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

Quarterly Status Report (2/20/98-5/20/98)

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1.0 INTRODUCTION

This report contains information on field and laboratory work performed between February 20th, 1998 and May 20th, 1998, 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
- aqueous-phase VOC concentrations
- temperature profiles
- installation of new instrument cluster

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 3/20/98 and 5/6/98 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.

Well NP-B was logged to a depth of 98 ft. Results of measurements in the top 50 ft in Well NP-B are shown in Fig. 1. The neutron count data are presented as volumetric moisture content, based on a regression derived in LBNL (1998a). As seen from these results, the overall volumetric moisture content in the formation did not change significantly during this period, though some redistribution of moisture occurred at around12-13 ft, and between 20 and 30 ft.

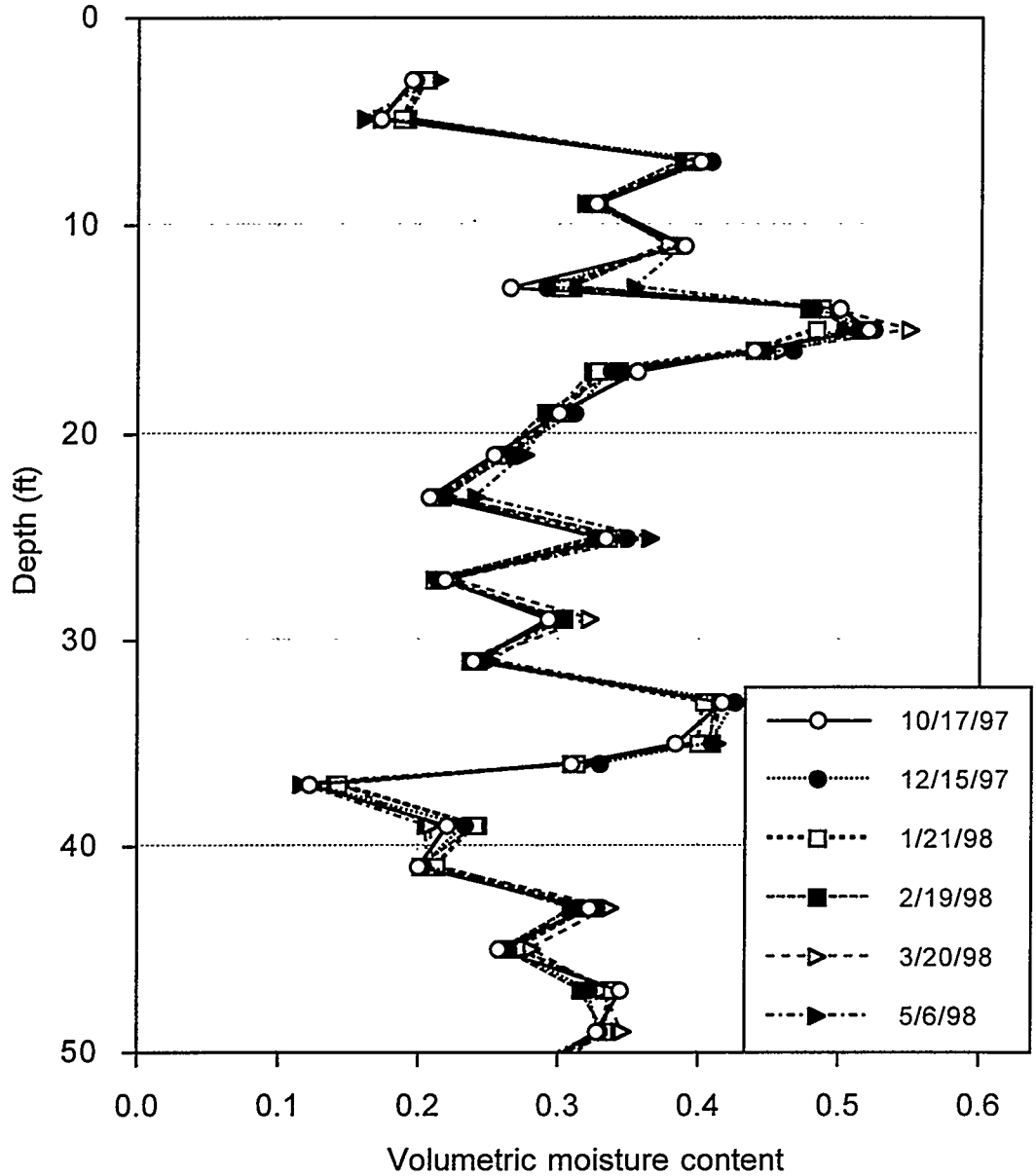

Figure 1. Volumetric moisture content based on neutron counts measured in the top 50 ft of Well NP-B over the period 10/97 to 5/98.

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 of VOC concentrations 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 sampling time and gas 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 45 days. EPA TO14 analyses are performed by the Environmental Measurements Laboratory of LBNL.

To date, ten complete sets of gas samples have been collected at the site on the following dates: 4/4/97, 5/8/97, 7/22/97, 8/26/97, 10/23/97, 12/15/97, 1/21/98, 2/19/98, 3/20/98, and 5/1/98. The analysis of the 4/4/97 samples from Well A was out of control due to problems with sample dilution. The analysis of the 5/8/97 samples has been questioned because of a contaminated blank. Results from 7/22/97 are being scrutinized, because, unlike all other data sets, they do not agree quantitatively with concentrations in pore-water samples, as compared using Henry's Law (LBNL, 1998a). However, only results from 4/4/97 have been excluded from this report.

TCE, cis-1,2-DCE, and Freon 123a have been identified as the major contaminants in the system (LBNL, 1997b). Freon 123a has only recently been positively identified because of its more exotic nature. Because the error arising from the reprocessing of previous data to arrive at Freon 123a concentrations is substantial, only data collected on and subsequent to 12/15/97 are presented. In this report we focus our attention on the parts of the vadose zone where consistent trends and large changes in concentrations have been observed, i.e., the top 30 ft of the profile for TCE and cis-1,2-DCE, and the 25 ft above the water table for Freon 123a. By doing so, we can present temporal changes more distinctly.

Time-trends in TCE concentrations in the gas phase are shown in Figs. 2 and 3 for Wells A and B, respectively. Changes in TCE levels are observed down to a depth of 18 ft, though they are far greater in the top 11 ft. At the two shallow depths, little change is observed during the summer of 1997, followed by a sharp increase during the fall and winter, marked by a peak in concentrations in March of 1998. The peak is especially distinct at the 6 ft depth, where soil-gas TCE concentrations reached 80 ppmv, compared with less than 10 ppmv eight months prior. This peak is followed by a sharp decline in May of 1998, a decline which is also seen at 11 ft, in both wells.

Time-trends in cis-1,2-DCE concentrations are shown in Figs. 4 and 5, for Wells A and B, respectively. Although the trends in TCE and cis-1,2-DCE are similar, some important differences exist. The peak in cis-1,2-DCE concentration at the 6-ft depth occurs in October 1997, 5 months prior to the peak in TCE. There is a second peak in cis-1,2-DCE in February 1998, but it is relatively lower. In Well A, the temporal trends are similar at 6 ft and 11 ft, while in Well B cis-1,2-DCE does not peak at 11 ft until March 1998. Furthermore, there is a fairly distinct peak at 18 ft in Well B, while no such peak is seen in Well A. Similar to the TCE trends, cis-1,2-DCE concentrations decline in May 1998.

The temporal trends described above are suggestive of seasonal fluxes, caused by either water infiltration or temperature gradients, or both. Future modeling of this system will consider both of these possibilities.

Time-trends in Freon 123a concentrations are shown in Figs. 6 and 7, for Wells A and B, respectively. Since Freon 123a has not been detected at depths shallower than 83 ft, only data from that and greater depths is presented. It is quite clear that there have been gradual increases in Freon 123a levels immediately above the water table, with the highest concentrations measured on 5/1/98. The reason for this trend is not clear. It is not known whether more contaminated groundwater has moved into the area, or whether fluctuations in groundwater level might be a factor. It should be noted that TCE and cis-1,2-DCE concentrations at these depths have not increased.

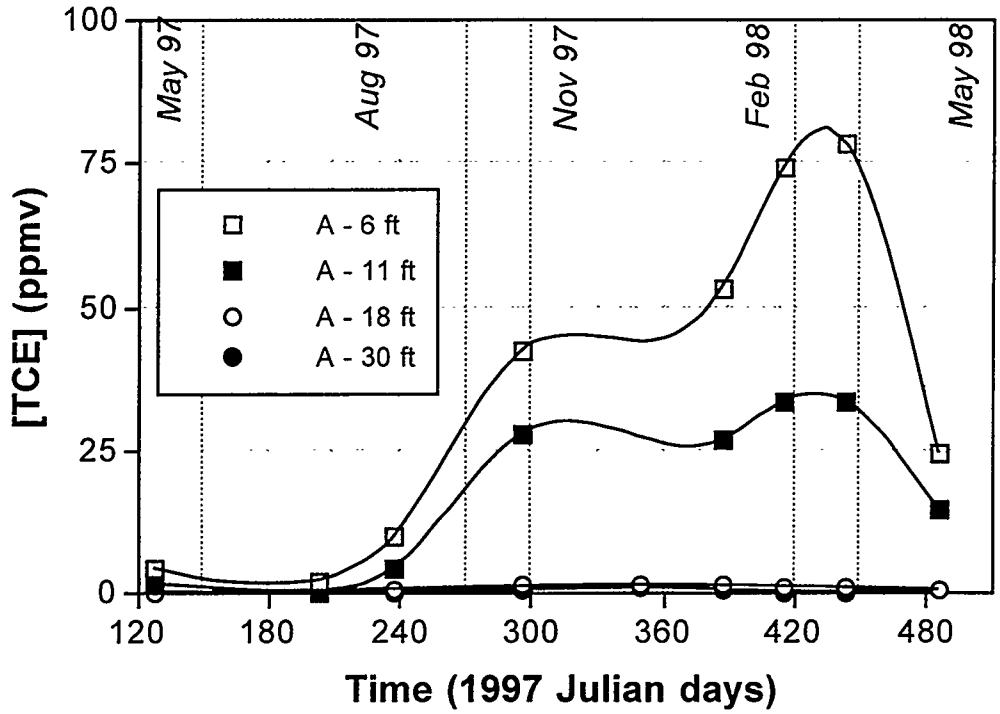

Figure 2. TCE concentrations in the gas-phase, as measured in Well A at 6, 11, 18, and 30 ft, from May 1997 to May 1998.

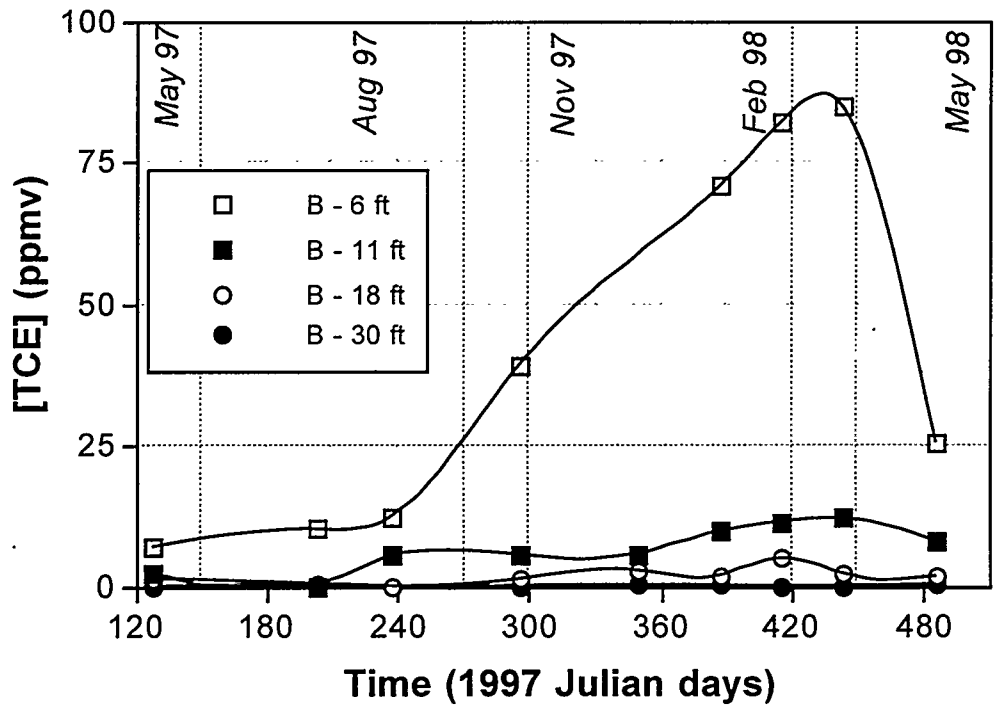

Figure 3. TCE concentrations in the gas-phase, as measured in Well B at 6, 11, 18, and 30 ft, from May 1997 to May 1998.

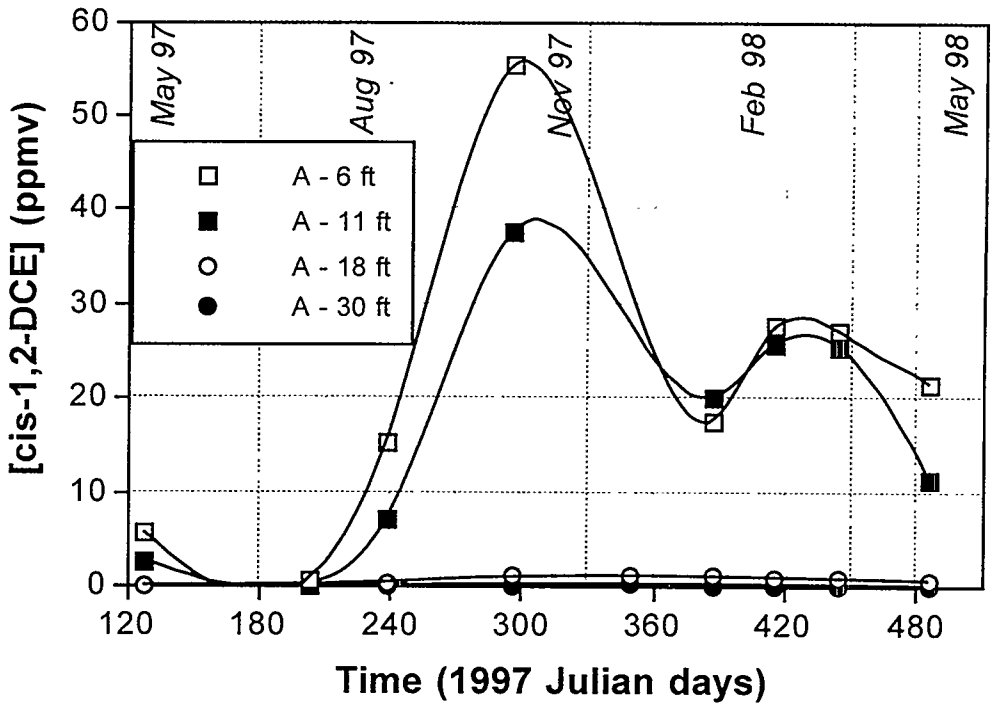

Figure 4. Cis-1,2-DCE concentrations in the gas-phase, as measured in Well A at 6, 11, 18, and 30 ft, from May 1997 to May 1998.

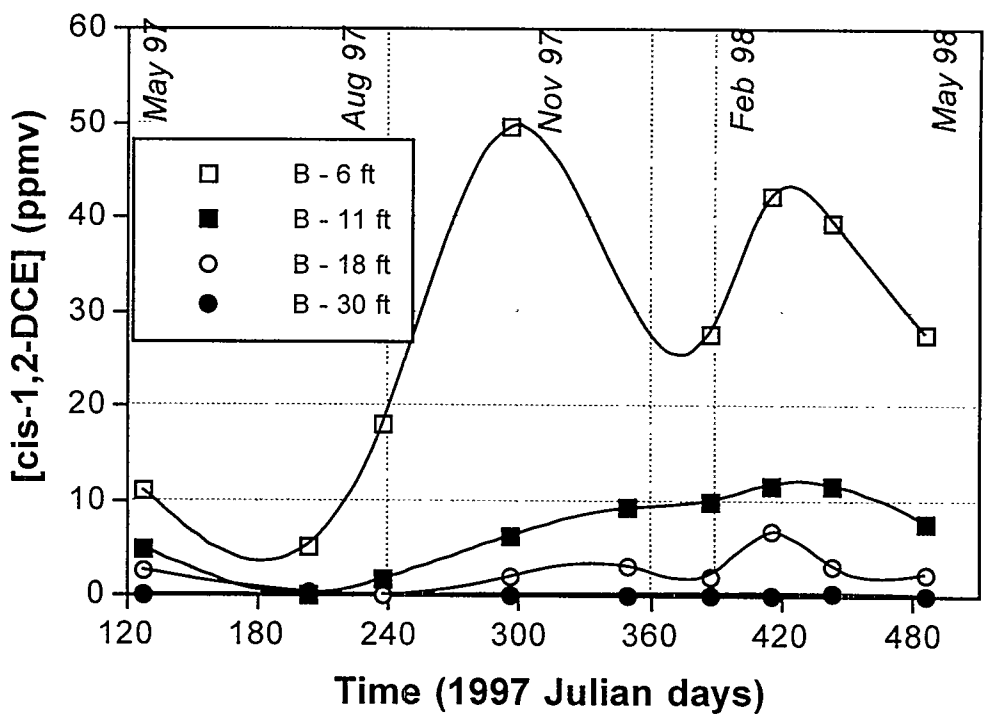

Figure 5. Cis-1,2-DCE concentrations in the gas-phase, as measured in Well B at 6, 11, 18, and 30 ft, from May 1997 to May 1998.

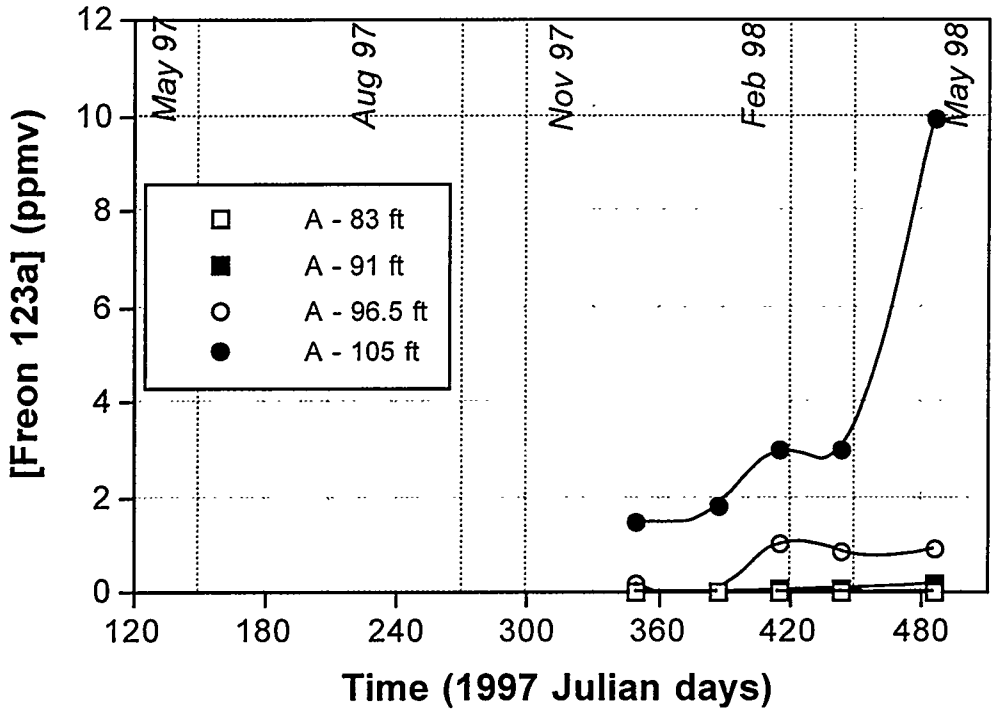

Figure 6. Freon 123a concentrations in the gas-phase, as measured in Well A at 83, 91, 96.5, and 105 ft, from May 1997 to May 1998.

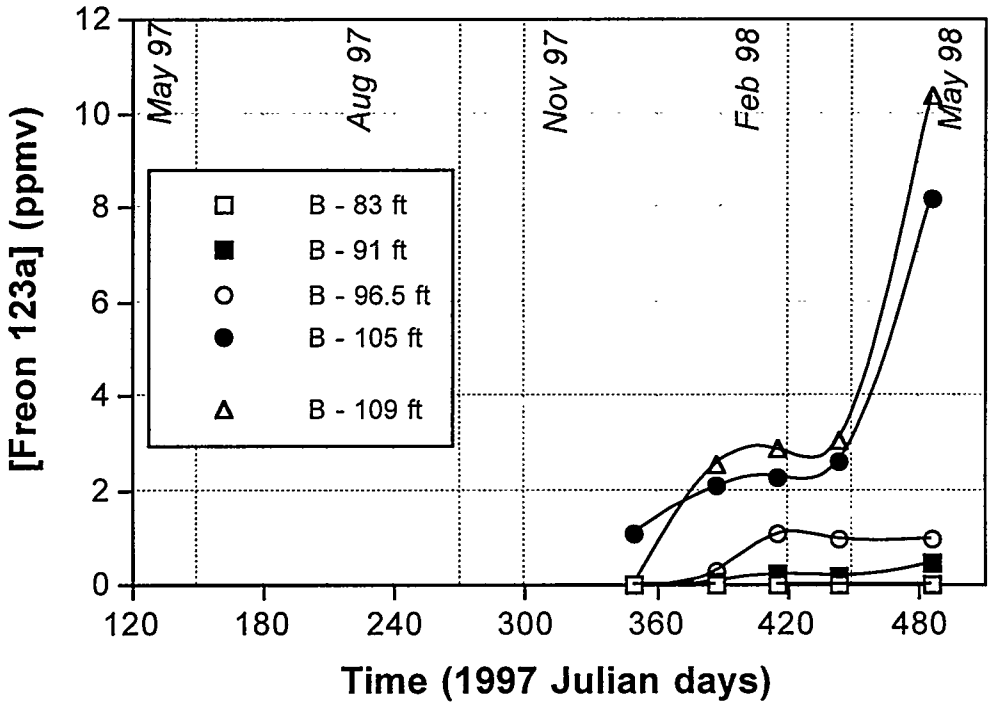

Figure 7. Freon 123a concentrations in the gas-phase, as measured in Well B at 83, 91, 96.5, 105, and 109 ft, from May 1997 to May 1998.

2.3 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. During the last quarter, lysimeter samples were extracted on 3/20/98, and 5/1/98. 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 smaller samples. Samples which do not completely fill the vial are topped off with distilled and deionized water, the volume of which is noted. This results in a dilution of the sample but eliminates headspace. All samples are acidified using HCl.

Although several compounds have been found to occur in the aqueous phase (LBNL, 1997a), TCE, cis-1,2-DCE, and Freon 123a are by far the dominant contaminants and only their distributions are presented in this report. Similar to the presentation of soil-gas data, we focus on liquid-phase contaminants in the top 30 ft of the sediment profile. Temporal changes in TCE concentrations in Wells A and B are shown in Fig. 8, while cis-1,2-DCE values are shown in Fig. 9. Lysimeters at 6 ft and 18 ft in Well A and at 18 ft and 30 ft in Well B have yielded no sample to date.

Data shown in Figs. 8 and 9 exhibit trends similar to but less distinct than those seen in the gas phase. Specifically, TCE concentrations peak in February 1998 and decline subsequently. This trend, however, is seen as deep as 30 ft, which was not the case in the gas phase. The same peak in February 1998 is seen in the cis-1,2-DCE data, though unlike the gas phase, an earlier peak in October 1997 is not observed. Unfortunately, due to the difficulties in obtaining a sample of adequate size, liquid-phase data are much more sparse than gas-phase data, and it is not likely that all of the trends in dissolved VOC movement will be discernible.

Table 1. Freon 123a concentrations in pore water samples collected from specified depths.

Date	Freon 123a at 112 ft, Well A (ppb)	Freon 123a at 109 ft, Well B (ppb)
5/7/97	51	80
7/22/97	76	51
10/23/97	101	65
1/21/98	75	58
2/19/98	91	65
3/20/98	27	60
5/1/98	66	63

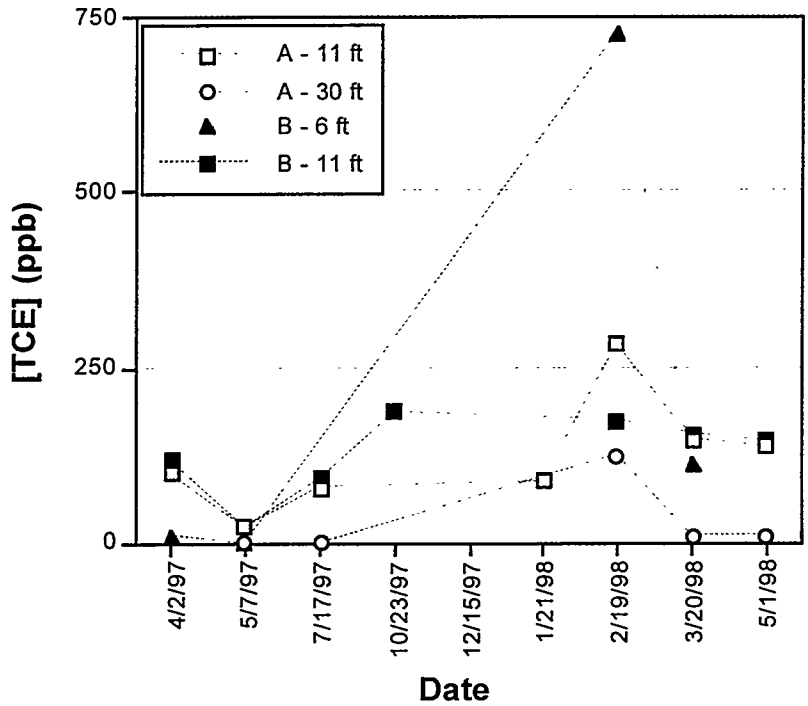

Figure 8. TCE concentrations in the liquid-phase, as measured in Well A at 11 and 30 ft, and Well B, at 6 and 11 ft, from April 1997 to May 1998.

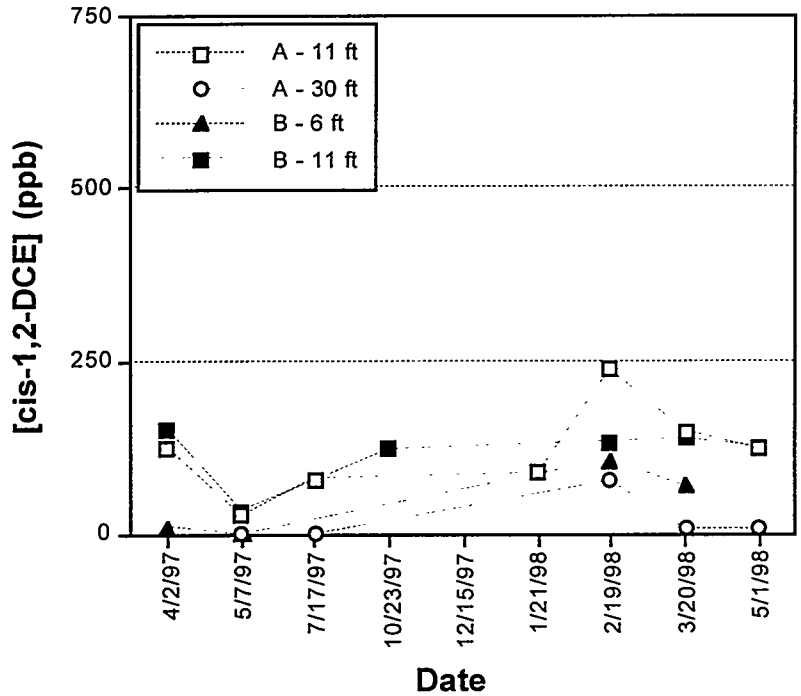

Figure 9. Cis-1,2-DCE concentrations in the liquid-phase, as measured in Well A at 11 and 30 ft, and Well B, at 6 and 11 ft, from April 1997 to May 1998.

Freon 123a concentrations are shown in Table 1. Freon 123a has only been detected in pore water at a depth of 112 ft in Well A and 109 ft in Well B. Sample was not always available from the next shallowest depth, 105 ft in each well, but it never contained Freon 123a above the quantification limit of 5 ppb. Freon 123a concentrations appear to be fairly stable in both wells, with a range of 50 to 100 ppb.

Water which enters the instrument vaults from the gravel fill underneath the pavement, and is automatically pumped out using sump pumps has been sampled and analyzed in the past. During the last quarter, no sump water was observed or sampled.

2.4 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. Most of the observed fluctuations in formation temperature occur in the top 30 ft. The continuous record of mean daily temperature measured at 6-, 11-, 18-, and 30-ft depths in Wells A and B is shown in Fig. 10, beginning in May 1997 through May 1998, one week short of a complete annual cycle. Temperature patterns from Wells A and B are very similar, small differences being attributable to slight differences in depth.

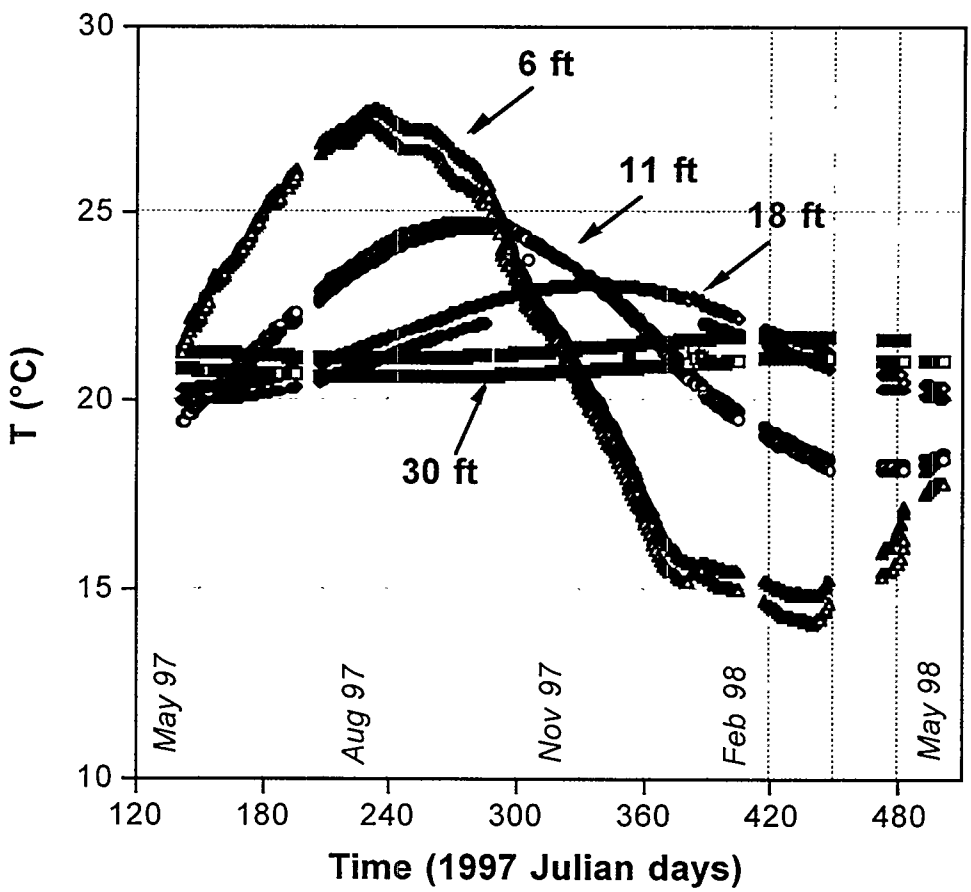

Figure 10. Temperature measured over a period of 51 weeks, from 5/97 to 5/98, at the four shallowest depths. Open symbols represent Well A, closed symbols represent Well B.

Temperature fluctuations are dampened rapidly with depth; temperature at 6 ft varies from as high as 27°C in August, to as low as 14°C in March, while temperature at 18 ft varies by only ±1.5°C from a mean of 21.5°C, and at 30 ft net changes are on the order of a fraction of a degree. This graph also illustrates a time lag in the temperature cycle at each depth, with peak temperatures at 6 ft and at 18 ft occurring in August and December, respectively. Such lags, and those at un-instrumented shallower depths which cannot be documented, result in reversals of the temperature gradient, which could contribute to the movement of VOCs in the top 20 ft of the profile. Diurnal temperature effects were not observed at any depth.

3.0 INSTALLATION OF NEW INSTRUMENTATION CLUSTER (VZMS-C)

In order to improve our understanding of the distribution of contaminants in the very shallow vadose zone at Site S-7, an additional well was drilled and instrumented. This well is located directly between the existing Wells A and B, as shown in Fig. 11. In addition to providing a better spatial resolution of pore-water VOC distribution, Well C was also instrumented with porous-ceramic tensiometers, which have a lower air-entry pressure than the tensiometers installed in Wells A and B, thereby increasing the range of matric potentials which can be measured. Tensiometers installed in Wells A and B employed stainless steel porous cups, which have a fairly high air-entry pressure (≈ 500 mbar) and they appear close to or above the matric potential in the formation. In addition, psychrometers were installed, which can be used for measuring matric potentials which are beyond the range of tensiometers. Finally, split-spoon samples collected during the drilling of this borehole are currently being analyzed for a suite of physical and hydrologic properties, which will subsequently be used as part of the input into the flow and transport model for enhanced data analysis.

3.1 Drilling Operations

A 25-ft deep borehole was drilled on 4/20/98 between Wells A and B (Fig. 11), using 8.25-in OD hollow-stem augers. Shortly after the completion of drilling and removal of augers from the borehole, a trickle of water at a depth of 3 ft was noted. McClellan AFB plumbers determined that there are no active utilities in the area and it was concluded that the water entering the hole was traveling in the subgrade to the second (buried) concrete slab. By the time this conclusion was reached, there had been marked erosion of the borehole at 3 ft and water continued to flow. A decision was made to abandon and backfill the borehole and drill another borehole, approximately 2 ft north of the original one. On 4/22/98, another 8.25-in borehole was drilled and after the augers were removed from the borehole, no seepage was observed. Based on the apparent stability of the borehole, the decision was made that it was not necessary to install the instruments through the auger, and all instruments were installed in the open borehole over the course of the next 2 hours.

3.2 Instrument Description

Three types of instruments were installed: tensiometers, psychrometers, and pressure-vacuum lysimeters. The tensiometers and lysimeters were purchased from Soilmoisture Equipment Corp., while the psychrometers were obtained from Wescor, Inc..

Each tensiometer consists of a 7/8-in OD acrylic body with a 1-bar air-entry pressure porous ceramic cup at the bottom and a rubber septum on the above-ground end of the tube. The tensiometer is installed in such a way that the porous cup is at the desired monitoring depth. Once filled with water, the pressure inside the tensiometer will equilibrate with the pressure in the formation via the exchange of water through the porous cup. A pressure transducer connected to a needle is used to measure the pressure inside the tensiometer via the septum stopper. Tensiometers can be used in the range of 0 to -800 mbar matric potential.

Each psychrometer consists of a thermocouple embedded in a porous stainless steel screen and connected insulated lead wire. The thermocouple-screen assembly is approx. 1/4-in in diameter, and approx. 0.5-in long. The thermocouple is installed at the desired measurement depth and the other end of the cable extends to the ground surface. The psychrometer measures the relative humidity of the formation which is then converted to a matric potential. The measurement is done by passing a current through the thermocouple (using a dew point microvoltmeter) to induce

condensation of a bead of water onto the "evaporating" surface. The rate at which this water evaporates from the junction can be correlated with the formation humidity. In theory, psychrometers can be used in the matric potential range of -1 to -80 bar, but ones for field application are effective at matric potentials lower than -2 bar. All psychrometers were calibrated in the laboratory prior to installation (Table 2). Re-calibration after installation is not possible.

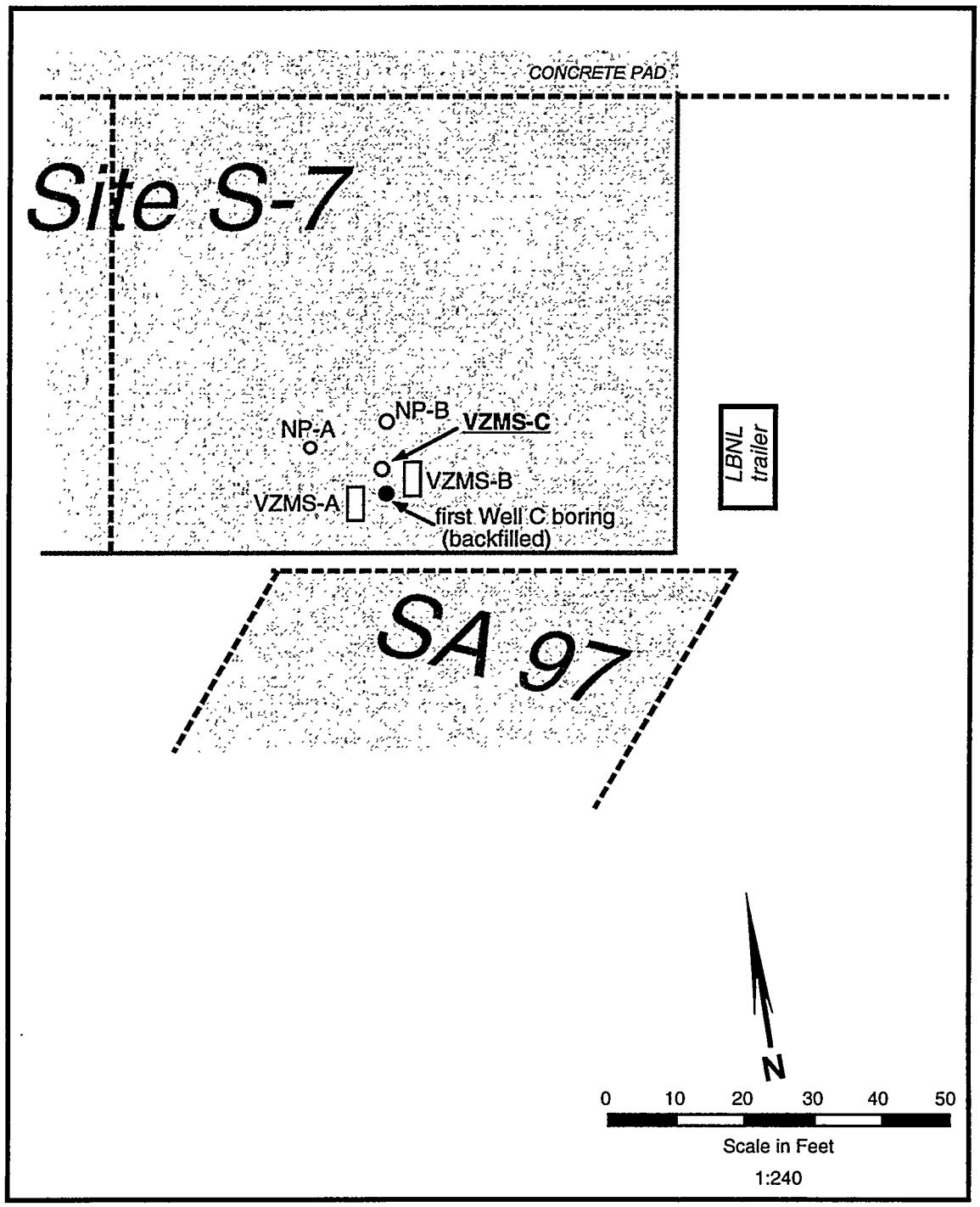

Figure 11. Site map showing the location of new instrumentation cluster (VZMS-C)..

Table 2. Psychrometer calibration in VZMS-C.

matric potential = (slope)V + (intercept)

Parameters for matric potential using 2 to 50 bar range

Psychrometer	Slope	Intercept	R^2
3' A	1.957	1.939	0.998
3' B	1.937	2.206	0.998
5' A	2.165	2.568	0.995
5' B	2.018	2.573	0.996
7' A	1.980	2.612	0.996
7' B	1.952	2.259	0.996
11' A	2.139	3.230	0.995
11' B	2.164	2.788	0.992
15' A	1.989	2.548	0.994
15' B	2.000	2.669	0.998
19' A	2.150	2.822	0.997
19' B	2.000	2.866	0.996
23' A	2.119	2.380	0.995
23' B	2.022	2.827	0.994

Pressure-vacuum lysimeters consist of a 1.9-in OD, 12-in long PVC body with a 1 bar air-entry pressure, high-conductivity porous ceramic cup at the bottom, and two polyethylene tubes leading to the surface. One of the tubes reaches the bottom of the porous cup, while the other just barely enters the PVC body. The former is used to apply vacuum and the latter to apply pressure during sampling. The lysimeter works via the application of a vacuum which then draws formation water in via the ceramic cup. Pressure-vacuum lysimeters can be installed at any depth, but are limited to the same range of matric potential as the tensiometers.

3.3 Installation Procedures

Seven levels of instruments were installed (Fig. 12), at 3, 5, 7, 11, 15, 19, and 23 ft. Each level consisted of one tensiometer, one lysimeter, and two psychrometers, each strapped to the opposite side of the lysimeter body. Each level is underlain by 6 inches of saturated bentonite powder. Before any instruments were installed, 4 inches of silica flour were poured into the borehole via a tremmie pipe. Then, the instruments were lowered into the borehole and placed as close to the borehole wall and as far from each other as possible. Another 8 inches of silica flour was added to cover the instruments. Approximately 25% equivalent volume of distilled water was added to wet the silica flour in order to establish hydraulic contact with the formation. Subsequently, 6 inches of bentonite powder was tremmied down the hole, followed by 6 inches of bentonite chips, through which 1.5 gal of distilled water was poured. Bentonite chips were added until the next desired level was reached and the procedure was repeated.

Following the instrumentation of the shallowest level, approximately 1.5 ft of cement was poured onto the saturated bentonite and an 8-inch vault was built, flush with ground surface. All of the leads and tubing extend into this vault. Following a few rainstorms, water began to seep into the vault, which was then sealed using polyurethane foam.

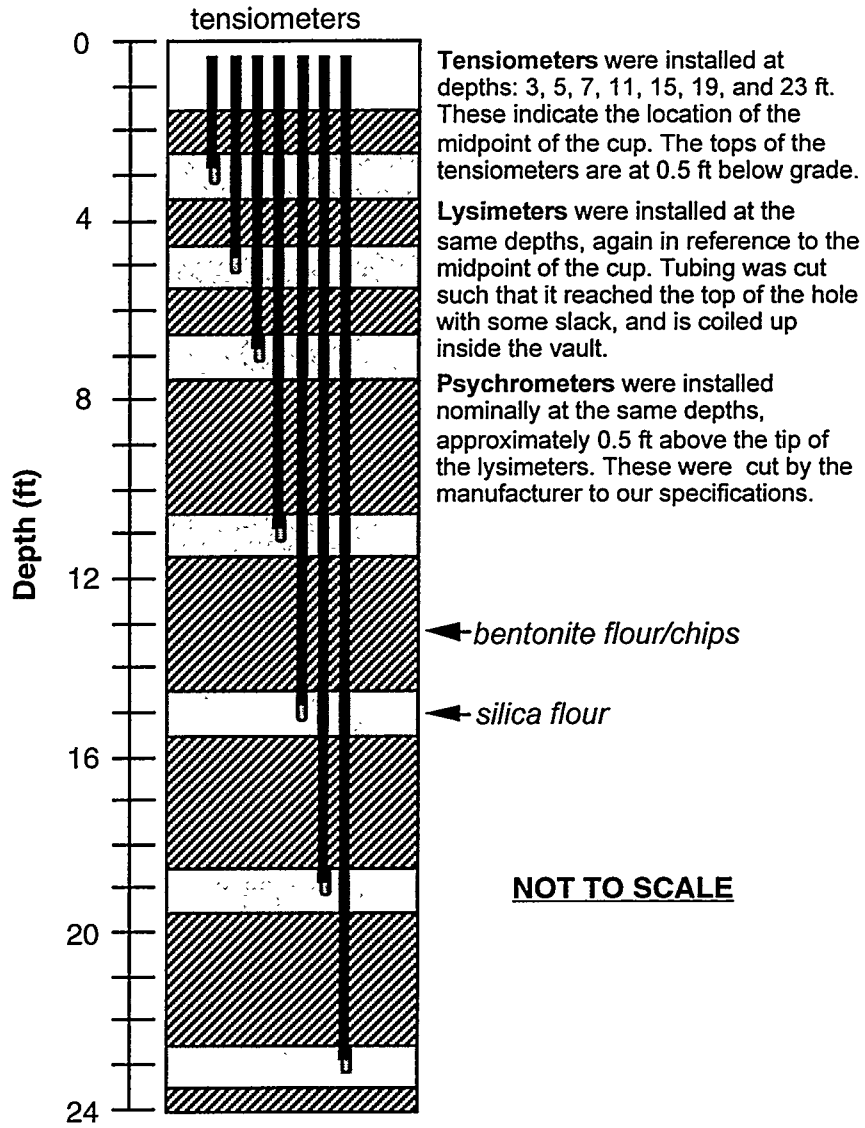

Figure 12. Schematic drawing of the distribution of instrumentation in Well-C. For the sake of clarity, only tensiometers are shown.

3.4 Development, Measurements, and Sampling

Due to the use of distilled water during the installation, the lysimeters were used to extract water from the backfill until an equilibrium with the surrounding formation was reached. The system was assumed to be at equilibrium when the volume extracted during a set amount of time was consistently the same and when pH and electrical conductivity of the extracted water stabilized. This data and subsequent sampling and analyses will be discussed in the next quarterly report. Formation water has been successfully extracted from 5 out of 7 lysimeters. Four out of 7 tensiometers appear to be giving reliable data, but more time is needed to test the assumption of equilibrium with the formation. Psychrometers appear to be just out of range, giving results which qualitatively indicate matric potentials near -1 bar. This agrees with the fact that most of the tensiometers are within their operating range of 0 to -800 mbar.

4.0 SUMMARY

Data collected over the last quarter have provided supporting evidence of a seasonal pattern of VOC movement in the shallow (0-30 ft) part of the vadose zone. More temporal data over the next 6 to 9 months will be needed to confirm this pattern and enhanced data analysis will be employed to explain it. The differences in TCE and cis-1,2-DCE patterns could be explained by two slightly vertically offset plumes or by dissimilar behavior due to different densities. Increases in Freon 123a concentrations have been observed and may also be part of a seasonal pattern but this cannot be confirmed given only 5 months of data.

A third cluster of instruments, Well C, was installed on 4/22/98. Observations made during drilling confirmed suspicions of subgrade water flow (LBNL, 1998b), which may be an important contributing factor to the hydrology of the site, possibly being responsible for infiltration of water during the winter. The existence of subgrade flow will affect the way that flow and transport will be modeled. Preliminary measurements indicate that most of the lysimeter and tensiometers will yield useful information. Under present soil moisture conditions the psychrometers cannot be used, but may become more useful if and when the formation dries up.

REFERENCES

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APPENDIX - ANALYTICAL REPORTS

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A1	Laboratory ID:	OW9803126
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	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	4.1
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	30.6
13	Chloroethane	75-00-3	LT	30.6
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	3.1
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	1.9	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.1
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. OW9803126

	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	3.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	27.4	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.1
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.1
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	44.0	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	107.4	**86-115**
Dibromofluoromethane	103.0	**86-118**
Toluene-d8	100.8	**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 Dalfrust Date: 6/18/98
Reviewer: [signature] Date: 6-18-98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A2	Laboratory ID:	OW9803127
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	7.0
2	Bromobenzene	108-86-1	LT	7.0
3	Bromochloromethane	74-97-5	LT	13.9
4	Bromodichloromethane	75-27-4	LT	7.0
5	Bromoform	75-25-2	LT	13.9
6	Bromomethane	74-83-9	LT	27.9
7	n-Butylbenzene	104-51-8	LT	7.0
8	sec-Butylbenzene	135-98-8	LT	7.0
9	ter-Butylbenzene	98-06-6	LT	7.0
10	Carbon Tetrachloride	56-23-5	LT	7.0
11	Chlorobenzene	108-90-7	LT	7.0
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	209.1
13	Chloroethane	75-00-3	LT	209.1
14	Chloroform	67-66-3	43.4	7.0
15	Chloromethane	74-87-3	LT	7.0
16	2-Chlorotoluene	95-49-8	LT	13.9
17	4-Chlorotoluene	106-43-4	LT	13.9
18	Dibromochloromethane	124-48-1	LT	13.9
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	13.9
20	1,2-Dibromoethane	106-93-4	LT	13.9
21	Dibromomethane	74-95-3	LT	7.0
22	1,2-Dichlorobenzene	95-50-1	LT	7.0
23	1,3-Dichlorobenzene	541-73-1	LT	7.0
24	1,4-Dichlorobenzene	106-46-7	LT	7.0
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	20.9
26	1,1-Dichloroethane	75-34-3	LT	7.0
27	1,2-Dichloroethane	107-06-2	LT	13.9
28	1,1-Dichloroethene	75-35-4	LT	7.0
29	cis-1,2-Dichloroethene	156-69-9	LT	7.0
30	trans-1,2-Dichloroethene	156-60-5	LT	7.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	20.9
32	1,2-Dichloropropane	78-87-5	LT	7.0
33	1,3-Dichloropropane	142-28-9	LT	7.0
34	2,2-Dichloropropane	594-20-7	LT	7.0

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803127

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	7.0
36	cis-1,3-Dichloropropene	10061-01-5	LT	7.0
37	trans-1,3-Dichloropropene	10061-02-6	LT	7.0
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	20.9
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	7.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	7.0
41	Ethylbenzene	100-41-4	LT	7.0
42	Hexachlorobutadien	87-68-3	LT	20.9
43	Isopropylbenzene	98-82-8	LT	13.9
44	p-Isopropyltoluene	99-87-6	LT	7.0
45	Methylene Chloride	75-09-2	LT	7.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	34.9
46	Naphthalene	91-20-3	LT	13.9
47	n-Propylbenzene	103-65-1	LT	7.0
48	Styrene	100-42-5	LT	7.0
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	7.0
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	13.9
51	Tetrachloroethene	127-18-4	LT	7.0
52	Toluene	108-88-3	LT	7.0
53	1,2,3-Trichlorobenzene	87-61-6	LT	13.9
54	1,2,4-Trichlorobenzene	120-82-1	LT	7.0
55	1,1,1-Trichloroethane	71-55-6	LT	7.0
56	1,1,2-Trichloroethane	79-00-5	LT	7.0
57	Trichloroethene	79-01-6	LT	7.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	13.9
59	1,2,3-Trichloropropane	96-18-4	LT	7.0
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	7.0
61	1,2,4-Trimethylbenzene	95-63-6	LT	7.0
62	1,3,5-Trimethylbenzene	108-67-8	LT	7.0
63	Vinyl Chloride	75-01-4	LT	7.0
64	Total-Xylene	1330-20-7	LT	13.9

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	102.1	**86-115**
Dibromofluoromethane	105.2	**86-118**
Toluene-d8	101.9	**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 : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A6	Laboratory ID:	OW9803128
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	1.4
2	Bromobenzene	108-86-1	LT	1.4
3	Bromochloromethane	74-97-5	LT	2.7
4	Bromodichloromethane	75-27-4	LT	1.4
5	Bromoform	75-25-2	LT	2.7
6	Bromomethane	74-83-9	LT	5.4
7	n-Butylbenzene	104-51-8	LT	1.4
8	sec-Butylbenzene	135-98-8	LT	1.4
9	ter-Butylbenzene	98-06-6	LT	1.4
10	Carbon Tetrachloride	56-23-5	LT	1.4
11	Chlorobenzene	108-90-7	LT	1.4
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	40.8
13	Chloroethane	75-00-3	LT	40.8
14	Chloroform	67-66-3	2.4	1.4
15	Chloromethane	74-87-3	LT	1.4
16	2-Chlorotoluene	95-49-8	LT	2.7
17	4-Chlorotoluene	106-43-4	LT	2.7
18	Dibromochloromethane	124-48-1	LT	2.7
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.7
20	1,2-Dibromoethane	106-93-4	LT	2.7
21	Dibromomethane	74-95-3	LT	1.4
22	1,2-Dichlorobenzene	95-50-1	LT	1.4
23	1,3-Dichlorobenzene	541-73-1	LT	1.4
24	1,4-Dichlorobenzene	106-46-7	LT	1.4
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	4.1
26	1,1-Dichloroethane	75-34-3	LT	1.4
27	1,2-Dichloroethane	107-06-2	LT	2.7
28	1,1-Dichloroethene	75-35-4	LT	1.4
29	cis-1,2-Dichloroethene	156-69-9	LT	1.4
30	trans-1,2-Dichloroethene	156-60-5	LT	1.4
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	4.1
32	1,2-Dichloropropane	78-87-5	LT	1.4
33	1,3-Dichloropropane	142-28-9	LT	1.4
34	2,2-Dichloropropane	594-20-7	LT	1.4

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803128

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	1.4
36	cis-1,3-Dichloropropene	10061-01-5	LT	1.4
37	trans-1,3-Dichloropropene	10061-02-6	LT	1.4
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	4.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.4
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	1.4
41	Ethylbenzene	100-41-4	LT	1.4
42	Hexachlorobutadien	87-68-3	LT	4.1
43	Isopropylbenzene	98-82-8	LT	2.7
44	p-Isopropyltoluene	99-87-6	LT	1.4
45	Methylene Chloride	75-09-2	LT	1.4
45	Methyl tert-Butyl Ether	1634-04-4	LT	6.8
46	Naphthalene	91-20-3	LT	2.7
47	n-Propylbenzene	103-65-1	LT	1.4
48	Styrene	100-42-5	LT	1.4
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	1.4
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	2.7
51	Tetrachloroethene	127-18-4	LT	1.4
52	Toluene	108-88-3	LT	1.4
53	1,2,3-Trichlorobenzene	87-61-6	LT	2.7
54	1,2,4-Trichlorobenzene	120-82-1	LT	1.4
55	1,1,1-Trichloroethane	71-55-6	LT	1.4
56	1,1,2-Trichloroethane	79-00-5	LT	1.4
57	Trichloroethene	79-01-6	LT	1.4
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.7
59	1,2,3-Trichloropropane	96-18-4	LT	1.4
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	1.4
61	1,2,4-Trimethylbenzene	95-63-6	LT	1.4
62	1,3,5-Trimethylbenzene	108-67-8	LT	1.4
63	Vinyl Chloride	75-01-4	LT	1.4
64	Total-Xylene	1330-20-7	LT	2.7

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	109.1	**86-115**
Dibromofluoromethane	104.7	**86-118**
Toluene-d8	103.9	**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: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A10	Laboratory ID:	OW9803129
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	2.1
2	Bromobenzene	108-86-1	LT	2.1
3	Bromochloromethane	74-97-5	LT	4.1
4	Bromodichloromethane	75-27-4	LT	2.1
5	Bromoform	75-25-2	LT	4.1
6	Bromomethane	74-83-9	LT	8.2
7	n-Butylbenzene	104-51-8	LT	2.1
8	sec-Butylbenzene	135-98-8	LT	2.1
9	ter-Butylbenzene	98-06-6	LT	2.1
10	Carbon Tetrachloride	56-23-5	LT	2.1
11	Chlorobenzene	108-90-7	LT	2.1
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	61.5
13	Chloroethane	75-00-3	LT	61.5
14	Chloroform	67-66-3	8.1	2.1
15	Chloromethane	74-87-3	LT	2.1
16	2-Chlorotoluene	95-49-8	LT	4.1
17	4-Chlorotoluene	106-43-4	LT	4.1
18	Dibromochloromethane	124-48-1	LT	4.1
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	4.1
20	1,2-Dibromoethane	106-93-4	LT	4.1
21	Dibromomethane	74-95-3	LT	2.1
22	1,2-Dichlorobenzene	95-50-1	LT	2.1
23	1,3-Dichlorobenzene	541-73-1	LT	2.1
24	1,4-Dichlorobenzene	106-46-7	LT	2.1
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	6.2
26	1,1-Dichloroethane	75-34-3	LT	2.1
27	1,2-Dichloroethane	107-06-2	LT	4.1
28	1,1-Dichloroethene	75-35-4	LT	2.1
29	cis-1,2-Dichloroethene	156-69-9	5.9	2.1
30	trans-1,2-Dichloroethene	156-60-5	LT	2.1
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	6.2
32	1,2-Dichloropropane	78-87-5	LT	2.1
33	1,3-Dichloropropane	142-28-9	LT	2.1
34	2,2-Dichloropropane	594-20-7	LT	2.1

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803129

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	2.1
36	cis-1,3-Dichloropropene	10061-01-5	LT	2.1
37	trans-1,3-Dichloropropene	10061-02-6	LT	2.1
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	6.2
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	2.1
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	2.1
41	Ethylbenzene	100-41-4	LT	2.1
42	Hexachlorobutadien	87-68-3	LT	6.2
43	Isopropylbenzene	98-82-8	LT	4.1
44	p-Isopropyltoluene	99-87-6	LT	2.1
45	Methylene Chloride	75-09-2	LT	2.1
45	Methyl tert-Butyl Ether	1634-04-4	LT	10.3
46	Naphthalene	91-20-3	LT	4.1
47	n-Propylbenzene	103-65-1	LT	2.1
48	Styrene	100-42-5	LT	2.1
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	2.1
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	4.1
51	Tetrachloroethene	127-18-4	LT	2.1
52	Toluene	108-88-3	LT	2.1
53	1,2,3-Trichlorobenzene	87-61-6	LT	4.1
54	1,2,4-Trichlorobenzene	120-82-1	LT	2.1
55	1,1,1-Trichloroethane	71-55-6	LT	2.1
56	1,1,2-Trichloroethane	79-00-5	LT	2.1
57	Trichloroethene	79-01-6	7.6	2.1
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	4.1
59	1,2,3-Trichloropropane	96-18-4	LT	2.1
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	2.1
61	1,2,4-Trimethylbenzene	95-63-6	LT	2.1
62	1,3,5-Trimethylbenzene	108-67-8	LT	2.1
63	Vinyl Chloride	75-01-4	LT	2.1
64	Total-Xylene	1330-20-7	LT	4.1

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	108.8	**86-115**
Dibromofluoromethane	106.6	**86-118**
Toluene-d8	97.8	**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: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A12	Laboratory ID:	OW9803130
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	1.1
2	Bromobenzene	108-86-1	LT	1.1
3	Bromochloromethane	74-97-5	LT	2.1
4	Bromodichloromethane	75-27-4	LT	1.1
5	Bromoform	75-25-2	LT	2.1
6	Bromomethane	74-83-9	LT	4.2
7	n-Butylbenzene	104-51-8	LT	1.1
8	sec-Butylbenzene	135-98-8	LT	1.1
9	ter-Butylbenzene	98-06-6	LT	1.1
10	Carbon Tetrachloride	56-23-5	LT	1.1
11	Chlorobenzene	108-90-7	LT	1.1
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	31.5
13	Chloroethane	75-00-3	LT	31.5
14	Chloroform	67-66-3	LT	1.1
15	Chloromethane	74-87-3	LT	1.1
16	2-Chlorotoluene	95-49-8	LT	2.1
17	4-Chlorotoluene	106-43-4	LT	2.1
18	Dibromochloromethane	124-48-1	LT	2.1
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.1
20	1,2-Dibromoethane	106-93-4	LT	2.1
21	Dibromomethane	74-95-3	LT	1.1
22	1,2-Dichlorobenzene	95-50-1	LT	1.1
23	1,3-Dichlorobenzene	541-73-1	LT	1.1
24	1,4-Dichlorobenzene	106-46-7	LT	1.1
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	3.2
26	1,1-Dichloroethane	75-34-3	LT	1.1
27	1,2-Dichloroethane	107-06-2	4.9	2.1
28	1,1-Dichloroethene	75-35-4	LT	1.1
29	cis-1,2-Dichloroethene	156-69-9	148	1.1
30	trans-1,2-Dichloroethene	156-60-5	LT	1.1
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.2
32	1,2-Dichloropropane	78-87-5	LT	1.1
33	1,3-Dichloropropane	142-28-9	LT	1.1
34	2,2-Dichloropropane	594-20-7	LT	1.1

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803130

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	1.1
36	cis-1,3-Dichloropropene	10061-01-5	LT	1.1
37	trans-1,3-Dichloropropene	10061-02-6	LT	1.1
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	3.2
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.1
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	1.1
41	Ethylbenzene	100-41-4	LT	1.1
42	Hexachlorobutadien	87-68-3	LT	3.2
43	Isopropylbenzene	98-82-8	LT	2.1
44	p-Isopropyltoluene	99-87-6	LT	1.1
45	Methylene Chloride	75-09-2	LT	1.1
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.3
46	Naphthalene	91-20-3	LT	2.1
47	n-Propylbenzene	103-65-1	LT	1.1
48	Styrene	100-42-5	LT	1.1
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	1.1
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	2.1
51	Tetrachloroethene	127-18-4	LT	1.1
52	Toluene	108-88-3	LT	1.1
53	1,2,3-Trichlorobenzene	87-61-6	LT	2.1
54	1,2,4-Trichlorobenzene	120-82-1	LT	1.1
55	1,1,1-Trichloroethane	71-55-6	LT	1.1
56	1,1,2-Trichloroethane	79-00-5	LT	1.1
57	Trichloroethene	79-01-6	145	1.1
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.1
59	1,2,3-Trichloropropane	96-18-4	LT	1.1
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	1.1
61	1,2,4-Trimethylbenzene	95-63-6	LT	1.1
62	1,3,5-Trimethylbenzene	108-67-8	LT	1.1
63	Vinyl Chloride	75-01-4	LT	1.1
64	Total-Xylene	1330-20-7	LT	2.1

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	104.6	**86-115**
Dibromofluoromethane	110.2	**86-118**
Toluene-d8	98.8	**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: 6/18/98
Reviewer: Date: 6·18·98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B1	Laboratory ID:	OW9803131
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	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	4.1
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	30.6
13	Chloroethane	75-00-3	LT	30.6
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	3.1
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	2.9	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.1
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. OW9803131

	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	3.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	61.1	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.1
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.1
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	74.1	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	106.2	**86-115**
Dibromofluoromethane	105.8	**86-118**
Toluene-d8	99.6	**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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B3	Laboratory ID:	OW9803132
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	2.4
2	Bromobenzene	108-86-1	LT	2.4
3	Bromochloromethane	74-97-5	LT	4.8
4	Bromodichloromethane	75-27-4	LT	2.4
5	Bromoform	75-25-2	LT	4.8
6	Bromomethane	74-83-9	LT	9.6
7	n-Butylbenzene	104-51-8	LT	2.4
8	sec-Butylbenzene	135-98-8	LT	2.4
9	ter-Butylbenzene	98-06-6	LT	2.4
10	Carbon Tetrachloride	56-23-5	LT	2.4
11	Chlorobenzene	108-90-7	LT	2.4
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	72.0
13	Chloroethane	75-00-3	LT	72.0
14	Chloroform	67-66-3	11.2	2.4
15	Chloromethane	74-87-3	LT	2.4
16	2-Chlorotoluene	95-49-8	LT	4.8
17	4-Chlorotoluene	106-43-4	LT	4.8
18	Dibromochloromethane	124-48-1	LT	4.8
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	4.8
20	1,2-Dibromoethane	106-93-4	LT	4.8
21	Dibromomethane	74-95-3	LT	2.4
22	1,2-Dichlorobenzene	95-50-1	LT	2.4
23	1,3-Dichlorobenzene	541-73-1	LT	2.4
24	1,4-Dichlorobenzene	106-46-7	LT	2.4
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	7.2
26	1,1-Dichloroethane	75-34-3	LT	2.4
27	1,2-Dichloroethane	107-06-2	LT	4.8
28	1,1-Dichloroethene	75-35-4	LT	2.4
29	cis-1,2-Dichloroethene	156-69-9	LT	2.4
30	trans-1,2-Dichloroethene	156-60-5	LT	2.4
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	7.2
32	1,2-Dichloropropane	78-87-5	LT	2.4
33	1,3-Dichloropropane	142-28-9	LT	2.4
34	2,2-Dichloropropane	594-20-7	LT	2.4

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803132

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	2.4
36	cis-1,3-Dichloropropene	10061-01-5	LT	2.4
37	trans-1,3-Dichloropropene	10061-02-6	LT	2.4
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	7.2
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	2.4
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	2.4
41	Ethylbenzene	100-41-4	LT	2.4
42	Hexachlorobutadien	87-68-3	LT	7.2
43	Isopropylbenzene	98-82-8	LT	4.8
44	p-Isopropyltoluene	99-87-6	LT	2.4
45	Methylene Chloride	75-09-2	LT	2.4
45	Methyl tert-Butyl Ether	1634-04-4	LT	12.0
46	Naphthalene	91-20-3	LT	4.8
47	n-Propylbenzene	103-65-1	LT	2.4
48	Styrene	100-42-5	LT	2.4
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	2.4
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	4.8
51	Tetrachloroethene	127-18-4	LT	2.4
52	Toluene	108-88-3	LT	2.4
53	1,2,3-Trichlorobenzene	87-61-6	LT	4.8
54	1,2,4-Trichlorobenzene	120-82-1	LT	2.4
55	1,1,1-Trichloroethane	71-55-6	LT	2.4
56	1,1,2-Trichloroethane	79-00-5	LT	2.4
57	Trichloroethene	79-01-6	LT	2.4
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	4.8
59	1,2,3-Trichloropropane	96-18-4	LT	2.4
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	2.4
61	1,2,4-Trimethylbenzene	95-63-6	LT	2.4
62	1,3,5-Trimethylbenzene	108-67-8	LT	2.4
63	Vinyl Chloride	75-01-4	LT	2.4
64	Total-Xylene	1330-20-7	LT	4.8

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	106.4	**86-115**
Dibromofluoromethane	112.4	**86-118**
Toluene-d8	97.0	**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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B8	Laboratory ID:	OW9803133
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	4.6
2	Bromobenzene	108-86-1	LT	4.6
3	Bromochloromethane	74-97-5	LT	9.2
4	Bromodichloromethane	75-27-4	LT	4.6
5	Bromoform	75-25-2	LT	9.2
6	Bromomethane	74-83-9	LT	18.4
7	n-Butylbenzene	104-51-8	LT	4.6
8	sec-Butylbenzene	135-98-8	LT	4.6
9	ter-Butylbenzene	98-06-6	LT	4.6
10	Carbon Tetrachloride	56-23-5	LT	4.6
11	Chlorobenzene	108-90-7	LT	4.6
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	138.0
13	Chloroethane	75-00-3	LT	138.0
14	Chloroform	67-66-3	28.9	4.6
15	Chloromethane	74-87-3	LT	4.6
16	2-Chlorotoluene	95-49-8	LT	9.2
17	4-Chlorotoluene	106-43-4	LT	9.2
18	Dibromochloromethane	124-48-1	LT	9.2
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	9.2
20	1,2-Dibromoethane	106-93-4	LT	9.2
21	Dibromomethane	74-95-3	LT	4.6
22	1,2-Dichlorobenzene	95-50-1	LT	4.6
23	1,3-Dichlorobenzene	541-73-1	LT	4.6
24	1,4-Dichlorobenzene	106-46-7	LT	4.6
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	13.8
26	1,1-Dichloroethane	75-34-3	LT	4.6
27	1,2-Dichloroethane	107-06-2	LT	9.2
28	1,1-Dichloroethene	75-35-4	LT	4.6
29	cis-1,2-Dichloroethene	156-69-9	LT	4.6
30	trans-1,2-Dichloroethene	156-60-5	LT	4.6
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	13.8
32	1,2-Dichloropropane	78-87-5	LT	4.6
33	1,3-Dichloropropane	142-28-9	LT	4.6
34	2,2-Dichloropropane	594-20-7	LT	4.6

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803133

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	4.6
36	cis-1,3-Dichloropropene	10061-01-5	LT	4.6
37	trans-1,3-Dichloropropene	10061-02-6	LT	4.6
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	13.8
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	4.6
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	4.6
41	Ethylbenzene	100-41-4	LT	4.6
42	Hexachlorobutadien	87-68-3	LT	13.8
43	Isopropylbenzene	98-82-8	LT	9.2
44	p-Isopropyltoluene	99-87-6	LT	4.6
45	Methylene Chloride	75-09-2	LT	4.6
45	Methyl tert-Butyl Ether	1634-04-4	LT	23.0
46	Naphthalene	91-20-3	LT	9.2
47	n-Propylbenzene	103-65-1	LT	4.6
48	Styrene	100-42-5	LT	4.6
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	4.6
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	9.2
51	Tetrachloroethene	127-18-4	LT	4.6
52	Toluene	108-88-3	LT	4.6
53	1,2,3-Trichlorobenzene	87-61-6	LT	9.2
54	1,2,4-Trichlorobenzene	120-82-1	LT	4.6
55	1,1,1-Trichloroethane	71-55-6	LT	4.6
56	1,1,2-Trichloroethane	79-00-5	LT	4.6
57	Trichloroethene	79-01-6	LT	4.6
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	9.2
59	1,2,3-Trichloropropane	96-18-4	LT	4.6
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	4.6
61	1,2,4-Trimethylbenzene	95-63-6	LT	4.6
62	1,3,5-Trimethylbenzene	108-67-8	LT	4.6
63	Vinyl Chloride	75-01-4	LT	4.6
64	Total-Xylene	1330-20-7	LT	9.2

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	107.6	**86-115**
Dibromofluoromethane	109.7	**86-118**
Toluene-d8	101.0	**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 : Date: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B12	Laboratory ID:	OW9803134
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	1.4
2	Bromobenzene	108-86-1	LT	1.4
3	Bromochloromethane	74-97-5	LT	2.8
4	Bromodichloromethane	75-27-4	LT	1.4
5	Bromoform	75-25-2	LT	2.8
6	Bromomethane	74-83-9	LT	5.7
7	n-Butylbenzene	104-51-8	LT	1.4
8	sec-Butylbenzene	135-98-8	LT	1.4
9	ter-Butylbenzene	98-06-6	LT	1.4
10	Carbon Tetrachloride	56-23-5	LT	1.4
11	Chlorobenzene	108-90-7	LT	1.4
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	42.6
13	Chloroethane	75-00-3	LT	42.6
14	Chloroform	67-66-3	3.2	1.4
15	Chloromethane	74-87-3	LT	1.4
16	2-Chlorotoluene	95-49-8	LT	2.8
17	4-Chlorotoluene	106-43-4	LT	2.8
18	Dibromochloromethane	124-48-1	LT	2.8
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.8
20	1,2-Dibromoethane	106-93-4	LT	2.8
21	Dibromomethane	74-95-3	LT	1.4
22	1,2-Dichlorobenzene	95-50-1	LT	1.4
23	1,3-Dichlorobenzene	541-73-1	LT	1.4
24	1,4-Dichlorobenzene	106-46-7	LT	1.4
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	4.3
26	1,1-Dichloroethane	75-34-3	LT	1.4
27	1,2-Dichloroethane	107-06-2	8.1	2.8
28	1,1-Dichloroethene	75-35-4	LT	1.4
29	cis-1,2-Dichloroethene	156-69-9	135	1.4
30	trans-1,2-Dichloroethene	156-60-5	LT	1.4
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	4.3
32	1,2-Dichloropropane	78-87-5	LT	1.4
33	1,3-Dichloropropane	142-28-9	LT	1.4
34	2,2-Dichloropropane	594-20-7	LT	1.4

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803134

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	1.4
36	cis-1,3-Dichloropropene	10061-01-5	LT	1.4
37	trans-1,3-Dichloropropene	10061-02-6	LT	1.4
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	4.3
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.4
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	1.4
41	Ethylbenzene	100-41-4	LT	1.4
42	Hexachlorobutadien	87-68-3	LT	4.3
43	Isopropylbenzene	98-82-8	LT	2.8
44	p-Isopropyltoluene	99-87-6	LT	1.4
45	Methylene Chloride	75-09-2	LT	1.4
45	Methyl tert-Butyl Ether	1634-04-4	LT	7.1
46	Naphthalene	91-20-3	LT	2.8
47	n-Propylbenzene	103-65-1	LT	1.4
48	Styrene	100-42-5	LT	1.4
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	1.4
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	2.8
51	Tetrachloroethene	127-18-4	LT	1.4
52	Toluene	108-88-3	LT	1.4
53	1,2,3-Trichlorobenzene	87-61-6	LT	2.8
54	1,2,4-Trichlorobenzene	120-82-1	LT	1.4
55	1,1,1-Trichloroethane	71-55-6	LT	1.4
56	1,1,2-Trichloroethane	79-00-5	LT	1.4
57	Trichloroethene	79-01-6	153	1.4
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.8
59	1,2,3-Trichloropropane	96-18-4	LT	1.4
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	1.4
61	1,2,4-Trimethylbenzene	95-63-6	LT	1.4
62	1,3,5-Trimethylbenzene	108-67-8	LT	1.4
63	Vinyl Chloride	75-01-4	LT	1.4
64	Total-Xylene	1330-20-7	LT	2.8

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	103.0	**86-115**
Dibromofluoromethane	102.0	**86-118**
Toluene-d8	100.6	**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 : Date: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B13	Laboratory ID:	OW9803135
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	3.4
2	Bromobenzene	108-86-1	LT	3.4
3	Bromochloromethane	74-97-5	LT	6.8
4	Bromodichloromethane	75-27-4	LT	3.4
5	Bromoform	75-25-2	LT	6.8
6	Bromomethane	74-83-9	LT	13.5
7	n-Butylbenzene	104-51-8	LT	3.4
8	sec-Butylbenzene	135-98-8	LT	3.4
9	ter-Butylbenzene	98-06-6	LT	3.4
10	Carbon Tetrachloride	56-23-5	LT	3.4
11	Chlorobenzene	108-90-7	LT	3.4
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	101.4
13	Chloroethane	75-00-3	LT	101.4
14	Chloroform	67-66-3	19.0	3.4
15	Chloromethane	74-87-3	LT	3.4
16	2-Chlorotoluene	95-49-8	LT	6.8
17	4-Chlorotoluene	106-43-4	LT	6.8
18	Dibromochloromethane	124-48-1	LT	6.8
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	6.8
20	1,2-Dibromoethane	106-93-4	LT	6.8
21	Dibromomethane	74-95-3	LT	3.4
22	1,2-Dichlorobenzene	95-50-1	LT	3.4
23	1,3-Dichlorobenzene	541-73-1	LT	3.4
24	1,4-Dichlorobenzene	106-46-7	LT	3.4
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	10.1
26	1,1-Dichloroethane	75-34-3	LT	3.4
27	1,2-Dichloroethane	107-06-2	LT	6.8
28	1,1-Dichloroethene	75-35-4	LT	3.4
29	cis-1,2-Dichloroethene	156-69-9	68.4	3.4
30	trans-1,2-Dichloroethene	156-60-5	LT	3.4
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	10.1
32	1,2-Dichloropropane	78-87-5	LT	3.4
33	1,3-Dichloropropane	142-28-9	LT	3.4
34	2,2-Dichloropropane	594-20-7	LT	3.4

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW9803135

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	3.4
36	cis-1,3-Dichloropropene	10061-01-5	LT	3.4
37	trans-1,3-Dichloropropene	10061-02-6	LT	3.4
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	10.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	3.4
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	3.4
41	Ethylbenzene	100-41-4	LT	3.4
42	Hexachlorobutadien	87-68-3	LT	10.1
43	Isopropylbenzene	98-82-8	LT	6.8
44	p-Isopropyltoluene	99-87-6	LT	3.4
45	Methylene Chloride	75-09-2	LT	3.4
45	Methyl tert-Butyl Ether	1634-04-4	LT	16.9
46	Naphthalene	91-20-3	LT	6.8
47	n-Propylbenzene	103-65-1	LT	3.4
48	Styrene	100-42-5	LT	3.4
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	3.4
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	6.8
51	Tetrachloroethene	127-18-4	LT	3.4
52	Toluene	108-88-3	LT	3.4
53	1,2,3-Trichlorobenzene	87-61-6	LT	6.8
54	1,2,4-Trichlorobenzene	120-82-1	LT	3.4
55	1,1,1-Trichloroethane	71-55-6	LT	3.4
56	1,1,2-Trichloroethane	79-00-5	LT	3.4
57	Trichloroethene	79-01-6	111	3.4
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	6.8
59	1,2,3-Trichloropropane	96-18-4	LT	3.4
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	3.4
61	1,2,4-Trimethylbenzene	95-63-6	LT	3.4
62	1,3,5-Trimethylbenzene	108-67-8	LT	3.4
63	Vinyl Chloride	75-01-4	LT	3.4
64	Total-Xylene	1330-20-7	LT	6.8

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	103.8	**86-115**
Dibromofluoromethane	104.4	**86-118**
Toluene-d8	102.0	**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 : _____ Date: 6/18/98
Reviewer: _____ Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	FB-1	Laboratory ID:	OW9803136
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	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	8.4	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	LT	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. OW9803136

	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	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.0
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	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	LT	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	107.2	**86-115**
Dibromofluoromethane	104.6	**86-118**
Toluene-d8	101.4	**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 : Rob Dahlquist Date: 6/18/98
Reviewer: [illegible] Date: 6·18·98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	DUP-2	Laboratory ID:	OW9803137
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	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	2.7	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. OW9803137

	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	Dichlorotrifluoroethane(Freon-123A)	354-23-4	50.1	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.0
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	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	67.1	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	107.6	**86-115**
Dibromofluoromethane	104.6	**86-118**
Toluene-d8	101.0	**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 : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A1	Laboratory ID:	OW980501
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	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	4.1
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	30.7
13	Chloroethane	75-00-3	LT	30.7
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	3.1
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	2.0	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.1
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. OW980501

	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	3.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	65.8	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.1
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.1
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	58.9	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	95.3	**86-115**
Dibromofluoromethane	91.4	**86-118**
Toluene-d8	102.2	**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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A10	Laboratory ID:	OW980502
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	2.8
2	Bromobenzene	108-86-1	LT	2.8
3	Bromochloromethane	74-97-5	LT	5.6
4	Bromodichloromethane	75-27-4	LT	2.8
5	Bromoform	75-25-2	LT	5.6
6	Bromomethane	74-83-9	LT	11.1
7	n-Butylbenzene	104-51-8	LT	2.8
8	sec-Butylbenzene	135-98-8	LT	2.8
9	ter-Butylbenzene	98-06-6	LT	2.8
10	Carbon Tetrachloride	56-23-5	LT	2.8
11	Chlorobenzene	108-90-7	LT	2.8
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	83.3
13	Chloroethane	75-00-3	LT	83.3
14	Chloroform	67-66-3	LT	2.8
15	Chloromethane	74-87-3	LT	2.8
16	2-Chlorotoluene	95-49-8	LT	5.6
17	4-Chlorotoluene	106-43-4	LT	5.6
18	Dibromochloromethane	124-48-1	LT	5.6
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	5.6
20	1,2-Dibromoethane	106-93-4	LT	5.6
21	Dibromomethane	74-95-3	LT	2.8
22	1,2-Dichlorobenzene	95-50-1	LT	2.8
23	1,3-Dichlorobenzene	541-73-1	LT	2.8
24	1,4-Dichlorobenzene	106-46-7	LT	2.8
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	8.3
26	1,1-Dichloroethane	75-34-3	LT	2.8
27	1,2-Dichloroethane	107-06-2	LT	5.6
28	1,1-Dichloroethene	75-35-4	LT	2.8
29	cis-1,2-Dichloroethene	156-69-9	4.5	2.8
30	trans-1,2-Dichloroethene	156-60-5	LT	2.8
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	8.3
32	1,2-Dichloropropane	78-87-5	LT	2.8
33	1,3-Dichloropropane	142-28-9	LT	2.8
34	2,2-Dichloropropane	594-20-7	LT	2.8

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW980502

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	2.8
36	cis-1,3-Dichloropropene	10061-01-5	LT	2.8
37	trans-1,3-Dichloropropene	10061-02-6	LT	2.8
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	8.3
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	2.8
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	2.8
41	Ethylbenzene	100-41-4	LT	2.8
42	Hexachlorobutadien	87-68-3	LT	8.3
43	Isopropylbenzene	98-82-8	LT	5.6
44	p-Isopropyltoluene	99-87-6	LT	2.8
45	Methylene Chloride	75-09-2	LT	2.8
45	Methyl tert-Butyl Ether	1634-04-4	LT	13.9
46	Naphthalene	91-20-3	LT	5.6
47	n-Propylbenzene	103-65-1	LT	2.8
48	Styrene	100-42-5	LT	2.8
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	2.8
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	5.6
51	Tetrachloroethene	127-18-4	LT	2.8
52	Toluene	108-88-3	LT	2.8
53	1,2,3-Trichlorobenzene	87-61-6	LT	5.6
54	1,2,4-Trichlorobenzene	120-82-1	LT	2.8
55	1,1,1-Trichloroethane	71-55-6	LT	2.8
56	1,1,2-Trichloroethane	79-00-5	LT	2.8
57	Trichloroethene	79-01-6	6.9	2.8
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	5.6
59	1,2,3-Trichloropropane	96-18-4	LT	2.8
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	2.8
61	1,2,4-Trimethylbenzene	95-63-6	LT	2.8
62	1,3,5-Trimethylbenzene	108-67-8	LT	2.8
63	Vinyl Chloride	75-01-4	LT	2.8
64	Total-Xylene	1330-20-7	LT	5.6

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	98.2	**86-115**
Dibromofluoromethane	98.2	**86-118**
Toluene-d8	103.8	**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: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	A12	Laboratory ID:	OW980503
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	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	2.1
4	Bromodichloromethane	75-27-4	LT	1.0
5	Bromoform	75-25-2	LT	2.1
6	Bromomethane	74-83-9	LT	4.1
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	30.9
13	Chloroethane	75-00-3	LT	30.9
14	Chloroform	67-66-3	LT	1.0
15	Chloromethane	74-87-3	LT	1.0
16	2-Chlorotoluene	95-49-8	LT	2.1
17	4-Chlorotoluene	106-43-4	LT	2.1
18	Dibromochloromethane	124-48-1	LT	2.1
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.1
20	1,2-Dibromoethane	106-93-4	LT	2.1
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	3.1
26	1,1-Dichloroethane	75-34-3	LT	1.0
27	1,2-Dichloroethane	107-06-2	3.9	2.1
28	1,1-Dichloroethene	75-35-4	LT	1.0
29	cis-1,2-Dichloroethene	156-69-9	120	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.1
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. OW980503

	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	3.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.1
43	Isopropylbenzene	98-82-8	LT	2.1
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.2
46	Naphthalene	91-20-3	LT	2.1
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	2.1
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	2.1
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	136	1.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.1
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	2.1

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	100.4	**86-115**
Dibromofluoromethane	95.0	**86-118**
Toluene-d8	100.8	**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: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B1	Laboratory ID:	OW980504
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	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	2.1
4	Bromodichloromethane	75-27-4	LT	1.0
5	Bromoform	75-25-2	LT	2.1
6	Bromomethane	74-83-9	LT	4.1
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	30.8
13	Chloroethane	75-00-3	LT	30.8
14	Chloroform	67-66-3	LT	1.0
15	Chloromethane	74-87-3	LT	1.0
16	2-Chlorotoluene	95-49-8	LT	2.1
17	4-Chlorotoluene	106-43-4	LT	2.1
18	Dibromochloromethane	124-48-1	LT	2.1
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.1
20	1,2-Dibromoethane	106-93-4	LT	2.1
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	3.1
26	1,1-Dichloroethane	75-34-3	LT	1.0
27	1,2-Dichloroethane	107-06-2	LT	2.1
28	1,1-Dichloroethene	75-35-4	LT	1.0
29	cis-1,2-Dichloroethene	156-69-9	3.2	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.1
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. OW980504

	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	3.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	62.7	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.1
43	Isopropylbenzene	98-82-8	LT	2.1
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.1
46	Naphthalene	91-20-3	LT	2.1
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	2.1
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	2.1
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	84.9	1.0
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.1
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	2.1

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	102.6	**86-115**
Dibromofluoromethane	93.8	**86-118**
Toluene-d8	102.4	**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: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B3	Laboratory ID:	OW980505
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	2.8
2	Bromobenzene	108-86-1	LT	2.8
3	Bromochloromethane	74-97-5	LT	5.6
4	Bromodichloromethane	75-27-4	LT	2.8
5	Bromoform	75-25-2	LT	5.6
6	Bromomethane	74-83-9	LT	11.2
7	n-Butylbenzene	104-51-8	LT	2.8
8	sec-Butylbenzene	135-98-8	LT	2.8
9	ter-Butylbenzene	98-06-6	LT	2.8
10	Carbon Tetrachloride	56-23-5	LT	2.8
11	Chlorobenzene	108-90-7	LT	2.8
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	84.2
13	Chloroethane	75-00-3	LT	84.2
14	Chloroform	67-66-3	LT	2.8
15	Chloromethane	74-87-3	LT	2.8
16	2-Chlorotoluene	95-49-8	LT	5.6
17	4-Chlorotoluene	106-43-4	LT	5.6
18	Dibromochloromethane	124-48-1	LT	5.6
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	5.6
20	1,2-Dibromoethane	106-93-4	LT	5.6
21	Dibromomethane	74-95-3	LT	2.8
22	1,2-Dichlorobenzene	95-50-1	LT	2.8
23	1,3-Dichlorobenzene	541-73-1	LT	2.8
24	1,4-Dichlorobenzene	106-46-7	LT	2.8
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	8.4
26	1,1-Dichloroethane	75-34-3	LT	2.8
27	1,2-Dichloroethane	107-06-2	LT	5.6
28	1,1-Dichloroethene	75-35-4	LT	2.8
29	cis-1,2-Dichloroethene	156-69-9	LT	2.8
30	trans-1,2-Dichloroethene	156-60-5	LT	2.8
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	8.4
32	1,2-Dichloropropane	78-87-5	LT	2.8
33	1,3-Dichloropropane	142-28-9	LT	2.8
34	2,2-Dichloropropane	594-20-7	LT	2.8

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW980505

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	2.8
36	cis-1,3-Dichloropropene	10061-01-5	LT	2.8
37	trans-1,3-Dichloropropene	10061-02-6	LT	2.8
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	8.4
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	2.8
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	2.8
41	Ethylbenzene	100-41-4	LT	2.8
42	Hexachlorobutadien	87-68-3	LT	8.4
43	Isopropylbenzene	98-82-8	LT	5.6
44	p-Isopropyltoluene	99-87-6	LT	2.8
45	Methylene Chloride	75-09-2	LT	2.8
45	Methyl tert-Butyl Ether	1634-04-4	LT	14.0
46	Naphthalene	91-20-3	LT	5.6
47	n-Propylbenzene	103-65-1	LT	2.8
48	Styrene	100-42-5	LT	2.8
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	2.8
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	5.6
51	Tetrachloroethene	127-18-4	LT	2.8
52	Toluene	108-88-3	LT	2.8
53	1,2,3-Trichlorobenzene	87-61-6	LT	5.6
54	1,2,4-Trichlorobenzene	120-82-1	LT	2.8
55	1,1,1-Trichloroethane	71-55-6	LT	2.8
56	1,1,2-Trichloroethane	79-00-5	LT	2.8
57	Trichloroethene	79-01-6	LT	2.8
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	5.6
59	1,2,3-Trichloropropane	96-18-4	LT	2.8
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	2.8
61	1,2,4-Trimethylbenzene	95-63-6	LT	2.8
62	1,3,5-Trimethylbenzene	108-67-8	LT	2.8
63	Vinyl Chloride	75-01-4	LT	2.8
64	Total-Xylene	1330-20-7	LT	5.6

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	96.0	**86-115**
Dibromofluoromethane	93.4	**86-118**
Toluene-d8	102.6	**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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	B12	Laboratory ID:	OW980506
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	Method:	EPA 8260(Purge & Trap)

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
1	Benzene	71-43-2	LT	1.1
2	Bromobenzene	108-86-1	LT	1.1
3	Bromochloromethane	74-97-5	LT	2.1
4	Bromodichloromethane	75-27-4	LT	1.1
5	Bromoform	75-25-2	LT	2.1
6	Bromomethane	74-83-9	LT	4.3
7	n-Butylbenzene	104-51-8	LT	1.1
8	sec-Butylbenzene	135-98-8	LT	1.1
9	ter-Butylbenzene	98-06-6	LT	1.1
10	Carbon Tetrachloride	56-23-5	LT	1.1
11	Chlorobenzene	108-90-7	LT	1.1
12	Chlorodifluoromethane(Freon-22)	75-45-6	LT	32.1
13	Chloroethane	75-00-3	LT	32.1
14	Chloroform	67-66-3	LT	1.1
15	Chloromethane	74-87-3	LT	1.1
16	2-Chlorotoluene	95-49-8	LT	2.1
17	4-Chlorotoluene	106-43-4	LT	2.1
18	Dibromochloromethane	124-48-1	LT	2.1
19	1,2-Dibromo-3-chloropropane	96-12-8	LT	2.1
20	1,2-Dibromoethane	106-93-4	LT	2.1
21	Dibromomethane	74-95-3	LT	1.1
22	1,2-Dichlorobenzene	95-50-1	LT	1.1
23	1,3-Dichlorobenzene	541-73-1	LT	1.1
24	1,4-Dichlorobenzene	106-46-7	LT	1.1
25	Dichlorodifluoromethane(Freon-12)	75-71-8	LT	3.2
26	1,1-Dichloroethane	75-34-3	LT	1.1
27	1,2-Dichloroethane	107-06-2	8.8	2.1
28	1,1-Dichloroethene	75-35-4	LT	1.1
29	cis-1,2-Dichloroethene	156-69-9	123	1.1
30	trans-1,2-Dichloroethene	156-60-5	LT	1.1
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.2
32	1,2-Dichloropropane	78-87-5	LT	1.1
33	1,3-Dichloropropane	142-28-9	LT	1.1
34	2,2-Dichloropropane	594-20-7	LT	1.1

Volatile Organics Analysis Data Sheet (Continued) Sample I.D. OW980506

	Compound	CAS #	Conc.(ug/L)	PQL(ug/L)
35	1,1-Dichloropropene	563-58-6	LT	1.1
36	cis-1,3-Dichloropropene	10061-01-5	LT	1.1
37	trans-1,3-Dichloropropene	10061-02-6	LT	1.1
38	1,2-Dichlorotetrafluoroethane(Freon-114)	76-14-2	LT	3.2
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.1
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	1.1
41	Ethylbenzene	100-41-4	LT	1.1
42	Hexachlorobutadien	87-68-3	LT	3.2
43	Isopropylbenzene	98-82-8	LT	2.1
44	p-Isopropyltoluene	99-87-6	LT	1.1
45	Methylene Chloride	75-09-2	LT	1.1
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.3
46	Naphthalene	91-20-3	LT	2.1
47	n-Propylbenzene	103-65-1	LT	1.1
48	Styrene	100-42-5	LT	1.1
49	1,1,2,2-Tetrachloroethane	79-34-5	LT	1.1
50	1,1,1,2-Tetrachloroethane	79-34-5	LT	2.1
51	Tetrachloroethene	127-18-4	LT	1.1
52	Toluene	108-88-3	LT	1.1
53	1,2,3-Trichlorobenzene	87-61-6	LT	2.1
54	1,2,4-Trichlorobenzene	120-82-1	LT	1.1
55	1,1,1-Trichloroethane	71-55-6	LT	1.1
56	1,1,2-Trichloroethane	79-00-5	LT	1.1
57	Trichloroethene	79-01-6	142	1.1
58	Trichlorofluoromethane(Freon-11)	75-69-4	LT	2.1
59	1,2,3-Trichloropropane	96-18-4	LT	1.1
60	1,1,2-Trichlorotrifluoroethane(Freon-113)	76-13-1	LT	1.1
61	1,2,4-Trimethylbenzene	95-63-6	LT	1.1
62	1,3,5-Trimethylbenzene	108-67-8	LT	1.1
63	Vinyl Chloride	75-01-4	LT	1.1
64	Total-Xylene	1330-20-7	LT	2.1

Surrogate Compounds	% Recovery	QC Limits (%)
4-Bromofluorobenzene	97.0	**86-115**
Dibromofluoromethane	92.4	**86-118**
Toluene-d8	100.2	**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 : _____ Date: 6/18/98
Reviewer: _____ Date: 6-18-98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	DUP-1	Laboratory ID:	OW980507
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	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	4.1
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	30.7
13	Chloroethane	75-00-3	LT	30.7
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	3.1
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	1.6	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.1
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. OW980507

	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	3.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	50.7	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.1
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.1
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	54.1	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	99.2	**86-115**
Dibromofluoromethane	92.4	**86-118**
Toluene-d8	100.0	**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 : Date: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	DUP-2	Laboratory ID:	OW980508
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	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	4.1
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	30.7
13	Chloroethane	75-00-3	LT	30.7
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	3.1
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	2.6	1.0
30	trans-1,2-Dichloroethene	156-60-5	LT	1.0
31	Dichlorofluoromethane(Freon-21)	75-43-4	LT	3.1
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. OW980508

	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	3.1
39	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	1.0
40	Dichlorotrifluoroethane(Freon-123A)	354-23-4	56.3	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.1
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	Methylene Chloride	75-09-2	LT	1.0
45	Methyl tert-Butyl Ether	1634-04-4	LT	5.1
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	76.5	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	100.7	**86-115**
Dibromofluoromethane	93.2	**86-118**
Toluene-d8	100.8	**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 : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
Volatile Organics Analysis Data Sheet

Sample ID:	FB-1	Laboratory ID:	OW980509
Matrix:	Water	Sample Wt./Vol.:	5.0 ml
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/5/98	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	LT	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. OW980509

	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	Dichlorotrifluoroethane(Freon-123A)	354-23-4	LT	1.0
41	Ethylbenzene	100-41-4	LT	1.0
42	Hexachlorobutadien	87-68-3	LT	3.0
43	Isopropylbenzene	98-82-8	LT	2.0
44	p-Isopropyltoluene	99-87-6	LT	1.0
45	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	LT	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	101.2	**86-115**
Dibromofluoromethane	99.0	**86-118**
Toluene-d8	101.2	**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 : _____ Date: 6/18/98
Reviewer: _____ Date: 6/18/98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-1	Laboratory ID:	OA980301
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/30/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	LT	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	LT	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	71-55-6	LT	18.77
19	Trichloroethene	79-01-6	92.1	19.08
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	LT	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		92	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	70%	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 Dabfunt Date: 6/18/98
Reviewer: H. Floyd Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-2	Laboratory ID:	OA980302
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/30/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	LT	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	173	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	79-00-5	LT	18.77
19	Trichloroethene	79-01-6	800	19.08
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	3010	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		3983	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	70%	**75-130**

** Detector is saturated
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: 6/18/98
Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-3	Laboratory ID:	OA980303
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	42.2	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	166	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	79-00-5	LT	18.77
19	Trichloroethene	79-01-6	367	19.08
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	842	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		1417	

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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-4	Laboratory ID:	OA980304
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	43.7	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	214	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	79-00-5	LT	18.77
19	Trichloroethene	79-01-6	238	19.08
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	50.3	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		546	

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 : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-5	Laboratory ID:	OA980305
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	37.2	25.28
9	1,2-Dichloroethane	107-06-2	LT	64.62
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	230	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	79-00-5	LT	18.77
19	Trichloroethene	79-01-6	235	19.08
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	13.5	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		515	

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 Drakeford Date: 6/18/98
Reviewer: H. Forstel Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-6	Laboratory ID:	OA980306
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	LT	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	162	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	79-00-5	LT	18.77
19	Trichloroethene	79-01-6	197	19.08
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		359	

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: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-7	Laboratory ID:	OA980307
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	LT	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	LT	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	79-00-5	LT	18.77
19	Trichloroethene	79-01-6	184	19.08
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		184	

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: 6/18/98
Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-8	Laboratory ID:	OA980308
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	LT	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	73.1	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
14	Tetrachloroethene	127-18-4	LT	15.12
15	Toluene	108-88-3	LT	27.20
16	1,1,1-Trichloroethane	71-55-6	LT	18.77
16	1,1,2-Trichloroethane	79-00-5	LT	18.77
17	Trichloroethene	79-01-6	179	19.08
18	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	16.61
17	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
18	Vinyl Chloride	75-01-4	LT	40.06
19	Total-Xylene	1330-20-7	LT	23.62
19	Total VOC		252	

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 : Date: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-9	Laboratory ID:	OA980309
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	46.12
2	Benzene	71-43-2	LT	34.34
3	Carbon Tetrachloride	56-23-5	LT	17.47
4	Chloroform	67-66-3	LT	22.50
5	1,2-Dichlorobenzene	95-50-1	LT	18.27
6	1,3-Dichlorobenzene	541-73-1	LT	18.27
7	1,4-Dichlorobenzene	106-46-7	LT	18.27
8	1,1-Dichloroethane	75-34-3	LT	27.09
9	1,2-Dichloroethane	107-06-2	LT	27.69
10	1,1-Dichloroethene	75-35-4	LT	83.08
11	cis-1,2-Dichloroethene	156-69-9	LT	27.69
12	trans-1,2-Dichloroethene	156-60-5	LT	27.69
13	Ethylbenzene	100-41-4	LT	25.31
14	Methylene Chloride	75-09-2	LT	31.62
15	Tetrachloroethene	127-18-4	LT	16.20
16	Toluene	108-88-3	LT	29.14
17	1,1,1-Trichloroethane	71-55-6	LT	20.11
18	1,1,2-Trichloroethane	79-00-5	LT	20.11
19	Trichloroethene	79-01-6	108	20.44
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.80
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.14
22	Vinyl Chloride	75-01-4	LT	42.93
23	Total-Xylene	1330-20-7	LT	25.31
24	Total VOC		108	

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 : Rob Dahlquist Date: 6/18/98
Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-10	Laboratory ID:	OA980310
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	43.04
2	Benzene	71-43-2	LT	32.05
3	Carbon Tetrachloride	56-23-5	LT	16.30
4	Chloroform	67-66-3	LT	21.00
5	1,2-Dichlorobenzene	95-50-1	LT	17.05
6	1,3-Dichlorobenzene	541-73-1	LT	17.05
7	1,4-Dichlorobenzene	106-46-7	LT	17.05
8	1,1-Dichloroethane	75-34-3	LT	25.28
9	1,2-Dichloroethane	107-06-2	LT	25.85
10	1,1-Dichloroethene	75-35-4	LT	77.54
11	cis-1,2-Dichloroethene	156-69-9	57.6	25.85
12	trans-1,2-Dichloroethene	156-60-5	LT	25.85
13	Ethylbenzene	100-41-4	LT	23.62
14	Methylene Chloride	75-09-2	LT	29.51
15	Tetrachloroethene	127-18-4	LT	15.12
16	Toluene	108-88-3	LT	27.20
17	1,1,1-Trichloroethane	71-55-6	LT	18.77
18	1,1,2-Trichloroethane	79-00-5	LT	18.77
19	Trichloroethene	79-01-6	178	19.08
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	16.61
21	1,2,4-Trimethylbenzene	95-63-6	LT	27.20
22	Vinyl Chloride	75-01-4	LT	40.06
23	Total-Xylene	1330-20-7	LT	23.62
24	Total VOC		235	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	93%	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 : Date: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-11	Laboratory ID:	OA980311
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	430
2	Benzene	71-43-2	LT	321
3	Carbon Tetrachloride	56-23-5	LT	163
4	Chloroform	67-66-3	LT	210
5	1,2-Dichlorobenzene	95-50-1	LT	170
6	1,3-Dichlorobenzene	541-73-1	LT	170
7	1,4-Dichlorobenzene	106-46-7	LT	170
8	1,1-Dichloroethane	75-34-3	LT	253
9	1,2-Dichloroethane	107-06-2	LT	258
10	1,1-Dichloroethene	75-35-4	LT	258
11	cis-1,2-Dichloroethene	156-69-9	897	258
12	trans-1,2-Dichloroethene	156-60-5	LT	258
13	Ethylbenzene	100-41-4	LT	236
14	Methylene Chloride	75-09-2	LT	295
15	Tetrachloroethene	127-18-4	LT	151
16	Toluene	108-88-3	LT	272
17	1,1,1-Trichloroethane	71-55-6	LT	188
18	1,1,2-Trichloroethane	79-00-5	LT	188
19	Trichloroethene	79-01-6	1100	191
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	166
21	1,2,4-Trimethylbenzene	95-63-6	LT	272
22	Vinyl Chloride	75-01-4	LT	401
23	Total-Xylene	1330-20-7	LT	236
24	Total VOC		1997	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	110%	75-130

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-12	Laboratory ID:	OA980312
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	6/13/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4304
2	Benzene	71-43-2	LT	3205
3	Carbon Tetrachloride	56-23-5	LT	1630
4	Chloroform	67-66-3	LT	2100
5	1,2-Dichlorobenzene	95-50-1	LT	1705
6	1,3-Dichlorobenzene	541-73-1	LT	1705
7	1,4-Dichlorobenzene	106-46-7	LT	1705
8	1,1-Dichloroethane	75-34-3	LT	2528
9	1,2-Dichloroethane	107-06-2	LT	2585
10	1,1-Dichloroethene	75-35-4	LT	2585
11	cis-1,2-Dichloroethene	156-69-9	25600	2585
12	trans-1,2-Dichloroethene	156-60-5	LT	2585
13	Ethylbenzene	100-41-4	LT	2362
14	Methylene Chloride	75-09-2	LT	2951
15	Tetrachloroethene	127-18-4	LT	1512
16	Toluene	108-88-3	LT	2720
17	1,1,1-Trichloroethane	71-55-6	LT	1877
18	1,1,2-Trichloroethane	79-00-5	LT	1877
19	Trichloroethene	79-01-6	33500	1908
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1661
21	1,2,4-Trimethylbenzene	95-63-6	LT	2720
22	Vinyl Chloride	75-01-4	LT	4006
23	Total-Xylene	1330-20-7	LT	2362
24	Total VOC		59100	

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

** Detector is saturated

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: 6/18/98

Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-13	Laboratory ID:	OA980313
Matrix:	Gas Cartridge	Sample Vol.(L):	0.096
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4304
2	Benzene	71-43-2	LT	3205
3	Carbon Tetrachloride	56-23-5	LT	1630
4	Chloroform	67-66-3	LT	2100
5	1,2-Dichlorobenzene	95-50-1	LT	1705
6	1,3-Dichlorobenzene	541-73-1	LT	1705
7	1,4-Dichlorobenzene	106-46-7	LT	1705
8	1,1-Dichloroethane	75-34-3	LT	2528
9	1,2-Dichloroethane	107-06-2	LT	2585
10	1,1-Dichloroethene	75-35-4	LT	2585
11	cis-1,2-Dichloroethene	156-69-9	27100	2585
12	trans-1,2-Dichloroethene	156-60-5	LT	2585
13	Ethylbenzene	100-41-4	LT	2362
14	Methylene Chloride	75-09-2	LT	2951
15	Tetrachloroethene	127-18-4	LT	1512
16	Toluene	108-88-3	LT	2720
17	1,1,1-Trichloroethane	71-55-6	LT	1877
18	1,1,2-Trichloroethane	79-00-5	LT	1877
19	Trichloroethene	79-01-6	78600	1908
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1661
21	1,2,4-Trimethylbenzene	95-63-6	LT	2720
22	Vinyl Chloride	75-01-4	LT	4006
23	Total-Xylene	1330-20-7	LT	2362
24	Total VOC		105700	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	107%	**75-130**

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	Field Blank-1	Laboratory ID:	OA970314
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	27.57
11	cis-1,2-Dichloroethene	156-69-9	LT	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	41.9	20.35
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		42	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	98%	**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: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-1	Laboratory ID:	OA980315
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	254	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	71-55-6	LT	20.02
19	Trichloroethene	79-01-6	661	20.35
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	3040	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		3956	

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 Dahlgeist Date: 6/18/98
Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-2	Laboratory ID:	OA980316
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	236	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	623	20.35
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	2590	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		3449	

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 : Rob Dahlquist Date: 6/18/98
Reviewer: H. Poweld. Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-3	Laboratory ID:	OA980317
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	43.4	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	234	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	444	20.35
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	957	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		1678	

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 : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-4	Laboratory ID:	OA980318
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	37.2	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	252	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	401	20.35
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	193	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		884	

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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-5	Laboratory ID:	OA980319
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	34.3	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	58.8	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	284	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	421	20.35
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	15.4	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		814	

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: 6/18/98
Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-6	Laboratory ID:	OA980320
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	28.9	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	256	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	68.3	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	328	20.35
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		681	

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: 6/18/98
Reviewer: _____ Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-7	Laboratory ID:	OA980321
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	51.6	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	213	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	407	20.35
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		672	

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: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-8	Laboratory ID:	OA980322
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	LT	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
14	Tetrachloroethene	127-18-4	LT	16.13
15	Toluene	108-88-3	LT	29.01
16	1,1,1-Trichloroethane	71-55-6	LT	20.02
16	1,1,2-Trichloroethane	79-00-5	LT	20.02
17	Trichloroethene	79-01-6	36.0	20.35
18	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.72
17	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
18	Vinyl Chloride	75-01-4	LT	42.74
19	Total-Xylene	1330-20-7	LT	25.20
19	Total VOC		36	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	96%	75-130

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

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

Analyst : Peter Dahlquist Date: 6/18/98
Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-9	Laboratory ID:	OA980323
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	73.6	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	192	20.35
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		266	

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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-10	Laboratory ID:	OA980324
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	45.2	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	260	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	344	20.35
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		649	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	97%	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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-11	Laboratory ID:	OA980325
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/25/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4591
2	Benzene	71-43-2	LT	3419
3	Carbon Tetrachloride	56-23-5	LT	1739
4	Chloroform	67-66-3	LT	2240
5	1,2-Dichlorobenzene	95-50-1	LT	1819
6	1,3-Dichlorobenzene	541-73-1	LT	1819
7	1,4-Dichlorobenzene	106-46-7	LT	1819
8	1,1-Dichloroethane	75-34-3	LT	2697
9	1,2-Dichloroethane	107-06-2	LT	2757
10	1,1-Dichloroethene	75-35-4	LT	2757
11	cis-1,2-Dichloroethene	156-69-9	3050	2757
12	trans-1,2-Dichloroethene	156-60-5	LT	2757
13	Ethylbenzene	100-41-4	LT	2520
14	Methylene Chloride	75-09-2	LT	3148
15	Tetrachloroethene	127-18-4	LT	1613
16	Toluene	108-88-3	LT	2901
17	1,1,1-Trichloroethane	71-55-6	LT	2002
18	1,1,2-Trichloroethane	79-00-5	LT	2002
19	Trichloroethene	79-01-6	2250	2035
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1772
21	1,2,4-Trimethylbenzene	95-63-6	LT	2901
22	Vinyl Chloride	75-01-4	LT	4274
23	Total-Xylene	1330-20-7	LT	2520
24	Total VOC		5300	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	100%	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: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-12	Laboratory ID:	OA980326
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	6/13/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4591
2	Benzene	71-43-2	LT	3419
3	Carbon Tetrachloride	56-23-5	LT	1739
4	Chloroform	67-66-3	LT	2240
5	1,2-Dichlorobenzene	95-50-1	LT	1819
6	1,3-Dichlorobenzene	541-73-1	LT	1819
7	1,4-Dichlorobenzene	106-46-7	LT	1819
8	1,1-Dichloroethane	75-34-3	LT	2697
9	1,2-Dichloroethane	107-06-2	LT	2757
10	1,1-Dichloroethene	75-35-4	LT	2757
11	cis-1,2-Dichloroethene	156-69-9	11700	2757
12	trans-1,2-Dichloroethene	156-60-5	LT	2757
13	Ethylbenzene	100-41-4	LT	2520
14	Methylene Chloride	75-09-2	LT	3148
15	Tetrachloroethene	127-18-4	LT	1613
16	Toluene	108-88-3	LT	2901
17	1,1,1-Trichloroethane	71-55-6	LT	2002
18	1,1,2-Trichloroethane	79-00-5	LT	2002
19	Trichloroethene	79-01-6	12300	2035
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1772
21	1,2,4-Trimethylbenzene	95-63-6	LT	2901
22	Vinyl Chloride	75-01-4	LT	4274
23	Total-Xylene	1330-20-7	LT	2520
24	Total VOC		24000	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	96%	75-130

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

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

Analyst : Richard Dahlquist Date: 6/18/98
Reviewer: [illegible] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-13	Laboratory ID:	OA980327
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	6/13/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	4591
2	Benzene	71-43-2	LT	3419
3	Carbon Tetrachloride	56-23-5	LT	1739
4	Chloroform	67-66-3	LT	2240
5	1,2-Dichlorobenzene	95-50-1	LT	1819
6	1,3-Dichlorobenzene	541-73-1	LT	1819
7	1,4-Dichlorobenzene	106-46-7	LT	1819
8	1,1-Dichloroethane	75-34-3	LT	2697
9	1,2-Dichloroethane	107-06-2	LT	2757
10	1,1-Dichloroethene	75-35-4	LT	2757
11	cis-1,2-Dichloroethene	156-69-9	39600	2757
12	trans-1,2-Dichloroethene	156-60-5	LT	2757
13	Ethylbenzene	100-41-4	LT	2520
14	Methylene Chloride	75-09-2	LT	3148
15	Tetrachloroethene	127-18-4	LT	1613
16	Toluene	108-88-3	LT	2901
17	1,1,1-Trichloroethane	71-55-6	LT	2002
18	1,1,2-Trichloroethane	79-00-5	LT	2002
19	Trichloroethene	79-01-6	85200	2035
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1772
21	1,2,4-Trimethylbenzene	95-63-6	LT	2901
22	Vinyl Chloride	75-01-4	LT	4274
23	Total-Xylene	1330-20-7	LT	2520
24	Total VOC		124800	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	102%	75-130

** Detector is saturated
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: 6/18/98
Reviewer: [illegible] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	Dup	Laboratory ID:	OA980528
Matrix:	Gas Cartridge	Sample Vol.(L):	0.111
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.23
2	Benzene	71-43-2	LT	27.72
3	Carbon Tetrachloride	56-23-5	LT	14.10
4	Chloroform	67-66-3	LT	18.16
5	1,2-Dichlorobenzene	95-50-1	LT	14.74
6	1,3-Dichlorobenzene	541-73-1	LT	14.74
7	1,4-Dichlorobenzene	106-46-7	LT	14.74
8	1,1-Dichloroethane	75-34-3	LT	21.87
9	1,2-Dichloroethane	107-06-2	30.2	22.35
10	1,1-Dichloroethene	75-35-4	LT	67.06
11	cis-1,2-Dichloroethene	156-69-9	220	22.35
12	trans-1,2-Dichloroethene	156-60-5	LT	22.35
13	Ethylbenzene	100-41-4	LT	20.43
14	Methylene Chloride	75-09-2	LT	25.52
15	Tetrachloroethene	127-18-4	LT	13.08
16	Toluene	108-88-3	LT	23.52
17	1,1,1-Trichloroethane	71-55-6	LT	16.23
18	1,1,2-Trichloroethane	79-00-5	LT	16.23
19	Trichloroethene	79-01-6	477	16.50
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.37
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.52
22	Vinyl Chloride	75-01-4	LT	34.65
23	Total-Xylene	1330-20-7	LT	20.43
24	Total VOC		727	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	99%	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 : Date: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	FB 2	Laboratory ID:	OA980329
Matrix:	Gas Cartridge	Sample Vol.(L):	0.090
Date Sampled:	3/20/98	Date Received:	3/25/98
Date Analyzed:	3/26/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	45.91
2	Benzene	71-43-2	LT	34.19
3	Carbon Tetrachloride	56-23-5	LT	17.39
4	Chloroform	67-66-3	LT	22.40
5	1,2-Dichlorobenzene	95-50-1	LT	18.19
6	1,3-Dichlorobenzene	541-73-1	LT	18.19
7	1,4-Dichlorobenzene	106-46-7	LT	18.19
8	1,1-Dichloroethane	75-34-3	LT	26.97
9	1,2-Dichloroethane	107-06-2	LT	27.57
10	1,1-Dichloroethene	75-35-4	LT	82.71
11	cis-1,2-Dichloroethene	156-69-9	LT	27.57
12	trans-1,2-Dichloroethene	156-60-5	LT	27.57
13	Ethylbenzene	100-41-4	LT	25.20
14	Methylene Chloride	75-09-2	LT	31.48
15	Tetrachloroethene	127-18-4	LT	16.13
16	Toluene	108-88-3	LT	29.01
17	1,1,1-Trichloroethane	71-55-6	LT	20.02
18	1,1,2-Trichloroethane	79-00-5	LT	20.02
19	Trichloroethene	79-01-6	LT	20.35
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	17.72
21	1,2,4-Trimethylbenzene	95-63-6	LT	29.01
22	Vinyl Chloride	75-01-4	LT	42.74
23	Total-Xylene	1330-20-7	LT	25.20
24	Total VOC		0	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	116%	75-130

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-1.2	Laboratory ID:	OA980501
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/2/98	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	70.90
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	71-55-6	LT	17.16
19	Trichloroethene	79-01-6	61.1	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		61	

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: 6/18/98
Reviewer: [illegible] Date: 6·18·98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-2.1	Laboratory ID:	OA980502
Matrix:	Gas Cartridge	Sample Vol.(L):	0.105
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/2/98	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	70.90
11	cis-1,2-Dichloroethene	156-69-9	137	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	3370	17.44
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	9940	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		13447	

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

** Detector is saturated
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: 6/18/98
Reviewer: [illegible] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-3	Laboratory ID:	OA980503
Matrix:	Gas Cartridge	Sample Vol.(L):	0.106
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	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	27.2	22.90
9	1,2-Dichloroethane	107-06-2	LT	23.41
10	1,1-Dichloroethene	75-35-4	LT	70.23
11	cis-1,2-Dichloroethene	156-69-9	133	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	691	17.28
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	885	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		1736	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	108%	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: 6/18/98
Reviewer: Date: 6·18·98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-4	Laboratory ID:	OA980504
Matrix:	Gas Cartridge	Sample Vol.(L):	0.106
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	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	30.7	22.90
9	1,2-Dichloroethane	107-06-2	LT	23.41
10	1,1-Dichloroethene	75-35-4	LT	70.23
11	cis-1,2-Dichloroethene	156-69-9	253	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	677	17.28
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	168	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		1129	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	100%	**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: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-5	Laboratory ID:	OA980505
Matrix:	Gas Cartridge	Sample Vol.(L):	0.106
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	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	32.1	22.90
9	1,2-Dichloroethane	107-06-2	LT	58.52
10	1,1-Dichloroethene	75-35-4	LT	70.23
11	cis-1,2-Dichloroethene	156-69-9	272	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	645	17.28
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	20.5	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		969	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	101%	**75-130**

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-6	Laboratory ID:	OA980506
Matrix:	Gas Cartridge	Sample Vol.(L):	0.106
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	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	70.23
11	cis-1,2-Dichloroethene	156-69-9	290	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	702	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		992	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	108%	75-130

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-7	Laboratory ID:	OA980507
Matrix:	Gas Cartridge	Sample Vol.(L):	0.107
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	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	69.57
11	cis-1,2-Dichloroethene	156-69-9	LT	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	99.8	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		100	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	106%	**75-130**

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-8	Laboratory ID:	OA980508
Matrix:	Gas Cartridge	Sample Vol.(L):	0.107
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	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	69.57
11	cis-1,2-Dichloroethene	156-69-9	35.7	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
14	Tetrachloroethene	127-18-4	LT	13.56
15	Toluene	108-88-3	LT	24.40
16	1,1,1-Trichloroethane	71-55-6	LT	16.84
16	1,1,2-Trichloroethane	79-00-5	LT	16.84
17	Trichloroethene	79-01-6	166	17.12
18	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.91
17	1,2,4-Trimethylbenzene	95-63-6	LT	24.40
18	Vinyl Chloride	75-01-4	LT	35.95
19	Total-Xylene	1330-20-7	LT	21.19
19	Total VOC		202	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	105%	75-130

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-9	Laboratory ID:	OA980509
Matrix:	Gas Cartridge	Sample Vol.(L):	0.107
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	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	69.57
11	cis-1,2-Dichloroethene	156-69-9	LT	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	68.2	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		68	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	104%	75-130

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-10	Laboratory ID:	OA980510
Matrix:	Gas Cartridge	Sample Vol.(L):	0.108
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	38.26
2	Benzene	71-43-2	LT	28.49
3	Carbon Tetrachloride	56-23-5	LT	14.49
4	Chloroform	67-66-3	LT	18.67
5	1,2-Dichlorobenzene	95-50-1	LT	15.15
6	1,3-Dichlorobenzene	541-73-1	LT	15.15
7	1,4-Dichlorobenzene	106-46-7	LT	15.15
8	1,1-Dichloroethane	75-34-3	LT	22.47
9	1,2-Dichloroethane	107-06-2	LT	22.98
10	1,1-Dichloroethene	75-35-4	LT	68.93
11	cis-1,2-Dichloroethene	156-69-9	81.8	22.98
12	trans-1,2-Dichloroethene	156-60-5	LT	22.98
13	Ethylbenzene	100-41-4	LT	21.00
14	Methylene Chloride	75-09-2	LT	26.23
15	Tetrachloroethene	127-18-4	LT	13.44
16	Toluene	108-88-3	LT	24.18
17	1,1,1-Trichloroethane	71-55-6	LT	16.68
18	1,1,2-Trichloroethane	79-00-5	LT	16.68
19	Trichloroethene	79-01-6	398	16.96
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.77
21	1,2,4-Trimethylbenzene	95-63-6	LT	24.18
22	Vinyl Chloride	75-01-4	LT	35.61
23	Total-Xylene	1330-20-7	LT	21.00
24	Total VOC		479	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	102%	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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-11.2	Laboratory ID:	OA980511
Matrix:	Gas Cartridge	Sample Vol.(L):	0.108
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/4/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	383
2	Benzene	71-43-2	LT	285
3	Carbon Tetrachloride	56-23-5	LT	145
4	Chloroform	67-66-3	LT	187
5	1,2-Dichlorobenzene	95-50-1	LT	152
6	1,3-Dichlorobenzene	541-73-1	LT	152
7	1,4-Dichlorobenzene	106-46-7	LT	152
8	1,1-Dichloroethane	75-34-3	LT	225
9	1,2-Dichloroethane	107-06-2	LT	230
10	1,1-Dichloroethene	75-35-4	LT	230
11	cis-1,2-Dichloroethene	156-69-9	696	230
12	trans-1,2-Dichloroethene	156-60-5	LT	230
13	Ethylbenzene	100-41-4	LT	210
14	Methylene Chloride	75-09-2	LT	262
15	Tetrachloroethene	127-18-4	LT	134
16	Toluene	108-88-3	LT	242
17	1,1,1-Trichloroethane	71-55-6	LT	167
18	1,1,2-Trichloroethane	79-00-5	LT	167
19	Trichloroethene	79-01-6	633	170
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	148
21	1,2,4-Trimethylbenzene	95-63-6	LT	242
22	Vinyl Chloride	75-01-4	LT	356
23	Total-Xylene	1330-20-7	LT	210
24	Total VOC		1329	

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: 6/18/98
Reviewer: [illegible] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-12.2	Laboratory ID:	OA980512
Matrix:	Gas Cartridge	Sample Vol.(L):	0.108
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/4/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3826
2	Benzene	71-43-2	LT	2849
3	Carbon Tetrachloride	56-23-5	LT	1449
4	Chloroform	67-66-3	LT	1867
5	1,2-Dichlorobenzene	95-50-1	LT	1515
6	1,3-Dichlorobenzene	541-73-1	LT	1515
7	1,4-Dichlorobenzene	106-46-7	LT	1515
8	1,1-Dichloroethane	75-34-3	LT	2247
9	1,2-Dichloroethane	107-06-2	LT	2298
10	1,1-Dichloroethene	75-35-4	LT	2298
11	cis-1,2-Dichloroethene	156-69-9	11500	2298
12	trans-1,2-Dichloroethene	156-60-5	LT	2298
13	Ethylbenzene	100-41-4	LT	2100
14	Methylene Chloride	75-09-2	LT	2623
15	Tetrachloroethene	127-18-4	LT	1344
16	Toluene	108-88-3	LT	2418
17	1,1,1-Trichloroethane	71-55-6	LT	1668
18	1,1,2-Trichloroethane	79-00-5	LT	1668
19	Trichloroethene	79-01-6	14500	1696
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1477
21	1,2,4-Trimethylbenzene	95-63-6	LT	2418
22	Vinyl Chloride	75-01-4	LT	3561
23	Total-Xylene	1330-20-7	LT	2100
24	Total VOC		26000	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	96%	75-130

** Detector is saturated
CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

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

Analyst : Rich Dallgent Date: 6/18/98
Reviewer: H.G. Pouyat Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	AG-13.2	Laboratory ID:	OA980513
Matrix:	Gas Cartridge	Sample Vol.(L):	0.108
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/4/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3826
2	Benzene	71-43-2	LT	2849
3	Carbon Tetrachloride	56-23-5	LT	1449
4	Chloroform	67-66-3	LT	1867
5	1,2-Dichlorobenzene	95-50-1	LT	1515
6	1,3-Dichlorobenzene	541-73-1	LT	1515
7	1,4-Dichlorobenzene	106-46-7	LT	1515
8	1,1-Dichloroethane	75-34-3	LT	2247
9	1,2-Dichloroethane	107-06-2	LT	2298
10	1,1-Dichloroethene	75-35-4	LT	2298
11	cis-1,2-Dichloroethene	156-69-9	21700	2298
12	trans-1,2-Dichloroethene	156-60-5	LT	2298
13	Ethylbenzene	100-41-4	LT	2100
14	Methylene Chloride	75-09-2	LT	2623
15	Tetrachloroethene	127-18-4	LT	1344
16	Toluene	108-88-3	LT	2418
17	1,1,1-Trichloroethane	71-55-6	LT	1668
18	1,1,2-Trichloroethane	79-00-5	LT	1668
19	Trichloroethene	79-01-6	24600	1696
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1477
21	1,2,4-Trimethylbenzene	95-63-6	LT	2418
22	Vinyl Chloride	75-01-4	LT	3561
23	Total-Xylene	1330-20-7	LT	2100
24	Total VOC		46300	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	107%	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 Walkenhorst Date: 6/18/98
Reviewer: H.G. Pound Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	Field Blank-1	Laboratory ID:	OA970514
Matrix:	Gas Cartridge	Sample Vol.(L):	0.109
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.91
2	Benzene	71-43-2	LT	28.23
3	Carbon Tetrachloride	56-23-5	LT	14.36
4	Chloroform	67-66-3	LT	18.50
5	1,2-Dichlorobenzene	95-50-1	LT	15.02
6	1,3-Dichlorobenzene	541-73-1	LT	15.02
7	1,4-Dichlorobenzene	106-46-7	LT	15.02
8	1,1-Dichloroethane	75-34-3	LT	22.27
9	1,2-Dichloroethane	107-06-2	LT	22.77
10	1,1-Dichloroethene	75-35-4	LT	22.77
11	cis-1,2-Dichloroethene	156-69-9	LT	22.77
12	trans-1,2-Dichloroethene	156-60-5	LT	22.77
13	Ethylbenzene	100-41-4	LT	20.80
14	Methylene Chloride	75-09-2	LT	25.99
15	Tetrachloroethene	127-18-4	LT	13.32
16	Toluene	108-88-3	LT	23.95
17	1,1,1-Trichloroethane	71-55-6	LT	16.53
18	1,1,2-Trichloroethane	79-00-5	LT	16.53
19	Trichloroethene	79-01-6	34.6	16.80
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.63
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.95
22	Vinyl Chloride	75-01-4	LT	35.29
23	Total-Xylene	1330-20-7	LT	20.80
24	Total VOC		35	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	98%	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: 6/18/98
Reviewer: [illegible] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-1.1	Laboratory ID:	OA980515
Matrix:	Gas Cartridge	Sample Vol.(L):	0.109
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/29/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.91
2	Benzene	71-43-2	LT	28.23
3	Carbon Tetrachloride	56-23-5	LT	14.36
4	Chloroform	67-66-3	LT	18.50
5	1,2-Dichlorobenzene	95-50-1	LT	15.02
6	1,3-Dichlorobenzene	541-73-1	LT	15.02
7	1,4-Dichlorobenzene	106-46-7	LT	15.02
8	1,1-Dichloroethane	75-34-3	LT	22.27
9	1,2-Dichloroethane	107-06-2	LT	22.77
10	1,1-Dichloroethene	75-35-4	LT	68.30
11	cis-1,2-Dichloroethene	156-69-9	73.3	22.77
12	trans-1,2-Dichloroethene	156-60-5	LT	22.77
13	Ethylbenzene	100-41-4	LT	20.80
14	Methylene Chloride	75-09-2	LT	25.99
15	Tetrachloroethene	127-18-4	LT	13.32
16	Toluene	108-88-3	LT	23.95
17	1,1,1-Trichloroethane	71-55-6	LT	16.53
18	1,1,2-Trichloroethane	71-55-6	LT	16.53
19	Trichloroethene	79-01-6	3850	16.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	10400	14.63
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.95
22	Vinyl Chloride	75-01-4	LT	35.29
23	Total-Xylene	1330-20-7	LT	20.80
24	Total VOC		14323	

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: 6/18/98
Reviewer: Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-2.1	Laboratory ID:	OA980516
Matrix:	Gas Cartridge	Sample Vol.(L):	0.109
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/29/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.91
2	Benzene	71-43-2	LT	28.23
3	Carbon Tetrachloride	56-23-5	LT	14.36
4	Chloroform	67-66-3	LT	18.50
5	1,2-Dichlorobenzene	95-50-1	LT	15.02
6	1,3-Dichlorobenzene	541-73-1	LT	15.02
7	1,4-Dichlorobenzene	106-46-7	LT	15.02
8	1,1-Dichloroethane	75-34-3	LT	22.27
9	1,2-Dichloroethane	107-06-2	LT	22.77
10	1,1-Dichloroethene	75-35-4	LT	68.30
11	cis-1,2-Dichloroethene	156-69-9	97.2	22.77
12	trans-1,2-Dichloroethene	156-60-5	LT	22.77
13	Ethylbenzene	100-41-4	LT	20.80
14	Methylene Chloride	75-09-2	LT	25.99
15	Tetrachloroethene	127-18-4	LT	13.32
16	Toluene	108-88-3	LT	23.95
17	1,1,1-Trichloroethane	71-55-6	LT	16.53
18	1,1,2-Trichloroethane	79-00-5	LT	16.53
19	Trichloroethene	79-01-6	2810	16.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	8170	14.63
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.95
22	Vinyl Chloride	75-01-4	LT	35.29
23	Total-Xylene	1330-20-7	LT	20.80
24	Total VOC		11077	

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 : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-3	Laboratory ID:	OA980517
Matrix:	Gas Cartridge	Sample Vol.(L):	0.109
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.91
2	Benzene	71-43-2	LT	28.23
3	Carbon Tetrachloride	56-23-5	LT	14.36
4	Chloroform	67-66-3	LT	18.50
5	1,2-Dichlorobenzene	95-50-1	LT	15.02
6	1,3-Dichlorobenzene	541-73-1	LT	15.02
7	1,4-Dichlorobenzene	106-46-7	LT	15.02
8	1,1-Dichloroethane	75-34-3	34.3	22.27
9	1,2-Dichloroethane	107-06-2	LT	22.77
10	1,1-Dichloroethene	75-35-4	LT	68.30
11	cis-1,2-Dichloroethene	156-69-9	213	22.77
12	trans-1,2-Dichloroethene	156-60-5	LT	22.77
13	Ethylbenzene	100-41-4	LT	20.80
14	Methylene Chloride	75-09-2	LT	25.99
15	Tetrachloroethene	127-18-4	LT	13.32
16	Toluene	108-88-3	LT	23.95
17	1,1,1-Trichloroethane	71-55-6	LT	16.53
18	1,1,2-Trichloroethane	79-00-5	LT	16.53
19	Trichloroethene	79-01-6	677	16.80
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	955	14.63
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.95
22	Vinyl Chloride	75-01-4	LT	35.29
23	Total-Xylene	1330-20-7	LT	20.80
24	Total VOC		1880	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	99%	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 Dabbgnist Date: 6/18/98
Reviewer: H. Powell Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-4	Laboratory ID:	OA980518
Matrix:	Gas Cartridge	Sample Vol.(L):	0.110
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.57
2	Benzene	71-43-2	LT	27.97
3	Carbon Tetrachloride	56-23-5	LT	14.23
4	Chloroform	67-66-3	LT	18.33
5	1,2-Dichlorobenzene	95-50-1	LT	14.88
6	1,3-Dichlorobenzene	541-73-1	LT	14.88
7	1,4-Dichlorobenzene	106-46-7	LT	14.88
8	1,1-Dichloroethane	75-34-3	30.5	22.07
9	1,2-Dichloroethane	107-06-2	LT	22.56
10	1,1-Dichloroethene	75-35-4	LT	67.67
11	cis-1,2-Dichloroethene	156-69-9	235	22.56
12	trans-1,2-Dichloroethene	156-60-5	LT	22.56
13	Ethylbenzene	100-41-4	LT	20.61
14	Methylene Chloride	75-09-2	LT	25.75
15	Tetrachloroethene	127-18-4	LT	13.19
16	Toluene	108-88-3	LT	23.74
17	1,1,1-Trichloroethane	71-55-6	LT	16.38
18	1,1,2-Trichloroethane	79-00-5	LT	16.38
19	Trichloroethene	79-01-6	620	16.65
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	450	14.50
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.74
22	Vinyl Chloride	75-01-4	LT	34.97
23	Total-Xylene	1330-20-7	LT	20.61
24	Total VOC		1335	

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 : Date: 6/18/98
Reviewer: Date: 6·18·98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-5	Laboratory ID:	OA980519
Matrix:	Gas Cartridge	Sample Vol.(L):	0.110
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.57
2	Benzene	71-43-2	LT	27.97
3	Carbon Tetrachloride	56-23-5	LT	14.23
4	Chloroform	67-66-3	LT	18.33
5	1,2-Dichlorobenzene	95-50-1	LT	14.88
6	1,3-Dichlorobenzene	541-73-1	LT	14.88
7	1,4-Dichlorobenzene	106-46-7	LT	14.88
8	1,1-Dichloroethane	75-34-3	34.2	22.07
9	1,2-Dichloroethane	107-06-2	LT	22.56
10	1,1-Dichloroethene	75-35-4	LT	67.67
11	cis-1,2-Dichloroethene	156-69-9	381	22.56
12	trans-1,2-Dichloroethene	156-60-5	LT	22.56
13	Ethylbenzene	100-41-4	LT	20.61
14	Methylene Chloride	75-09-2	LT	25.75
15	Tetrachloroethene	127-18-4	LT	13.19
16	Toluene	108-88-3	LT	23.74
17	1,1,1-Trichloroethane	71-55-6	LT	16.38
18	1,1,2-Trichloroethane	79-00-5	LT	16.38
19	Trichloroethene	79-01-6	596	16.65
20	Dichlorotrifluoroethane(Freon-123)	306-83-2	21.6	14.50
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.74
22	Vinyl Chloride	75-01-4	LT	34.97
23	Total-Xylene	1330-20-7	LT	20.61
24	Total VOC		1033	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	96%	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: 6/18/98
Reviewer: Date: 6·18·98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-6	Laboratory ID:	OA980520
Matrix:	Gas Cartridge	Sample Vol.(L):	0.110
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/27/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.57
2	Benzene	71-43-2	LT	27.97
3	Carbon Tetrachloride	56-23-5	LT	14.23
4	Chloroform	67-66-3	LT	18.33
5	1,2-Dichlorobenzene	95-50-1	LT	14.88
6	1,3-Dichlorobenzene	541-73-1	LT	14.88
7	1,4-Dichlorobenzene	106-46-7	LT	14.88
8	1,1-Dichloroethane	75-34-3	LT	22.07
9	1,2-Dichloroethane	107-06-2	LT	22.56
10	1,1-Dichloroethene	75-35-4	LT	67.67
11	cis-1,2-Dichloroethene	156-69-9	343	22.56
12	trans-1,2-Dichloroethene	156-60-5	LT	22.56
13	Ethylbenzene	100-41-4	LT	20.61
14	Methylene Chloride	75-09-2	53.6	25.75
15	Tetrachloroethene	127-18-4	LT	13.19
16	Toluene	108-88-3	LT	23.74
17	1,1,1-Trichloroethane	71-55-6	LT	16.38
18	1,1,2-Trichloroethane	79-00-5	LT	16.38
19	Trichloroethene	79-01-6	503	16.65
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.50
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.74
22	Vinyl Chloride	75-01-4	LT	34.97
23	Total-Xylene	1330-20-7	LT	20.61
24	Total VOC		899	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	96%	**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: 6/18/98
Reviewer: [signature] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-7	Laboratory ID:	OA980521
Matrix:	Gas Cartridge	Sample Vol.(L):	0.110
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.57
2	Benzene	71-43-2	LT	27.97
3	Carbon Tetrachloride	56-23-5	LT	14.23
4	Chloroform	67-66-3	LT	18.33
5	1,2-Dichlorobenzene	95-50-1	LT	14.88
6	1,3-Dichlorobenzene	541-73-1	LT	14.88
7	1,4-Dichlorobenzene	106-46-7	LT	14.88
8	1,1-Dichloroethane	75-34-3	LT	22.07
9	1,2-Dichloroethane	107-06-2	LT	22.56
10	1,1-Dichloroethene	75-35-4	LT	67.67
11	cis-1,2-Dichloroethene	156-69-9	171	22.56
12	trans-1,2-Dichloroethene	156-60-5	LT	22.56
13	Ethylbenzene	100-41-4	LT	20.61
14	Methylene Chloride	75-09-2	LT	25.75
15	Tetrachloroethene	127-18-4	LT	13.19
16	Toluene	108-88-3	LT	23.74
17	1,1,1-Trichloroethane	71-55-6	LT	16.38
18	1,1,2-Trichloroethane	79-00-5	LT	16.38
19	Trichloroethene	79-01-6	560	16.65
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.50
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.74
22	Vinyl Chloride	75-01-4	LT	34.97
23	Total-Xylene	1330-20-7	LT	20.61
24	Total VOC		731	

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 Dabbenist Date: 6/18/98
Reviewer: H. Boyd Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-8	Laboratory ID:	OA980522
Matrix:	Gas Cartridge	Sample Vol.(L):	0.111
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.23
2	Benzene	71-43-2	LT	27.72
3	Carbon Tetrachloride	56-23-5	LT	14.10
4	Chloroform	67-66-3	LT	18.16
5	1,2-Dichlorobenzene	95-50-1	LT	14.74
6	1,3-Dichlorobenzene	541-73-1	LT	14.74
7	1,4-Dichlorobenzene	106-46-7	LT	14.74
8	1,1-Dichloroethane	75-34-3	LT	21.87
9	1,2-Dichloroethane	107-06-2	LT	22.35
10	1,1-Dichloroethene	75-35-4	LT	67.06
11	cis-1,2-Dichloroethene	156-69-9	LT	22.35
12	trans-1,2-Dichloroethene	156-60-5	LT	22.35
13	Ethylbenzene	100-41-4	LT	20.43
14	Methylene Chloride	75-09-2	LT	25.52
14	Tetrachloroethene	127-18-4	LT	13.08
15	Toluene	108-88-3	LT	23.52
16	1,1,1-Trichloroethane	71-55-6	LT	16.23
16	1,1,2-Trichloroethane	79-00-5	LT	16.23
17	Trichloroethene	79-01-6	LT	16.50
18	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.37
17	1,2,4-Trimethylbenzene	95-63-6	LT	23.52
18	Vinyl Chloride	75-01-4	LT	34.65
19	Total-Xylene	1330-20-7	LT	20.43
19	Total VOC		0	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	99%	75-130

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

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-9	Laboratory ID:	OA980523
Matrix:	Gas Cartridge	Sample Vol.(L):	0.111
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.23
2	Benzene	71-43-2	LT	27.72
3	Carbon Tetrachloride	56-23-5	LT	14.10
4	Chloroform	67-66-3	LT	18.16
5	1,2-Dichlorobenzene	95-50-1	LT	14.74
6	1,3-Dichlorobenzene	541-73-1	LT	14.74
7	1,4-Dichlorobenzene	106-46-7	LT	14.74
8	1,1-Dichloroethane	75-34-3	LT	21.87
9	1,2-Dichloroethane	107-06-2	LT	22.35
10	1,1-Dichloroethene	75-35-4	LT	67.06
11	cis-1,2-Dichloroethene	156-69-9	73.3	22.35
12	trans-1,2-Dichloroethene	156-60-5	LT	22.35
13	Ethylbenzene	100-41-4	LT	20.43
14	Methylene Chloride	75-09-2	LT	25.52
15	Tetrachloroethene	127-18-4	LT	13.08
16	Toluene	108-88-3	LT	23.52
17	1,1,1-Trichloroethane	71-55-6	LT	16.23
18	1,1,2-Trichloroethane	79-00-5	LT	16.23
19	Trichloroethene	79-01-6	356	16.50
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.37
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.52
22	Vinyl Chloride	75-01-4	LT	34.65
23	Total-Xylene	1330-20-7	LT	20.43
24	Total VOC		429	

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 : Date: 6/18/98
Reviewer: Date: 6·18·98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-10	Laboratory ID:	OA980524
Matrix:	Gas Cartridge	Sample Vol.(L):	0.111
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.23
2	Benzene	71-43-2	LT	27.72
3	Carbon Tetrachloride	56-23-5	LT	14.10
4	Chloroform	67-66-3	LT	18.16
5	1,2-Dichlorobenzene	95-50-1	LT	14.74
6	1,3-Dichlorobenzene	541-73-1	LT	14.74
7	1,4-Dichlorobenzene	106-46-7	LT	14.74
8	1,,1-Dichloroethane	75-34-3	LT	21.87
9	1,2-Dichloroethane	107-06-2	28.4	22.35
10	1,1-Dichloroethene	75-35-4	LT	67.06
11	cis-1,2-Dichloroethene	156-69-9	181	22.35
12	trans-1,2-Dichloroethene	156-60-5	LT	22.35
13	Ethylbenzene	100-41-4	LT	20.43
14	Methylene Chloride	75-09-2	LT	25.52
15	Tetrachloroethene	127-18-4	LT	13.08
16	Toluene	108-88-3	LT	23.52
17	1,1,1-Trichloroethane	71-55-6	LT	16.23
18	1,1,2-Trichloroethane	79-00-5	LT	16.23
19	Trichloroethene	79-01-6	410	16.50
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.37
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.52
22	Vinyl Chloride	75-01-4	LT	34.65
23	Total-Xylene	1330-20-7	LT	20.43
24	Total VOC		619	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	98%	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 : Date: 6/18/98
Reviewer: Date: 6·18·98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	Dup	Laboratory ID:	OA980525
Matrix:	Gas Cartridge	Sample Vol.(L):	0.111
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	37.23
2	Benzene	71-43-2	LT	27.72
3	Carbon Tetrachloride	56-23-5	LT	14.10
4	Chloroform	67-66-3	LT	18.16
5	1,2-Dichlorobenzene	95-50-1	LT	14.74
6	1,3-Dichlorobenzene	541-73-1	LT	14.74
7	1,4-Dichlorobenzene	106-46-7	LT	14.74
8	1,1-Dichloroethane	75-34-3	LT	21.87
9	1,2-Dichloroethane	107-06-2	30.2	22.35
10	1,1-Dichloroethene	75-35-4	LT	67.06
11	cis-1,2-Dichloroethene	156-69-9	220	22.35
12	trans-1,2-Dichloroethene	156-60-5	LT	22.35
13	Ethylbenzene	100-41-4	LT	20.43
14	Methylene Chloride	75-09-2	LT	25.52
15	Tetrachloroethene	127-18-4	LT	13.08
16	Toluene	108-88-3	LT	23.52
17	1,1,1-Trichloroethane	71-55-6	LT	16.23
18	1,1,2-Trichloroethane	79-00-5	LT	16.23
19	Trichloroethene	79-01-6	477	16.50
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.37
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.52
22	Vinyl Chloride	75-01-4	LT	34.65
23	Total-Xylene	1330-20-7	LT	20.43
24	Total VOC		727	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	99%	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 : Date: 6/18/98
Reviewer: Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-11.2	Laboratory ID:	OA980526
Matrix:	Gas Cartridge	Sample Vol.(L):	0.112
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/4/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3689
2	Benzene	71-43-2	LT	2747
3	Carbon Tetrachloride	56-23-5	LT	1397
4	Chloroform	67-66-3	LT	1800
5	1,2-Dichlorobenzene	95-50-1	LT	1461
6	1,3-Dichlorobenzene	541-73-1	LT	1461
7	1,4-Dichlorobenzene	106-46-7	LT	1461
8	1,1-Dichloroethane	75-34-3	LT	2167
9	1,2-Dichloroethane	107-06-2	LT	2216
10	1,1-Dichloroethene	75-35-4	LT	2216
11	cis-1,2-Dichloroethene	156-69-9	2290	2216
12	trans-1,2-Dichloroethene	156-60-5	LT	2216
13	Ethylbenzene	100-41-4	LT	2025
14	Methylene Chloride	75-09-2	LT	2529
15	Tetrachloroethene	127-18-4	LT	1296
16	Toluene	108-88-3	LT	2331
17	1,1,1-Trichloroethane	71-55-6	LT	1609
18	1,1,2-Trichloroethane	79-00-5	LT	1609
19	Trichloroethene	79-01-6	1760	1635
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1424
21	1,2,4-Trimethylbenzene	95-63-6	LT	2331
22	Vinyl Chloride	75-01-4	LT	3434
23	Total-Xylene	1330-20-7	LT	2025
24	Total VOC		4050	

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 : Rob Dabbgurst Date: 6/18/98
Reviewer: H. Powell Date: 6-18-98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-12.2	Laboratory ID:	OA980527
Matrix:	Gas Cartridge	Sample Vol.(L):	0.112
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/4/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3689
2	Benzene	71-43-2	LT	2747
3	Carbon Tetrachloride	56-23-5	LT	1397
4	Chloroform	67-66-3	LT	1800
5	1,2-Dichlorobenzene	95-50-1	LT	1461
6	1,3-Dichlorobenzene	541-73-1	LT	1461
7	1,4-Dichlorobenzene	106-46-7	LT	1461
8	1,1-Dichloroethane	75-34-3	LT	2167
9	1,2-Dichloroethane	107-06-2	LT	2216
10	1,1-Dichloroethene	75-35-4	LT	2216
11	cis-1,2-Dichloroethene	156-69-9	7790	2216
12	trans-1,2-Dichloroethene	156-60-5	LT	2216
13	Ethylbenzene	100-41-4	LT	2025
14	Methylene Chloride	75-09-2	LT	2529
15	Tetrachloroethene	127-18-4	LT	1296
16	Toluene	108-88-3	LT	2331
17	1,1,1-Trichloroethane	71-55-6	LT	1609
18	1,1,2-Trichloroethane	79-00-5	LT	1609
19	Trichloroethene	79-01-6	8180	1635
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1424
21	1,2,4-Trimethylbenzene	95-63-6	LT	2331
22	Vinyl Chloride	75-01-4	LT	3434
23	Total-Xylene	1330-20-7	LT	2025
24	Total VOC		15970	

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 Walbeart Date: 6/18/98
Reviewer: H.S. Powell Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	BG-13.2	Laboratory ID:	OA980528
Matrix:	Gas Cartridge	Sample Vol.(L):	0.112
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	6/4/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	3689
2	Benzene	71-43-2	LT	2747
3	Carbon Tetrachloride	56-23-5	LT	1397
4	Chloroform	67-66-3	LT	1800
5	1,2-Dichlorobenzene	95-50-1	LT	1461
6	1,3-Dichlorobenzene	541-73-1	LT	1461
7	1,4-Dichlorobenzene	106-46-7	LT	1461
8	1,1-Dichloroethane	75-34-3	LT	2167
9	1,2-Dichloroethane	107-06-2	LT	2216
10	1,1-Dichloroethene	75-35-4	LT	2216
11	cis-1,2-Dichloroethene	156-69-9	27600	2216
12	trans-1,2-Dichloroethene	156-60-5	LT	2216
13	Ethylbenzene	100-41-4	LT	2025
14	Methylene Chloride	75-09-2	LT	2529
15	Tetrachloroethene	127-18-4	LT	1296
16	Toluene	108-88-3	LT	2331
17	1,1,1-Trichloroethane	71-55-6	LT	1609
18	1,1,2-Trichloroethane	79-00-5	LT	1609
19	Trichloroethene	79-01-6	25600	1635
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	1424
21	1,2,4-Trimethylbenzene	95-63-6	LT	2331
22	Vinyl Chloride	75-01-4	LT	3434
23	Total-Xylene	1330-20-7	LT	2025
24	Total VOC		53200	

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

** Detector is saturated
CAS #: Chemical Abstract Services Registry Number
PQL: Practical Quantitation Limits
LT: Less than PQL

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

Analyst : [signature] Date: 6/18/98
Reviewer: [signature] Date: 6.18.98

LBL Environmental Measurements Laboratory
TO-14 Analysis Data Sheet

Sample ID:	FB 2	Laboratory ID:	OA980529
Matrix:	Gas Cartridge	Sample Vol.(L):	0.113
Date Sampled:	5/1/98	Date Received:	5/5/98
Date Analyzed:	5/28/98	Method:	TO-14

	Compound	CAS #	Conc.(ppbv)	PQL(ppbv)
1	Acetone	67-64-1	LT	36.57
2	Benzene	71-43-2	LT	27.23
3	Carbon Tetrachloride	56-23-5	LT	13.85
4	Chloroform	67-66-3	LT	17.84
5	1,2-Dichlorobenzene	95-50-1	LT	14.48
6	1,3-Dichlorobenzene	541-73-1	LT	14.48
7	1,4-Dichlorobenzene	106-46-7	LT	14.48
8	1,1-Dichloroethane	75-34-3	LT	21.48
9	1,2-Dichloroethane	107-06-2	LT	21.96
10	1,1-Dichloroethene	75-35-4	LT	65.88
11	cis-1,2-Dichloroethene	156-69-9	LT	21.96
12	trans-1,2-Dichloroethene	156-60-5	LT	21.96
13	Ethylbenzene	100-41-4	LT	20.07
14	Methylene Chloride	75-09-2	LT	25.07
15	Tetrachloroethene	127-18-4	LT	12.84
16	Toluene	108-88-3	LT	23.11
17	1,1,1-Trichloroethane	71-55-6	LT	15.95
18	1,1,2-Trichloroethane	79-00-5	LT	15.95
19	Trichloroethene	79-01-6	LT	16.21
20	Dichlorotrifluoroethane (Freon 123)	306-83-2	LT	14.11
21	1,2,4-Trimethylbenzene	95-63-6	LT	23.11
22	Vinyl Chloride	75-01-4	LT	34.04
23	Total-Xylene	1330-20-7	LT	20.07
24	Total VOC		0	

Surrogate Compound	% Recovery	QC Limits (%)
4-Bromofluorobenzene	110%	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: 6/18/98
Reviewer: Date: 6-18-98