-Trimethylbenzene	95-63-6	LT	2.93
22	Vinyl Chloride	75-01-4	LT	4.32
23	Total-Xylene	1330-20-7	LT	2.55
24	Total VOC		1867	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	86%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-12	Laboratory ID:	OA970826a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	17.6	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	45.3	27.27
9	1,2-Dichloroethane	107-06-2	260	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	1670	27.88
12	trans-1,2-Dichloroethene	156-60-5	32.0	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
15	Tetrachloroethene	127-18-4	LT	16.31
16	Toluene	108-88-3	LT	29.34
17	1,1,1-Trichloroethane	71-55-6	LT	20.24
18	1,1,2-Trichloroethane	79-00-5	LT	20.24
19	Trichloroethene	79-01-6	1030	20.58
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	NR	17.92
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
22	Vinyl Chloride	75-01-4	LT	43.22
23	Total-Xylene	1330-20-7	LT	25.48
24	Total VOC		3055	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	85%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-13	Laboratory ID:	OA970827a
Matrix:	Gas Cartridge	Sample Vol.(L):	0.890
Date Sampled:	8/26/97	Date Received:	8/26/97
Date Analyzed:	9/25/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.43
2	Benzene	71-43-2	64.3	34.57
3	Carbon Tetrachloride	56-23-5	LT	17.58
4	Chloroform	67-66-3	LT	22.65
5	1,2-Dichlorobenzene	95-50-1	LT	18.39
6	1,3-Dichlorobenzene	541-73-1	LT	18.39
7	1,4-Dichlorobenzene	106-46-7	LT	18.39
8	1,1-Dichloroethane	75-34-3	110	27.27
9	1,2-Dichloroethane	107-06-2	212	27.88
10	1,1-Dichloroethene	75-35-4	LT	27.88
11	cis-1,2-Dichloroethene	156-69-9	2540	27.88
12	trans-1,2-Dichloroethene	156-60-5	251	27.88
13	Ethylbenzene	100-41-4	LT	25.48
14	Methylene Chloride	75-09-2	LT	31.83
15	Tetrachloroethene	127-18-4	LT	16.31
16	Toluene	108-88-3	LT	29.34
17	1,1,1-Trichloroethane	71-55-6	LT	20.24
18	1,1,2-Trichloroethane	79-00-5	LT	20.24
19	Trichloroethene	79-01-6	2370	20.58
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.92
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.34
22	Vinyl Chloride	75-01-4	LT	43.22
23	Total-Xylene	1330-20-7	LT	25.48
24	Total VOC		5546	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A-1	Laboratory ID:	OW971062
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	10/23/97	Date Received:	10/27/97
Date Analyzed:	10/28/97	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	1.0
2	Bromobenzene	108-86-1	LT	1.0
3	Bromochloromethane	74-97-5	LT	2.0
4	Bromodichloromethane	75-27-4	LT	1.0
5	Bromoform	75-25-2	LT	2.0
6	Bromomethane	74-83-9	LT	4.0
7	n-Butylbenzene	104-51-8	LT	1.0
8	sec-Butylbenzene	135-98-8	LT	1.0
9	ter-Butylbenzene	98-06-6	LT	1.0
10	Carbon Tetrachloride	56-23-5	LT	1.0
11	Chlorobenzene	108-90-7	LT	1.0
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	30.0
13	Chloroethane	75-00-3	LT	30.0
14	Chloroform	67-66-3	LT	1.0
15	Chloromethane	74-87-3	LT	1.0
16	2-Chlorotoluene	95-49-8	LT	2.0
17	4-Chlorotoluene	106-43-4	LT	2.0
18	Dibromochloromethane	124-48-1	LT	2.0
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.0
20	1,2-Dibromoethane	106-93-4	LT	2.0
21	Dibromomethane	74-95-3	LT	1.0
22	1,2-Dichlorobenzene	95-50-1	LT	1.0
23	1,3-Dichlorobenzene	541-73-1	LT	1.0
24	1,4-Dichlorobenzene	106-46-7	LT	1.0
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	3.0
26	1,1-Dichloroethane	75-34-3	LT	1.0
27	1,2-Dichloroethane	107-06-2	LT	2.0
28	1,1-Dichloroethene	75-35-4	LT	1.0
29	cis-1,2-Dichloroethene	156-69-9	2.8	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.0
32	1,2-Dichloropropane	78-87-5	LT	1.0
33	1,3-Dichloropropane	142-28-9	LT	1.0
34	2,2-Dichloropropane	594-20-7	LT	1.0

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW971062

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	1.0
36	cis-1,3-Dichloropropene	10061-01-5	LT	1.0
37	trans-1,3-Dichloropropene	10061-02-6	LT	1.0
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	3.0
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Ethylbenzene	100-41-4	LT	1.0
41	Hexachlorobutadien	87-68-3	LT	3.0
42	Isopropylbenzene	98-82-8	LT	2.0
43	p-Isopropyltoluene	99-87-6	LT	1.0
44	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.0
46	Naphthalene	91-20-3	LT	2.0
47	n-Propylbenzene	103-65-1	LT	1.0
48	Styrene	100-42-5	LT	1.0
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	1.0
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	2.0
51	Tetrachloroethene	127-18-4	LT	1.0
52	Toluene	108-88-3	LT	1.0
53	1,2,3-Trichlorobenzene	87-61-6	LT	2.0
54	1,2,4-Trichlorobenzene	120-82-1	LT	1.0
55	1,1,1-Trichloroethane	71-55-6	LT	1.0
56	1,1,2-Trichloroethane	79-00-5	LT	1.0
57	Trichloroethene	79-01-6	63.3	1.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.0
59	1,2,3-Trichloropropane	96-18-4	LT	1.0
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	1.0
61	1,2,4-Trimethylbenzene	95-63-6	LT	1.0
62	1,3,5-Trimethylbenzene	108-67-8	LT	1.0
63	Vinyl Chloride	75-01-4	LT	1.0
64	Total-Xylene	1330-20-7	LT	2.0

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	100.3	**86-115**
Dibromofluoromethane	103.6	**86-118**
Toluene-d8	97.6	**88-110**

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits (based on 5 ml water sample volume)
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A-7	Laboratory ID:	OW971063
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	10/23/97	Date Received:	10/27/97
Date Analyzed:	10/28/97	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	5.0
2	Bromobenzene	108-86-1	LT	5.0
3	Bromochloromethane	74-97-5	LT	10.0
4	Bromodichloromethane	75-27-4	LT	5.0
5	Bromoform	75-25-2	LT	10.0
6	Bromomethane	74-83-9	LT	20.0
7	n-Butylbenzene	104-51-8	LT	5.0
8	sec-Butylbenzene	135-98-8	LT	5.0
9	ter-Butylbenzene	98-06-6	LT	5.0
10	Carbon Tetrachloride	56-23-5	LT	5.0
11	Chlorobenzene	108-90-7	LT	5.0
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	150.0
13	Chloroethane	75-00-3	LT	150.0
14	Chloroform	67-66-3	LT	5.0
15	Chloromethane	74-87-3	LT	5.0
16	2-Chlorotoluene	95-49-8	LT	10.0
17	4-Chlorotoluene	106-43-4	LT	10.0
18	Dibromochloromethane	124-48-1	LT	10.0
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	10.0
20	1,2-Dibromoethane	106-93-4	LT	10.0
21	Dibromomethane	74-95-3	LT	5.0
22	1,2-Dichlorobenzene	95-50-1	LT	5.0
23	1,3-Dichlorobenzene	541-73-1	LT	5.0
24	1,4-Dichlorobenzene	106-46-7	LT	5.0
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	15.0
26	1,1-Dichloroethane	75-34-3	LT	5.0
27	1,2-Dichloroethane	107-06-2	LT	10.0
28	1,1-Dichloroethene	75-35-4	LT	5.0
29	cis-1,2-Dichloroethene	156-69-9	LT	5.0
30	trans-1,2-Dichloroethene	156-60-5	LT	5.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	15.0
32	1,2-Dichloropropane	78-87-5	LT	5.0
33	1,3-Dichloropropane	142-28-9	LT	5.0
34	2,2-Dichloropropane	594-20-7	LT	5.0

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW971063

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	5.0
36	cis-1,3-Dichloropropene	10061-01-5	LT	5.0
37	trans-1,3-Dichloropropene	10061-02-6	LT	5.0
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	15.0
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	5.0
40	Ethylbenzene	100-41-4	LT	5.0
41	Hexachlorobutadien	87-68-3	LT	15.0
42	Isopropylbenzene	98-82-8	LT	10.0
43	p-Isopropyltoluene	99-87-6	LT	5.0
44	Methylene Chloride	75-09-2	LT	5.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	25.0
46	Naphthalene	91-20-3	LT	10.0
47	n-Propylbenzene	103-65-1	LT	5.0
48	Styrene	100-42-5	LT	5.0
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	5.0
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	10.0
51	Tetrachloroethene	127-18-4	LT	5.0
52	Toluene	108-88-3	LT	5.0
53	1,2,3-Trichlorobenzene	87-61-6	LT	10.0
54	1,2,4-Trichlorobenzene	120-82-1	LT	5.0
55	1,1,1-Trichloroethane	71-55-6	LT	5.0
56	1,1,2-Trichloroethane	79-00-5	LT	5.0
57	Trichloroethene	79-01-6	LT	5.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	10.0
59	1,2,3-Trichloropropane	96-18-4	LT	5.0
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	5.0
61	1,2,4-Trimethylbenzene	95-63-6	LT	5.0
62	1,3,5-Trimethylbenzene	108-67-8	LT	5.0
63	Vinyl Chloride	75-01-4	LT	5.0
64	Total-Xylene	1330-20-7	LT	10.0

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	98.2	**86-115**
Dibromofluoromethane	102.0	**86-118**
Toluene-d8	97.7	**88-110**

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits (based on 5 ml water sample volume)
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dehlgrant Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A-12	Laboratory ID:	OW971064
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	10/23/97	Date Received:	10/27/97
Date Analyzed:	10/28/97	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	10.0
2	Bromobenzene	108-86-1	LT	10.0
3	Bromochloromethane	74-97-5	LT	20.0
4	Bromodichloromethane	75-27-4	LT	10.0
5	Bromoform	75-25-2	LT	20.0
6	Bromomethane	74-83-9	LT	40.0
7	n-Butylbenzene	104-51-8	LT	10.0
8	sec-Butylbenzene	135-98-8	LT	10.0
9	ter-Butylbenzene	98-06-6	LT	10.0
10	Carbon Tetrachloride	56-23-5	LT	10.0
11	Chlorobenzene	108-90-7	LT	10.0
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	300.0
13	Chloroethane	75-00-3	LT	300.0
14	Chloroform	67-66-3	LT	10.0
15	Chloromethane	74-87-3	LT	10.0
16	2-Chlorotoluene	95-49-8	LT	20.0
17	4-Chlorotoluene	106-43-4	LT	20.0
18	Dibromochloromethane	124-48-1	LT	20.0
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	20.0
20	1,2-Dibromoethane	106-93-4	LT	20.0
21	Dibromomethane	74-95-3	LT	10.0
22	1,2-Dichlorobenzene	95-50-1	LT	10.0
23	1,3-Dichlorobenzene	541-73-1	LT	10.0
24	1,4-Dichlorobenzene	106-46-7	LT	10.0
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	30.0
26	1,1-Dichloroethane	75-34-3	LT	10.0
27	1,2-Dichloroethane	107-06-2	LT	20.0
28	1,1-Dichloroethene	75-35-4	LT	10.0
29	cis-1,2-Dichloroethene	156-69-9	LT	10.0
30	trans-1,2-Dichloroethene	156-60-5	LT	10.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	30.0
32	1,2-Dichloropropane	78-87-5	LT	10.0
33	1,3-Dichloropropane	142-28-9	LT	10.0
34	2,2-Dichloropropane	594-20-7	LT	10.0

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW971064

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	10.0
36	cis-1,3-Dichloropropene	10061-01-5	LT	10.0
37	trans-1,3-Dichloropropene	10061-02-6	LT	10.0
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	30.0
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	10.0
40	Ethylbenzene	100-41-4	LT	10.0
41	Hexachlorobutadien	87-68-3	LT	30.0
42	Isopropylbenzene	98-82-8	LT	20.0
43	p-Isopropyltoluene	99-87-6	LT	10.0
44	Methylene Chloride	75-09-2	LT	10.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	50.0
46	Naphthalene	91-20-3	LT	20.0
47	n-Propylbenzene	103-65-1	LT	10.0
48	Styrene	100-42-5	LT	10.0
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	10.0
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	20.0
51	Tetrachloroethene	127-18-4	LT	10.0
52	Toluene	108-88-3	LT	10.0
53	1,2,3-Trichlorobenzene	87-61-6	LT	20.0
54	1,2,4-Trichlorobenzene	120-82-1	LT	10.0
55	1,1,1-Trichloroethane	71-55-6	LT	10.0
56	1,1,2-Trichloroethane	79-00-5	LT	10.0
57	Trichloroethene	79-01-6	LT	10.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	20.0
59	1,2,3-Trichloropropane	96-18-4	LT	10.0
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	10.0
61	1,2,4-Trimethylbenzene	95-63-6	LT	10.0
62	1,3,5-Trimethylbenzene	108-67-8	LT	10.0
63	Vinyl Chloride	75-01-4	LT	10.0
64	Total-Xylene	1330-20-7	LT	20.0

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	100.9	**86-115**
Dibromofluoromethane	103.1	**86-118**
Toluene-d8	96.4	**88-110**

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits (based on 5 ml water sample volume)
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B-1	Laboratory ID:	OW971065
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	10/23/97	Date Received:	10/27/97
Date Analyzed:	10/28/97	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	1.0
2	Bromobenzene	108-86-1	LT	1.0
3	Bromochloromethane	74-97-5	LT	2.0
4	Bromodichloromethane	75-27-4	LT	1.0
5	Bromoform	75-25-2	LT	2.0
6	Bromomethane	74-83-9	LT	4.0
7	n-Butylbenzene	104-51-8	LT	1.0
8	sec-Butylbenzene	135-98-8	LT	1.0
9	ter-Butylbenzene	98-06-6	LT	1.0
10	Carbon Tetrachloride	56-23-5	LT	1.0
11	Chlorobenzene	108-90-7	LT	1.0
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	30.0
13	Chloroethane	75-00-3	LT	30.0
14	Chloroform	67-66-3	LT	1.0
15	Chloromethane	74-87-3	LT	1.0
16	2-Chlorotoluene	95-49-8	LT	2.0
17	4-Chlorotoluene	106-43-4	LT	2.0
18	Dibromochloromethane	124-48-1	LT	2.0
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.0
20	1,2-Dibromoethane	106-93-4	LT	2.0
21	Dibromomethane	74-95-3	LT	1.0
22	1,2-Dichlorobenzene	95-50-1	LT	1.0
23	1,3-Dichlorobenzene	541-73-1	LT	1.0
24	1,4-Dichlorobenzene	106-46-7	LT	1.0
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	3.0
26	1,1-Dichloroethane	75-34-3	LT	1.0
27	1,2-Dichloroethane	107-06-2	LT	2.0
28	1,1-Dichloroethene	75-35-4	LT	1.0
29	cis-1,2-Dichloroethene	156-69-9	2.5	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.0
32	1,2-Dichloropropane	78-87-5	LT	1.0
33	1,3-Dichloropropane	142-28-9	LT	1.0
34	2,2-Dichloropropane	594-20-7	LT	1.0

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW971065

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	1.0
36	cis-1,3-Dichloropropene	10061-01-5	LT	1.0
37	trans-1,3-Dichloropropene	10061-02-6	LT	1.0
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	3.0
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Ethylbenzene	100-41-4	LT	1.0
41	Hexachlorobutadien	87-68-3	LT	3.0
42	Isopropylbenzene	98-82-8	LT	2.0
43	p-Isopropyltoluene	99-87-6	LT	1.0
44	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.0
46	Naphthalene	91-20-3	LT	2.0
47	n-Propylbenzene	103-65-1	LT	1.0
48	Styrene	100-42-5	LT	1.0
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	1.0
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	2.0
51	Tetrachloroethene	127-18-4	LT	1.0
52	Toluene	108-88-3	LT	1.0
53	1,2,3-Trichlorobenzene	87-61-6	LT	2.0
54	1,2,4-Trichlorobenzene	120-82-1	LT	1.0
55	1,1,1-Trichloroethane	71-55-6	LT	1.0
56	1,1,2-Trichloroethane	79-00-5	LT	1.0
57	Trichloroethene	79-01-6	49.8	1.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.0
59	1,2,3-Trichloropropane	96-18-4	LT	1.0
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	1.0
61	1,2,4-Trimethylbenzene	95-63-6	LT	1.0
62	1,3,5-Trimethylbenzene	108-67-8	LT	1.0
63	Vinyl Chloride	75-01-4	LT	1.0
64	Total-Xylene	1330-20-7	LT	2.0

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	101.5	**86-115**
Dibromofluoromethane	106.6	**86-118**
Toluene-d8	97.2	**88-110**

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits (based on 5 ml water sample volume)
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B-12	Laboratory ID:	OW971066
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	10/23/97	Date Received:	10/27/97
Date Analyzed:	10/28/97	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	5.0
2	Bromobenzene	108-86-1	LT	5.0
3	Bromochloromethane	74-97-5	LT	10.0
4	Bromodichloromethane	75-27-4	LT	5.0
5	Bromoform	75-25-2	LT	10.0
6	Bromomethane	74-83-9	LT	20.0
7	n-Butylbenzene	104-51-8	LT	5.0
8	sec-Butylbenzene	135-98-8	LT	5.0
9	ter-Butylbenzene	98-06-6	LT	5.0
10	Carbon Tetrachloride	56-23-5	LT	5.0
11	Chlorobenzene	108-90-7	LT	5.0
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	150.0
13	Chloroethane	75-00-3	LT	150.0
14	Chloroform	67-66-3	LT	5.0
15	Chloromethane	74-87-3	LT	5.0
16	2-Chlorotoluene	95-49-8	LT	10.0
17	4-Chlorotoluene	106-43-4	LT	10.0
18	Dibromochloromethane	124-48-1	LT	10.0
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	10.0
20	1,2-Dibromoethane	106-93-4	LT	10.0
21	Dibromomethane	74-95-3	LT	5.0
22	1,2-Dichlorobenzene	95-50-1	LT	5.0
23	1,3-Dichlorobenzene	541-73-1	LT	5.0
24	1,4-Dichlorobenzene	106-46-7	LT	5.0
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	15.0
26	1,1-Dichloroethane	75-34-3	LT	5.0
27	1,2-Dichloroethane	107-06-2	LT	10.0
28	1,1-Dichloroethene	75-35-4	LT	5.0
29	cis-1,2-Dichloroethene	156-69-9	119	5.0
30	trans-1,2-Dichloroethene	156-60-5	LT	5.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	15.0
32	1,2-Dichloropropane	78-87-5	LT	5.0
33	1,3-Dichloropropane	142-28-9	LT	5.0
34	2,2-Dichloropropane	594-20-7	LT	5.0

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW971066

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	5.0
36	cis-1,3-Dichloropropene	10061-01-5	LT	5.0
37	trans-1,3-Dichloropropene	10061-02-6	LT	5.0
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	15.0
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	5.0
40	Ethylbenzene	100-41-4	LT	5.0
41	Hexachlorobutadien	87-68-3	LT	15.0
42	Isopropylbenzene	98-82-8	LT	10.0
43	p-Isopropyltoluene	99-87-6	LT	5.0
44	Methylene Chloride	75-09-2	LT	5.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	25.0
46	Naphthalene	91-20-3	LT	10.0
47	n-Propylbenzene	103-65-1	LT	5.0
48	Styrene	100-42-5	LT	5.0
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	5.0
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	10.0
51	Tetrachloroethene	127-18-4	LT	5.0
52	Toluene	108-88-3	LT	5.0
53	1,2,3-Trichlorobenzene	87-61-6	LT	10.0
54	1,2,4-Trichlorobenzene	120-82-1	LT	5.0
55	1,1,1-Trichloroethane	71-55-6	LT	5.0
56	1,1,2-Trichloroethane	79-00-5	LT	5.0
57	Trichloroethene	79-01-6	186	5.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	10.0
59	1,2,3-Trichloropropane	96-18-4	LT	5.0
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	5.0
61	1,2,4-Trimethylbenzene	95-63-6	LT	5.0
62	1,3,5-Trimethylbenzene	108-67-8	LT	5.0
63	Vinyl Chloride	75-01-4	LT	5.0
64	Total-Xylene	1330-20-7	LT	10.0

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	100.9	**86-115**
Dibromofluoromethane	104.4	**86-118**
Toluene-d8	96.0	**88-110**

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits (based on 5 ml water sample volume)
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst: Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-1	Laboratory ID:	OA971022
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/28/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	LT	23.80
9	1,2-Dichloroethane	107-06-2	LT	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	LT	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	33.0	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		33	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Lisa Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-2	Laboratory ID:	OA971024
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	26.8	23.80
9	1,2-Dichloroethane	107-06-2	LT	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	253	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	3311	17.96
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		3591	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-3	Laboratory ID:	OA971025
Matrix:	Gas Cartridge	Sample Vol.(L):	0.103
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.12
2	Benzene	71-43-2	LT	29.87
3	Carbon Tetrachloride	56-23-5	LT	15.19
4	Chloroform	67-66-3	80.0	19.57
5	1,2-Dichlorobenzene	95-50-1	LT	15.89
6	1,3-Dichlorobenzene	541-73-1	LT	15.89
7	1,4-Dichlorobenzene	106-46-7	LT	15.89
8	1,1-Dichloroethane	75-34-3	86.0	23.56
9	1,2-Dichloroethane	107-06-2	LT	24.09
10	1,1-Dichloroethene	75-35-4	LT	24.09
11	cis-1,2-Dichloroethene	156-69-9	288	24.09
12	trans-1,2-Dichloroethene	156-60-5	LT	24.09
13	Ethylbenzene	100-41-4	LT	22.02
14	Methylene Chloride	75-09-2	LT	27.50
15	Tetrachloroethene	127-18-4	LT	14.09
16	Toluene	108-88-3	LT	25.35
17	1,1,1-Trichloroethane	71-55-6	LT	17.49
18	1,1,2-Trichloroethane	79-00-5	LT	17.49
19	Trichloroethene	79-01-6	2156	17.78
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.48
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.35
22	Vinyl Chloride	75-01-4	LT	37.34
23	Total-Xylene	1330-20-7	LT	22.02
24	Total VOC		2610	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-4	Laboratory ID:	OA971026
Matrix:	Gas Cartridge	Sample Vol.(L):	0.104
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.73
2	Benzene	71-43-2	LT	29.59
3	Carbon Tetrachloride	56-23-5	LT	15.05
4	Chloroform	67-66-3	LT	19.39
5	1,2-Dichlorobenzene	95-50-1	LT	15.74
6	1,3-Dichlorobenzene	541-73-1	LT	15.74
7	1,4-Dichlorobenzene	106-46-7	LT	15.74
8	1,1-Dichloroethane	75-34-3	101	23.34
9	1,2-Dichloroethane	107-06-2	LT	23.86
10	1,1-Dichloroethene	75-35-4	LT	23.86
11	cis-1,2-Dichloroethene	156-69-9	594	23.86
12	trans-1,2-Dichloroethene	156-60-5	LT	23.86
13	Ethylbenzene	100-41-4	LT	21.80
14	Methylene Chloride	75-09-2	LT	27.24
15	Tetrachloroethene	127-18-4	LT	13.96
16	Toluene	108-88-3	LT	25.11
17	1,1,1-Trichloroethane	71-55-6	LT	17.33
18	1,1,2-Trichloroethane	79-00-5	LT	17.33
19	Trichloroethene	79-01-6	2640	17.61
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.34
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.11
22	Vinyl Chloride	75-01-4	LT	36.98
23	Total-Xylene	1330-20-7	LT	21.80
24	Total VOC		3335	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-5	Laboratory ID:	OA971027
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	25.0	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	99.5	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	656	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	2469	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		3250	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rob Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-6	Laboratory ID:	OA971028
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	LT	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	LT	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	198	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	629	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	NR	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		827	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-7	Laboratory ID:	OA971029
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	LT	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	LT	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	169	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	608	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		776	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-8	Laboratory ID:	OA971030
Matrix:	Gas Cartridge	Sample Vol.(L):	0.106
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	38.98
2	Benzene	71-43-2	LT	29.03
3	Carbon Tetrachloride	56-23-5	LT	14.76
4	Chloroform	67-66-3	LT	19.02
5	1,2-Dichlorobenzene	95-50-1	LT	15.44
6	1,3-Dichlorobenzene	541-73-1	LT	15.44
7	1,4-Dichlorobenzene	106-46-7	LT	15.44
8	1,1-Dichloroethane	75-34-3	LT	22.90
9	1,2-Dichloroethane	107-06-2	LT	23.41
10	1,1-Dichloroethene	75-35-4	LT	23.41
11	cis-1,2-Dichloroethene	156-69-9	57.5	23.41
12	trans-1,2-Dichloroethene	156-60-5	LT	23.41
13	Ethylbenzene	100-41-4	LT	21.39
14	Methylene Chloride	75-09-2	LT	26.73
15	Tetrachloroethene	127-18-4	LT	13.69
16	Toluene	108-88-3	LT	24.63
17	1,1,1-Trichloroethane	71-55-6	LT	17.00
18	1,1,2-Trichloroethane	79-00-5	LT	17.00
19	Trichloroethene	79-01-6	217	17.28
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.05
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.63
22	Vinyl Chloride	75-01-4	LT	36.28
23	Total-Xylene	1330-20-7	LT	21.39
24	Total VOC		274	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: H Powell Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-9	Laboratory ID:	OA971031
Matrix:	Gas Cartridge	Sample Vol.(L):	0.106
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	38.98
2	Benzene	71-43-2	LT	29.03
3	Carbon Tetrachloride	56-23-5	LT	14.76
4	Chloroform	67-66-3	LT	19.02
5	1,2-Dichlorobenzene	95-50-1	LT	15.44
6	1,3-Dichlorobenzene	541-73-1	LT	15.44
7	1,4-Dichlorobenzene	106-46-7	LT	15.44
8	1,1-Dichloroethane	75-34-3	LT	22.90
9	1,2-Dichloroethane	107-06-2	LT	23.41
10	1,1-Dichloroethene	75-35-4	LT	23.41
11	cis-1,2-Dichloroethene	156-69-9	68.7	23.41
12	trans-1,2-Dichloroethene	156-60-5	LT	23.41
13	Ethylbenzene	100-41-4	LT	21.39
14	Methylene Chloride	75-09-2	LT	26.73
15	Tetrachloroethene	127-18-4	LT	13.69
16	Toluene	108-88-3	LT	24.63
17	1,1,1-Trichloroethane	71-55-6	LT	17.00
18	1,1,2-Trichloroethane	79-00-5	LT	17.00
19	Trichloroethene	79-01-6	229	17.28
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.05
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.63
22	Vinyl Chloride	75-01-4	LT	36.28
23	Total-Xylene	1330-20-7	LT	21.39
24	Total VOC		298	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	92%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Date: 12/3/97
Reviewer: Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-10	Laboratory ID:	OA971032
Matrix:	Gas Cartridge	Sample Vol.(L):	0.107
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	38.62
2	Benzene	71-43-2	LT	28.76
3	Carbon Tetrachloride	56-23-5	LT	14.63
4	Chloroform	67-66-3	LT	18.84
5	1,2-Dichlorobenzene	95-50-1	LT	15.30
6	1,3-Dichlorobenzene	541-73-1	LT	15.30
7	1,4-Dichlorobenzene	106-46-7	LT	15.30
8	1,1-Dichloroethane	75-34-3	LT	22.68
9	1,2-Dichloroethane	107-06-2	LT	23.19
10	1,1-Dichloroethene	75-35-4	LT	23.19
11	cis-1,2-Dichloroethene	156-69-9	132	23.19
12	trans-1,2-Dichloroethene	156-60-5	LT	23.19
13	Ethylbenzene	100-41-4	LT	21.19
14	Methylene Chloride	75-09-2	LT	26.48
15	Tetrachloroethene	127-18-4	LT	13.56
16	Toluene	108-88-3	LT	24.40
17	1,1,1-Trichloroethane	71-55-6	LT	16.84
18	1,1,2-Trichloroethane	79-00-5	LT	16.84
19	Trichloroethene	79-01-6	453	17.12
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	14.91
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.40
22	Vinyl Chloride	75-01-4	LT	35.95
23	Total-Xylene	1330-20-7	LT	21.19
24	Total VOC		584	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-11	Laboratory ID:	OA971033
Matrix:	Gas Cartridge	Sample Vol.(L):	0.107
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	11/1/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	38.62
2	Benzene	71-43-2	LT	28.76
3	Carbon Tetrachloride	56-23-5	LT	14.63
4	Chloroform	67-66-3	70.1	18.84
5	1,2-Dichlorobenzene	95-50-1	LT	15.30
6	1,3-Dichlorobenzene	541-73-1	LT	15.30
7	1,4-Dichlorobenzene	106-46-7	LT	15.30
8	1,1-Dichloroethane	75-34-3	98.7	22.68
9	1,2-Dichloroethane	107-06-2	353	23.19
10	1,1-Dichloroethene	75-35-4	LT	23.19
11	cis-1,2-Dichloroethene	156-69-9	1270	23.19
12	trans-1,2-Dichloroethene	156-60-5	LT	23.19
13	Ethylbenzene	100-41-4	LT	21.19
14	Methylene Chloride	75-09-2	LT	26.48
15	Tetrachloroethene	127-18-4	LT	13.56
16	Toluene	108-88-3	LT	24.40
17	1,1,1-Trichloroethane	71-55-6	LT	16.84
18	1,1,2-Trichloroethane	79-00-5	LT	16.84
19	Trichloroethene	79-01-6	1330	17.12
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	14.91
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.40
22	Vinyl Chloride	75-01-4	LT	35.95
23	Total-Xylene	1330-20-7	LT	21.19
24	Total VOC		3122	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-12	Laboratory ID:	OA971012
Matrix:	Gas Cartridge	Sample Vol.(L):	0.108
Date Sampled:	10/23/97	Date Received:	10/23/97
Date Analyzed:	10/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	382.61
2	Benzene	71-43-2	LT	284.90
3	Carbon Tetrachloride	56-23-5	LT	144.90
4	Chloroform	67-66-3	LT	186.68
5	1,2-Dichlorobenzene	95-50-1	LT	151.54
6	1,3-Dichlorobenzene	541-73-1	LT	151.54
7	1,4-Dichlorobenzene	106-46-7	LT	151.54
8	1,1-Dichloroethane	75-34-3	LT	224.74
9	1,2-Dichloroethane	107-06-2	358	229.76
10	1,1-Dichloroethene	75-35-4	LT	229.76
11	cis-1,2-Dichloroethene	156-69-9	37700	229.76
12	trans-1,2-Dichloroethene	156-60-5	LT	229.76
13	Ethylbenzene	100-41-4	LT	209.96
14	Methylene Chloride	75-09-2	LT	262.30
15	Tetrachloroethene	127-18-4	LT	134.39
16	Toluene	108-88-3	LT	241.76
17	1,1,1-Trichloroethane	71-55-6	LT	166.83
18	1,1,2-Trichloroethane	79-00-5	LT	166.83
19	Trichloroethene	79-01-6	27900	169.58
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	147.68
21	1,2,4-Trimethylbenzene	95-63-6	LT	241.76
22	Vinyl Chloride	75-01-4	LT	356.13
23	Total-Xylene	1330-20-7	LT	209.96
24	Total VOC		65958	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	95%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: B Pamfil Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-13	Laboratory ID:	OA971013
Matrix:	Gas Cartridge	Sample Vol.(L):	0.108
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	382.61
2	Benzene	71-43-2	LT	284.90
3	Carbon Tetrachloride	56-23-5	LT	144.90
4	Chloroform	67-66-3	LT	186.68
5	1,2-Dichlorobenzene	95-50-1	LT	151.54
6	1,3-Dichlorobenzene	541-73-1	LT	151.54
7	1,4-Dichlorobenzene	106-46-7	LT	151.54
8	1,1-Dichloroethane	75-34-3	LT	224.74
9	1,2-Dichloroethane	107-06-2	LT	229.76
10	1,1-Dichloroethene	75-35-4	LT	229.76
11	cis-1,2-Dichloroethene	156-69-9	55500	229.76
12	trans-1,2-Dichloroethene	156-60-5	391	229.76
13	Ethylbenzene	100-41-4	LT	209.96
14	Methylene Chloride	75-09-2	LT	262.30
15	Tetrachloroethene	127-18-4	LT	134.39
16	Toluene	108-88-3	LT	241.76
17	1,1,1-Trichloroethane	71-55-6	LT	166.83
18	1,1,2-Trichloroethane	79-00-5	LT	166.83
19	Trichloroethene	79-01-6	42200	169.58
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	147.68
21	1,2,4-Trimethylbenzene	95-63-6	LT	241.76
22	Vinyl Chloride	75-01-4	LT	356.13
23	Total-Xylene	1330-20-7	LT	209.96
24	Total VOC		98091	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	93%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	FB2	Laboratory ID:	OA971015
Matrix:	Gas Cartridge	Sample Vol.(L):	0.104
Date Sampled:	10/24/97	Date Received:	10/23/97
Date Analyzed:	10/31/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.73
2	Benzene	71-43-2	LT	29.59
3	Carbon Tetrachloride	56-23-5	LT	15.05
4	Chloroform	67-66-3	LT	19.39
5	1,2-Dichlorobenzene	95-50-1	LT	15.74
6	1,3-Dichlorobenzene	541-73-1	LT	15.74
7	1,4-Dichlorobenzene	106-46-7	LT	15.74
8	1,1-Dichloroethane	75-34-3	LT	23.34
9	1,2-Dichloroethane	107-06-2	LT	23.86
10	1,1-Dichloroethene	75-35-4	LT	23.86
11	cis-1,2-Dichloroethene	156-69-9	LT	23.86
12	trans-1,2-Dichloroethene	156-60-5	LT	23.86
13	Ethylbenzene	100-41-4	LT	21.80
14	Methylene Chloride	75-09-2	LT	27.24
15	Tetrachloroethene	127-18-4	LT	13.96
16	Toluene	108-88-3	LT	25.11
17	1,1,1-Trichloroethane	71-55-6	LT	17.33
18	1,1,2-Trichloroethane	79-00-5	LT	17.33
19	Trichloroethene	79-01-6	LT	17.61
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.34
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.11
22	Vinyl Chloride	75-01-4	LT	36.98
23	Total-Xylene	1330-20-7	LT	21.80
24	Total VOC		0	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	93%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-1	Laboratory ID:	OA971036
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/27/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	LT	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	37.6	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	235	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	71-55-6	LT	17.16
19	Trichloroethene	79-01-6	3820	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		4092	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	92%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-1B	Laboratory ID:	OA971023
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/27/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.51
2	Benzene	71-43-2	LT	30.17
3	Carbon Tetrachloride	56-23-5	LT	15.34
4	Chloroform	67-66-3	LT	19.77
5	1,2-Dichlorobenzene	95-50-1	LT	16.05
6	1,3-Dichlorobenzene	541-73-1	LT	16.05
7	1,4-Dichlorobenzene	106-46-7	LT	16.05
8	1,1-Dichloroethane	75-34-3	36.3	23.80
9	1,2-Dichloroethane	107-06-2	LT	24.33
10	1,1-Dichloroethene	75-35-4	LT	24.33
11	cis-1,2-Dichloroethene	156-69-9	210	24.33
12	trans-1,2-Dichloroethene	156-60-5	LT	24.33
13	Ethylbenzene	100-41-4	LT	22.23
14	Methylene Chloride	75-09-2	LT	27.77
15	Tetrachloroethene	127-18-4	LT	14.23
16	Toluene	108-88-3	LT	25.60
17	1,1,1-Trichloroethane	71-55-6	LT	17.66
18	1,1,2-Trichloroethane	79-00-5	LT	17.66
19	Trichloroethene	79-01-6	4080	17.96
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	15.64
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.60
22	Vinyl Chloride	75-01-4	LT	37.71
23	Total-Xylene	1330-20-7	LT	22.23
24	Total VOC		4326	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	92%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-2	Laboratory ID:	OA971037
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/27/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	LT	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	45.6	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	393	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	3350	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		3788	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	**75-130**

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rob Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-3	Laboratory ID:	OA971038
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/27/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.35
2	Benzene	71-43-2	LT	29.30
3	Carbon Tetrachloride	56-23-5	LT	14.90
4	Chloroform	67-66-3	LT	19.20
5	1,2-Dichlorobenzene	95-50-1	LT	15.59
6	1,3-Dichlorobenzene	541-73-1	LT	15.59
7	1,4-Dichlorobenzene	106-46-7	LT	15.59
8	1,1-Dichloroethane	75-34-3	69.6	23.12
9	1,2-Dichloroethane	107-06-2	LT	23.63
10	1,1-Dichloroethene	75-35-4	LT	23.63
11	cis-1,2-Dichloroethene	156-69-9	353	23.63
12	trans-1,2-Dichloroethene	156-60-5	LT	23.63
13	Ethylbenzene	100-41-4	LT	21.60
14	Methylene Chloride	75-09-2	LT	26.98
15	Tetrachloroethene	127-18-4	LT	13.82
16	Toluene	108-88-3	LT	24.87
17	1,1,1-Trichloroethane	71-55-6	LT	17.16
18	1,1,2-Trichloroethane	79-00-5	LT	17.16
19	Trichloroethene	79-01-6	2260	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.19
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.87
22	Vinyl Chloride	75-01-4	LT	36.63
23	Total-Xylene	1330-20-7	LT	21.60
24	Total VOC		2683	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	92%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rob Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-4	Laboratory ID:	OA971039
Matrix:	Gas Cartridge	Sample Vol.(L):	0.104
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/27/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.73
2	Benzene	71-43-2	LT	29.59
3	Carbon Tetrachloride	56-23-5	LT	15.05
4	Chloroform	67-66-3	LT	19.39
5	1,2-Dichlorobenzene	95-50-1	LT	15.74
6	1,3-Dichlorobenzene	541-73-1	LT	15.74
7	1,4-Dichlorobenzene	106-46-7	LT	15.74
8	1,1-Dichloroethane	75-34-3	LT	23.34
9	1,2-Dichloroethane	107-06-2	LT	23.86
10	1,1-Dichloroethene	75-35-4	LT	23.86
11	cis-1,2-Dichloroethene	156-69-9	487	23.86
12	trans-1,2-Dichloroethene	156-60-5	LT	23.86
13	Ethylbenzene	100-41-4	LT	21.80
14	Methylene Chloride	75-09-2	LT	27.24
15	Tetrachloroethene	127-18-4	LT	13.96
16	Toluene	108-88-3	LT	25.11
17	1,1,1-Trichloroethane	71-55-6	LT	17.33
18	1,1,2-Trichloroethane	79-00-5	LT	17.33
19	Trichloroethene	79-01-6	2640	17.61
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.34
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.11
22	Vinyl Chloride	75-01-4	LT	36.98
23	Total-Xylene	1330-20-7	LT	21.80
24	Total VOC		3127	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-5	Laboratory ID:	OA971040
Matrix:	Gas Cartridge	Sample Vol.(L):	0.104
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/27/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.73
2	Benzene	71-43-2	LT	29.59
3	Carbon Tetrachloride	56-23-5	LT	15.05
4	Chloroform	67-66-3	LT	19.39
5	1,2-Dichlorobenzene	95-50-1	LT	15.74
6	1,3-Dichlorobenzene	541-73-1	LT	15.74
7	1,4-Dichlorobenzene	106-46-7	LT	15.74
8	1,1-Dichloroethane	75-34-3	71.8	23.34
9	1,2-Dichloroethane	107-06-2	25.6	23.86
10	1,1-Dichloroethene	75-35-4	LT	23.86
11	cis-1,2-Dichloroethene	156-69-9	546	23.86
12	trans-1,2-Dichloroethene	156-60-5	LT	23.86
13	Ethylbenzene	100-41-4	LT	21.80
14	Methylene Chloride	75-09-2	LT	27.24
15	Tetrachloroethene	127-18-4	LT	13.96
16	Toluene	108-88-3	LT	25.11
17	1,1,1-Trichloroethane	71-55-6	LT	17.33
18	1,1,2-Trichloroethane	79-00-5	LT	17.33
19	Trichloroethene	79-01-6	1880	17.61
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	15.34
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.11
22	Vinyl Chloride	75-01-4	LT	36.98
23	Total-Xylene	1330-20-7	LT	21.80
24	Total VOC		2523	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-6	Laboratory ID:	OA971041
Matrix:	Gas Cartridge	Sample Vol.(L):	0.104
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/28/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.73
2	Benzene	71-43-2	LT	29.59
3	Carbon Tetrachloride	56-23-5	LT	15.05
4	Chloroform	67-66-3	LT	19.39
5	1,2-Dichlorobenzene	95-50-1	LT	15.74
6	1,3-Dichlorobenzene	541-73-1	LT	15.74
7	1,4-Dichlorobenzene	106-46-7	LT	15.74
8	1,1-Dichloroethane	75-34-3	27.9	23.34
9	1,2-Dichloroethane	107-06-2	37.9	23.86
10	1,1-Dichloroethene	75-35-4	LT	23.86
11	cis-1,2-Dichloroethene	156-69-9	507	23.86
12	trans-1,2-Dichloroethene	156-60-5	LT	23.86
13	Ethylbenzene	100-41-4	LT	21.80
14	Methylene Chloride	75-09-2	114	27.24
15	Tetrachloroethene	127-18-4	LT	13.96
16	Toluene	108-88-3	LT	25.11
17	1,1,1-Trichloroethane	71-55-6	LT	17.33
18	1,1,2-Trichloroethane	79-00-5	LT	17.33
19	Trichloroethene	79-01-6	1060	17.61
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	NR	15.34
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.11
22	Vinyl Chloride	75-01-4	LT	36.98
23	Total-Xylene	1330-20-7	LT	21.80
24	Total VOC		1747	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-7	Laboratory ID:	OA971042
Matrix:	Gas Cartridge	Sample Vol.(L):	0.104
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/28/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	39.73
2	Benzene	71-43-2	LT	29.59
3	Carbon Tetrachloride	56-23-5	LT	15.05
4	Chloroform	67-66-3	LT	19.39
5	1,2-Dichlorobenzene	95-50-1	LT	15.74
6	1,3-Dichlorobenzene	541-73-1	LT	15.74
7	1,4-Dichlorobenzene	106-46-7	LT	15.74
8	1,1-Dichloroethane	75-34-3	LT	23.34
9	1,2-Dichloroethane	107-06-2	33.8	23.86
10	1,1-Dichloroethene	75-35-4	LT	23.86
11	cis-1,2-Dichloroethene	156-69-9	175	23.86
12	trans-1,2-Dichloroethene	156-60-5	LT	23.86
13	Ethylbenzene	100-41-4	LT	21.80
14	Methylene Chloride	75-09-2	LT	27.24
15	Tetrachloroethene	127-18-4	LT	13.96
16	Toluene	108-88-3	LT	25.11
17	1,1,1-Trichloroethane	71-55-6	LT	17.33
18	1,1,2-Trichloroethane	79-00-5	LT	17.33
19	Trichloroethene	79-01-6	521	17.61
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	15.34
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.11
22	Vinyl Chloride	75-01-4	LT	36.98
23	Total-Xylene	1330-20-7	LT	21.80
24	Total VOC		730	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-8	Laboratory ID:	OA971043
Matrix:	Gas Cartridge	Sample Vol.(L):	0.103
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/28/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.12
2	Benzene	71-43-2	LT	29.87
3	Carbon Tetrachloride	56-23-5	LT	15.19
4	Chloroform	67-66-3	LT	19.57
5	1,2-Dichlorobenzene	95-50-1	LT	15.89
6	1,3-Dichlorobenzene	541-73-1	LT	15.89
7	1,4-Dichlorobenzene	106-46-7	LT	15.89
8	1,1-Dichloroethane	75-34-3	LT	23.56
9	1,2-Dichloroethane	107-06-2	LT	24.09
10	1,1-Dichloroethene	75-35-4	LT	24.09
11	cis-1,2-Dichloroethene	156-69-9	35.6	24.09
12	trans-1,2-Dichloroethene	156-60-5	LT	24.09
13	Ethylbenzene	100-41-4	LT	22.02
14	Methylene Chloride	75-09-2	LT	27.50
14	Tetrachloroethene	127-18-4	LT	14.09
15	Toluene	108-88-3	LT	25.35
16	1,1,1-Trichloroethane	71-55-6	LT	17.49
16	1,1,2-Trichloroethane	79-00-5	LT	17.49
17	Trichloroethene	79-01-6	144	17.78
18	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	15.48
17	1,2,4-Trimethylbenzene	95-63-6	LT	25.35
18	Vinyl Chloride	75-01-4	LT	37.34
19	Total-Xylene	1330-20-7	LT	22.02
19	Total VOC		179	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	90%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rob Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-9	Laboratory ID:	OA971044
Matrix:	Gas Cartridge	Sample Vol.(L):	0.103
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/28/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.12
2	Benzene	71-43-2	LT	29.87
3	Carbon Tetrachloride	56-23-5	LT	15.19
4	Chloroform	67-66-3	LT	19.57
5	1,2-Dichlorobenzene	95-50-1	LT	15.89
6	1,3-Dichlorobenzene	541-73-1	LT	15.89
7	1,4-Dichlorobenzene	106-46-7	LT	15.89
8	1,1-Dichloroethane	75-34-3	LT	23.56
9	1,2-Dichloroethane	107-06-2	LT	24.09
10	1,1-Dichloroethene	75-35-4	236	24.09
11	cis-1,2-Dichloroethene	156-69-9	179	24.09
12	trans-1,2-Dichloroethene	156-60-5	LT	24.09
13	Ethylbenzene	100-41-4	LT	22.02
14	Methylene Chloride	75-09-2	LT	27.50
15	Tetrachloroethene	127-18-4	LT	14.09
16	Toluene	108-88-3	LT	25.35
17	1,1,1-Trichloroethane	71-55-6	LT	17.49
18	1,1,2-Trichloroethane	79-00-5	LT	17.49
19	Trichloroethene	79-01-6	668	17.78
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	15.48
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.35
22	Vinyl Chloride	75-01-4	LT	37.34
23	Total-Xylene	1330-20-7	LT	22.02
24	Total VOC		1084	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-10	Laboratory ID:	OA971045
Matrix:	Gas Cartridge	Sample Vol.(L):	0.103
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/28/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.12
2	Benzene	71-43-2	LT	29.87
3	Carbon Tetrachloride	56-23-5	LT	15.19
4	Chloroform	67-66-3	LT	19.57
5	1,2-Dichlorobenzene	95-50-1	LT	15.89
6	1,3-Dichlorobenzene	541-73-1	LT	15.89
7	1,4-Dichlorobenzene	106-46-7	LT	15.89
8	1,1-Dichloroethane	75-34-3	LT	23.56
9	1,2-Dichloroethane	107-06-2	70.7	24.09
10	1,1-Dichloroethene	75-35-4	LT	24.09
11	cis-1,2-Dichloroethene	156-69-9	148	24.09
12	trans-1,2-Dichloroethene	156-60-5	LT	24.09
13	Ethylbenzene	100-41-4	LT	22.02
14	Methylene Chloride	75-09-2	LT	27.50
15	Tetrachloroethene	127-18-4	LT	14.09
16	Toluene	108-88-3	48.7	25.35
17	1,1,1-Trichloroethane	71-55-6	LT	17.49
18	1,1,2-Trichloroethane	79-00-5	LT	17.49
19	Trichloroethene	79-01-6	319	17.78
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	15.48
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.35
22	Vinyl Chloride	75-01-4	LT	37.34
23	Total-Xylene	1330-20-7	LT	22.02
24	Total VOC		587	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL
* Compounds could not be determined because of interferent on detector.
California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-11	Laboratory ID:	OA971046
Matrix:	Gas Cartridge	Sample Vol.(L):	0.103
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/28/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	40.12
2	Benzene	71-43-2	LT	29.87
3	Carbon Tetrachloride	56-23-5	LT	15.19
4	Chloroform	67-66-3	LT	19.57
5	1,2-Dichlorobenzene	95-50-1	LT	15.89
6	1,3-Dichlorobenzene	541-73-1	LT	15.89
7	1,4-Dichlorobenzene	106-46-7	LT	15.89
8	1,1-Dichloroethane	75-34-3	64.2	23.56
9	1,2-Dichloroethane	107-06-2	301	24.09
10	1,1-Dichloroethene	75-35-4	LT	24.09
11	cis-1,2-Dichloroethene	156-69-9	1930	24.09
12	trans-1,2-Dichloroethene	156-60-5	LT	24.09
13	Ethylbenzene	100-41-4	LT	22.02
14	Methylene Chloride	75-09-2	LT	27.50
15	Tetrachloroethene	127-18-4	LT	14.09
16	Toluene	108-88-3	LT	25.35
17	1,1,1-Trichloroethane	71-55-6	LT	17.49
18	1,1,2-Trichloroethane	79-00-5	LT	17.49
19	Trichloroethene	79-01-6	1480	17.78
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	15.48
21	1,2,4-Trimethylbenzene	95-63-6	LT	25.35
22	Vinyl Chloride	75-01-4	LT	37.34
23	Total-Xylene	1330-20-7	LT	22.02
24	Total VOC		3775	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	89%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-12	Laboratory ID:	OA971025
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	405.1
2	Benzene	71-43-2	LT	301.7
3	Carbon Tetrachloride	56-23-5	LT	153.4
4	Chloroform	67-66-3	LT	197.7
5	1,2-Dichlorobenzene	95-50-1	LT	160.5
6	1,3-Dichlorobenzene	541-73-1	LT	160.5
7	1,4-Dichlorobenzene	106-46-7	LT	160.5
8	1,1-Dichloroethane	75-34-3	LT	238.0
9	1,2-Dichloroethane	107-06-2	LT	243.3
10	1,1-Dichloroethene	75-35-4	LT	243.3
11	cis-1,2-Dichloroethene	156-69-9	6130	243.3
12	trans-1,2-Dichloroethene	156-60-5	LT	243.3
13	Ethylbenzene	100-41-4	LT	222.3
14	Methylene Chloride	75-09-2	LT	277.7
15	Tetrachloroethene	127-18-4	LT	142.3
16	Toluene	108-88-3	LT	256.0
17	1,1,1-Trichloroethane	71-55-6	LT	176.6
18	1,1,2-Trichloroethane	79-00-5	LT	176.6
19	Trichloroethene	79-01-6	5730	179.6
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	156.4
21	1,2,4-Trimethylbenzene	95-63-6	LT	256.0
22	Vinyl Chloride	75-01-4	LT	377.1
23	Total-Xylene	1330-20-7	LT	222.3
24	Total VOC		11860	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	93%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rick Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-13	Laboratory ID:	OA971026
Matrix:	Gas Cartridge	Sample Vol.(L):	0.102
Date Sampled:	10/23/97	Date Received:	10/24/97
Date Analyzed:	10/24/97	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	405.1
2	Benzene	71-43-2	LT	301.7
3	Carbon Tetrachloride	56-23-5	LT	153.4
4	Chloroform	67-66-3	LT	197.7
5	1,2-Dichlorobenzene	95-50-1	LT	160.5
6	1,3-Dichlorobenzene	541-73-1	LT	160.5
7	1,4-Dichlorobenzene	106-46-7	LT	160.5
8	1,1-Dichloroethane	75-34-3	LT	238.0
9	1,2-Dichloroethane	107-06-2	LT	243.3
10	1,1-Dichloroethene	75-35-4	LT	243.3
11	cis-1,2-Dichloroethene	156-69-9	49600	243.3
12	trans-1,2-Dichloroethene	156-60-5	396	243.3
13	Ethylbenzene	100-41-4	LT	222.3
14	Methylene Chloride	75-09-2	LT	277.7
15	Tetrachloroethene	127-18-4	LT	142.3
16	Toluene	108-88-3	LT	256.0
17	1,1,1-Trichloroethane	71-55-6	LT	176.6
18	1,1,2-Trichloroethane	79-00-5	LT	176.6
19	Trichloroethene	79-01-6	39100	179.6
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	156.4
21	1,2,4-Trimethylbenzene	95-63-6	LT	256.0
22	Vinyl Chloride	75-01-4	LT	377.1
23	Total-Xylene	1330-20-7	LT	222.3
24	Total VOC		89096	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	91%	75-130

CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

California D.O.H.S. Cert. # 1704

Analyst : Rich Dahlquist Date: 12/3/97
Reviewer: [illegible] Date: 12/3/97

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